THE MEANING AND STRUCTURE OF A SCIENCE FICTION STORY: A SYSYEMIC FUNCTIONAL ANALYSIS

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1. Introduction

What is a text? To a layman, a text may be just a text or it may be "I've got no idea". To the people in the linguistics circle who are not concerned with language as social semiotic, a text may be a rather fuzzy and abstract term, or it may mean "a body of printed or written work" as defined by the *Collins English Dictionary* (1990). To the etymologist, a text may carry a general meaning of texture, because, as they may explain, "text" is derived from the Latin word "textus" meaning "texture". But what is linguistic texture is still another problem.

It may be inappropriate to ask second or foreign language teachers such a big question. If the question is given to them, I am sure, the polite answer will be "Sorry, we are language users, we are not concerned with language theory. What we're supposed to do is to use and teach language correctly and appropriately, and nothing else." Fortunately, the "correctly" and the "appropriately" in their answer have a lot to do with text, and to understand what a text is will certainly help them a great deal in their teaching (for detail of this point, see Halliday, McIntosh and Strevens 1964, Halliday and Hasan 1985, and Burns 1990).

With these difficulties in mind, in this paper, an attempt is made to explore the grammar and meaning of a science fiction story as a text. The procedures and conventions used in the analysis are based on the framework of Halliday's (1994) *An Introduction to Functional Grammar*; Halliday and Hasan's (1985) *Language, Text and Context: Aspect of Language in Social-Semiotic Perspective*; Hasan's (1984) *Coherence and Cohesive*; and Butt's (1984) *The Theme and Lexico-Grammar in the Poetry of Wallace*. The analysis will proceed from the context of the chosen text; clauses and clause complexes analysis; the transitivity pattern, the mood pattern, the theme-rheme pattern, the grammatical and lexical cohesion analyses for the cohesive harmony of the text; to a summary of the context of situation of the text in terms of the three contextual parameters: field, tenor and mode.

2. The Context of the Chosen Text

This text is taken from an English textbook *Streamline English: Connection* published by Cambridge University Press in 1983. The title of the text is *A Science Fiction Story* indicating its genre. Above the text there is a picture in which there are a man and a woman sitting in a forest of a new planet. Behind them there is a spaceship. There are two astronauts' helmets, one in front of them and the other at their back. They are holding a fruit in their hands. The woman is looking at the man.

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3. Clauses and Clause Complexes Analysis

The analysis of the text into clauses and clause complexes and their logico-semantic relations can be done as follows:

(1) | | The spaceship flew around the new planet several times. (2) | | The planet was blue and green. (3) | | | They couldn't see the surface of the planet (4) | | because there were too many white clouds. (5) | | | The spaceship descended slowly through the clouds (6) | | and landed in the middle of a green forest. (7) | | | The two astronauts put on their spacesuits, (8) | | opened the door, (9) | | climbed carefully down the ladder, (10) | | and stepped on to the planet. | | |

(11) | | The woman looked at a small control unit on her arm. (12) | | | "It's all right," (13) | | she said to the man. (14) | | | "We can breathe the air ... (15) | | it's a mixture of oxygen and nitrogen." (16) | | | Both of them took off the helmets (17) | | and breathed deeply. | | |

(18) | | They looked at everything carefully. (19) | | All the plants and animals looked new and strange. (20) | | They couldn't find any intelligent life. (21) | | After several hours, they returned to their spaceship. (22) | | Everything looked normal. (23) | | | The man switched on the controls, (24) | | but nothing happened. (25) | | | "Something's wrong," (26) | | he said, (27) | | "I don't understand... (28) | | the engines aren't working." (29) | | | He switched on the computer, (30) | | but that didn't work either. (31) | | | "Eve", he said, (32) | | "we are stuck here (33) | |... we can't take off!" | | |

(34) | | | "Don't worry, Adam," (35) | | she replied. (36) | | "They'll rescue us soon." | | |

The analysis shows that the text consists of 36 clauses which make up 18 clause complexes. Most of the clauses in the clause complexes are in paratactic relation showing their interdependence. Their semantic relations are mainly of elaboration and expansion. Four clause complexes (VII, XV, XVII, XVII) are of quoting and quoted relation characterising the dialogic portion of the text. There is only one clause complex (III) which has hypotactic relation. One more thing that should be commented upon here concerns the division of clause complexes VII and XVI which read as *"It's all right," she said to the man. "We can breathe the air... it's a mixture of oxygen and nitrogen."* and *"Something's wrong," he said. "I don't understand... the engines aren't working."* It is the conventional full stop in writing that causes argument. The full stop in writing here suggests that there may be two clause complexes in each. In this paper, all the four clauses are combined into one clause complex, representing one semantic structure in the writer's own thinking. This is shown in Table 1 below.

Table 1. Clauses and Clause Complexes

	(1) 1	|| 1.1 ||
II	(2) 1	|| 1. 1 ||
III	(3) 1 2	||| 1α || x 1β |||
IV	(5) 1 2	|| 1.1 || + 1.2 |||
V	(7) 1 2 3 4	||| 1.1 || = 1.2 || = 1.3 || = 1.4 |||
VI	(11) 1	||| 1.1 || 1.2 || = 1.3 || = 1.4 |||
VII	(12) 1 2 3 4	
VIII	(16) 1 2	||| 1.1 || + 1.2 |||
IX	(18) 1	|| 1.1 ||
X	(19) 1	|| 1.1 ||
XI	(20) 1	|| 1.1 ||
XII	(21) 1	|| 1.1 ||
XIII	(22) 1	|| 1.1 ||
XIV	(23)	

	1	||| **1.1** || x **1.2** |||
	2	
XV	**(25)**	
	1	||| □**1.1** ||**1.2** || =**1.3** || = **1.4** |||
	2	
	3	
	4	
XVI	**(29)**	
	1	|| **1.1** || x **1.2** ||
	2	
XVII	**(31)**	||| □**1.1** || **1.2** || =**1.3** ||
	1	
	2	
	3	
XVIII	**(34)**	
	1	|||□**1.1** || **1.2** || = **1.3** |||
	2	
	3	

Boundary Markers used for the analysis:

| | |: Clause complex boundary

| |: Clause boundary

- Type of dependence

1.1 1.2 1.3 ...: Paratactic relation

α

β : Hypotactic relation

• Logico-semantic relations

= : Elaboration

+ : Extension

x : Enhancement

" : Projection / locution (wording)

• Others:

I, II, III ...: Number of clause complex in the whole text

(1), (2), (3) ...: Number of clause in the whole text

1, 2, 3 ...: Number of clause within a clause complex

4. Transitivity Pattern

The text is a narrative about the two astronauts landing in a new planet for the first time. The "what is going on?" of the text is well represented in the experiential component of meaning. From the point of view of transitivity, of the 36 clauses 17 are material process (*flew* in 1, *descended* in 5, *landed* in 6, *put on* in 7, *opened* in 8, *climbed* in 9, *stepped* in 10, *took off* in 16, *returned* in 21, *switched on* in 23, *happened* in 24, *aren't working* in 28, *switched on* in 29, *didn't work* in 30, *are stuck* in 32, and *take off* in 33). These are used to describe the motion of the spaceship (1, 5, and 6) and the physical actions of the actors; 6 are mental process (*couldn't see* in 3, *looked at* in 11, *looked at* in 18, *couldn't find* in 20, *don't understand* in 27, and *don't worry* in 34) characterising the perception and feeling of the characters when they land in the new planet; and 7 are relational and existential processes (*was* in 2, *were* in 4, *'s* in 12, *'s* in 15, *looked* in 19, *looked* in 22, and *'s* in 25) positing that things are in existent and describing the state of being of the things under the observation of the astronauts in the new planet.

Most of the processes are in the simple past tense (25/36). They are used in the narrative portion. The present simple (9/36), the present continuous (1/36), and the simple future (1/36) are used in the dialogic portion, characterising the actions which occurred, is occurring and will occur at the moment of the characters' speaking. The circumstantial components in the clauses of the text are of manner (*slowly*, *carefully*, *deeply*), location (*around the planet*, *here*, *in the middle of the green forest*), and direction (*through the cloud*). The transitivity pattern of the text is represented in Table 2.

Table 2. Transitivity Pattern of the Text

Clause		Participa (nt 1)	Process	Participant 2	Circumstances	
I	1	Actor	material *flew*		Location	Frequency
II	2	Carrier	relational *was*			
III	3	Senser	mental *see*	Phenomenon		
	4	Existent	relational *were*			
IV	5	Actor	material *descended*		Manner	Direction
	6	Actor	material *landed*		Location	
V	7	Actor	material *put on*	Goal		
	8	Actor	material *opened*	Goal		
	9	Actor	material *climbed*		Manner	Location
	10	Actor	material *stepped*			Location
VI	11	Senser	mental *looked at*	Phenomenon	Location	
	12	Carrier	relational *'s*	Attribute		
VII	13	Sayer	verbal *said*	Target		
	14	Behaver	behavioural *breath*	Range		
	15	Carrier	relational *'s* (is)	Attribute		
VIII	16	Actor	material *took off*	Goal		

	17	Behaver	behavioural *breathed*		Manner	
IX	18	Senser	mental *looked at*	Phenomenon	Manner	
X	19	Carrier	relational *looked*	Attribute		
XI	20	Senser	mental *find*	Phenomenon		
XII	21	Actor	material *returned*		Direction	
XIII	22	Carrier	relational *looked*	Attribute		
XIV	23	Actor	material *switched on*	Goal		
	24	Actor	material *happened*			
XV	25	Carrier	relational *'s (is)*	Attribute		
	26	Sayer	verbal *said*			
	27	Senser	mental *understand*			
	28	Actor	material *working*			
XVI	29	Actor	material*switched on*			
	30	Actor	material *work*			
XVII	31	Sayer	verbal *said*			
	32	Goal	material *are stuck*		Location	
	33	Actor	material *take off*			
XVIII	34		mental *worry*			
	35	Sayer	verbal *replied*			
	36	Actor	material *rescue*	Goal		

5. The Mood Pattern

The "Who is taking part?" of the text is presented in its mood patterns. In terms of speech function, one can see the two role relationships, one is between the writer and the reader(s), and the other between the characters themselves. The analysis shows that most of the Subjects in the clauses of the text are personal. Apart from the fictional features presented by borrowing the two imaginary characters from the Bible (Eve and Adam), the science fiction features worded in the nominal groups which are placed in the subject position are modern science terms (*astronaut, planet, spaceship, computer, control unit ...).* The finite elements in the narrative portion are combined with the simple past tense, while in the dialogic portion, they are combined with a variety of tenses such as the simple present (*is, are*), the present continuous (*aren't working*), and the future simple (*will*).

There are very few modal elements used in the text. Only 4 clauses contain modality. Two of them express the writer's judgement about the characters' inability to perform the actions (*they couldn't* in 3 and *they couldn't* in 20). Two others express the characters' (as subject) inability to perform the actions (*can't* in 14 and *can't* in 33). Of 36 clauses, 35 are in the declarative mood, which is one of the typical features of a narrative. The mood pattern of the text is represented in Table 3.

Table 3. Mood Pattern of the Text

Clause		Subject	Finite	Mood	Modality
I	1	The spaceship	flew	declarative	
II	2	The planet	was	declarative	
III	3	They	couldn't	declarative	ability/neg.
	4	There	were	declarative	
IV	5	The spaceship	descended	declarative	
	6		landed	declarative	
V	7	The two astronauts	put	declarative	
	8		opened	declarative	
	9		climbed	declarative	
	10		stepped	declarative	
VI	11	The woman	looked	declarative	
	12	It	is	declarative	
VII	13	She	said	declarative	
	14	We	can	declarative	ability/pos.
	15	It	's (is)	declarative	
VIII	16	Both of them	took	declarative	
	17		breathed	declarative	
IX	18	They	looked	declarative	
X	19	All plants and Animals	looked	declarative	
XI	20	They	couldn't	declarative	ability/neg.
XII	21	They	returned	declarative	
XIII	22	Everything	looked	declarative	
XIV	23	The man	switched	declarative	
	24	Nothing	happened	declarative	
XV	25	Something	's (is)	declarative	
	26	He	said	declarative	
	27	I	don't	declarative	
	28	The engines	aren't	declarative	ability/neg.
XVI	29	He	switched	declarative	
	30	That	didn't	declarative	
XVII	31	We	are	declarative	
	32	He	said	declarative	
	33	We	can't	declarative	ability/neg.
XVIII	34		don't	imperative	
	35	She	replied	declarative	
	36	They	'll (will)	declarative	

6. The Theme-Rheme Pattern

Our analysis shows that most of the themes in the text belong to the plane of ideational component (that is, topical theme). Of 21 clauses and clause complexes analysed for theme, 17 have unmarked theme and 4 have marked theme. At the beginning of the text, inanimate nouns as theme predominate (*spaceship* in 1, *planet* in 2, and *spaceship*

in 5), then they are shifted to animate nouns (*astronaut*, *man*, and *woman*) and the third person participant (*she*, *he*, and *they*) revealing the development of the story. 4 clause complexes contain textual theme (III, VIII, XIV, and XVI); and of the 4 marked theme, 3 are in the dialogic portion expressing the logical relations of addition and enhancement. What is interesting is that although there are dialogic portions in the text, there are no interpersonal themes. This suggests that the text may be written to be read or told. There is a kind of what Danes [7, 1974] calls "thematic progression" in the text, though this pattern is not always consistent: (Rheme 1 → Theme 2 (in clauses 1 and 2); Theme 1 → Rheme 2 (in clauses 2 – 3); Rheme 1 → Rheme 2 (in clauses 4 – 5); Rheme 1 → Theme 1 (in clauses 16 = 17 – 18); Theme 1 → Theme 2 (in clauses 20 – 21); and Rheme 1 → Theme 2 (in clauses 29 – 30). This is the method of text development to carry the narrative forward and it is what Halliday [2, 1994] calls "the text with a stepwise structure." The Theme-Rheme pattern of the text can be represented in Table 4.

Table 4. The Theme-Rheme Pattern of the Text

Clause		**Textual Theme**	**Interpersonal Theme**	**Topical Theme**	**Markedness of Theme**
I	1			The spaceship	unmarked
II	2			the planet	unmarked
III	3			They	unmarked
	4	because		There	unmarked
IV	5			The spaceship	unmarked
	6	and		(ellipsis)	
V	7			The two astronauts	unmarked
	8			(ellipsis)	
	9			(ellipsis)	
	10			(ellipsis)	
VI	11			The woman	unmarked
	12			It's all right	*marked*
VII	13			(ellipsis)	
	14			(ellipsis)	
	15			(ellipsis)	
VIII	16			both of them	unmarked
	17	and		(ellipsis)	

IX	18			they	unmarked
X	19			All the plants an animals	unmarked
XI	20			they	unmarked
XII	21			After several hours	*marked*
XIII	22			Everything	unmarked
XIV	23			The man	unmarked
	24	but		Nothing	unmarked
XV	25			Something's wrong	*marked*
	26			(ellipsis)	
	27			(ellipsis)	
	28			(ellipsis)	
XVI	29			He	unmarked
	30	but		that	unmarked
XVII	31			He said	unmarked
	32			(ellipsis)	
	33			(ellipsis)	
XVIII	34			Don't worry	*marked*
	35			(ellipsis)	
	36			(ellipsis)	

7. The Cohesion of the Text

7.1. Grammatical Cohesion

According to Halliday and Hasan (1976), there are four main types of grammatical cohesive devices: reference, ellipsis, substitution, and conjunction. It should be noted here that there are very few conjunctive devices in the text. Therefore, although they are analysed, they are not discussed in detail in this exercise. The analysis of the grammatical cohesive devices of the text is based on the frameworks of Butt's [5,1984], Halliday [2,1994], Halliday and Hasan [10,1976]. It focuses mainly on the different types of reference such as anaphoric, cataphoric, exophoric, personal reference, and demonstrative reference. Table 5 presents a detailed account of all grammatical cohesive devices found in the text. The first column enunciates the cohesive devices, the second contains interpretative sources, the third states the phoric status of the tie, and the last presents the chain relation in terms of the address of all the preceding members in the chain. Tables 6 and 7 summarise the total number of references, the number of clauses, the number of cohesive ties in the text and the number of ties per clause.

Table 5. Grammatical Cohesive Devices of the Text

Cohesive Devices	Interpretative Devices	Ties Status	Chain
The (planet)	1. planet	anaphoric	2 –1
they		exophoric	
the (surface)	3. planet	cataphoric	3 – 3 – 2 – 1
the (planet)	2. planet	anaphoric	3 – 2 – 1
the (spaceship)	1. spaceship	anaphoric	5 –1
the (clouds)	3. clouds	anaphoric	5 – 3
the (middle)	6. forest	cataphoric	6 – 6
the (astronauts)	3. they	anaphoric	7 – 3
their	7. astronauts	anaphoric	7 – 7 – 3
the (door)		exophoric	
the (ladder)		exophoric	
the (planet)	3. planet	anaphoric	10 – 3 – 2 – 1
the (woman)		exophoric	
her (arm)	11. woman	anaphoric	11 – 11
It	11. unit	anaphoric	12 – 11
she	11. woman	anaphoric	13 – 11
the (man)		exophoric	
we	7. astronauts	anaphoric	14 – 7
the (air)		exophoric	
It	14. air	anaphoric	15 – 14
them	14. astronauts	anaphoric	16 – 14 – 7 – 3
their	16. astronauts	anaphoric	16 – 16 – 14 – 7 – 3
they	16. astronauts	anaphoric	18 – 16 – 14 – 7 – 3
the (plants)		exophoric	
they	18. astronauts	anaphoric	20 – 18 – 16 – 14 – 7 – 3
they	20. astronauts	anaphoric	21 – 20 – 18 – 16 – 14 – 7 – 3
their	21. they	anaphoric	21 – 21 – 20 – 18 – 16 – 14 – 7– 3
the (man)	13. man	anaphoric	23 – 13
the (controls)		exophoric	
he	23. the man	anaphoric	26 – 23 –13
I	26. the man	anaphoric	27 – 26 – 23 – 13
the (engines)		exophoric	
he	26. the man	anaphoric	29 – 27 – 26 – 23 – 13

the (computer)		exophoric	
that	29. the computer	anaphoric	30 – 29
he	29. the man	anaphoric	31 – 29 – 27 – 26 – 23 – 13
we	21. astronauts	anaphoric	32 – 21 – 21 – 20 – 18 – 16 – 7 – 3
we	32. astronauts	anaphoric	33–32– 21– 21– 20– 18–16 – 7 – 3
she	13. the woman	anaphoric	35 – 13 – 11
they		exophoric	
us	33. astronauts	anaphoric	36-33- 32- 21- 21- 20- 18- 16- 7-3

Table 6

Total number of reference: 44	
Anaphoric reference:	29
Exophoric reference:	13
Cataphoric reference:	2

Table 7

Number of clauses:	36
Number of cohesive ties:	43
Number of tie per clause:	1. 02

As shown in Table 6, the number of exophoric reference is 13 / 44. This suggests that the text is not highly self-sufficient, and that it may be part of a larger text. In contrast, the data in Table 7 may suggest that the text is highly cohesive. The grammatical cohesive devices of the text can be displayed as follows:

A Science Fiction Story

The spaceship flew around **the** new planet several times. **The** planet was blue
R:D R:D R:D

and green. **They** couldn't see **the** surface of **the** planet because there were too
R:P R:D R:D

many white clouds. **The** spaceship descended slowly through **the** clouds and
R:D R:D

landed in **the** middle of a green forest. **The** two astronauts put on **their** space
R:D R:D R:P

suits, opened **the** door, climbed carefully down **the** ladder, and stepped onto **the**
R:D R:D R:D

planet. **The** woman looked at a small control unit on **her** arm. "**It**"s all right,' **she**
R:D R:P R:D R:P

said to **the** man. "**We** can breathe **the** air... **it**'s a mixture of oxygen and

R:P R:P R:D

nitrogen.' Both of **them** took off **their** helmets and breathed deeply.

R:P R:P

They looked at everything carefully. All **the** plants and animals looked new and

R:P R:D

strange. **They** couldn't find any intelligent life. After several hours, **they**

R:P R:P

returned to **their** spaceship. Everything looked normal. **The** man switched on **the**

R:P R:D

controls, but nothing happened. "Something's wrong," **he** said, "**I** don't

R:P R:P

understand... **the** engines aren't working.' **He** switched on **the** computer, but

R:D R:P

that didn't work either. "Eve," **he** said, "**we** are stuck **here** ... **we** can't take off!"

R:D R:P R:P R:D R:P

"Don't worry, Adam," **she** replied. "**They**'ll rescue **us** soon."

R:P R:P R:P

Notes:

R:D: Demonstrative reference — Cataphoric reference

R:P: Personal reference — Anaphoric reference

Exophoric reference — Anaphoric and exophoric reference

7.2. Lexical Cohesion

Lexical Chains

The lexical cohesion analysis is based on Halliday and Hasan's (1976) and Hasan's (1984) procedures. The analysis focuses on such lexical cohesive ties as repetition, antonym, meronym, synonym, syper-ordinate hyponym, and collocation. The analysis of these parameters is represented in Table 8. The Roman numerals state the clause number in which the lexical tokens occur. Following Table 8, Table 9 presents the scores in terms of chain per clause, token per clause, tie per chain, and tie per clause.

- spaceship (1, 4, 21), door (8), ladder (9), control (23), engine (27), computer (20)
- planet (1, 2, 3, 10), forest (6), plants (19), animals (19), life (28)
- astronauts (7, 8, 9, 10), woman/Eve (11), man/Adam (13, 23)
- air (14), oxygen (15), nitrogen (15)
- new (1, 19)
- green (2, 6), blue (2), white (4)
- several (1, 21)
- times (1), hours (21)?
- carefully (9, 18)
- everything (18, 22)
- flew (1), descended (5), landed (6), stuck (32), take off (33)
- put on (7), took off (17)
- see (3), looked at (11), looked (18, 19, 23), find (20)
- switched on (23, 29)
- climbed (7), stepped (10)
- working (28), work (30)
- said (19, 26), replied (35)
- breathed (14, 17)

From the analysis we can see that the total number of chains is 18 with 66 tokens and 67 ties. Table 9 summarises the scores.

Table 9

chain/clause	token/cl.	token/chain	tie/chain	tie//clause
0.50	1.9	3. 7	3.7	1.9

Lexical Relations

The spaceship flew around the new planet several times. The **planet** was blue
REP
and **green**. They couldn't see the **surface** of the **planet** because there **were** too
ANT MER REP REP
many **white** clouds. The **spaceship** **descended** slowly through the **clouds** and
ANT REP COL REP
landed in the middle of a **green** **forest**. The two **astronauts** put on their space
COL REP MER REP
suits, opened the **door**, climbed carefully down the **ladder**, and **stepped** onto the
MER MER SYN

planet.
REP
The **woman** **looked at** a small control unit on her **arm.** 'It**'s** all right,' she said to
HYP SYN MER REP
the **man**. "We can breathe the air ... it's a mixture of **oxygen** and **nitrogen**." Both
HYP MER MER
of them **took off** their helmets and **breathed** deeply.
ANT REP
They **looked at** everything **carefully**. All the plants and animals **looked** **new** and
REP REP REP REP
strange. They couldn't **find** any intelligent life. After **several** hours, they
SYN REP
returned to their **spaceship**. **Everything** **looked** normal. The **man** switched on the
REP REP REP REP
controls, but nothing happened. "Something**'s** wrong," he **said**, 'I don't
MER REP REP
understand... the **engines** aren't working." He **switched on** the **computer**, but
MER REP MER
that didn't **work** either. "**Eve,"** he **said**, "we **are** **stuck** here ... we **can't** **take off**!"
REP REP REP REP ANT REP ANT
"Don't worry, **Adam**," she **replied**. "They'**ll** rescue us soon."
REP ANT REP

Notes:

REP = repetition SYN = synonym
ANT = antonym HYP = hyponym
MER = meronym COL = collocation

7.3. Chain Interactions

The chain interactions are represented in the diagram that follows. Because of the great number of lexical chains and the complexity in each chain, it is not possible to get the accurate scores. The analysis is done in terms of

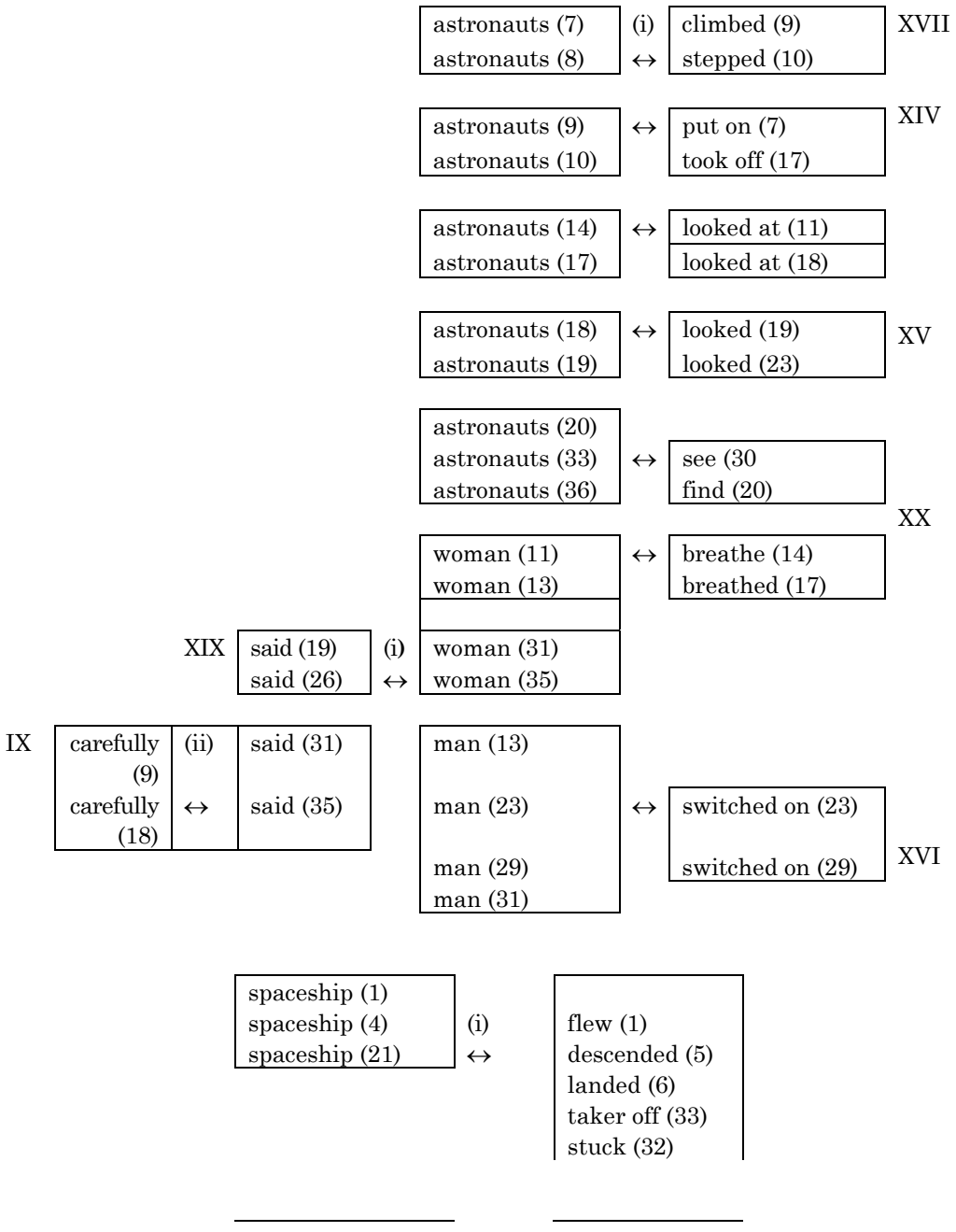
(i) Relevant tokens: all those tokens that enter into identity or similarity chains; these are divided into:

(a) Central tokens: those relevant tokens that interact;

(b) Non-central tokens: those tokens that do not interact;

(ii) Peripheral tokens: those tokens that do not enter into any kind of chain. The final figures are summarised in Table 10.

Table 10. Chain interractions



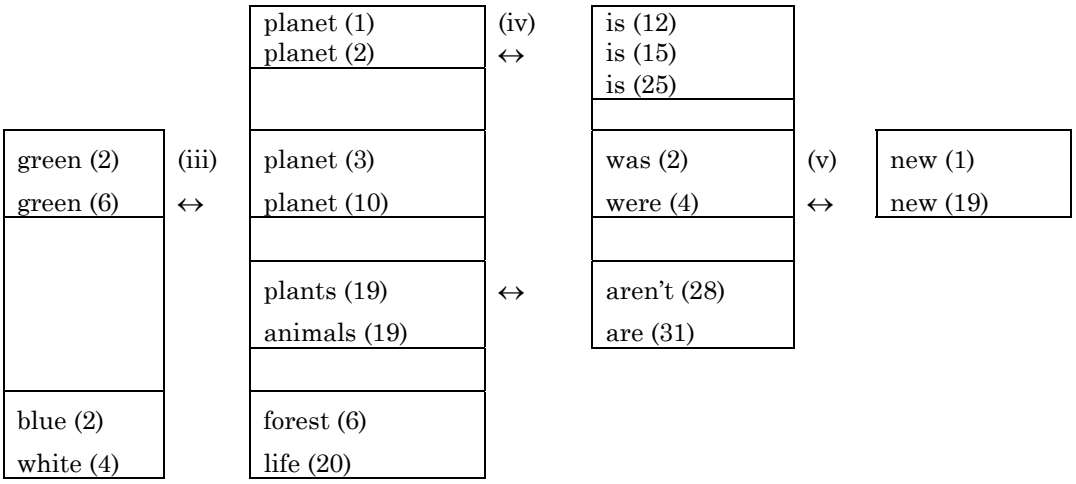


Table 10. Final Figures for Cohesive Harmony/Coherence

Total	RT	PT	CT	CT as % of TT	CT per PT
116	68	44	58	50%	1.035

Notes:

RT: relevant tokens

PT: peripheral tokens

CT: central tokens

It can be said at this point that the text under study is highly cohesive, and based on these formal features it can also be concluded that the text has achieved both coherence and harmony.

7.4. Contextual Configuration of the Text

In the systemic functional model, context is seen as an integral part of language. According to Halliday (1978, 1994), given an adequate specification of the semiotic properties of the context, one can predict not everything, but still a great deal about the language that will occur, with reasonable probability of being right. Context is characterised by three parameters: field, tenor, and mode. These features of the text under study can be summarised as follows:

1. Field

- A science fiction story written for teaching purposes in the form of story-telling.
- Participant types: actors, sensers, behavers, and sayers.
- Process types: predominantly material, with past events characterising the feature of narrative.

2. Tenor

- Writer and readers, with writer adopting the role as recounter.
- Astronaut (male) and astronaut (female) with information exchanging roles.

• Mood: declarative in both narrative and dialogic portion (except 1 in clause 34)

• Modality: ability on the part of the characters.

3. Mode

• Medium: written; channel: a combination of visual and graphic.

• Not highly sufficient (this fact is shown in the number of exophoric references.

• High lexical density and parataxis and low grammatical intricacy.

7.5. Concluding Remarks

In this article, I have been concerned with the analysis of a science fiction story, using systemic functional linguistics as the theoretical framework. As can be seen from the analysis, systemic functional linguistics is a model of language which encompasses levels of language – phonology, lexico-grammar, and semantics – and the social context in which language (communication) occurs. Further, different from other models of language such as TG, systemic functional linguistics possesses a very rich pool of analytical instruments which helps researchers tackle not only phonological but also grammatical (syntax), semantic and discoursal problems of a text. "There may be many roads to lead to Rome", but our analysis has shown very powerfully that the systemic functional road can be the best at least at the current state of human knowledge. However, in order to travel comfortably along this road, it is recommended that the traveller study the map (the theory), details of the road (the analytical instruments) carefully. "A thousand-mile journey often starts with single steps."

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CẤU TRÚC VÀ NGỮ NGHĨA CỦA MỘT CÂU CHUYỆN KHOA HỌC VIỄN TƯỞNG: PHÂN TÍCH THEO QUAN ĐIỂM CHỨC NĂNG

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Bài viết dự định phân tích một câu chuyện khoa học viễn tưởng ngắn có nhan đề "A Science Fiction Story" in trong giáo trình tiếng Anh *Streamline English: Connection* do Oxford University Press xuất bản, sử dụng lí thuyết chức năng do Halliday và các nhà ngôn ngữ học chức năng hệ thống khác phát triển. Bài viết bắt đầu bằng việc trả lời câu hỏi "Thế nào là văn/ngôn bản?". Sau đó bài viết cung cấp thêm một số chi tiết về ngôn cảnh trong đó ngôn bản xuất hiện. Mục này được kế tiếp bằng việc phân tích toàn bộ câu truyện từ bốn bình diện: chuyển tác, thức, đề ngữ, và liên kết, mỗi bình diện được phân tích, thống kê và được thảo luận chi tiết. Bài viết quan tâm đặc biệt đến việc phân tích những sự tương tác từ vựng theo chuỗi để xem độ liên kết và độ mạch lạc của ngôn bản. Mục 7.4 trình bày những nét khái quát về ngôn cảnh tình huống hình thành nên ngữ vực gọi là "truyện khoa học viễn tưởng". Trong phần kết luận bài viết tóm tắt lại những nội dung chính đã trình bày và cố gắng chỉ ra rằng ngôn ngữ học chức năng là một mô hình ngôn ngữ toàn diện với bộ công cụ phân tích có thể sử dụng để phân tích các loại hình ngôn bản một cách hữu hiệu. Tuy nhiên, để có thể phân tích được người phân tích nên nghiên cứu kĩ từng công cụ trong bộ đồ nghề này. "Một cuộc trường chinh vạn dặm thường bắt đầu bằng những bước đơn lẻ".