Hypertext and Plurilinearity: Challenging an Old-fashioned Discourse Model

Birgitta Bexten
Leiden University Center for Linguistics (LUCL)
Departement for German Studies – University of Leiden – Leiden, The Netherlands
b.bexten@let.leidenuniv.nl

Abstract:
Hypertexts are special. Particularly their network structure is a challenge for discourse linguists to describe. In this paper, I demonstrate how we can accept this challenge using an old-fashioned but exceptional text model, namely Roland Harweg’s (1974) concept of plurilinearity. This model allows describing the main hypertext features: text bifurcations, simultaneously existing text strings, and text combinations from a discourse linguistic point of view.

Keywords: global discourse structure, discourse organising model, hypertext.

Résumé:

Mots-clés: structure globale du discours, modèle d’organisation du discours, hypertexte.

The starting point

While traditional texts in principle form a single reading sequence, texts in a hypertext environment split up, recombine and provide simultaneously existing reading paths. Even if the reader re-linearises (parts of) the hypertext while reading it, the text structurally remains a network. Obviously, this does not apply to lexicon-like hypertexts. Lexicons consist of several linked, but independent texts. Therefore, they are less interesting here. Only hypertexts that present a single text, e.g. hypernovels, entail the challenge of structurally concatenating all text parts in a single network.
But how special really are those non-linear texts? Many discourse linguists have already argued that no text is a purely linear phenomenon (e.g. Petöfi 1971, Rieser 1980, van Dijk 1978). The linear text surface is based on an underlying non-linear semantic structure. In addition, the thematic text progression is not linear but rather hierarchic (Harweg 2001). Especially longer texts tend to be thematically segmented into hierarchic units like chapters or paragraphs.

Considering these conditions, it seems worth looking for an existing theory which is able to deal with the global, network-like hypertext structure. But – and this ‘but’ is crucial – this model should not only account for the underlying semantics, because in terms of their global meaning structure, hypertexts hardly differ from any other texts. What really differs is the surface. Therefore, the linguistic model should be applicable to a non-linear surface structure.

Harweg’s model of plurilinearity

One theory that plays to this requirement is the concept of plurilinearity which Harweg (1974) introduces in his article “Bifurcations de textes”, and which has been augmented by Tschauder (1989). Harweg points out that the traditional assumption of structurally linear texts is incomplete. He argues that not even traditional texts are necessarily unilinear; even though this applies to most of them. Oral discourses (e.g. discussions between more than three people) as well as written discourses (e.g. texts with footnotes) can bifurcate and thus become plurilinear. The only condition is that all resulting text strings are connected with the same initial text part by means of usual text-building devices. Two different text strings can even be recombined if someone refers to both of them in the same utterance.

The mere possibility of plurilinearity becomes a presupposition in hypertext: without text bifurcations and recombinations, there would be no network.

In the reminder, I show to what extend the features of plurilinear texts and texts in a hypertext environment match and of what use Harweg’s model can be for describing the global structure of hypertext.

Text bifurcations

Consider the following example: imagine that this text were a lecture I would be presenting. Imagine that the moment I start reading “Hypertexts are special” one of the listeners would inform his neighbour under his breath: “That’s completely nonsense! I just read the other day…” In this case, That would directly refer to my statement. In a normal conversation I would most likely react immediately and we would get a normal linear oral text. But in the current case, what we get are two different text strings which both refer to one and the same preceding unilinear part. Both strings textually continue this unilinear part, and therefore, both parts belong to the same text. Only that this text is not unilinear any more, instead it has bifurcated and has become plurilinear: due to the bifurcation we get two simultaneously continuing text strings.

The same is true for texts with footnotes. In the following example from Halliday (2004, 71), the initial text string is connected simultaneously with the pronouns This in the main text and It in the footnote.

“...If I say what the duke did was give my aunt that teapot, the nominalization what the duke did carries the meaning ‘and that’s all he did, in the context of what we are talking about.’ This is also the explanation of the marked form [...]”

*It further indicates [...] something about the role of the duke [...]”

Figure 1: Text bifurcation in print texts.
Now consider the following (translated and slightly shortened) extracts from Berkenheger’s (1997) hypernovel “Zeit für die Bombe”.

“The fourth doctor told about his case.
One of his most talented students just
has been taken to the psychiatry. ‘And
guess, why? He didn’t want to drop his
suitcase.’
The doctor’s hands […]”

“The walls murmured that Iwan shouldn’t
open somebody else’s suitcase, Vero-
nika’s least of all.”

Here, too the initial text continues without a break in the first unit and at the same time is proceeded in the link’s target unit.

Both, texts with footnotes just as well as hypertexts, confront the reader with a dilemma: the text splits up at the word which is followed by a footnote marker or functions as a hypertext link. The reader has to decide whether to read on in the current hypertext node or whether to branch off and pursue the link’s target node. He has to follow one of the two simultaneously existing reading paths. Both subsequent text strings are textually connected with the preceding text part and, thus, offer just two different versions of the proceeding story.

**Main strings vs. side strings**

The explanations above show why hypertexts sometimes are referred to as generalised footnotes (e.g. Nielsen 1995, 2). Even though, there is a fundamental difference between footnote texts and hypertext units. For footnotes, just as remarks during a lecture, only supplement the main text. The text does not become incomprehensible without them. Nielsen (ibid.) explains in a footnote “I guess you decided to read the footnote this time. But you could just as easily have skipped it.” In hypertext on the other hand, especially in fictional hypertexts, most units are part of the main text. Even if some hypertext units do have footnote character, the main text itself would be incomplete without interconnected units. Describing hypertext as a generalised footnote means overlooking this fact.

Therefore, to really get a grip on the global structure of hypertext, it would be useful to find plurilinear texts without side strings. And, indeed, plurilinear texts can do without side strings, too.

Consider the following macrotext example (Harweg 1974, 57f):

(Situation: Mother and two suns sitting in the living room. Father enters.)

Father: Look, darling, I bought something for you, a vase.

(All four talk about the vase for a while. … Several weeks later.)

Peter: I broke the vase.
Paul: What vase?
Peter: The vase father lately bought for mother.

Mother: Darling, the vase is gone.
Father: What vase?
Mother: The vase you gave to me several weeks ago.

Figure 2: Text bifurcation in hypertext.

Figure 3: Text bifurcation in plurilinear macrotexts.

1. Macrotexts, as Harweg (1970) describes them, usually are not recognised as single texts by the intuition of the normal language user. They consist of at least two different disconnected microtexts, i.e. texts that could roughly be characterised as normal texts. Several microtexts form one macrotext if they are connected by normal text building devices as is the case in the example given above.

Scheday, 2006, prépublication n° 14, (fasicule n° 1, p. 117-122)
Both subsequent dialogues are connected to the initial text string by the same anaphoric expression the vase, but none of the two dialogues can be regarded as more important than the other.

Text combinations

Except from text bifurcations, a hypertext network cannot do without text combinations. In the following example two different hypertext units are linked with the same target node. And in both cases the target text seamlessly follows the preceding text parts.

"The fourth doctor told about his case. One of his most talented students just has been taken to the psychiatry. 'And guess, why? He didn't want to drop his suitcase.'"

"I hope Veronika has it cold', he wished with a glance at her piece of luggage, which he now started to open. Perhaps only because there wasn't anything else to do."

"The walls murmured that Iwan shouldn't open somebody else's suitcase, Veronika's least of all."

Figure 4: Text combination in hypertext.

With Harweg's model, we can trace the same possibilities in traditional texts. Imagine four people sitting in a bar discussing the last Olympic doping scandal. At one point, the conversation splits up into two dialogues (e.g. because somebody directly addresses one person and asks his opinion while the other two just continue talking). Now imagine that an alert listener addresses the whole group by saying: “Hey, what you just said is a brilliant argument against what we said in the beginning.” He thereby reintegrates the one discussion into the other. His remark not only picks up one of the conversations (what you just said) but reconnects it to the initial text part (what we said in the beginning). Most likely, all four will rejoin a single discussion again. The only difference with the hypertext example is that here the bifurcation as well as the combination are a question of text production. In hypertext, they are structural phenomena which are independent of both text production and reception.

Conclusions

Many features of hypertexts and plurilinear texts match. Both start with an initial text string and bifurcate at one or more places. Both consist of simultaneously existing text strings that are connected to an initial string by text building devices. Both might but do not need to have side strings. And both can provide text combinations.

The final question, I want to answer here therefore is: Are hypertexts plurilinear texts? The answer is: No, ideally they are not. Even though, many hypertexts rather have a tree- than a network-structure, and therefore are plurilinear. But ideal hypertexts structurally are not linear; not even plurilinear. They present network-like texts: a single information unit can occur at various places in different reading sequences. What, nevertheless, makes the model of plurilinearity worth using, is that it provides discourse linguistic devices to describe the decisive features of hypertext networks, namely text bifurcations, text combinations and simultaneously existing text strings.

Harweg’s concept of plurilinearity is based on a comprehensive analysis of discourse relations. It can be used to approach not only the hypertext’s global but also its local structure. Discussing to what extent this model contributes to a discourse linguistic description.

Schedée, 2006, prépublication n°14, (fascicule n°1, p. 117-122).
of network-structured text, therefore, is the first step to constructing a coherent model of discourse in hypertext.

Bibliography

HARWEG R. (2001a), Studien zur Textlinguistik, Aachen, Shaker Verlag (Bochumer Beiträge zur Semiotik; Neue Folge 7).
TSCHAUDER G. (1989), Textverbindungen. Ansätze zu einer Makrotextologie, auch unter Berücksichti-
gung fiktionaler Texte, Bochum, Brockmeyer.