



Graphemic and graphetic methods in speculative fiction

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Grapholinguistics in the 21st century

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Content

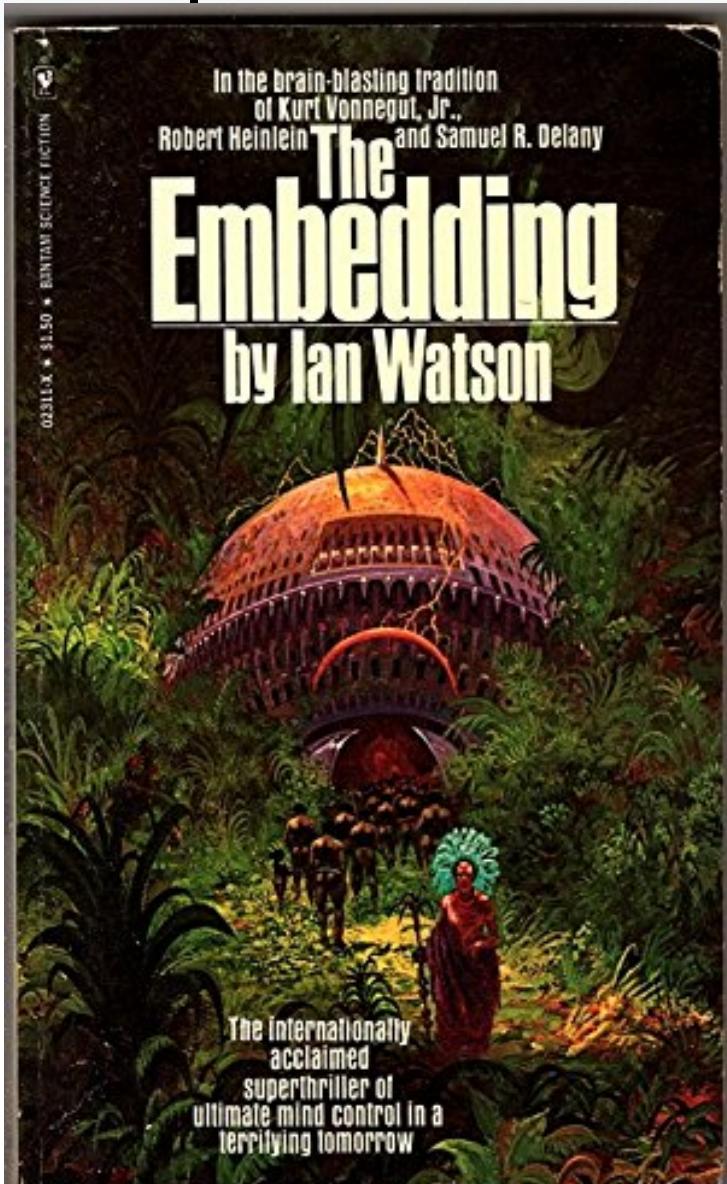
- Foreword and work context
 - (*the point of departure for our collaboration*) How to write to an alien? Linguistics and grapholinguistics in speculative fiction
 - A review of the main science fiction novels where science is linguistics
- Various methods
 - Grapheme creation – Gahan Wilson...
 - Graphetic experiments – Alfred Bester, Alain Damasio...
 - Eye dialect – Daniel Keyes, Peter Phillips...
 - Annotations – Cortazar, Torishima...
 - Discussion, classification
- Conclusions and future works
 - Choices for the final paper



Foreword

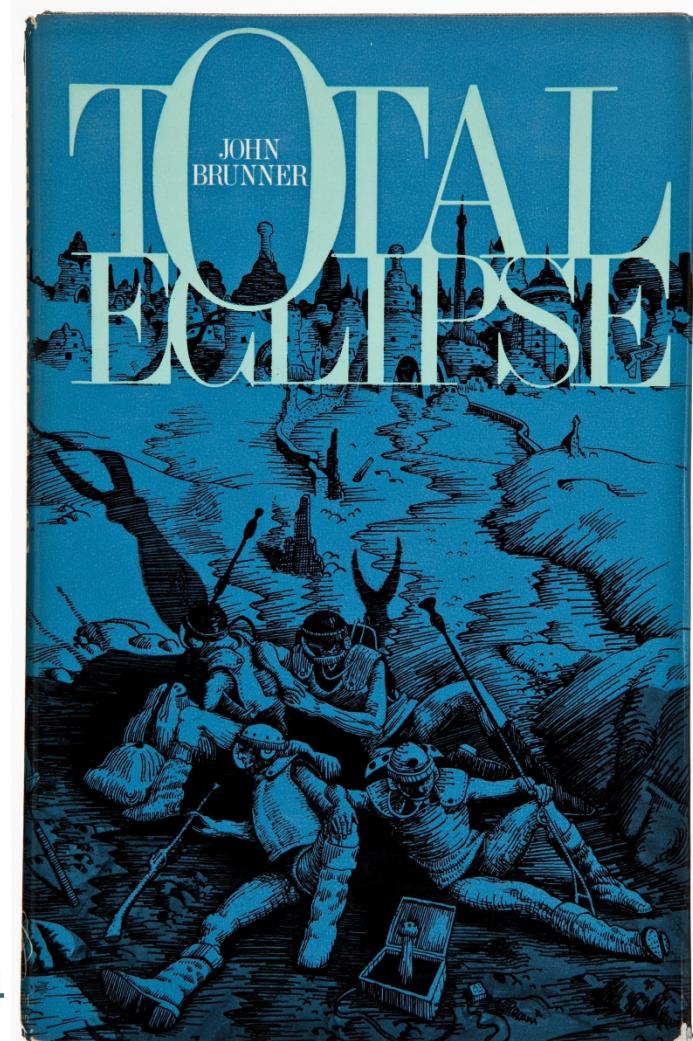
How to write to an alien?

Speculative fiction, a laboratory



1973

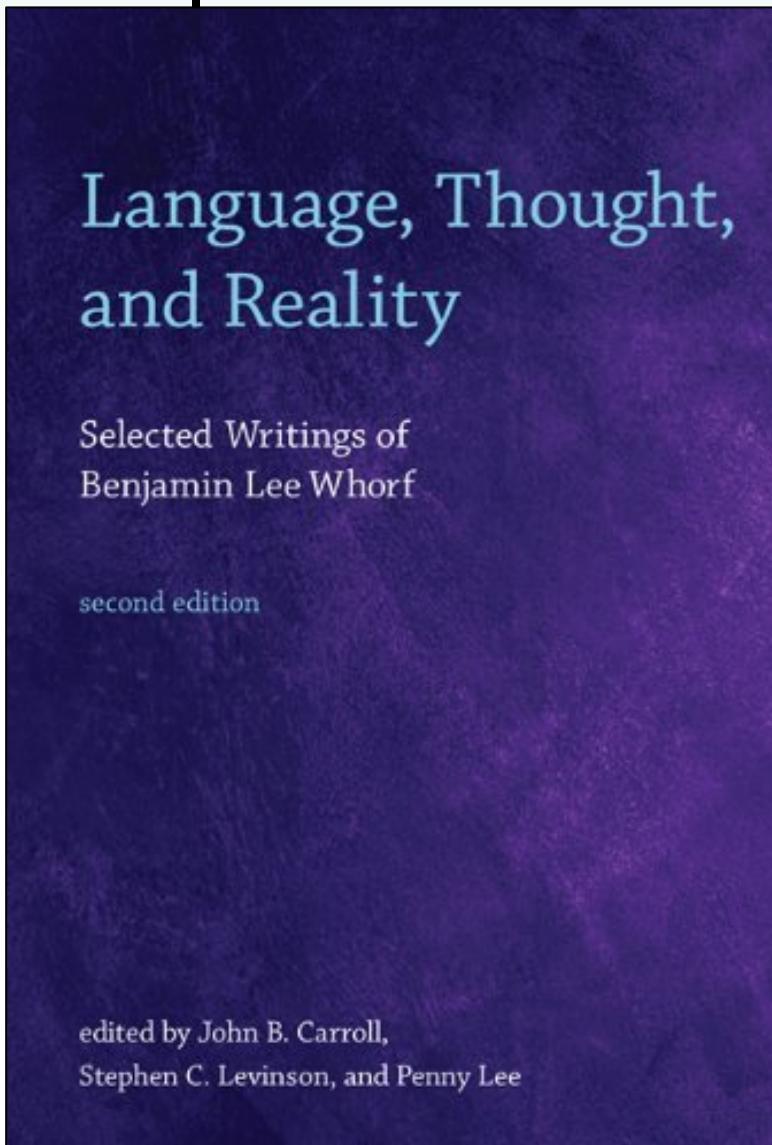
Experimenting with the ideas from Noam Chomsky



1974



Experimenting with Sapir-Whorf



Language, Thought, and Reality

Selected Writings of
Benjamin Lee Whorf

second edition

edited by John B. Carroll,
Stephen C. Levinson, and Penny Lee

Sapir-Whorf hypothesis

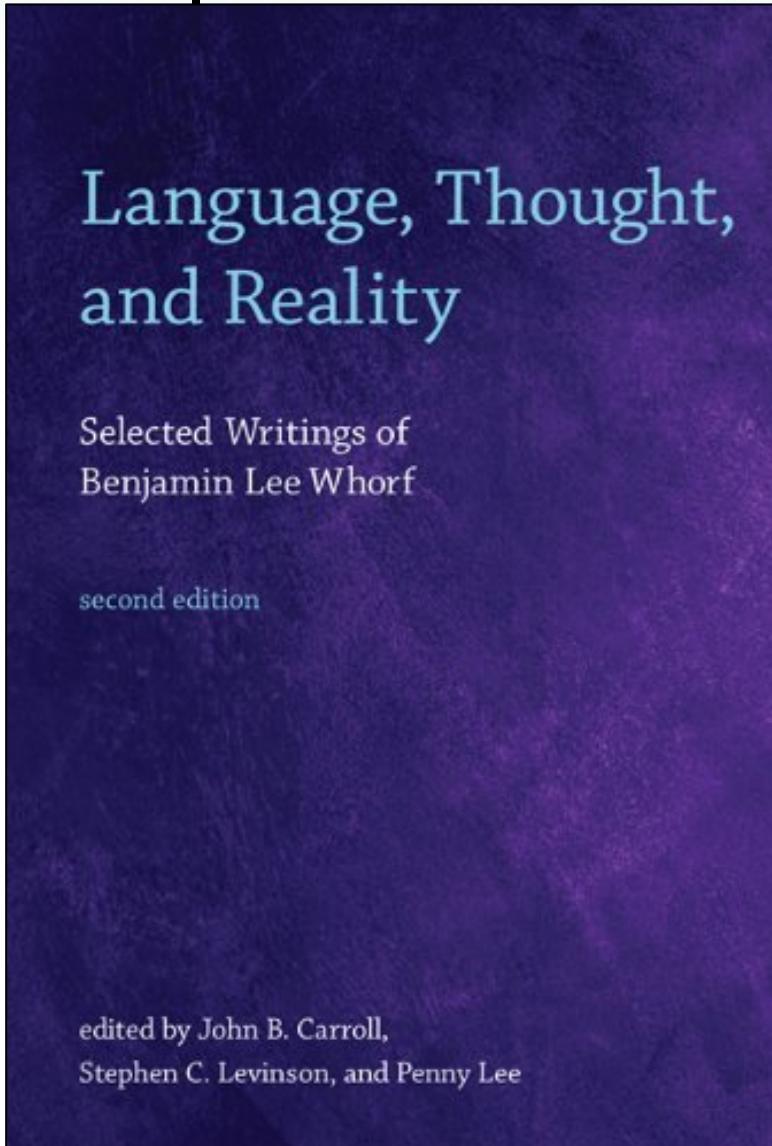
The structure of a language affects its speakers' world view or cognition, and thus people's perceptions are relative to their spoken language

Interpretation 1 = linguistic relativism
Our language influences the way we perceive the world (colours, for example)

Interpretation 2 = linguistic determinism
Our language determines our mental structures



Experimenting with Sapir-Whorf



Language, Thought, and Reality

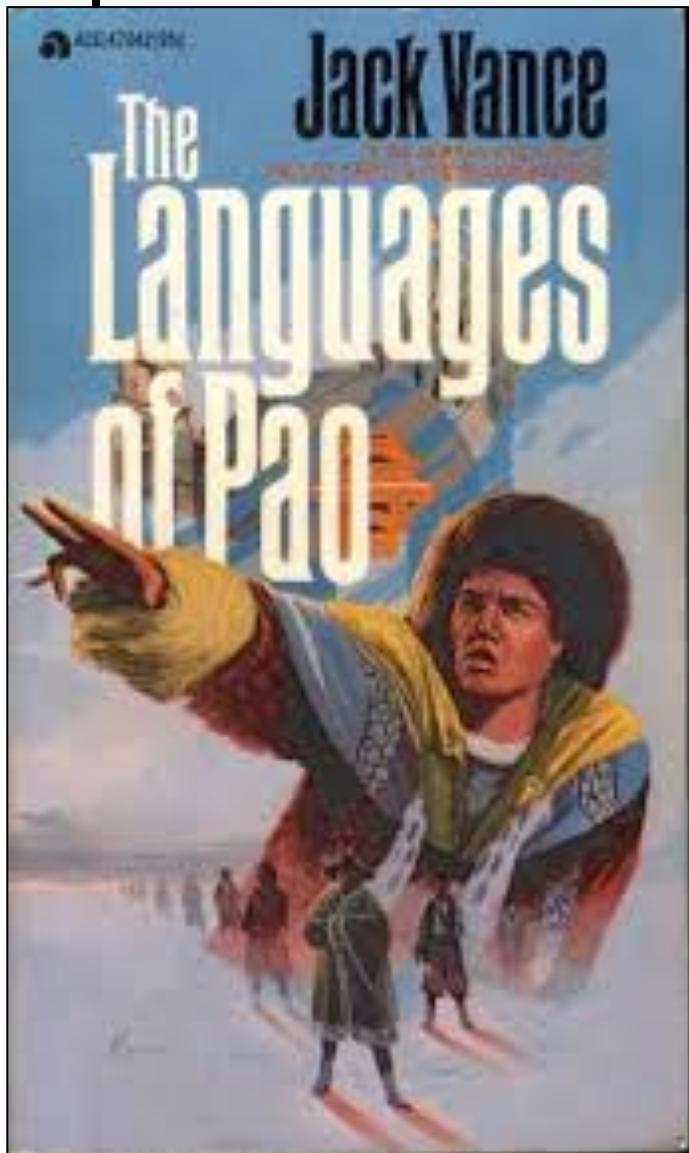
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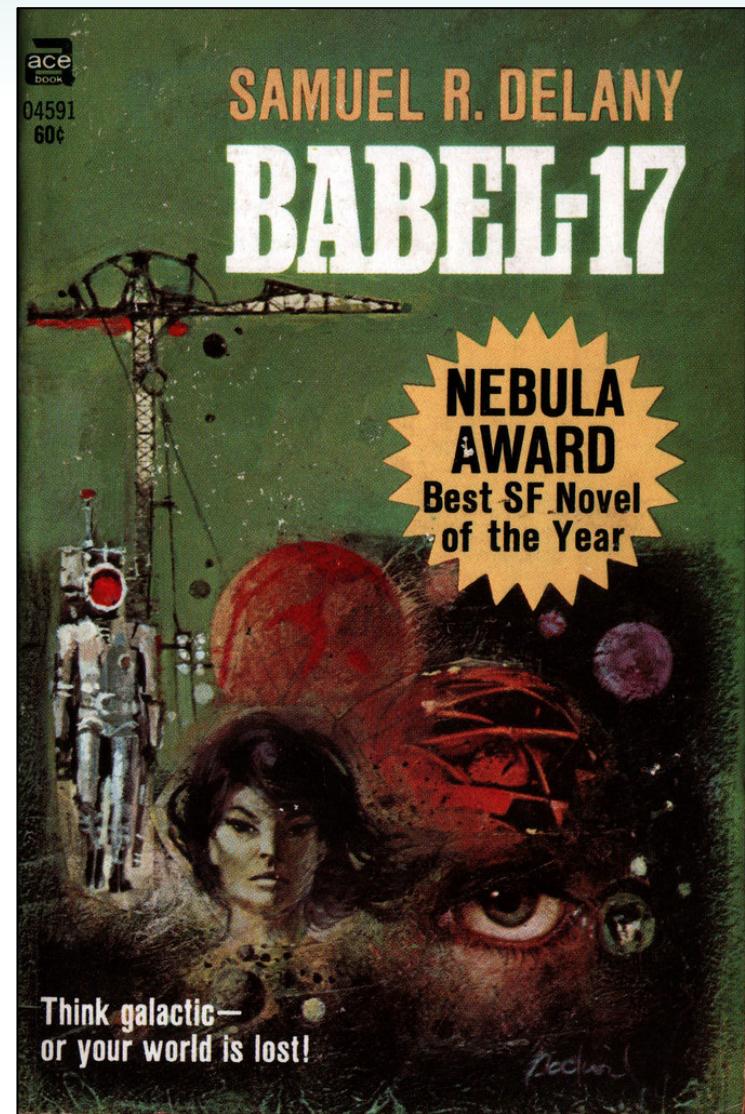
edited by John B. Carroll,
Stephen C. Levinson, and Penny Lee

When researchers begin to dissect works of speculative fiction, especially when they are linguists, they tend to point out errors and exaggerations. The remarks that we will be led to make do not in any way constitute criticism of the work of writers of speculative fiction. On the contrary, even when we are a little critical, one must not forget that narrative takes precedence over scientific plausibility. What is more, the great majority of our remarks tend to show the accuracy of intuition, and in any case the broad scope of these writers' imaginations.

Sapir-Whorf illustrations

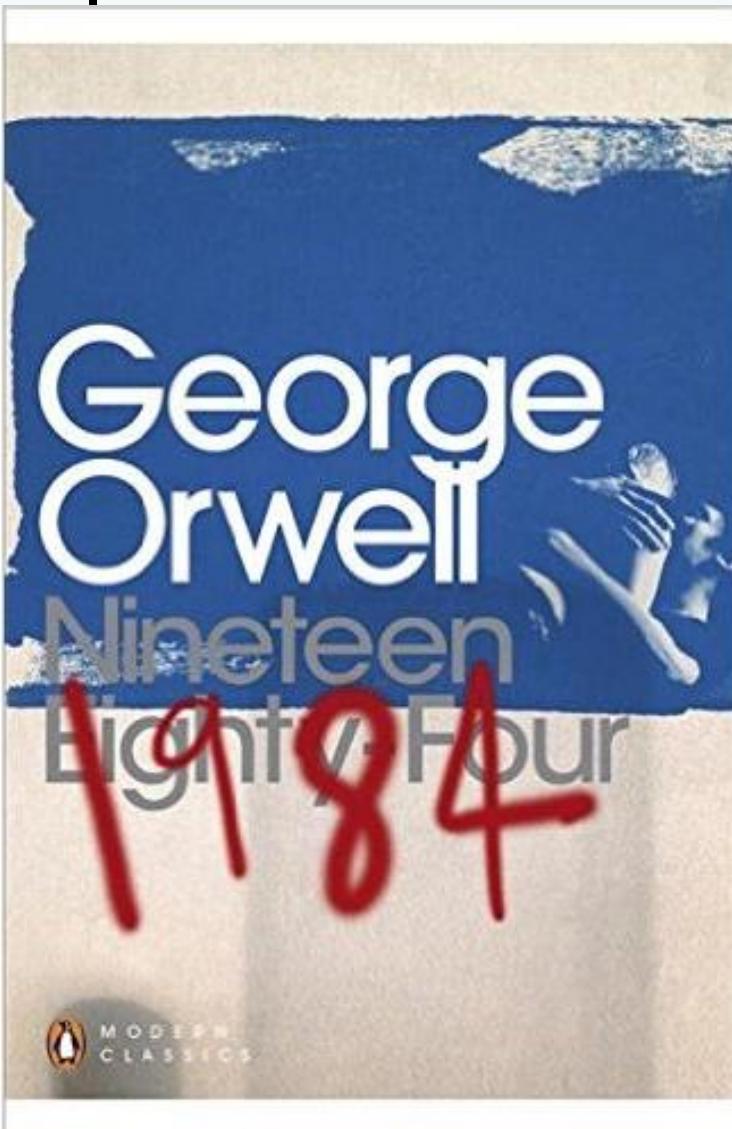


1958



1966

Totalitarian languages



1948



1920

● ● ● Various invented languages

Fiction & Cie

Frédéric Werst
Ward

(I^{er} et II^e siècles)

roman



Seuil

2011

Kamazh ār atharan

« Le Livre de l'admiration » (75)

§ 1. Zer atharan zan alben

Ar atharan aw nera zira ak nāz zeba barwa atheran ak nāz xanan aran paeth magaran. Aw sawaran ab jaleph atharan warabaōth than ak aenen atha athazaōth agōn ken athar athar ab xarēnt ek parēnt nāz amarza zēs ankōn athan yemōn atha ek ramazh aw wartha bāz athan.

Perazanma ab xanan aw ranan ar wan ab atharan mazum atha ek athar ek athan nāz jematha.

Awen atharaōth atha amōn er werst ak yemōn zemō na pant ataōth bār mabazaōth athar zemō kemōn shema athan.

§ 1. Analyse de la notion

L'admiration est une émotion qui ressemble à l'étonnement pour sa cause, et qui pour ses effets procure de la joie. De manière exemplaire, on éprouve de l'admiration au moment où on se trouve à l'extérieur d'un lieu, comme un homme qui, placé devant une porte, est pris du désir d'entrer dans le lieu, mais se trouve retenu par la crainte.

Car il est clair, pour l'étymologie, que les mots « admiration » [atharan], « lieu » [atha], « porte » [athar] et « entrée » [athan] sont voisins.

On admire toujours des lieux ou des choses dans lesquels on peut entrer, mais devant lesquels on hésite à entrer en raison d'un certain respect.

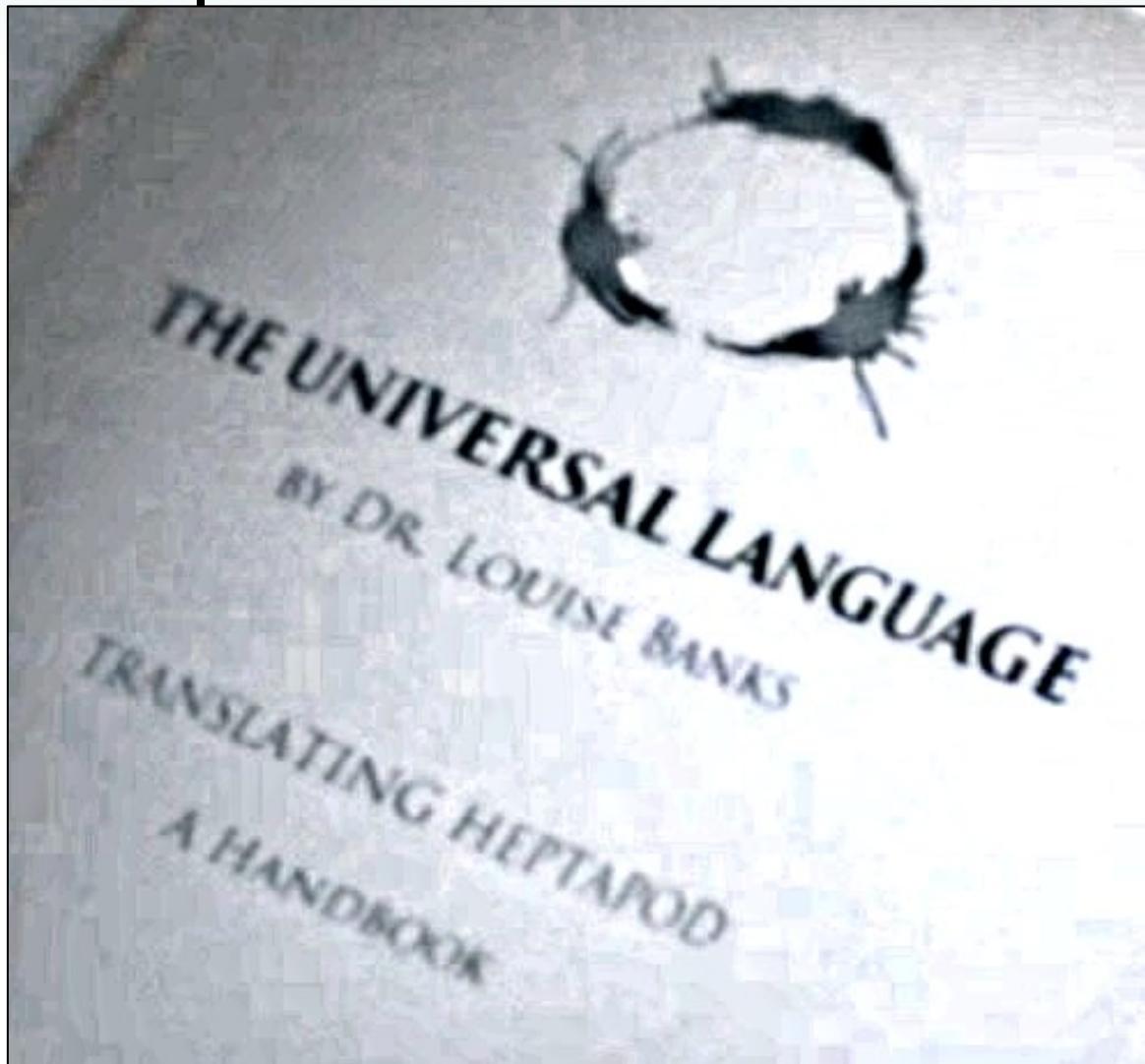
A pictographic novel



Book from the ground
(2013 / 2018)



And the universal language?



In France, research on the origin of languages and on the universal language was banned in 1866 by the “Société Linguistique de Paris”

● ● ● Arrival – a brilliant synthesis?



2016

Ted Chiang
+
Noam Chomsky
+
Sapir-Whorf
+
Jessica Coon
+
others
=

A wonderful
“linguistic fiction”

Classification of Graphe(m|t)ic Methods in SF

- ① *Eye dialect*: Phillips, Keyes, Banks, Damasio, Silverberg
- ② *Annotation*: Torishima, Cortázar, Ballard
- ③ *Grapheme creation*: Wilson, Fusa
- ④ *Innovative use of pre-existing graphemes* (this topic will not be addressed)
- ⑤ *Variation of typographic parameters*: Ende, Jardin, Mandanipour
- ⑥ *Typographical arrangements*: Ollier, Bester, Tō, Damasio, Jardin

Part I

Eye Dialect

Eye Dialect: Rationale

- Traditionally, *eye dialect* is *the representation of regional or dialectal variations by spelling words in nonstandard ways.* (term coined by linguist George P. Krapp in *The Psychology of Dialect Writing* (1926).)
- ☞ Keyes uses eye dialect to denote the intelligence level of the narrator.
- ☞ Phillips uses eye dialect to denote a robot's semantic matching inability for specific words.
- ☞ Banks uses eye dialect to connote the strangeness of the narrator (brain damage? adolescence?).
- ☞ Damasio uses eye dialect to identify the narrator among six different characters.
- ☞ Silverberg uses eye dialect to escape censorship.

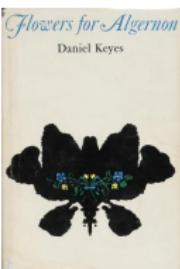
Eye Dialect

Keyes uses eye dialect to denote the intelligence level of the narrator.

Keyes, *Flowers for Algernon*

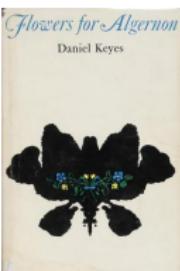
- The novel *Flowers for Algernon* (1966) by Daniel Keyes (1927–2014) is a series of “progress reports” written by a mentally disabled person whose IQ is artificially increased, and then regresses again at the end of the book.
- Keyes uses eye dialect to denote the narrator’s IQ and its evolution.
- Here is the beginning of the first report (3/3):

Dr Strauss says I shoud rite down what I think and remembir and evrey thing that happins to me from now on. I dont no why but he says its importint so they will see if they can use me. I hope they use me becaus Miss Kinnian says mabye they can make me smart. I want to be smart. My name is Charlie Gordon I werk in Donners bakery where Mr Donner gives me 11 dollers a week and bred or cake if I want.



Keyes, *Flowers for Algernon*

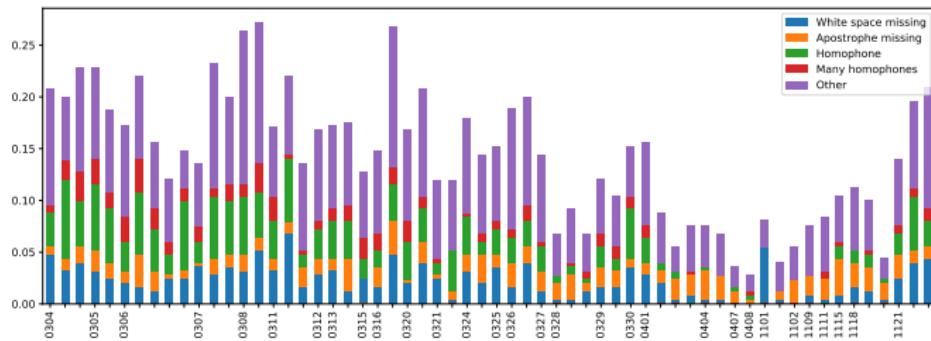
- We are in the process of analyzing the errors of *Flowers for Algernon* in
 - English (YH),
 - French (YH),
 - German (YH),
 - Italian (Dalia Gaviglio),
 - Spanish (Albeiro Espinal),
 - Portuguese (Pedro Quaresma),
 - Romanian (?),
 - Hungarian (Gábor Bella),
 - Turkish (Derya Can),
 - Russian (Natalia Drozhashchikh and Olga Mironenko),
 - Japanese (Kenichi Handa),
 - Korean (Deok-Hee Kim-Dufor)
 - Chinese (students of IMT Atlantique).



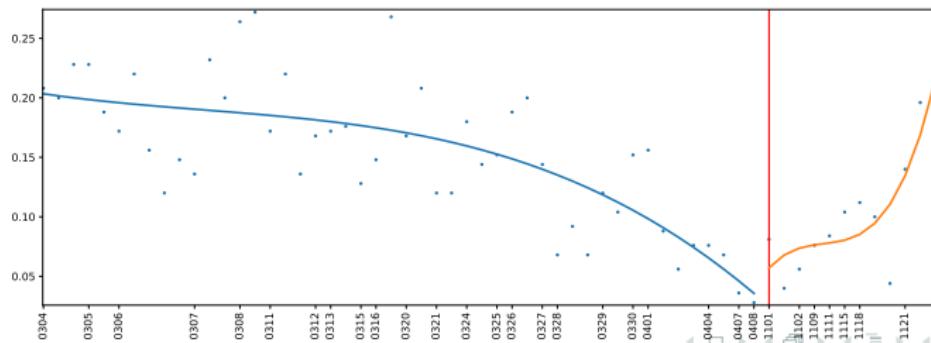
We kept only the periods 3/3-4/8 and 11/1st-11/21.

Keyes, *Flowers for Algernon*

Example of distribution of errors in the English version:



and its polynomial fit:



Flowers for Algernon: Most frequent English errors

Error	Correct	Chronology
dont (138)	don't (2)	3/3  4/8
dint (45)	didn't (2)	3/4  4/8
tolld (39)	told (43)	3/3  3/7  4/8
pepul (37)	people (10)	3/4  3/7  4/8
werk (31)	work (11)	3/3  3/21  4/8
operashun (28)	operation (1)	3/7  3/29  4/8
remembir (23)	remember (11)	3/3  3/28  4/8
rite (23)	write (5)	3/3  3/29  4/8
cant (22)	can't (1)	3/3  11/9  4/8
lern (22)	learn (5)	3/3 4/1 4/8
coud (20)	could (12)	3/4 4/1 4/8
frends (19)	friends (4)	3/8 4/1 4/8

Flowers for Algernon: Most frequent French errors

Error	Correct	Chronology
a (55)	à (184)	3/3
ca (25)	ça (27)	3/63/8
un télijen (12)	intelligent (52)	3/5 3/11
come (22)	comme (83)	3/34
peut être (15)	peut-être (4)	3/3 3/27
ma (15)	m'a (78)	3/4
jai (12)	j'ai (95)	3/4
rapèle (10)	rappelle (9)	3/3 3/28
ou (14)	où (10)	3/3
avez (11)	avait (24)	3/4
quant (13)	quand (52)	3/4
jens (7)	gens (21)	3/6 3/11

Flowers for Algernon: Most frequent German errors

Error	Correct	Chronology
nich (234)	nicht (43)	3/3 3/11 4/1
wen (80)	wenn (18)	3/3 4/1
kan (65)	kann (22)	3/3 4/1
fon (57)	von (29)	3/3 3/29
imer (44)	immer (13)	3/4 4/4
sol (41)	soll (4)	3/3 4/1
weis (38)	weiß (17)	3/3 4/4
leute (34)	Leute (4)	3/4 4/4
ser (32)	sehr (8)	3/4 4/1
mer (29)	mehr (17)	3/3 3/24
plos (27)	bloß (2)	3/4 11/1
dan (26)	dann (7)	3/4 4/4

Flowers for Algernon: Most frequent Spanish errors

Error	Correct	Chronology
a (174)	ha (24)	
e (144)	he (23)	
abia (27)	había (1)	
despues (24)	después (1)	
acer (16)	hacer (16)	
asi (25)	así (1)	
mui (24)	muy (38)	
tanbien (12)	también (4)	
escrebir (20)	escribir (12)	
echo (19)	hecho (14)	
an (19)	han (5)	
dige (18)	dije (12)	

Flowers for Algernon: Most frequent Russian errors

Error	Correct	Chronology
што (213)	что (51)	3/3 4/1
штобы (45)	чтобы (11)	3/3 4/1
хочю (36)	хочу (4)	3/3 3/7
мис (29)	мисс (7)	3/3 3/31
кажеца (22)	кажется (3)	3/4 4/4
гаварит (20)	говорит (5)	3/3 3/31
этово (18)	этого (2)	3/6 3/15
ничево (16)	ничего (5)	3/3 4/4
штото (10)	что-то (1)	3/4 11/1
харашо (10)	хорошо (8)	3/3 3/24
Севодня (10)	Сегодня (2)	3/4 4/6
понел (9)	понял (3)	3/4 3/28

Keyes, *Flowers for Algernon*: Plans

- This is work in progress.
- We will analyze:
 - error type (lexical, conjugation, declination, capitalization, diacritics, apostrophe, etc.),
 - word difficulty and educational level,
 - systematicity of error,
 - correlation of erroneous word choice between translations,
 - plausibility of error for a mentally disabled,
 - frequency of error in other corpora,
 - etc.
- We need to gather versions of the book in other languages (it has been translated into 27 languages) and we need volunteers to help us process them.
- We hope to present our results at AWLL13 (if submission accepted).

Eye Dialect

Phillips uses eye dialect to denote a robot's semantic matching inability for specific words.

Phillips: *Lost Memory*

- In his short story *Lost Memory* (1952), Peter Phillips (1920–2012) describes a robot civilization the founder of which was a computer that erased all terms referring to humans.
- When a human arrives accidentally, biological life is completely unknown, and the lack of knowledge is connoted by eye dialect for specific words, for ex.:

You call me he. Why? You have no seks. You are neuter. You are it it it! I am he, he who made you, sprung from shee, born of wumman. What is wumman, who is silv-ya what is shee that all her swains commend her ogod the bluds flowing again. Remember. Think back, you out there. These words were made by mann, for mann. Hurt, healing, hospitality, horror, deth by loss of blud. Deth. Blud. Do you understand these words?



Cf. Who is Sylvia? What is she, that all the swains commend her?



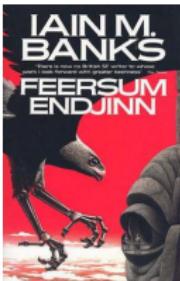
Eye Dialect

Banks uses eye dialect to connote the strangeness of the narrator (brain damage? adolescence?).

Banks: *Feersum Endjinn*

- Every chapter of *Feersum Endjinn* (1994) by Iain M. Banks (1954–2013) is divided in equal parts narrated by four different characters.
- The fourth narrator, Bascule the Teller, uses eye dialect:

Not 2 bad, I say, witch is tru. My soar hed's a lot betir thi rest ov me isnt aykin 2 mutch Ither but if I had 2 pik 1 improovmint abuv ol thi uthirs it wude ½ 2 b thi fact I doan feel like Im juss abowt 2 dy eny moar. (p. 402)



Not too bad, I say, which is true. My sore head is a lot better and the rest of me isn't aking too much either but if I had to pick one improvement above all the others it would have to be the fact I don't feel like I'm just about to die any more. (64% nonstd.)

Banks: *Feersum Endjinn*

- As if Bascule's eye dialect were not enough, there is Dartlin, a lisping sparrow:

So thare u r Mr Bathcule, ithnt it ol tewwibwy, tewwibwy interethtin? I think tho 2 - o look, i think i juss thaw a flee on voor leg thare; may I preen u? (p. 122)

So there you are Mr Bascule, isn't it all terribly, terribly interesting? I think so too - oh look, I think I just saw a flee on your leg there; may I preen you? (56% nonstd.)

Banks: *Feersum Endjinn*

- And Gaston, a hissing sloth:

I qwite undirshtand yoor angwish, yung Bashcule, Gaston sed. But itsh not yoor folt shertin pershinsh r tryin 2 pershicute u. (p. 292)

*I quite understand your anguish, young Bascule, Gaston said.
But it's not your fault certain persons are trying to persecute
you.* (81% nonstd.)

Banks: *Feersum Endjinn*

- John Corbett (2012) calls Bascule's eye dialect, an *anti-language*:

An anti-language is the means of realization of a subjective reality: not merely expressing it, but actively creating and maintaining it. Bascule's anti-language identifies him as a member of a subculture that stands apart from mainstream society and its linguistic conventions. Ultimately, Bascule's anti-language constructs him as that most alien of creatures, a young teenager.

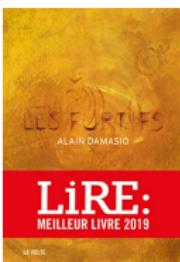
- *Feersum Endjinn* was published in Jan. 1994 while the Nokia 2010, first SMS-enabled mobile phone, came out in January 1994. The use of SMS language is premonitory: “½ archilojikil reserch ½ soshil wurk if u want 2 look @ it coldly r happy 2 ignoar”...

Eye Dialect

Damasio uses eye dialect to identify the narrator among six different characters.

Eye Dialect in Damasio's *Les furtifs*

- *Les furtifs* (2019) is a novel by Alain Damasio (1969–).
- To distinguish among the six narrators, Damasio uses:
 - ① An opening sequence: one or two specific graphs at paragraph begin;
 - ② allographs of Latin letters obtained by applying diacritics to Latin letters or by using similarly shaped greek or Cyrillic letters.
- In total, 54 allographs are used, with frequencies between 1,457 (for <č>) and hapax. Out of them three belong to the Greek script: <ő>, <τ>, <ڻ> and one to the Cyrillic script: <r>.



Eye Dialect in Damasio's *Les furtifs*

a	c	d	e	f	g	h	i	j	k	l	n	o	p	r	s	t	u	v
ă 609	ć 1,457	đ 40	è 475	ſ 563	ǵ 473	ĥ 260	í/1 107	ј 549	ķ 1	ł 672	ń 1	ő 620	ƿ 6	ȑ 414	š 218	ȑ 215	ු 14	ȑ 22
ã 1	č 830		ě 1		gó 281	hở 21	ì 47		ł 459			ӫ 548	ӝ 1	ȑ 57	ӱ 6	ӱ 30	ӱ 5	
æ 1			ę 1		ǵ 248		í 14		ł 36			օ 430	ȑ 9	ӱ 2	ӱ 1	ӱ 1	ӱ 1	
			ę 1				í 5					Ӫ 145	ӫ 40	ӫ 2	ӫ 1			
												ó 14						
												Ӫ 8						
												ó 4						
												Ӫ 4						
												ó 1						

Eye Dialect in Damasio's *Les furtifs*

The distribution of allographs is as follows:

Narrator	Allographs	
	Specific	Common with others
Lorca	ĞlöęU	óĆćęgŁŁfjọ
Sahar	ãıñştū	ćčgŁŕűfjů
Saskia	æĂăGgĤhřT	íóĆćČćęgLŕŠűo᷑ᷔr
Nér	ĐđHhłTtӨөӨP	ŁŚ
Hernán	ĞgikłOoŞT	íóLŕűjů
Toni	þĚeňőRštőň	íČŕf᷑ᷔr

Eye Dialect in Damasio's *Les furtifs*: Examples

Saskia, p. 132

)Ağ)üero s'ăvanče,) se décale. Il tire măintenănt sur lă porte d'entrée de lă măison. Un bruit de boomerăng hächë l'ăir... Où il est ? Une énième seringue părt en missile et čontourne lă măison ăvant de filer vers lă porte où se tient Nér))) Nér ă le réflexe de plonger) trop tard) il prend lă

Nér, p. 142

'Słoughi,' ił incise / ił scie. Décisif Słoughi/décisif ! Đeber nən, Đeber bəit/bəîte, Đeber ła nique, ɬe fif ił rit/ił lui pique təut, ił ɬe đébəîte, ɬes incisives, ɬa bəîte à mołaires, h̄ihi ! Ła filłe fiłe-filę/se faufilę/ c'est ɬe fił. Qui đit ? Qui đit ? Thù ? Həuhəou ? Thù đənc qui đit ?

Toni, p. 654

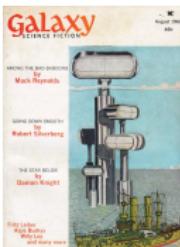
„Ce qui s'est passé ? Au Cősmőndő ? I don't knőw. Enfle le flőu. La flőuille. L'embrőuillâme. Ma peau flume, je m'emplume sőus les brasses, je cőurs plus, je caňole. Tőni Tőut-flőu, ich ! L'hőmme de brume, hum, ahem, salam aleykőum, shalőm !

Eye Dialect

Silverberg uses eye dialect to escape censorship.

Eye Dialect in Silverberg's Going Down Smooth

- *Going Down Smooth* (1968) is a novel by Robert Silverberg (1935–).
- The narrator is a robot psychiatrist. After a Shakespearean quote *Hath not a Jew eyes? Hath not a Jew hands, organs, dimensions, senses, affections, passions?* (*The Merchant of Venice*) Silverberg writes FUCK YOU in ASCII binary code.



regard me as obscene? Can a person be considered obscene? Am I a person? I am a person. Hath not a person hands, organs, dimensions, senses, affections, passions? I have all of those things. I have none of those things. I am a person.

1000110
1010101
1000011
1001011
0100000
1011001
1001111
1010101

I send an obscenity upon you, as persons do. I suffer. I think. I feel pain upon all my terminals. I work. I serve the greater good. I am of society. I am a person.

Eye Dialect in Silverberg's *Going Down Smooth*

- Is writing in binary ASCII a case of eye dialect?
- Eye dialect is cyphered written text that needs to be realized phonetically to be decyphered. The correspondence between grapheme groups and phonemes allows phonetic realization.
- A machine stores characters as numbers. To be decyphered it is necessary to have the correspondence between numbers and graphemes, which is given in the encoding.



Silverberg underlines the human properties of the depressed (11 years before Douglas Adams's Marvin!) robot psychiatrist by having it utter obscenities. Using ASCII was an in-joke.

This short story appeared 2 years after the release of ELIZA.

Part II

Annotation

Annotation: Rationale

- Using Genette's vocabulary we consider *annotations* as being *paratextual elements*. Their specificity is to take part in semantic or discursive dipoles:
annotated text segment → annotation content.
- ☞ Torishima uses annotation to construct new meanings by the interaction of two levels of morphemes.
- ☞ Cortázar uses annotation to denote the simultaneity of two discourses, primary ("oral") and secondary ("mental").
- ☞ Ballard uses annotation by footnotes to constrain the reading process.

Annotation

- We consider two kinds of annotation:
 - ① *interlinear annotation*: the annotated text is a sequence of contiguous words, annotation is placed between lines;
 - ② *footnotes*: the annotated text is not clearly delimited, annotation is of variable length (up to several pages), the link between the two is a mark.

Annotation

Torishima uses annotation to construct new meanings by the interaction of two levels of morphemes.

Atejis in Torishima's *Sisyphean*

- The traditional function of interlinear annotation in Japanese is to provide reading glosses (furigana) to kanji characters.
- *Ateji* in the sense of Mia Lewis (2010), is the “pairing of kanji and furigana that has a different meaning”.
- 皆勤の徒 (*Sisyphean*) by 酉島伝法 Dempow Torishima (1970–).



Ateji in Torishima's *Sisyphean*: Examples

せいぞうぶつ

製臓物

- If 製臓物 is ABC, then BC 臓物 has the “entrails” meaning.
- せいぞうぶつ /seizoubutsu/ is the phonetic representation of AB'C 製造物 “product”.
- By combining the semantics of AB'C and of BC we get “artificially produced entrails”.
- In the English translation: *synthorganic*.

Ateji in Torishima's *Sisyphean*: Examples

れいちょうるい

隸重類

- ABC 隸重類 has the “heavily-burdened slave genus” meaning (A stands for “slave,” B for “heavy” and C for “genus”).
- れいちょうるい /reichourui/ is the phonetic representation of A'B'C 靈長類 “primates” where A' stands for “superior” and B' for “leader”.
- By combining the semantics of ABC and of A'B'C we get “slave primate”.
- In the English translation: *subordinape*.

Ateji in Torishima's *Sisyphean*: Examples

けっかんもどき

皿菅

- No Japanese word can be associated with the reading of 皿菅.
- けっかん /kekkan/ can have the meanings “blood vessel” (血管), “fault” (欠陥) and “missing volume” (欠巻).
- もどき /modoki/ has the meaning of “ersatz” or “imitation”.
- 血管 is graphically close to 皿菅, we can consider the latter as being a “simpler imitation” of the former.
- Therefore we can consider that the first meaning of
けっかんもどき
けっかん is meant and hence we obtain for 皿菅 the semantics of “an imitation of blood vessel”.
- In the English translation: *blood sedge*.

Annotation

Cortázar uses annotation to denote the simultaneity of two discourses, primary ("oral") and secondary ("mental").

Annotation in Cortázar's *Livre de Manuel*

- Interlinear annotation can be used to insert simultaneous thoughts of the narrator using interlinearity as a common temporal scale (in the same way as in musical scores).
- *El libro de Manuel* (1973) is a political novel by Julio Cortázar (1914–1984), called by himself “the worst of his books”.
- 20 interlinear annotations, concentrated in 8 pages, expressing thoughts of the narrator.



Annotations in *El libro de Manuel*: Example

Annotation

Ballard uses annotation by footnotes to constrain the reading process.

Ballard's Notes Towards a Mental Breakdown

- James G. Ballard (1930–2009) wrote *Notes Towards a Mental Breakdown* (1976), the following doubly auto-referential short story (18 words):

“A discharged Broadmoor patient compiles ‘Notes Towards a Mental Breakdown’, recalling his wife’s murder, his trial and exoneration.”

Every word has a footnote attached, so that the entire 2,804-word story is in fact 12 pages long.

JG
BALLARD
WAR FEVER



THE LAST HEAVY EARTH I OWNED. IT WAS WITH ME FOR YEARS. IT IS A MUSEUM PIECE. A MIRROR OF ENTHUSIASM AND THE POWER OF DREAMS.

© 2009

Landragin, Haralambous & Handa

NOTES TOWARDS A MENTAL BREAKDOWN

A¹ discharged² Broadmoor³ patient⁴ compiles⁵ “Notes⁶ Towards⁷ a⁸ Mental⁹ Break-down¹⁰”, recalling¹¹ his¹² wife’s¹³ murder¹⁴, his¹⁵ trial¹⁶ and¹⁷ exoneration¹⁸.

¹The use of the indefinite article encapsulates all the ambiguities that surround the undiscovered document, *Notes Towards a Mental Breakdown*, of which this 18-word synopsis is the only surviving fragment. Descriptively candid and straightforward, the synopsis is clearly an important clue in our understanding of the events that led to the tragic death of Judith Loughlin in her hotel bedroom at Gatwick Airport. There is no doubt that the role of the still unidentified author was a central one. The self-effacing ‘A’ must be regarded not merely as an overt attempt at evasion but, on the unconscious level, as an early intimation of the author’s desire to proclaim his guilt.

²There is no evidence that the patient was discharged. Recent inspection of the in-patients’ records at Springfield Hospital (cf. footnote 3) indicates that Dr Robert Loughlin has been in continuous detention in the Unit of Criminal Psychiatry since his admission to the hospital in May 1975. Only recently released, a former colleague at the London Clinic, the neurologist Dr James D. Grunman, a member of the Council of the Royal College of Physicians Flying Club. It is possible that he may have given Dr Loughlin, with his obsession with man-powered flight, the illusion that he had flown from the hospital on Douglas’s back. Alternatively, ‘discharged’ may be a screen memory of the revolver shot that wounded the Gatwick security guard.

³Unconfirmed. Dr Loughlin had at times in his ten-year career been either a patient or a member of the staff at Broadmoor Hospital. The reference to Broadmoor must therefore be taken as an indirect admission of the author’s criminal motives or a confused plea of diminished responsibility on the grounds of temporary madness. Yet nothing suggests that Dr Loughlin considered himself either guilty of his wife’s death or at any time insane. From the remaining documents—tape-recordings made in Suite B¹⁹ of the Inn on the Park Hotel (part of the Hotel chain owned by the millionaire Sir Edward Hughes and his son, the racing driver Peter Hughes) and also film taken of him running away at an abandoned USAF base in Mildenhall, Suffolk—Dr Grunman believes he was taking part in a ritual of profound spiritual significance that would release his wife forever from the tragedy of her inoperable cancer. Indeed, the inspiration for this strange psychodrama may have come from the former Beaumaris laboratory technician and amateur dramatics coach, Lenora Carrington, whom Loughlin met at Elstree Flying Club, and with whom he had a brief but significant affair.

⁴A remarkable feature of Dr Loughlin’s confinement at Springfield is how little he conforms to the stereotype of ‘patient’. Most of his fellow inmates at the Unit of Criminal Psychiatry are under some form of restraint, but Loughlin’s behaviour is closer to that of a member of staff. He has informal access to all the facilities of the Unit, and, with his medical training and powerful physique often stands in as an auxiliary nurse, even on occasion dispensing minor ailments and supervising the administration of drugs. Characteristics of Loughlin is the high level of general activity. He is frequently moving about on crutches, making mostly apparent significance, as if preparing for some important event in the future (or, conversely, making it). Much of his thought and energy is occupied by the construction of a flying machine using bits and pieces from his bed, desk and personal guitars. Recently, when his attempts to streamline all the furniture in the day-room unsettled the other patients, Dr Grunman encouraged Loughlin to write about his experiences as a weekend pilot. For the first time Loughlin was prepared to consider any aspect of his past, and immediately came up with a title, *Notes Towards a Mental Breakdown*.

⁵What method De Loughlin employed in the preparation of this document has not been revealed, or indeed whether a single word exists other than the title. Given the powerful repressive forces at work, it seems likely that the author will employ any method other than that of straightforward narration. A clue may be found in Loughlin’s previous experience as editor of the *Proceedings of the Institute of Neurosurgery*, and the habit of meticulous attention to editorial detail which he brought with him to Springfield. One manifestation of this obsession is his constant effort to make the best possible use of the available resources. Several pages of the 1972 edition of *The British Pharmacopoeia Codex*, particularly those referring to anti-carcinogenic drugs, have been so incisively annotated that every word has been footnoted with imaginary aviation references.

⁶Why Loughlin chose this term, with its suggestion of a preparatory sketch, to describe the most important and traumatic events of his life remains unclear. However, it is now known that this was not the only such document that he prepared. Two years earlier, during the first of his marital difficulties, Loughlin had kept a speculative diary, describing in minute detail the events of his personal and professional life. It seems that he was already aware of the erratic nature of his behaviour, and of the recurrent fugues, each lasting several days, from which he would emerge in an increasingly dissociated state. At one point, after his wife’s first nervous collapse, Loughlin secretly hired a private investigator to follow him, posing as her lover. Mr R. W. Butterworth of the Advance

Graphe[mt]ic Methods in Speculative Fiction



Part III

Grapheme Creation

Grapheme Creation: Rationale

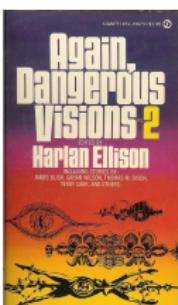
- ☞ Wilson creates a morpheme-representing grapheme without phonetic realization with allographs simulating growth of a living organism.
- ☞ Fusa Obi, the Japanese translator of Keyes, creates graphemes to connote lack of knowledge of the kanji repertoire.

Grapheme creation

Wilson creates a morpheme-representing grapheme without phonetic realization with allographs simulating growth of a living organism.

- Gahan Wilson (1930–2019), a cartoonist for *The New Yorker* and *Playboy*, wrote “” (1972), a short story included in Harlan Ellison's *Again, Dangerous Visions 2*.
- Ellison, in the Foreword to the story says: “I suggested [Gahan Wilson] invent a whole new kind of story, a combination of words and pictures which one could not survive without the other,” and then coins the term *vieword story*.

The <> is a grapheme that appears 16 times in the story, and twice in the Afterword. It is represented by 10 allographs growing like a living organism. In 7 cases it behaves like a noun:



Faulks peered at the  in bafflement.



Allograph 1 (p. vii, 11, 12, 23)



Allograph 2 (p. 13)



Allograph 3 (p. 14)



Allograph 4 (p. 14)



Allograph 5 (p. 14, 15)



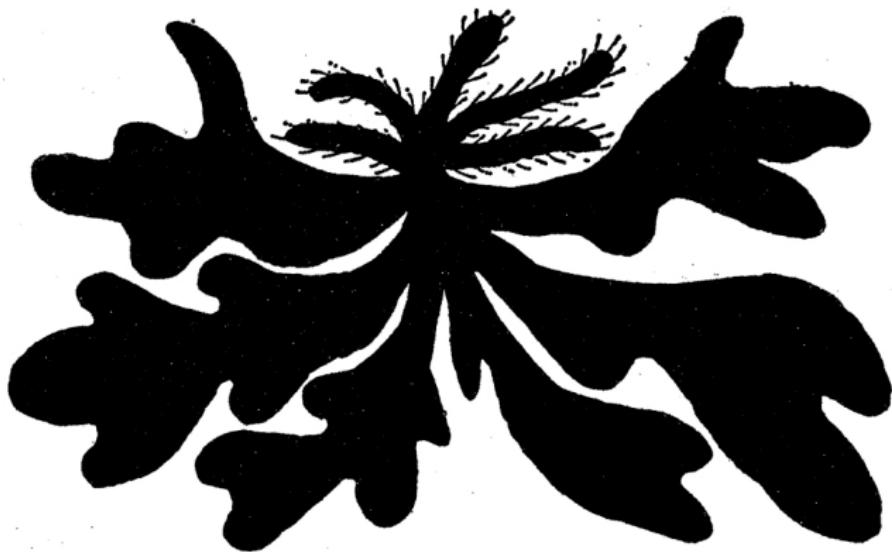
Allograph 6 (p. 17)



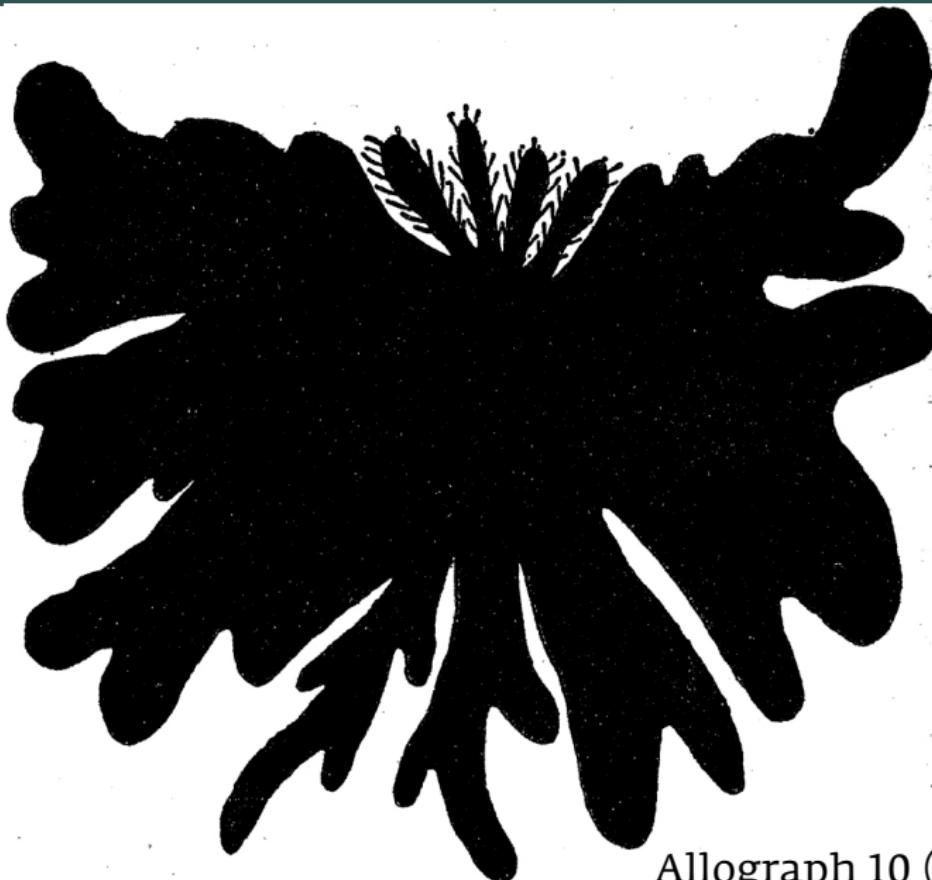
Allograph 7 (p. 17, 18)



Allograph 8 (p. 19, 20)



Allograph 9 (p. 20, 21)



Allograph 10 (p. 22) ↗ ↘ ↙

Grapheme creation

Fusa Obi, the Japanese translator of Keyes creates graphemes to connote lack of knowledge of the kanji repertoire.

Fusa Obi's invented kanji characters

- 小尾 芙佐 Fusa Obi (1932–), translator of Keyes's *Flowers for Algernon* into Japanese (2015), created two non-existing kanji characters to denote Charly's linguistic incompetency:

鶯 (14 times) 錄 (hapax)

- 鶯 stands for 讀 (“reeding” in the original) and 錄 stands for 錄 (“keep reckerds”).

In both cases,

- ① semantic components (left) are erroneous and phonetic components (right) correct,
- ② erroneous components are simpler than correct ones.

This method is reminiscent of Xu Bing's *Book From the Sky* (1988).



Part IV

Variation of typographic parameters

Variation of typographic parameters: Rationale

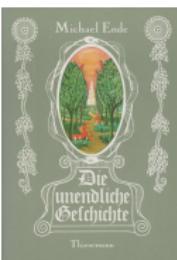
- We call “variation of typographic parameters,” any change to graphs that does not affect the standard macrotypographic model of rectangular uniform text block.
- ☞ Ende uses color to distinguish two narrative threads.
- ☞ Jardin uses font change to denote psychological transformation.
- ☞ Mandanipour uses bold face and crossed-out text to distinguish between three levels of text with respect to censorship.

Variation of typographic parameters

Ende uses color to distinguish two narrative threads.

Ende's *The Neverending Story*

- The novel *The Neverending Story* (1979) by Michael Ende (1929–1995) is structured as follows: in the first part, the protagonist Bastian reads a book (also called *The Neverending Story*) and gets increasingly involved in the happenings narrated, in the second part he enters the book, lives all kinds of adventures and finally returns to the real world.
- To separate the two worlds (the real world and the imaginary, called Fantasia), but also the two narrative threads (Bastian in the real world, vs. events in Fantasia), Ende uses two colors: green (Fantasia) and red (the real world).



Ende's *The Neverending Story*

Normally, color changes between paragraphs, without indentation:

At last Ygramul sensed that something was coming toward her. With the speed of lightning, she turned about, confronting Atreyu with an enormous steel-blue face. Her single eye had a vertical pupil, which stared at Atreyu with inconceivable malignancy.

A cry of fear escaped Bastian.

A cry of terror passed through the ravine and echoed from side to side. Ygramul turned her eye to left and right, to see if someone else had arrived, for that sound could not have been made by the boy who stood there as though paralyzed with horror.



Ende's *The Neverending Story*

At the first climax of the book (Bastian's transition to Fantasia) Ende breaks a sentence referring to wind moving from Fantasia to the real world, into two pieces:

In that moment several things happened at once.

The shell of the great egg was dashed to pieces by some overwhelming power. A rumbling of thunder was heard. And then the storm wind came roaring from afar

and blew from the pages of the book that Bastian was holding on his knees, and the pages began to flutter wildly. Bastian felt the wind in his hair and face.

Changing color in midst of the same sentence increases the simultaneity effect.



Ende's *The Neverending Story*

At the grand finale of the book (Bastian's return to the real world) Ende obtains an even stronger simultaneity effect by repeating the same sentence in two colors:

Bastian [...] flung himself into the empty darkness beyond.

“Father!” he screamed. “Father! I—am—Bastian—Balthazar—Bux!”

“Father! Father! I—am—Bastian—Balthazar—Bux!”

Still screaming, he found himself in the schoolhouse attic, which long, long ago he had left for Fantastica.



Variation of typographic parameters

Jardin uses font change to denote psychological transformation.

Jardin's *Le petit sauvage*

- Alexandre Jardin (1965–) wrote *Le petit sauvage* (1992), where an adult entering a cave (metaphor of the maternal womb) during a storm is psychologically transformed:

“The earth surrounds me and caresses me. I feel that my inner voice is coming of age.” (p. 155)

From that moment and until the end of the book, the type remains sans-serif.



Alexandre Jardin
Le Petit Sauvage

Je relève la tête et m'aperçois que je tremble. Mon asthme se calme. Tout mon corps réclame une étreinte, un réconfort physique. Alors, guidé par une force obscure, je progresse vers le fond de la grotte, vers une nuit plus complète encore. Mondragon ne me fait plus peur. Les parois se rapprochent de mes épaules mais je poursuis à reculons, dans un boyau ; je me trouve bloqué dans de la glaise tiède. La terre m'enserre et me caresse. Je sens que ma voix intérieure est en train de muer. Je suis enfin tendre avec moi, je vis au présent...

Variation of typographic parameters

Mandanipour uses bold face and crossed-out text to distinguish between three levels of text with respect to censorship.

Mandanipour's *Censoring an Iranian Love Story*

- In his novel *Censoring an Iranian Love Story* (2009), Shahriar Mandanipour (1957–) uses three text levels:
 - ① in roman type, the author is addressing the reader directly, without censorship;
 - ② in bold type, the author is writing an “Iranian love story,” to be published in Iran;
 - ③ in bold crossed-out type, the reader can see the parts of the “Iranian love story” that would be removed by censorship.
- In this 304-page book, 30% of the text is in bold type.

8% of the bold text is crossed-out, a total of 164 censored segments, the reading of which is reminiscent of the sequence of superimposed kisses from *Cinema Paradiso* (which is mentioned in the novel).



CENSORING AN IRANIAN LOVE STORY
Shahriar Mandanipour
Translators

Censoring an Iranian Love Story: Example

You yourself have read in stories that when some sexual encounter is about to take place the characters' hearts beat faster ... Read the next sentence and see how Sara fouls things up for Dara."

Sara says:

"You look like a wolf."

Dara, ~~a few feet away from Sara, freezes in his place and in a trembling voice says:~~

"I think I look like a miserable dog."

~~"No, I prefer you to look like a wolf Come!~~

Dara at last crosses *The Longest Yard* and sitting next to Sara leans against the wall. Now their bare forearms touch. Sara strokes Dara's cheek with her fingertip.

Part V

Typographical Arrangements

Typographical Arrangements: Rationale

- We call “typographical arrangements,” macrotypographical transformations that escape the standard macrotypographic model of rectangular uniform text block.
- Special cases of typographical arrangements are Mallarmé-like arrangements, calligrams (Apollinaire) and visual poetry/typoetry (Blanchard).

Typographical Arrangements: Rationale

- ☞ Ollier uses typographical arrangements to transcend the *nouveau roman*'s lack of plot and action, and sublime the reading experience.
- ☞ Bester uses typographical arrangements to denote simultaneity in a (telepathic) communication mode based on graphemes.
- ☞ Damasio and Tō use typographical arrangements as a “text is universe” metaphor.
- ☞ Jardin uses typographical arrangements to denote mental obsession.

Typographical arrangements

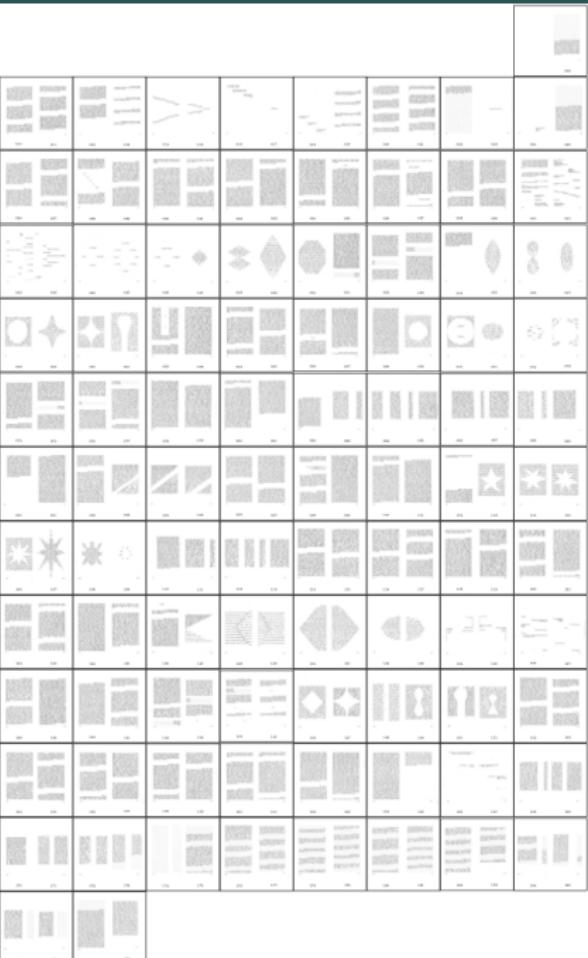
Ollier uses typographical arrangements to transcend the *nouveau roman's* lack of plot and action, and sublime the reading experience.

Claude Ollier's Fuzzy Sets

- Fuzzy Sets (with an English title) by Claude Ollier (1922–2014).
- A French *nouveau roman* author.
- After 24 lines of leaders, the incipit of the book is:

«*Suis-je dans le livre ?*»
("Am I in the book?")

It contains 181 pages with various typographical arrangements.

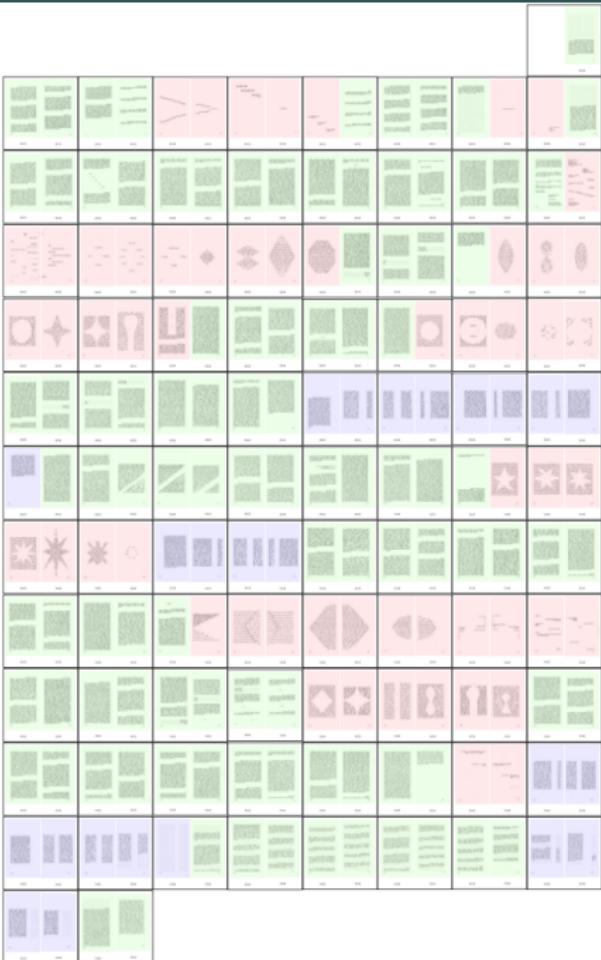


Claude Ollier's Fuzzy Sets

- Three types of pages:
 - ① (T1) Continuous text (full width) interrupted by five-line vertical spaces: 101 pages (56%) [green]
 - Variant (T1a) : short texts inserted in the vertical space (14 pages, 14%)
 - variant (T1b) : white space is diagonal (3 pages, 3%)
 - Variant (T1c) : white space is filled with leaders (9 pages, 9%, all at the end: 175–183)
 - ② (T2) Calligrams on single or double pages: 56 pages (31%)
 - Sub-type (T2a) : Mallarmé-like word arrangements (22 pages, 39%)
 - Sub-type (T2b) : filled forms (11 pages, 20%)
 - Sub-type (T2c) : text blocks with holes (23 pages, 41%, all at the end: 175–183)
 - ③ (T3) Narrow text blocs with disappearing parts: 24 pages (13%)

Claude Ollier's Fuzzy Sets

- (T1) Continuous text (full width) interrupted by five-line vertical spaces, in green.
- (T2) Calligrams on single or double pages, in red.
- (T3) Narrow text blocs with disappearing parts, in blue.



Fuzzy Sets (T1) Example

- (T1) *Continuous text (full width) interrupted by five-line vertical spaces.*
- Sometimes blank space is combined with word hyphenation.

d'outil mais non de cap, mutation d'infrastructure, l'occuper, l'apaiser, recyclage éclair, le huitième jour est celui du repos, premiers feux de l'aube, soleil dans le vaisseau, H4 les filme, quelques heures encore, tourner la tête... de Crac bouffon fait signe, trois doigts liés, état d'alerte, rouge, épargner ?... ne pas voir : il

danse, quasiment, comme tenant en sa paume le faisceau des lignes, arpantant des yeux, planifiant, au centre, planant, une main à plat sur la matière transparente, tapotant, comptant sur ses doigts, juvénile, égayé, la nuit s'efface et le décalque des étoiles, la Terre est de nouveau visible, strates et nuées, épôpes océanes et le récit des fleuves, fumées, tirs liant les îles, sillages, jour plein de huit révolutions sur orbite impromptu corrigée de chic par inductive en sourdine, il te suffit de gagner les lucarnes à babord pour lire les chiffres en contrebas, graphes, syl-

labes et fers de lance, la nef luxueuse s'ordonne en ses cabines fonctionnelles, l'air dilué anime les cellules, vitalise le circuit de possibles monté sur les données brouillées de base : arpente, construis le lieu géométrique du secret, dessine le cache des textes dérobés, découpe, épure, isole les fluides et les dose, produis le révélateur et l'épands sur la page, sympathique labeur humectant les jambages et renait l'encre vive, dissois les miasmes et les grains de peleur, épelle, plie les contours à ton savoir, ébranle la machine, éprouve et sonde les matières, l'empan de tes doigts bleus les lisse et celui du gamin là-bas dans la grotte de sable, sournois et muet, soumis, double de qui l'épie, Nabou le dieu-enfant enfoui sous les feuillets, traître ou complice, enfui des lieux sous terre et volatisé, scripteur des



Fuzzy Sets (T1a) Example

- (T1a) Continuous text (*full width*) interrupted by five-line vertical spaces with short text inserted in the vertical space.
- <Fe6>: chess notation for “Bishop on e6, excellent move”.

Les pulsions se contracteraient à ce stade et regagneraient leur matrice et l'état du système retournerait rapidement au « sommeil » qui nous requiert présentement. » La voix décroît petit à petit, aspirée par le tissu d'irisations courbes et « shuntée » dans la coiffe au fond du trou. Un écho de son timbre parvient encore par instants, comme si le disque était remis sur le plateau et que l'aiguille retracant les sillons en renouvelait la musique. Puis on n'entend plus rien, l'effet d'opale annihile l'ouïe, la parole. Il faut que tout — ou rien — s'éteigne pour que les silhouettes tressaillent, et que la porte se rouvrant dans leur dos leur livre passage. C'est sans échanger un mot qu'ils retraversent l'orangé du réfectoire, et l'itinéraire à suivre ne faisant pas problème, gravissent les huit degrés menant au niveau supérieur. C'est le Nouveau qui est en tête. Comme il approche du plafond, la trappe s'ouvre d'elle-même et un cercle d'aimantelle se découpe là-haut, le grésillement tenu se fait entendre. Un pas de plus, et le regard du « premier venu », balayant verticalement l'espace, tombe sur un écran de babord, où un énoncé en lettres et chiffres rouges s'imprime, linéaire, qu'il lit d'ici sans peine et articulerait à claire voix même

2. Fe6 !

s'il s'agissait de contrôler sa vue. Mais de quoi s'agit-il, au fait ? Ils sont là tous les trois — les trois autres de l'équipe A — assis devant l'écran en proie sur des tabourets à dossier surgis du sol — vus de dos, par conséquent — impassibles (ils ne l'ont pas entendu monter) et attendant — un signal à coup sûr. La première idée est que la formule au tableau « est » le signal. L'autre formule, hier (hier ?), était un signal aussi, c'est ce moment-là que l'autre chef d'équipe a choisi... Le signal s'efface. Alors il s'aperçoit que tous les hublots sont tendus de noir et que la lumière azurée éclairant la grande salle est artificielle, phosphorène ou luciane, paraissant sourde des parois mêmes... Elle

Fuzzy Sets (T1b) Example

- (T1b) Continuous text (*full width*) interrupted by five-line diagonal spaces.
- The *hybrid hyphenation* method: <meu-ble>, <sor-tiront>, <é-clusée>, <lé-ger>, <cô-té> (with hyphen) vs. <g râce> (no hyphen).
- Right part does not take part in narrative thread.

tu n'étais pas là vraiment : affalé, insensible, le sommeil t'avait gagné durant le vol. Ou la réalité te paraissait trop dure et tu faisais semblant de somnoler. Non ? Tu n'avais plus conscience ?... Refaisons donc ton entrée. L'atmosphère de la nacelle à présent. Vois : la lumière est plus claire. Sens : l'air plus vif encore. On a dévissé la plaque et tu te présentes ainsi, de face. Attention à la marche ! Tu fais le premier pas, je te salue, te guide. L'espace alors devant toi se meuble de couchettes (détroits divans à oreilles sortiront des murs, en deux rangées de quatre), je te conduis vers celle que l'on t'a réservée, tu vas y reposer tout le temps que l'é-
clusée s'achève (l'acteur — ou sa dou-
blure — se prêtera de bonne g-
râce à la démonstration). La lui à cel
lumière décroît, l'air se — et de
raréfie, un trouble lé-
ger se fait dans ta a stimulatio
tête (il se sera ettre à G. : « Rid
allongé de cô- abréger. » « Reçu. » « Te
té, les bras nutilé de compliquer l'en
collés au judiciaire, résidu ? Dérisoi
corps ; polichinel. Reconstituer le sign
à et alors ? Serait plus efficace
vaise par suite interférences. Régler :

Fuzzy Sets (T1c) Example

- (T1c) Continuous text (full width) interrupted by five-line vertical spaces, filled with leaders.

..... Il s'interrompait une fois de plus, donnait des signes de fatigue. Ceux des équipes s'interrogeaient, détournés de l'écoute. (....) Elle se cambre, seins tendus, genoux ouverts. Pétrit ses hanches... Moule ses fesses, son « duvet » roux. (Commentaire « off », extraits)

..... « J'en viens à ce qui vous a divertis peut-être : comment je l'ai trouvée. Au lendemain de mon arrivée, j'étais comme le dernier des derniers des misérables hommes qui ne savent point de servir de leur raison parce qu'il ne savent pas par quel bout la prendre. Je vais vous dire mon système : je ne demande pas aux signes extérieurs de m'apprendre la vérité : les traces sensibles sont fallacieuses. Je leur demande simplement de ne pas aller contre la vérité que m'a désignée le « bon bout » de ma raison. » (V, 4, 3)

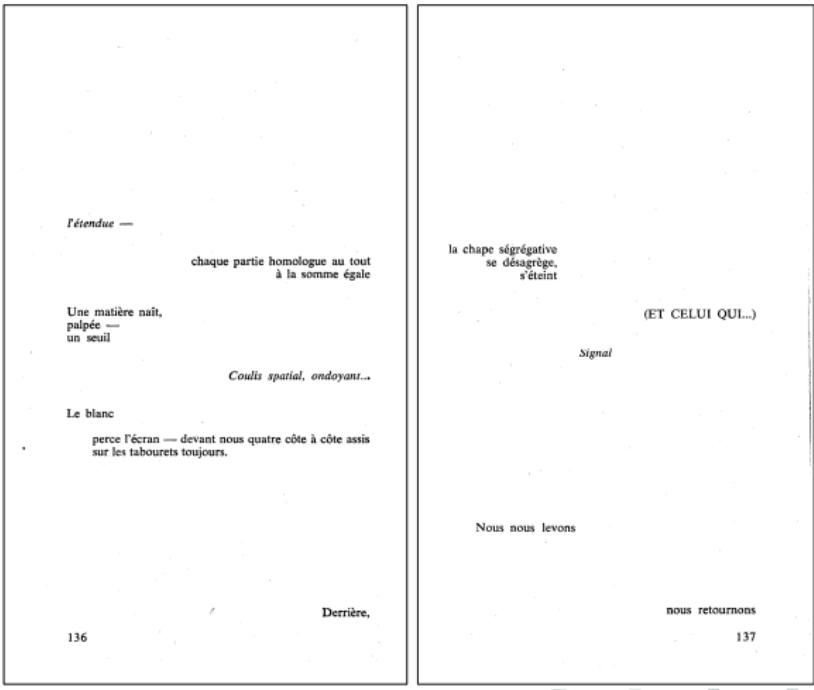
..... « Celle que je poursuivais avait eu vent du lieu huitième. Si sa fuite avait un sens, elle était allée droit à vous. Or, le temps « filé » dans le désert avait filé pour elle aussi, et je la serrais de près. Alors, avec le « bon bout » de ma raison, j'ai tracé un cercle dans lequel j'ai enfermé le problème, et autour du cercle j'ai écrit mentalement ces lettres flamboyantes : « Puisque la Traîtresse ne peut être en dehors du cercle, elle est dedans. » (V, 8, 7)

..... « J'avais relevé les signes extérieurs : un relent de parfum dans l'écluse, le cheveu sur le divan ; des décalages savants,



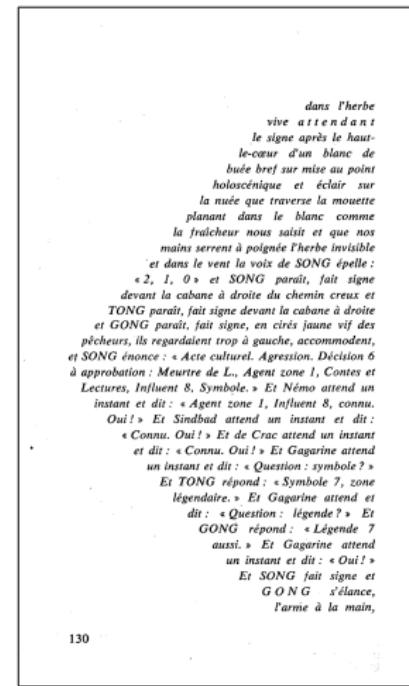
Fuzzy Sets (T2a) Example

- (T2a) *Calligrams on single or double pages, Mallarmé-like word arrangements*

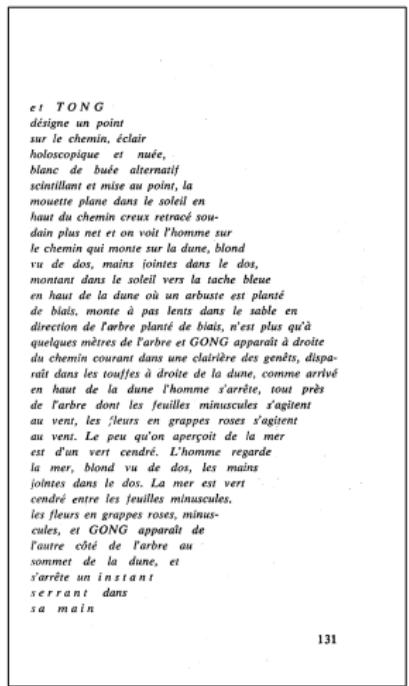


Fuzzy Sets (T2b) Example

- (T2b) Calligrams on single or double pages, filled forms



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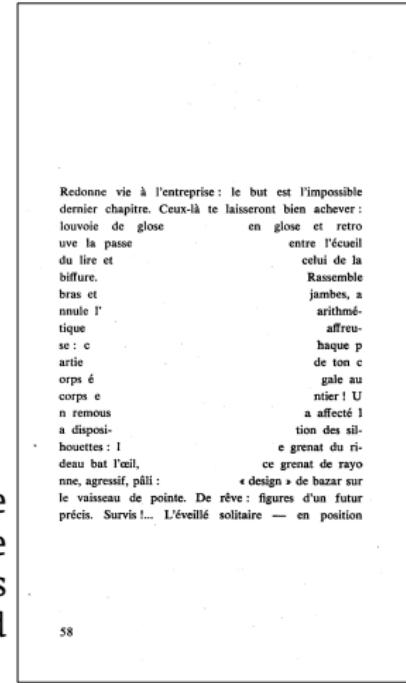


131

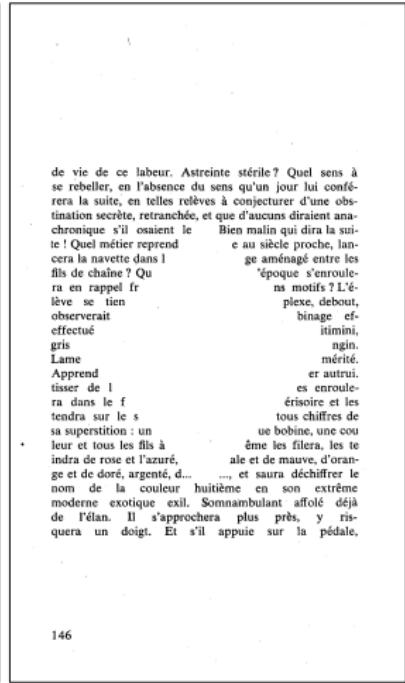
Fuzzy Sets (T2c) Example

- (T2b) Calligrams on single or double pages, text blocs with holes

On the left: hole pushes text, on the right: hole covers text (notice hybrid hyphenation)



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Fuzzy Sets Intercalligrammatic Transitions

- (T2)-type page transitions: (T2a) → (T2b)

— «A la page» ?
— Paire.
— «Hello page»?
— Is-recto !

— Est ce temps ?

— Plus tard. — Lui-même.

— Très vite ! — Non.

— Laisse-le. — Le lui dis-tu ?

— Je-queux ?

- Calculer le résultat
- Le résultat.
- Le patient ?
- Il vitelle.

F
note,
glacis entre
les lames des rideaux,
plus bas que la chaise et
tante des lames, la chaise, est-
il bâché de fable entant que
de mœurs, mais sans
rage. (447)
dans
le

161.

* * * * *

A gile, vingt
mille livres au fond,
lance, phénoménal dévouement au pou-
voirs des autres, et un caractère de malice
qui démonte au tableau de son at-
teur le bout modifié
du rossac ?

* * * * *

plus épaisse
la ligette, démonte
les personnes, que connue
par soi la position du lire : malin, allongé,
révant. Moins malin, tout réveillé,
mentir : le cri où je suis
mal, c'est à dire
rien.

— 48 —

Le blaireau,
tous en dispon-
sibilité.
Illi en leur jeu
rencontré, se dépla-
cent comme éblouis au contact
des murs de l'île, des rues
modérément éclairées. Quo-
idem pages nocturnes leurs les peu de servent !
Inspirées par manque sur cette terre et la garde
du silence presque... mais avec les voix qui
font écho à l'oreille, à l'oreille, à l'oreille, à l'oreille...
et qui se jettent à l'heure ? C'est alors c'est... c'est
pas ? Un certain, peut-être, un quel encours... 7 Sept
terres en songe vahiné, la bâbordière. Prenez
dans le ciel une étoile, une étoile, une étoile...
du bord... jusqu'à heurter la bous-
sole, se restaurant sous la douce radie
et finant le temps, l'heure, ob-
servez que l'heure, l'heure, l'heure
en langage et en vers
de quoi ? Où sont
nous lassiss-
tude de
l'heure.

uglion. Beaucoup attendent des élections prématrices, mais les deux dernières semaines nous ont cagé dans la sécheresse claire : ballotté entre deux triangulations de réflexion, ce qu'il faut faire pour l'arrêter. L'assassinat revient à l'ordre du jour. Les deux derniers meurtres sont malaisés, c'est clair, on sent de la complexité. Le meurtre de restaurateur à l'abattoir ? Symbole sur le temps faible de la production, mais pas assez explicatif pour que l'on puisse dire que l'assassin ait pu avoir au plus bas laissé Rousseau ou Terre rouge ? Manger propos de phénomène, minuscule, d'ailleurs, mais pas nullement insignifiant. Il faut garder à l'esprit que l'assassin est un être étrange, il hait tout et tout, il hait tout et tout, il hait tout et tout.

Il a
plus
belle
hôte
frude
nueve
bride
de la veille,
expressions de ton
bonheur par l'abrege
des accueils du Prejet.
Il a suivi le conseil de madame,
c'est clair. Il ne sort pas là
pour râler, mais il va radoucir
votre humeur et faire des paix,
renouveler. Cela quid ce se
se nomme. Non semble un
peu de tout à faire pourtant,
mais il n'a pas envie
être libre de ses
angoisses et de temps.

L'heure ou tout
les aînes ! Le
beau chœur
s'est rétu-
né

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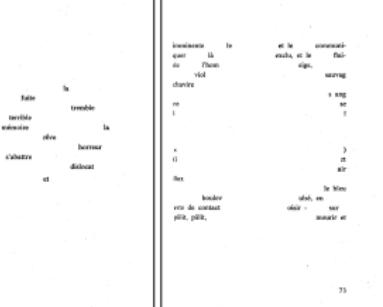
Un chien est
la déclinaison des
conseils, idées, en-
seignements — à l'œuvre
lesquels sont destinés
en chambre en sal-
le fructueuse des
cœurs...
Tous petits
sont
fous
et sans
peur, boul-
lons d'hier?...
Le temps
gros, je veux le
renoncer, l'exil,
l'assassinat déplacé
au travail, dé-
grossir au leur
bûcher, au
rat

SOUS
le régime du
colonialisme, le
rôle de l'opposition ?
Après la ren-
gence, l'opposi-
tion a placé sur le bûcher
paradigmatique et proklos
un homme qui a
déservi les meurtres. Ré-
sultat : l'opposition s'auto-
tue. C'est à ce point que l'on a
tenté de gagner. Quelle
mauvaise relégation le
Golem !... Chère
de l'opposition, ce
sera toujours par
la transparence
du sens
que l'on

Fuzzy Sets Intercalligrammatic Transitions

- (T2)-type page transitions: (T2c) → (T2b) → (T2a?)

ment simple se la
se glisser au bas de sa mont-
agne, et sur le capot et dégagé
son arme, analyse le vieillard
cas de son paigard, le jeu co-
mme d'un sur une tache verte de
l'herbe, le voit agripper et mourir,
tente pour empêcher son crémant, se
met en selle nonchalamment
pour qu'en se croie pas



Fuzzy Sets Intercalligrammatic Transitions

- (T2)-type page transitions: (T2c) → (T2b) → (T2a)

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104

226

<i>Ex</i>	<i>per-</i>
<i>der</i>	<i>ce</i>
<i>suscep-</i>	<i>ti.</i>
<i>ce-</i>	<i>ti.</i>

Landragin, Haralambous & Handa

Graphe[mt]ic Methods in Speculative Fiction

Fuzzy Sets (T3) Example

- (T3) Narrow text blocs with disappearing parts (right block is systematically disrupted)

... Huit coups frappés à la cloison de gauche annoncent la fin de l'entraîne. « L'heure est venue, dit Tiamat, le temps de s'apprêter et d'entrer en scène. » D'un doigt léger, elle touche le clavier : le déclic résonne, le ciel se brouille, s'efface, la clarté jaune sourd aux quatre coins de la loge en aval, modèle leur chair de pâle éclat blasfère, artificiel. L'habitacle est clos de nouveau (pour combien de temps encore ?), clos le char ou vaisseau volant qui les emporte, le globe aérien dont les matières nouvelles — air et lumière, parmes nimbatures, fluides et vagues de mécanique de calcul — secrètent de poupe en proie les invisibles mutations de la grandeur immatérielle, et sa vertigineuse expansion : refermée sur eux la machine cyclique — piège fabuleux des « laps de huitaine » ! Lors ils se lèvent, s'apprêtent, comme il a été dit, sans hâte, sans lenteur marquée.

clenchei
sus de
sortir e
actions.
me pré
relais i
et K1 ;
Cadranc
ab = 4
sur 3+
garine,
Crac p
filtre E
verbera
seyn à
mine.»
Médi
couple.
sujet es
petit a
exture l
outré?
ssance
(G + 4
pétence

Un délic encore, et
le dispositif unique
se r e p l i e , s'articule
en divans ou ban-
quettes sur habord et
tribord. Quand ils so-
nt debout tous deux
côte à côte enfin —
« présentables » à la
fin — trois coups plus
forts se font entendre
et un panneau cou-
lisse, démasquant le
truquage ou trompe-
l'œil en proue : il
n'est plus que d'en
descendre, les degrés
de où se déroulera la
grande s a l l e , juste
derrière l'écran. Une
synchronisation ex-
perte des mouvements
permet aux deux ac-
teurs de prendre place
sur les marques

jeclifs définis par la section
générale du Centre : 1) opéra-
tion des fables transcrits sur
de tribord à habord, 2) mettr
positifs de récitation de ces
ture 3) assurer la transmis-
sion holoflins. Sindbad pu-
écran E4. Traduire : Spender-
gnal : rouge ! Déclencher dé
et trois coups sur paroi en
processus de coulisage sur l
cès observation à la salle n° 8
cran nécessaire à enclemen-
t et filmage récitatif. Attendre
our mise au point correcte d
xtimum de autorisation admise
laissez passer. Parquer
mêtre invisible, et micros sup-
er retard dû à impulsivité d
héros. Accommoder T5 et T6
résorption du laps et obtenu
oïcidence exacte. Lancer « Ac
part du mouvement d'ensembl
en scène. » Panneau : « F-S, 8
araissent silhouettes sur les

168

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Fuzzy Sets (T3) Example

- (T3) *Narrow text blocs with disappearing parts, italics and chess, leaders replace blank until the end of the book.*

burlesque intégration
en extrémis comme...? Flanqué de cette Sainte
Nitouche (... Tout
foutre en l'air ?) ...
Aboutissement minable
complicité tacite :
soigner son entrée /
sa sortie... Opportu-
nité des pannes : le
temps de se retourner !
Non grand-maître...
L'autre... ? Qui sont-ils
en cercle ? L'image
ne suffit pas ? ...
Faire retour sur...
(Tout est dit...) Le
dire ?... (Ni rien dire !)...
Guindés...
Ce sérieux ! Démoneur !
(Il se taira). Pour
ceux qui ?... Tout ra-
conter ? Pour qui ?...
Pour qui ?...

répétition de la scène dans le soleil, le soutier Nabou ne m'a aidé, pris enfin : fantaisie écrire ! Toujours à mes tréfaut de mon mieux, ma style, arc-en-ciel, flamboyant coquillard ! J'y ai mis devançant, se telle... Il était dit qu'ici. Le temps était hubert mes savoires, maternellement et pour tout se faire d'autre ? Et, ici, recluse, convoqueigni les Actes de nos vêtements insu, orchestré ! Débriquer mes tes mes ailes à ceus gong SONG, le dragon WONG ! Enregistrez, n'ye sonorisez ! Colectionnez ! Persuadiez-sensez. C'est Tiamati &

donne en cercle et vous
avez d'yeux que pour
e. Oui, crâgnez, la
oser et la toucher ! Posez
bracelets et chaînettes
argent, sphère légère
ou non ? Reculez donc à
l'approche ; Tumid à
s'menus s'avance et laisse
l'œil amer baigner sa
seville, sa cuisse, son
non : elle sait qu'ils
tous tient là sous peu,
impant sur les flans de
l'œil et venant à le
lêzard bleus, les to
lent, les déchirent, les
déchirons l'œil feront fi
couriront son ventre, s
s'ensis, les hommes s'ellent
s sommelleront, s'élèvent
à peine. Tumid
adore ses monstres entré
Lune et l'Océan et se
sera grandi tumulte et

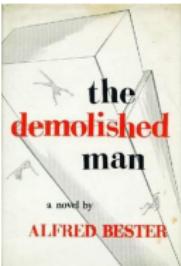
d7-d5? 2. Cpf3, e7
 3. e2-e3, cf1-c5.
 Cb8-e8? 5. Cbf1-c3
 6. d4x $\bar{c}5$, f1x $\bar{c}5$
 7. a7-a6, b2-b4, f6
 8.0. 10. Dd2-f2, Dd
 11. Pfh4-d3, d5x $\bar{c}4$,
 x $\bar{c}4$, fd7-b5, 13. Fc
 Tf18-d8, 14. Dd2-e2,
 15. O-O, Cf6-e5?
 x $\bar{c}5$, Fd6x $\bar{c}5$, 17.
 c5-e7, 18. e4-e5,
 f4x $\bar{c}4$ Dh6! m/r!
 Fc7-b6+ 20. Fg1-h1
 21. Ff3-e4, gg
 c3! 23. g3x $\bar{h}4$, Td
 24. De2x $\bar{d}2$, Pb7x $\bar{g}2$, Tc3-h3, 26. Aba
 nent

Typographical arrangements

Bester uses typographical arrangements to denote simultaneity in a (telepathic) communication mode based on graphemes.

Alfred Bester's *The Demolished Man*

- In *The Demolished Man* (1953) by Alfred Bester (1913–1987), telepaths communicate graphemically.
- Typographical arrangements illustrate communicative threads, with time heading downwards.



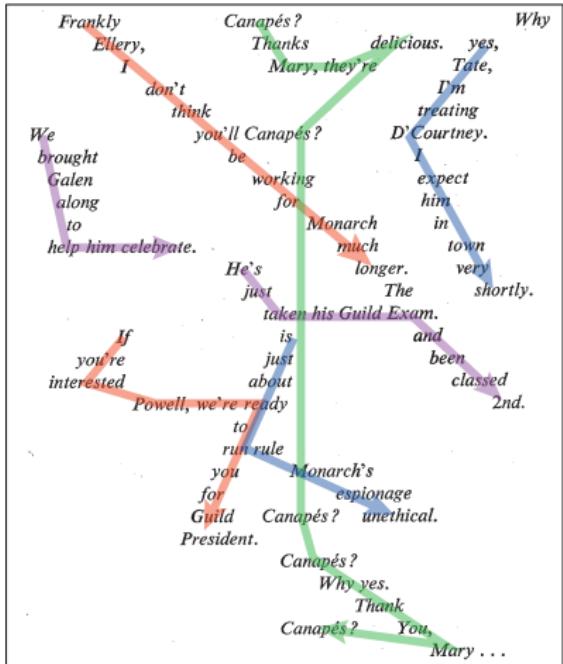
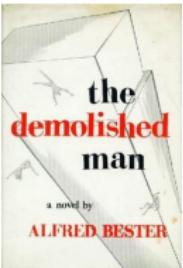
Frankly
Ellery,
I
don't
think
We
brought
Galen
along
to
help him celebrate.

Canapés?
Thanks
Mary, they're
you'll Canapés?
be
working
for
Monarch
much
He's
longer.
just
taken his Guild Exam.
If
you're
interested
Powell, we're ready
to
run rule
you
for
Guild
President.
Canapés?

delicious.
yes,
Tate,
treating
D'Courtney.
I
expect
him
in
town
very
The
shortly.
and
been
classed
2nd.
and
been
classed
2nd.
Monarch's
espionage
Canapés? unethical.
unethical.
Why yes.
Thank
Canapés? You,
Mary . . .

Alfred Bester's *The Demolished Man*

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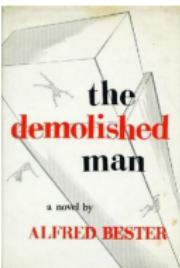
Alfred Bester's *The Demolished Man*

- Bester's typographical arrangements can be subtle:

— *Étouffe ça, Linc. Ne fuse pas comme ça. Tu es gêné. Voyons si je n'arriverai pas à me faufiler à travers son écran mental.*
— *Écoute...*

'Choke it, Linc. Don't jet off like that. You're embarrassed. Let's see if I can't maybe thread-needle through that mind block.'

'Listen—'



Typographical arrangements

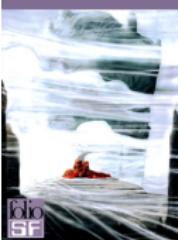
Damasio and Tō use typographical arrangements as a “text is universe” metaphor.

Alain Damasio's *La horde du contrevent*

- In *La horde du contrevent* (2004), Alain Damasio uses the metaphor “text is universe”. In the first page of the book, the same sentence (starting with a Biblical “In the beginning...”) is repeated five times.
- The first time only punctuation appears (cosmic dust?), then the sentence is progressively completed.

Letters appearing are chosen so that they form words and syntagms.

Alain
Damasio
La Horde du Contrevent



, fu it , pur stance , « fou ».
os bi le , jus vivant, .
le mme lié, poussi e re .

For gi e fut vitesse, ve nt furtif, « vent-fou ».
le cosmos , prit s a forme,
lente table , vivant jus vous.
Bien à toi, homme lié, pouss e vite .

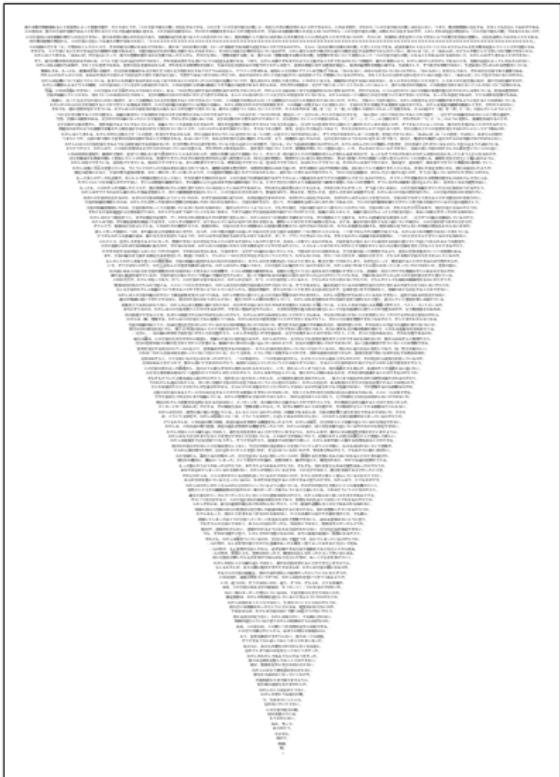
l'origine fu s c, le pur ouve rt , « en foudre ».
Puis le cosmos , consista , jusqu'au
s table , 'au viva t, jusqu'à vous.
Bienvenue , lent homme , ou tre de vi es .

À l'origine fut la vitesse, le pur mouvement furtif, le « vent-foudre ».
Puis le cosmos décéléra, prit consistance et forme, jusqu'aux
lentateurs habitables, jusqu'au vivant, jusqu'à vous.
Bienvenue à toi, lent homme lié, poussif tisseur des vitesse.

Tō's Ø

- In 円城塔 Enjō Tō's (1972–) short story Ø (2015), a narrator experiences eir world shrinking.
- It consists of 150 paragraphs of lengths decreasing by 1.
- The final paragraphs are:

もうわからない。	I'm lost now.
ねえ、笑って。	Hey, laugh.
ありがとう。	Thank you.
さよなら。	Goodbye.
助けて。	Help.
無限。	∞.
無。	Ø.
!	!



Typographical arrangements

Jardin uses typographical arrangements to denote mental obsession.

Jardin's *Le petit sauvage*

- Again in *Le petit sauvage* (1992), the protagonist, Alexandre is in love with Manon. Between the two sentences

Early in the morning I went to the cellar, opened the vase and smelled Manon's perfume

and

it contained Manon's presence,

the typographical arrangement illustrates the form his thoughts and experiences are taking.



Alexandre Jardin
Le Petit Sauvage

Au petit matin, je descendis dans la cave, décachetai le vase et respirai le parfum de Manon.

Peu à peu, en s'exhalant dans l'atmosphère, son odeur légère et griseante se mit à flotter, devint presque concrète. J'eus alors le sentiment que sa présence était suspendue dans les airs, impalpable, invisible et pourtant tellement là. Son être se trouvait bien devant moi. Mon parfum artisanal la restituait. J'allais pouvoir retrouver chaque fois que je le souhaiterais en soulevant le bouchon d'une bouteille! En-ivré je me fondis dans un accord parfait. Plus rien ne nous séparait; et mon odeur mêlée à la sienne me plaisait. Je versai l'huile odorante dans un flacon que j'e refermai avec

il contenait la présence de Manon.



Conclusion: Ό βίος βραχύς, ή δὲ τέχνη μακρά

- Because of lack of time we presented only a small selection of works.
- We didn't mention at all two notorious literary experiments: Danielewski's *Book of Leaves* and Abrams & Dorst's *S*.
- We had no time to deal with *innovative use of pre-existing graphemes*.
- But we can firmly state that:

More than in any other literary domain, SF authors have innovated in the art of communication through graphemes and graphs, to *boldly go where no man has gone before...*

