

Paris Diderot University  
6th International Technical Communication Conference  
“Life-Long Learning”  
February 2<sup>nd</sup>, 2018

## Technical Communication: a Two-Sided Coin?

Axel Petit - Koussai Houssine - Laetitia Naly

## One Starting Point: *The Two Cultures*



Charles Percy Snow, CBE  
©NYT

“In our society (that is, advanced Western society) we have lost even the pretense of a common culture. [...] This is serious for our creative, intellectual and, above all, normal life.”

C. P. Snow, *The Two Cultures*  
(1959)

# Outline

1. Technical Communication after World War II

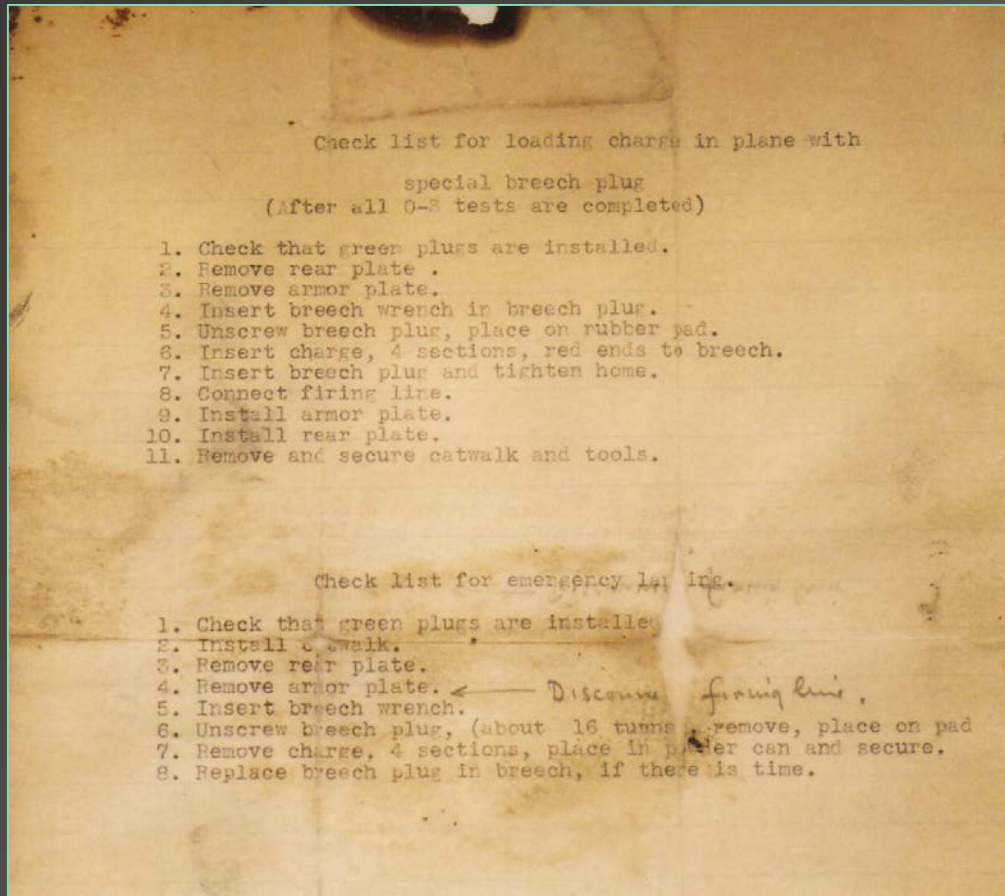
2. Analyzing Technical Documents with AntConc

3. Confronting the Results with Linguistic Theories

4. Using Cognitive Psychology to Understand T.C.

5. Conclusions

# 1. Technical Communication after World War II



**Since WWII, T.C. has been shaped by:**

- the military and its standards
- economic productivism + rationalizing processes
- computer science (medium + languages)

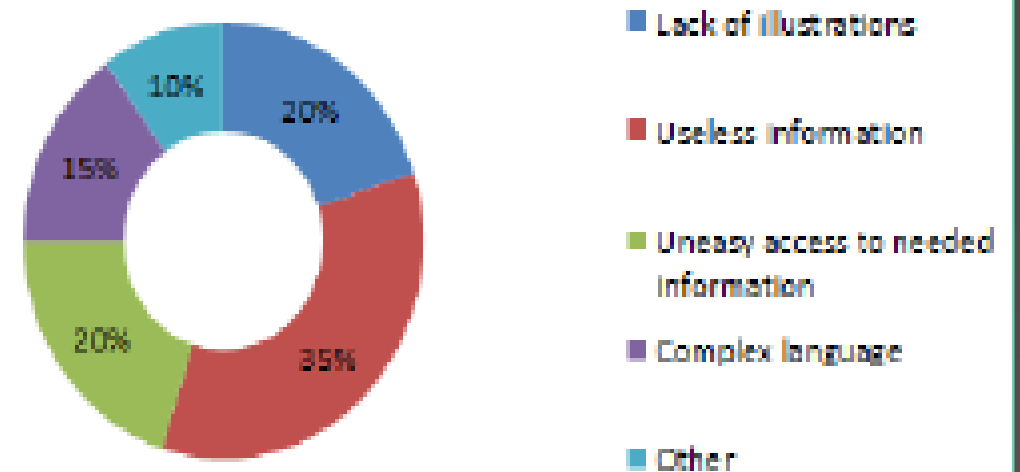
Checklist for Little Boy bomb charge  
aboard Enola Gay (1945) ©Atomic  
Heritage Foundation

## 2. Analyzing Technical Documents with AntConc

### Corpus:

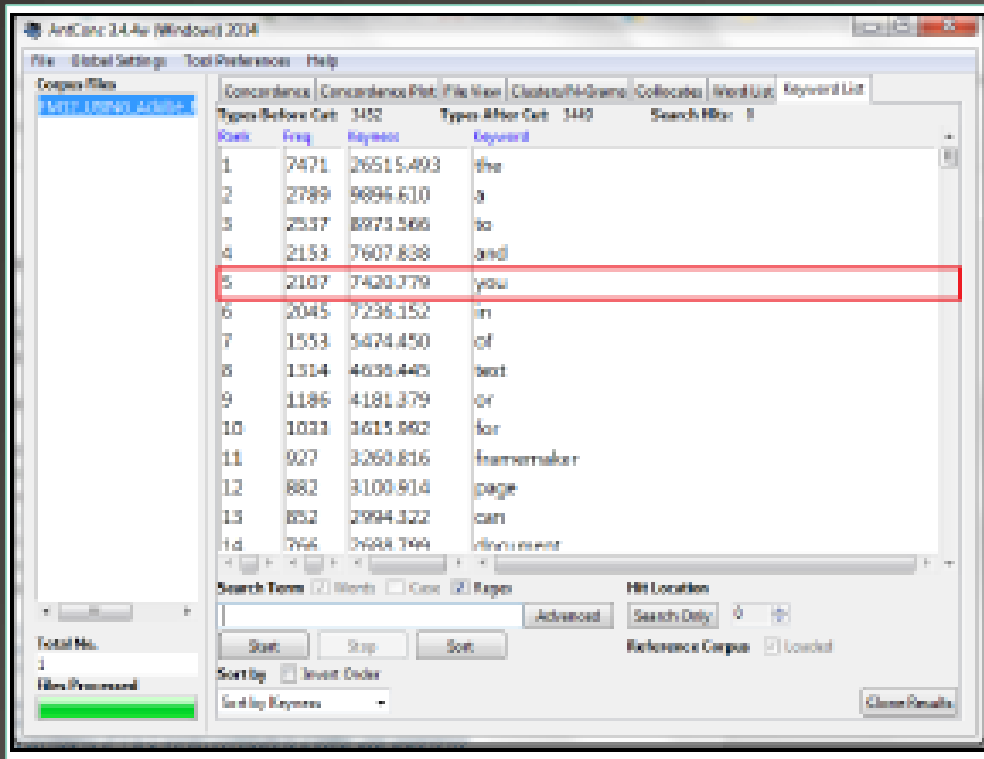
- Adobe FrameMaker 12 User Manual
- Articulate Storyline 2 User Manual
- Juniper Secure Access 7.0 Admin. Guide
- MindManager 2016 User Guide
- Caplio 500SE Software User Guide
- Oracle VM VirtualBox User Manual
- Oracle Balanced Scorecard Install Guide
- Corel VideoStudio Pro X7 User Guide 4
- Avast Antivirus Home Edition 4.8 User Guide
- Atlassian JIRA 6.4 User Guide

### What do you notice when reading technical documents?



Users' feedback

## 2. Analyzing Technical Documents with AntConc



Rank	Freq	Keycount	Keyword
1	7471	26515.493	the
2	2789	9896.610	a
3	2537	8973.966	to
4	2153	7607.838	and
5	2107	7420.779	you
6	2045	7236.352	in
7	1553	5474.450	of
8	1314	4636.443	text
9	1186	4181.379	or
10	1033	3615.982	for
11	927	3260.816	framemaker
12	882	3100.914	page
13	852	2994.322	can
14	766	2688.744	reference

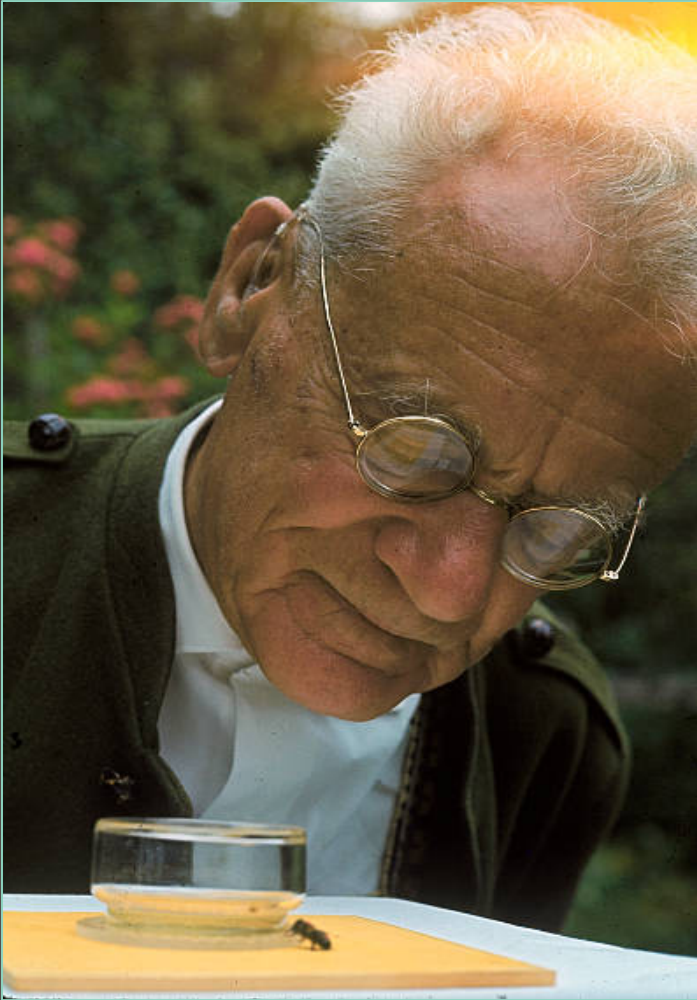
*Adobe FrameMaker 12 User Manual*

AntConc word analysis

### Main traits:

- **brevity**: syntax + terms
- **simplification**: procedures + terms
- **redundancy** : structures + syntax + terms
- **illustrative diversity**: changing codes/mediums to clarify a point

### 3. Confronting the Results with Linguistic Theories

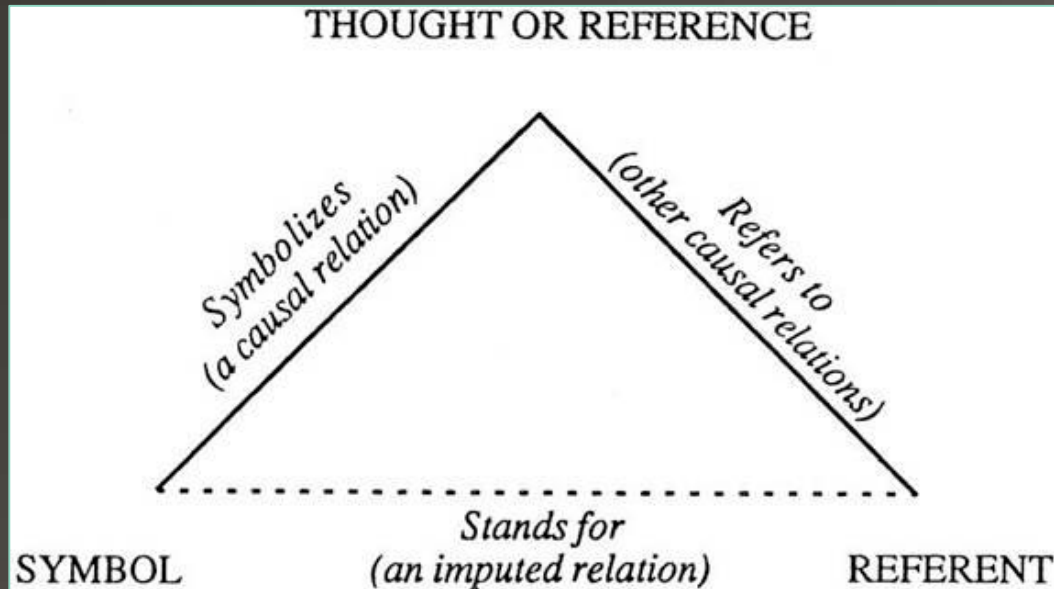


Ethologist Karl Von Frisch  
©GettyImages

#### What T.C. shares with the language of bees:

- goal-oriented production
- context-dependant codes and signs
- non-ambiguous signs
- redundancy

### 3. Confronting the Results with Linguistic Theories



Ogden and Richards' 1923 semiotic triangle

#### In T.C.:

- the referent-symbol link prevails;
- the abstract reference is secondary.



### 3. Confronting the Results with Linguistic Theories

Addresser	<b>Factors</b>	Addressee
	Context	
	Contact	
<hr/>		
Emotive	<b>Functions</b>	Conative
	Referential	
	Phatic	
	Metalingual	
	Poetic	

**T.C. performs 4/6 functions:**

- referential
- phatic
- conative
- metalingual

Jakobson 1958 Factors and Functions of Communication

## 4. Using Cognitive Psychology to Understand T.C.



OVH server room ©OVH

### **Tech users simultaneously perform 5 tasks:**

- conceiving the pursued goal + maintaining it in the working memory
  - encoding the instructions
  - encoding the features of the device
  - considering the whole device + setting up an action plan while summoning previous knowledge
  - carrying out the task
- ( based on Franck Ganier, 2001)

# 5. Conclusions

User interface . . . . .
Welcome screen . . . . .
Workspaces . . . . .
Standard workspaces . . . . .
Save a custom workspace . . . . .
Switch workspaces . . . . .
Reset a workspace . . . . .
Rename a custom workspace . . . . .
Delete a custom workspace . . . . .

*Technical communication is based on:*

- *science + technology*
- *concision*
- *clarity*
- *focus*
- *univocity*

*It is both a tool and a specific discourse about specialized fields.*