

Hyperlinks:
keywords or key words

Goal

- To examine the inherent keyness of hyperlinks
- To compare hyperlinks to statistical keywords
- Do hyperlinks correspond with the statistical keywords?
- Case study: examination of hypertextual fiction

Statistical keywords

- Keywords analysis
 - Effective and useful method for determination and identification the discourse topic of texts
- Keywords identification
 - Perform by using statistical methods
 - Appear differences against human cognitive processing
 - Humans make interpretative observations and understand the keyness in qualitative rather than quantitative point of view

Hyperlinks

- Salient type of reference
- Highlighting lexical strings from texts, which lead readers to another relating text
- Easy navigation by using hypelinks
- Shifting of discourse topics
- When author wants to provide additional information

Cataphoricity

- Type of referentiality
- Word refers to something in the text = hyperlink
- Creation:
 1. The link element refers from the source to the target fragment (see next slide example)
 2. The link element describes the target fragment in some way

Cataphoricity creation - example

First, Roland McKenry, Jr. had spent most of his life in Buford and knew everybody in the town. Second, the guy's suit was way too nice. Custom made, from the looks of it. Probably the guy was not even from Columbia or Charleston. It looked like a suit you'd see on a guy from New York, Milan, London. Maybe Atlanta. Maybe.



Link: suit

But the thing was, after a certain point, you started to realize Teddy had a way of trying to build himself up to be more than he really was.

Take the suit, for example. He must have talked about that fucking custom made suit somewhere in the neighborhood of a million times. How he'd chosen the fabric out of a hundred different bolts of cloth. How it had a certain thread count and there was mohair in it - this, that and the other. How it was some Chinese tailor with an English accent, flew over from Hong Kong a couple times a year to take orders from special customers, have it made in hotel rooms by these seamstresses he'd fly over.

Notes

Unless author of hypertext chooses systematic approach for logic linking, reader can NOT know which type should expect

Semantically filled link

- This term describes hyperlinks, that refer explicitly to an identifiable referent
- Proper and concrete nouns form referentially more or less straightforward bridges
- Abstract nouns require more mental processing
- Verbs, adjectives and adverbs present increasing referential challenges
 - do not use as a links in hypertexts

Semantically filled link

- Which one is easier to envision the potential referent of the link?

Example 1: John, the moon

Example 2: jealousy, quickly

Question?

Hyperlinks should be consider key words in a hypertext?

Keyness definition

Scott & Tribble

A quality words may have in a given text or set of texts, suggesting that they are important, they reflect what the text is really about, avoiding trivia and insignificant details.

Hyperlinks vs. Key words

If hyperlinks mostly saliently communicates the core information content, we can surmise that hyperlinks can be deemed as key words

A contrastive case study

- Examination of hypertextual fiction called The Heist (author W. Sorrells)
- All fragments were compiled as a corpus
- Keywords analysis was performed on each fragment using WordSmith tool version 4.0
- British National Corpus was used as reference corpus

A contrastive case study

- All hyperlinks were extracted from structural maps created on Cmap Tools
- Comparison of the hyperlinks to the keywords lists of source and target fragments

Results

Lexical cohesion:

- repetition, reiteration co-reference of collocation was found between hyperlinks and target fragment

In 88 % of cases

Results

Discourse topical linking

- Hyperlink functioning as a descriptive label of the events depicted in target fragment

Graph

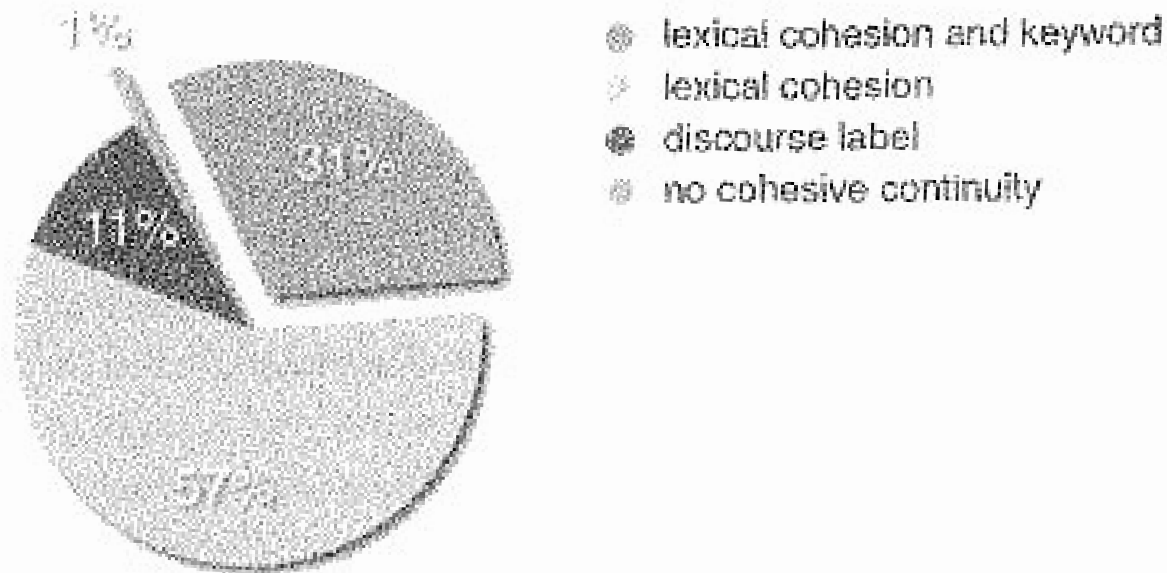


Figure 1. Hyperlinks and keywords in *The Heist*

Only 1 % of hyperlinks show no apparent cohesive continuity at all.

List of hyperlinks

Table 1. Hyperlinks of *The Heist*, Part 1

rust colored suit, THE HEIST BEGINS, look sharp, highly developed sense of irony, nine hundred dollar suit, idea, The bank manager, suit, KST-464, heard anything, Mr. McKenry Sr, Roland McKenry, Jr., Roland McKenry, Sr., Spring Lake Plantation, gone off on the new guy, his daddy, paydirt, silent alarms, Columbia, Noreen, Farmer's Community Bank, gotten out the door, new guy, suit, story about Mo and the new guy, video cameras, "I'm liking this dude already", suit, highly developed sense of irony, cleft in his chin, chief of police, Roland McKenry, Sr., looking at you funny, Jim Beam, Buford, South Carolina, Bug Something-or-other, Teddy Clapp, drank like a fish, middle aged chick with big knockers, Spring Lake Plantation, Spring Lake Plantation, Roland McKenry, Farmer's Community Bank, Ed Lampier, cellmate at that Federal camp in Alabama, development, highly developed sense of humour, bright idea, Ed Lampier, suit, Chief Loy, poor dumb bastard, his dad's bank, Jew stick-up man, Buford, North Carolina, bad idea, Teddy Clapp, THE HEIST BEGINS, certain feelings, local, bank, your friend, walked away, video cameras, highly developed sense of irony, highly developed sense of irony, dad, ready, willing and able, bank, squeeze it in, tell us something, bank's layout's pretty simple, nine hundred dollar suit, nose, THE HEIST BEGINS, his son, jew bank robbers, incident with a punk, J. C. Penney, silent alarms, suit, trust, THE HEIST BEGINS, the phone rang, suit, suit, Mo Rosen, ridiculous looking overalls, Mr. McKenry Jr., suit, layout of the bank

List of keywords

Table 2. Keywords of *The Heist* ($p < 0.001$), Part 1

Clapp, Teddy, Guy, suit, South, Colombia, modern, fann, brochure, fat, Moe, tea, Ed, bug, from, town, decade, population, dope, Milan, Roland, thug, known, Jimmy, they, hooked, joint, Jew, jew, criminal, Dutch, Schultz, suit, tailor, bought, criminals, crackhead, drinking, goyishe, federal, that's, Jimmie, banks, percent, five, Jimmie, food, Moe, grocery, robbed, spouse, mr, cabe, worked, many, system, art, state, Lampier, stick, Ed, we, Ed, we'll, grand, bird, city, council, night, police, Roland, chief, police, sharp, Gaddis, William, county, fulton, concur, probation, penitentiary, goliath, birthday, Briston, hence, nose, you, Kramer, nose, I'm, plague, big, suit, suits, blue, McKenry, mr, smart, McKenry, square, living, clubhouse, her, she, against, boring, candidate, friends, hinted, heist, crime, you

Results

- There appear a lot of multiword links
- Proper names identify all of major characters in the story
- Hyperlinks evokes ideas of criminal activity, the police,
- Repetition of certain words (highly, suit,..)
 - They may possess particular keyness in text

Results

- The hyperlinks list gives more comprehensive impression of the texts aboutness than statistical keywords
- Lexical items of hyperlinks match the keywords of
 - The target fragment 31 %
 - The source fragment 23 %

Conclusion

- Case study do NOT provide enough empirical evidence
- Suggest that the keyness concept can be employed in the hypertext analysis
- Hyperlinks can be considered a surface level equivalent to statistically derived keywords

Conclusion

- Hyperlinks represent subjectively evaluated key elements of story
- Hyperlinks of individual text fragments do NOT exhibit a high level of correspondence with statistical keywords

Conclusion

- Hyperlinks keyness of hyperlinks demonstrates the importance of examining on two different levels
- Hyperlinks are NOT a reliable indicator of the statistically identified discourse topics

Conclusion

From statistical point of view:

Hyperlinks are key words

but they are NOT keywords