

A :adjective

Ad :adverbial

E :element of sentences excluding M

AV:auxiliary verb both of α and β

α : modal AV

β :aspect and passive AV

(Element)

M :same as M (in Form)

S :subject

V :verb

O :object

C :complement

n :generic term for c, p, c (in form)

These short forms are actually used mixed as illustrated below:

S^P:a subject in a phrase form such as *Mr. and Mrs. Itoh* in *Mr. and Mrs. Itoh live in Kobe.*

V^P:a phrasal verb such as *got up* in *They got up early this morning.*

C^c:a complement in a clause form: *what they used to be* as in *They are not what they used to be.*

A^w:an adjective in a word form : *black* in *She had black eyes. Black, however, in Her eyes are black.* is not A^w but C^w as the *black* is a complement of the sentence.

Ad^P: an adverb in a phrase form :*very well* as in *She plays the piano very well.*

A^c:an adjective in a clause form, a relative clause as *who became doctors* in *He has three sons who became doctors.*

AV_a^P:a modal auxiliary verb in a phrase form :*used to* as in *He used to call for her.*

AV _{β} ^P:an aspect auxiliary verb in a phrase form: *has been* as in *It has been raining since this morning.*

3. Listing of the Materials

The corpus has been collected from the English textbooks as referred on the previous page.

In this chapter I will analyze them with a view to their syntactic status. More positively, they are to be divided into Onion's five basic sentence patterns.

Now I will pick up some sentences from the corpus according to the sentence structures.

(1) S V Structures.

- ① Troy lies on the eastern bank of the Hudson.
- ② Today we live in an age of "global interdependence."
- ③ In 1808 a crisis took place in Goya's life.

(2) S V C Structures

- ④ Jonny Appleseed was surely a unique hero of the West.
- ⑤ When I was eighteen, I fell seriously ill with polio.
- ⑥ The British have long been famous as a nation of animal-lovers.

(3) S V O Structures

- ⑦ They wondered what they could do first.
- ⑧ Suddenly the truth hit me like a stone between the eyes.
- ⑨ A baby uses all his senses to make such findings.

(4) S V O O Structures

- ⑩ Ulysses told his men to build a big wooden horse.
- ⑪ If you could do it, I'd give you half of my steak.
- ⑫ I'll tell you what.

(5) S V O C Structures

- ⑬ At the beach hundreds of people watched him open a small bottle of Atlantic Ocean water.
- ⑭ On the way home my wife saw a cupboard standing on the pavement outside a furniture shop.
- ⑮ When I don't write, I feel my world getting smaller.

Structures which are not readily classifiable are given in chapter one. They are all excluded from consideration in this paper.

4. Encoding of the Sentences

The next step for plotting the data on the display of a computer is to give the codes to them as follow:

⑩a. Although we belong to many different nations and
 Ad^{c13}
different parts of the world, we know that we are
 $S^w V^w O^{c7}$
dependent on each other.

This sentence with codes such as Ad^{c13}, S^w , and so on can be rewritten using the schematic type. I will call it a code sentence.

b. $[Ad^{c13}] [(S^w) (V^w) (O^{c7})]$

The last stage for plotting the data on the computer display is to put the code sentences into the simplified matrix.

c.

C	XXXXXXXXXXXXXXXXXX			OOOOOOO
P				
W		O	O	
	Ad	S	V	O

O:E X:M

Result of the Computation

I have successfully entered the whole material. Here I will show some of them.

⑪

a. Tardy slips and bells are used to teach the child that punctuality and time itself are to be respected.

b.

C			XXXXXXXXXX
P	OOOO	XXXX	
W		xo	
	S	V	

⑫

a. Preparation for my "on-time" appearance began the night before.

b.

C			
P	XXXX	XXX	
W	o	o	
	S	V	

⑬

a. Now it was his turn to lose.

b.

C				
P				xx
W	x	o	o	xo
	Ad	S	V	C

⑭

a. When Andy came back half an hour later, all three steaks were ready.

b.

C	XXXXXXXXXX			
P			oo	
W		x	o	
	Ad	A	S	V

⑮

a. Calling them together, he said, "My sons, my end is near."

b.

C				OOOOOOO
P	xxx			
W		o	o	
	Ad	S	V	O

⑯

a. The three brothers couldn't work out how to share them as their father had said.

b.

C				XXXXX
P		oo	oooo	
W	xx	o	x	
	A	S	Av	V
			O	Ad

⑰

a. Jiro told me that he was sleepy.

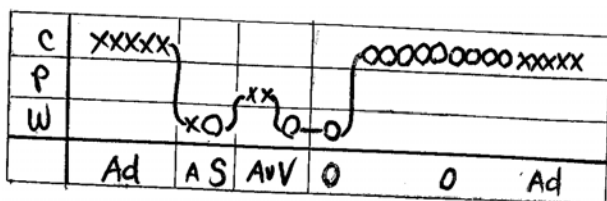
b.

C				OOOO
P				
W	o	o	o	
	S	V	O	O

24

a. When I was a child, my mother used to tell me how important it was to be at school when the first bell rang.

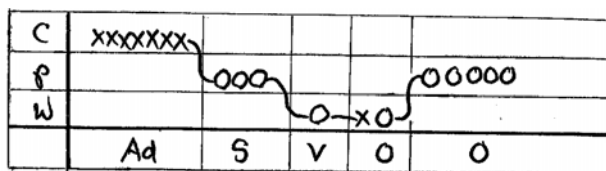
b.



25

a. As soon as the days were warm, Laura and Mary begged their mother to let them run barefoot.

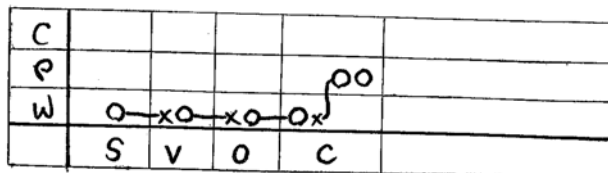
b.



26

a. I could make my voice deep, high, or in between.

b.



5. Observation

This paper is based on a computer analysis of a representative corpus of English sentences from state approved textbook. The graphic figures are meant to show visually how English sentences are constructed.

However, I have some doubt if I could apply the pictorial graphs I got in the paper to other English sentences, especially the ones that do not appear in state-approved textbooks. Thus further research (e. g. the graph work on the matrix) is needed to account for several phenomena which were not adequately represented in the corpus (such as the objective description of sounds and meanings; and the other corpuses than the state-approved textbooks). This will be the next step of my study on an corpus-based study of English sentences by using a computer.

It has been, however, successfully shown that the schematic type is adequate to cover the English sentences of all the corpus, and that all coded sentences were illustrated on the graph which, I believe, enabled me to grasp to a certain extent how English sentences in the corpus are arranged. My primary computer approach could give a clear picture of the arrangements of English sentences found in the state-approved textbooks.

References

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 Christopher Jones and Sue Tortescue ; *Using Computers in the Language Classroom*, Longman, p.1, 1987
 Quirk et al.; *A Comprehensive Grammar of the English Language*, Longman, p.152.,1985