

CHAPTER 3

THEORETICAL FRAMEWORK AND RESEARCH METHODOLOGY

3.0 Introduction

This chapter will provide a description of the theoretical framework used and the methodology of carrying out the research. This chapter is divided into three main sections. Section 3.1 will lay out the details of the analytical tool deployed, i.e., the system of transitivity, which will include the process types, participants and circumstantial elements. Section 3.2 will delineate the procedures undertaken to achieve the aims of the current study. This will include the procedures of selecting data, selecting unit of analysis, coding, analyzing and interpreting data. Section 3.3 then will end with a chapter summary.

3.1 Theoretical Framework: The System of Transitivity

The current study deploys the transitivity theory of Halliday and Matthiessen (2004, based on Halliday 1985 & 1994) as its major analytical tool in bringing out the human characteristics of anthropomorphic frogs and foxes. The transitivity explications of Thompson (2004), Bloor and Bloor (2004) and Eggins (2004) are incorporated to elucidate the analysis.

As mentioned in Chapter 2, transitivity is one of the major theories in systemic functional linguistics (SFL). In SFL, transitivity is represented by *clause* as the “major unit of grammatical analysis” (Bloor & Bloor, 2004, p. 8). Bloor and Bloor (2004, p. 8) further assert that as a clause is consisted of one or more groups (Verbal Group, Nominal Group, Adjectival Group, Adverbial Group and Prepositional Phrase), it

therefore “has a special place in expressing meaning” reflecting “how things happen” and “how people feel”. In relation, transitivity represents *what is done* (Verbal Group), *who does it* (Nominal Group and Adjectival Group), and *where, when, why and how it happens* (Adverbial Group and Prepositional Phrase).

According to Halliday and Matthiessen, (2004, p. 61) transitivity is a “model of experience” which reflects reality. Because transitivity analysis is able to differentiate specific actions of events, the participants involved in the actions, and conditions under which the actions are done, it is thus considered suitable to the analysis of character in revealing what the character does, thinks and says. This section, therefore, seeks to detail out the three transitivity elements mentioned above. This chapter uses samples from the current study to illustrate the transitivity concept. Where there were no samples in the current study to illustrate the particular concept, samples then will be drawn from the transitivity explications of Halliday and Matthiessen (2004), Thompson (2004), Bloor and Bloor (2004), and Eggins (2004).

3.1.1 The System of Transitivity: Process Types and Participants

The system of transitivity recognizes six process types realized by verbal groups: *material* (of doing and happening), *mental* (of sensing), *relational* (of being and having), *verbal* (of saying), *behavioural* (of behaving), and *existential* (of existing). This system of process types is visually represented in Figure 3.

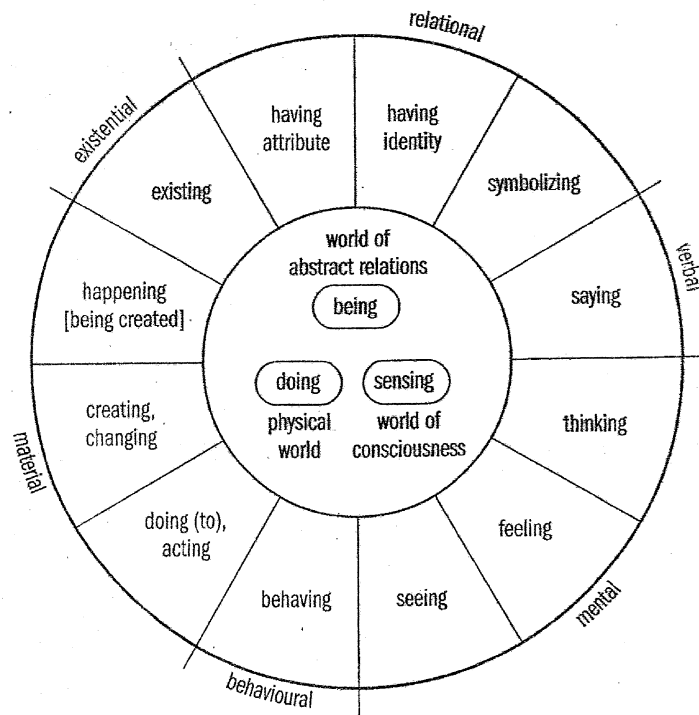


Figure 3.1 Types of process. Taken from Halliday & Matthiessen, 2004, p. 172.

In Figure 3.1 above, the major processes are *material*, *mental* and *relational*. In between these three major processes are the minor processes which are *verbal*, *behavioural*, and *existential*. The above diagram shows that “the regions are continuous” and the border areas signify that “the process types are fuzzy categories” (Halliday and Matthiessen, 2004, p.172). This means that as “the world of our experience is highly indeterminate” (ibid), certain action words may lie in between the adjacent process types. For example, the clause “*the data indicate the moon is a balloon*” is positioned by Halliday and Matthiessen (2004) as lying more at the border of relational and verbal processes rather than being a “prototypical example” of either a relational or a verbal clause (ibid). With respect to the current study, any instances of fuzzy categories will be determined by paying close attention to the context of each

story. Fuzzy categories related to the current study will be illustrated further in Section 3.2.4.

For each process type mentioned above, a set of participant roles is assigned which is realized by nominal groups and adjectival groups. Participant roles consist of main and oblique participants. Main participants (traditionally known as Subject and direct Object), such as Actor, Senser, Goal and Phenomenon, are directly involved in the processes and they have an obligatory appearance. On the other hand, oblique participants (traditionally known as indirect Object), such as Recipient, Beneficiary and Receiver, appear optionally. Table 3.1 below summarizes the process types and their related participants.

Table 3.1 Process types and the assigned participants (Adapted from Thompson, 2004, p.108)

Process type	Core meaning	Main participants	Oblique participants
material	‘doing’, ‘happening’	Actor, (Goal)	Recipient, Client, Scope/Range, Attribute
mental:	‘sensing’:	Senser, Phenomenon	-
perception	‘perceiving’		
cognition	‘thinking’		
emotion	‘feeling’		
desideration	‘wanting’		
relational:	‘being and having’:		
attributive	‘attributing’	Carrier, Attribute	Attributor, Beneficiary
identifying	‘identifying’	Value, Token / Identified, Identifier	Assigner
verbal	‘saying’	Sayer, (Target)	Receiver, Verbiage
behavioural	‘behaving’	Behaver	Behaviour, Phenomenon
existential	‘existing’	Existent	-

The relationship between each process type and its participants will be described in the following sub-sections, beginning with the major processes (material, mental and relational), followed by the minor processes (verbal, behavioural and existential).

3.1.1.1 Material Processes and Participants

Material processes concern verbs of doing and happening. The events that take place have some “input of energy” (Halliday and Matthiessen, 2004, p. 179) or as Eggins (2004, p. 215) calls it “concrete, tangible actions”. Some examples of material processes are *play, eat, open, walk* and *live*. “The source of the energy” (Halliday and Matthiessen, 2004, p. 179) that does the physical action is thus the participant, here known as Actor. Traditionally, Actor is known as Subject. However, when a clause is transitive, an Object appears. In transitivity, an Object is called as Goal. Examples 1.a and 1.b below present samples of language showing the concrete actions with their assigned participants.

Example 1.a

Mr. Jeremy	put on	a macintosh, and a pair of shiny goloshes	[JF/C9]
Actor	Process: material	Goal	

Example 1.b

He	turned	the rusty key in the lock	[MT/C34]
Actor	Process: material	Goal	

In addition to the role of Actor and Goal, there are some other kinds of participants involved – Scope/Range, Recipient, Client, Attribute - and they are oblique participants in a material clause. Scope/Range is an Object which does not receive much effect from an action. On the other hand, Recipient and Client are participants that are “benefitting from the performance of the process” (Halliday & Matthiessen, 2004, p. 191). Recipient is concerned with ‘to’ whereas Client is concerned with ‘for’. Attribute on the other hand may be used to express “the resultant

qualitative state of the Actor or Goal after the process has been completed” (Halliday & Matthiessen, 2004, p. 195). The pair of examples 2.a, 2.b, 3.a, 3.b, 4.a, 4.b and 5.a, 5.b below illustrate samples of sentences having oblique participants.

(i) Scope/Range:

Example 2.a

The rain trickled down his back. [JF/C20]

Example 2.b

Now when Little White fox discovered that his big, kind friend was dead he ran home as fast as his legs could carry him to tell his mother the sad news. [LW/C4 and 5]

(ii) Recipient:

Example 3.a

She never had tasted one before, but as she told Mr. Sparrow, who had brought it to her. [FF/C43, 44 and 45]

Example 3.b

One day he was living in a stick-house in the coppice, causing terror to the family of old Mr. Benjamin Bouncer. [MT/F5 and 6]

(iii) Client:

Example 4.a

The last phrase he told me was that our fate is to build for our children an assuring future.

[Halliday & Matthiessen, 2004, p. 190]

Example 4.b

Do you want us to make up the full pallet for you? [Halliday & Matthiessen, 2004, p. 190]

(iv) Attribute:

Example 5.a

Mr. Bannister described how an unarmed black American, Mr. William Whitfield, was shot dead in a New York supermarket on Christmas Day last year when an officer mistook the keys he was carrying for a gun. [Halliday & Matthiessen, 2004, p. 190]

Example 5.b

They stripped her clean of every bit of jewellery she ever had.

[Halliday & Matthiessen, 2004, p. 190]

3.1.1.2 Mental Processes and Participants

Mental processes are processes of sensing concerned with our own consciousness; and it involves our state of mind and psychology (Bloor and Bloor, 2004). Some verb examples of mental processes are *hate, like, want, and love*. Mental processes can be categorised into four types as in Table 3.2 below.

Table 3.2 Types of mental processes

Mental process types	Meaning	Verb examples
Perceptive	perceiving	see; hear; feel; taste;
Cognitive	thinking	think; dream; know; guess; find out; discover; remember; forget; wonder; believe; understand
Desiderative	wanting	wish; determine; intend; want; hope;
Emotive	feeling	like; dislike; love; admire;

As a mental process is a process of sensing, that which perceives, thinks, wants, and feels is known as *Senser*. On the other hand, that which is perceived, thought of, wanted, and felt is known as *Phenomenon*. Examples 6, 7, 8 and 9 below illustrate examples of mental clauses where each clause represents one type of mental process.

Example 6

Poor Little Freckle Frog	felt	very badly	
Senser	Process: mental, perceptive	Circumstance	[FF/C17]

Example 7

he	guessed	where Tommy Brock had gone to	
Senser	Process: mental, cognitive	Phenomenon	[MT/C29]

Example 8

and	(he)	wished	he didn't have to meet the stranger	[LW/C196]
-	Senser	Process: mental, desiderative	Phenomenon	

Example 9

But	Mr. Jeremy	liked	getting his feet wet	[JF/C2]
-	Senser	Process: mental, emotive	Phenomenon	

3.1.1.3 Relational Processes and Participants

While material clauses concern outer experiences and material clauses concern inner experience, relational clauses on the hand concern both inner and outer experiences. As clauses having the processes of being and having, relational clauses are categorised into *Attributive* and *Identifying*.

For Attributive clause, the Subject is known as Carrier, and the entity attributed to the Carrier is called Attribute. Examples 10.a and 10.b below show examples of attributive clauses.

Example 10.a

He	was	quite pleased	[JF/C5]
Carrier	Process: relational, attributive	Attribute	

Example 10.b

At last	Mr. Tod's preparations	were	complete	[MT/C99]
-	Carrier	Process: relational, attributive	Attribute	

On the other hand, an Identifying clause carries a Subject known as Token /Identified, and the entity that the Token is identified with is known as Value/Identifier. To distinguish Token from Value, Thompson (2004, p. 98) explains that Token is “the

specific embodiment” while Value is “the more general category”. Examples 11.a and 11.b below are depictions of identifying clauses.

Example 11.a

It	was	his own fault	
Token	Process: relational, identifying	Value	[MT/C20]

Example 11.b

and	the only thing it swallowed	was	Mr. Jeremy's goloshes	
-	Value	Process: relational, identifying	Token	[JF/C41]

An Attributive clause can be distinguished from an Identifying clause as it is not reversible and does not have the passive form, whereas an Identifying clause is reversible and has the passive form (Eggins, 2004). For example: “*You’re skinny.*” (an Attributive clause) cannot be reversed or transformed into the passive form as “*Skinny is become by you.*” (Eggins, 2004, p. 241). On the other hand, “*You’re the skinniest one here.*” (an Identifying clause) can be reversed or transformed into the passive form as “*The skinniest one here is you.*” (Eggins, 2004, p. 242). Other characteristics that distinguish an Attributive clause from an Identifying clause are described by Halliday and Matthiessen (2004) and Thompson (2004) as such:

- 1) An Attributive clause can be probed with *what* or *how* x is *like?*; while an Identifying clause can be probed with *what, which* or *who* x is *identified with?*
- 2) Adjective attributions as second participant, e.g., *ugly* [FF/C1] and *upset* [MT/C19], should belong to Attributive type.
- 3) A nominal group for Attributive type is indefinite, i.e., either the “noun is a common noun, with no article or an indefinite article (*a* or *some*)”; while a

nominal group for Identifying type is definite, i.e., “there is a definite article, such as ‘the’ or ‘this’; or a possessive determiner, such as ‘my’ or ‘John’s’; or the noun is a proper noun, such as a name.” (Thompson, 2004, p. 100)

- 4) “The lexical verb in the verbal group realizing the Process is one of the ‘ascriptive’ classes. For example: *sounds complete nonsense, turned into a pig.*” (Halliday & Matthiessen, 2004, p. 219)

Like material and mental clauses, the intensive clauses of attributive and identifying types also have oblique participants who “may be configured with a third participant representing the entity assigning the relationship of identity of attribution” (Halliday & Matthiessen, 2004, p. 237). As for attributive clauses, this oblique participant is called the *Attributor*; as for identifying clauses, this is called the *Assigner*. The pair of examples 12.a and 12.b and 13.a and 13.b below show samples of oblique participants in intensive attributive and identifying clauses.

(i) Attributor in attributive clause:

Example 12.a

It made his head ache. [LW/C104]

Example 12.b

Perhaps Little White fox was sorry the sun was going down so soon that day [LW/C329]

(ii) Assigner in identifying clause:

Example 13.a

We might call it the authorial voice. [Halliday & Matthiessen, 2004, p. 237]

Example 13.b

The Queen forced him to be her new lover. [Thompson, 2004, p. 126]

There is another oblique participant which occasionally appears in relational processes called *Beneficiary*. *Beneficiary* has a similar role like *Recipient* and *Client* mentioned in Section 3.1.1.1, for example: *Little Freckle Frog was very grateful to*

him [FF/C21]. According to Thompson (2004), Beneficiary can appear with or without a preposition; and “it can appear with all process types except existential processes” (p. 106).

Apart from the intensive clause types, there are other relational clause types which are *possessive* and *circumstantial* clauses. The pair of examples 14.a and 14.b and 15.a and 15.b below illustrate samples of possessive and circumstantial clauses.

(i) Possessive

Example 14.a

He	had	the dearest little red float	[JF/C18]
Carrier: possessor	Process: relational, attributive	Attribute: possessed	

Example 14.b

the piano	is	Emily’s	[Halliday & Matthiessen, 2004, p. 239]
Token	Process: relational, identifying	Value	

(ii) Circumstantial

Example 15.a

the meeting	is	On Friday
Carrier	Process: relational, attributive	Attribute

[Halliday & Matthiessen, 2004, p. 239]

Example 15.b

the time of the meeting	is	Friday
Token	Process: relational, identifying	Value

[Halliday & Matthiessen, 2004, p. 239]

3.1.1.4 Verbal Processes and Participants

A verbal process is a process of saying. Some examples of lexical verbs that represent verbal processes are *say*, *tell*, *criticize*, *announce*, and *enquire*. A clause that contains a verbal process can be in the form of quotes or reported speech. The participant representing the speaker is known as Sayer. However, quotations (direct speeches in inverted commas) in third person narratives do not carry a transitivity function, as in the texts used in the current study. The quotes and reported speech form are shown in Examples 16.a and 16.b below:

Example 16.a

"It will make a great mess in my bedroom; but I could never sleep in that bed again without a spring cleaning of some sort,"	said	Mr. Tod	
	Process: verbal	Sayer	
Quoted	Quoting		[MT/C100]

Example 16.b

and	(he)	started to tell	his mother	that Tdariuk wasn't dead	
-	Sayer	Process: verbal	Receiver	Verbiage	
	Reporting			Reported	[LW/C38]

In addition to Sayer, there are three more participants namely Receiver and Verbiage (as oblique participants), and, Target. These three participants are described in the pair of examples 17.a and 17.b, 18.a and 18.b and 19.a and 19.b below.

(i) Receiver: the participant to whom the utterance is directed, for example:

Example 17.a

Nobody could call Mr. Tod "nice". [MT/C1]

Example 17.b

He burst breathlessly into the cave and started to tell his mother that Tdariuk wasn't dead

[LW/C37]

(ii) Verbiage: “represents what the Sayer said” not in quotation or reported form but “in terms of its character as an expression” (Bloor & Bloor, 2004, p. 124-125), for example:

Example 18.a

So, that very evening, before she went home, she told Big Mary all about it [FF/C53]

Example 18.b

Little White Fox didn’t stop to ask a single question. [LW/C33]

(iii) Target: the saying directed at, “rather than addressed to” (Thompson, 2004, p. 101), for example:

Example 19.a

Every one admired her beautiful lace, and she told them all how kind Little Black Spider had been. [FF/C40]

Example 19.b

I’m always praising you to my friends. [Halliday, 1985, p. 130]

3.1.1.5 Behavioural Processes and Participants

Behavioural processes are about behaving. According to Halliday and Matthiessen (2004, p.248), they are “physiological and psychological” behaviour which are partly material and partly mental. Table 3.3 below provides some examples of verbs that discriminate behavioural process type from material and mental processes, including verbal processes.

Table 3.3 Examples of verbs serving as Process in behavioural clauses.
Taken from Halliday & Matthiessen, 2004, p. 251.

(i)	[near mental]	processes of consciousness represented as forms of behaviour	look, watch, stare, listen, think, worry, dream
(ii)	[near verbal]	verbal processes as forms of behaviour	chatter, grumble, talk, gossip, argue, murmur, mouth
(iii)	-	physiological processes manifesting states of consciousness	cry, laugh, smile, frown, sigh, sob, snarl, hiss, whine, nod
(iv)	-	other physiological processes	breathe, sneeze, cough, hiccup, burp, faint, shit, yawn, sleep
(v)	[near material]	bodily postures and pastimes	sing, dance, lie (down), sit (up, down)

Typically, a behavioural process involves only one participant, which is a Subject known as Behaver. In a behavioural clause there may also exist an oblique

participant which has a similar function to Scope/Range. This kind of participant is called Behaviour. According to Eggins (2004, p. 234), Behaviour denotes “a restatement of the process”. Examples 20.a and 20.b below show some samples of behavioural clauses having Behavior and Behaviour as participants.

Example 20.a

(he)	gave	a big, long sniff	
Behaver	Process: behavioural	Behaviour	[LW/C87]

Example 20.b

He	just held	his breath	
Behaver	Process: behavioural	Behaviour	[LW/C31]

However, “if there is another participant which is not a restatement of the process, it is called a Phenomenon” (ibid), as in Examples 21.a and 21.b below.

Example 21.a

and	(he)	(was) listening	attentively	to the snores	
-	Behaver	Process: behavioural	Circumstance	Phenomenon	[MT/C57]

Example 21.b

and	(he)	spied	them	
-	Behaver	Process: behavioural	Phenomenon	[LW/C119]

3.1.1.6 Existential Processes and Participants

An existential process concerns existence. Typically, an existential clause can be identified when there exist the word ‘there’ in a clause indicating existence, and has the verb *be*. ‘There’ generally does not carry the function of a participant or

circumstance, nor does it have any function in the transitivity structure. Examples of existential clauses are shown in Examples 22.a and 22.b below.

Example 22.a

There	will never be	any love lost between Tommy Brock and Mr. Tod	
-	Process: existential	Existent	[MT/C131]

Example 22.b

On the wall	there	hangs	a picture
Circumstance	-	Process: existential	Existent

[Halliday & Matthiessen, 2004, p. 259]

Since an existential clause carries the verb *be*, it may resemble a relational clause. To distinguish an existential process from a relational one, examples of verbs are provided as in Table 3.4 below.

Table 3.4 Examples of verbs serving as Process in existential clauses.
Taken from Halliday & Matthiessen, 2004, p. 258.

Type		Verbs
neutral	exist	exist, remain
	happen	arise; occur, come about, happen, take place
+ circumstantial feature	time	follow, ensure
	place	sit, stand, lie; hang, rise, stretch, emerge, grow
abstract		erupt, flourish, prevail

An existential clause, however, does not have oblique participants. The only participant that is directly involved is Existent as in Examples 22.a and 22.b above.

3.1.2 The System of Transitivity: Circumstances

Circumstantiation concerns the “notion of ‘when, where, how and why’ things happen” (Halliday and Matthiessen, 2004, p. 260). They are realized by “adverbial groups or prepositional phrases” (Eggins, 2004, p. 222). Halliday and Matthiessen

(2004) assert that, circumstantial elements are processes that serve as expansions of other processes, and, “typically they occur freely in all types of process, and with essentially the same significance wherever they occur” (p. 261). Thus, they may enhance, extend, elaborate and project meanings. Table 3.5 below describes the types of circumstantial element and their functions.

Table 3.5 Circumstantial elements and their function. Adapted from Halliday & Matthiessen, 2004, p. 262.

Type		Examples of realization
1 Extent	distance; duration; frequency	<i>for; throughout</i>
2 Location	place; time	<i>at; towards; behind; until, since; today, now</i>
3 Manner	means; quality; comparison; degree	<i>by, with; together, jointly; like, unlike; considerably, deeply</i>
4 Cause	reason; purpose; behalf	<i>because of, due to; for the purpose of; on behalf of</i>
5 Contingency	condition; default; concession	<i>in case of, in the event of; in the absence of, without; despite, in spite of</i>
6 Accompaniment	comitative; additive	<i>with; without; as well as, besides; instead of</i>
7 Role	guise; product	<i>as, by way of, in the role/shape/guise/form of; into</i>
8 Matter		<i>about, concerning, on, of, with reference to, in [‘with respect to’]</i>
9 Angle	source; viewpoint	<i>according to, in the words of; to, in the view/opinion of</i>

To further illustrate the function of the circumstantial elements, Examples 23.a, 23.b, 23.c, 24.a, 24.b, 25.a, 25.b, 25.c, 25.d, 26.a, 26.b, 26.c, 27.a, 27.b, 27.c, 28.a, 28.b, 29.a, 29.b, 30, 31.a and 31.b below lay down sample clauses for each of the type of circumstance.

(i) Extent

Example 23.a

they	can be carried	thousands of miles	by gentle currents
Participant	Process	Circumstance: extent, distance	Circumstance

[Halliday & Matthiessen, 2004, p. 264]

Example 23.b

and	for nearly an hour	he	stared at	the float
-	Circumstance: extent, duration	Participant	Process	Behaviour

 [JF/C21]

Example 23.c

then	he	left	the room	again
-	Participant	Process	Participant	Circumstance: extent, frequency

 [MT/C66]

(ii) Location

Example 24.a

And	here	he	had found	these strange rocks
-	Circumstance: location, place	Participant	Process	Participant

 [LW/C71]

Example 24.b

So	early one fine day,	she	went to see	the Morning Glory Ladies
-	Circumstance: location, time	Participant	Process	Participant

 [FF/C14]

(iii) Manner

Example 25.a

and	(she)	hit	him	with her ugly face
-	Participant	Process	Participant	Circumstance: manner, means

 [LW/C111]

Example 25.b

Mr. Tod	opened	the door	cautiously
Participant	Process	Participant	Circumstance: manner, quality

 [MT/C35]

Example 25.c

Mr. Jeremy	bounced up	to the surface of the water	like a cork and the bubbles out of a soda water bottle
Participant	Process	Circumstance	Circumstance: manner, comparison

 [JF/C42]

Example 25.d

Poor Little Freckle Frog	felt	very badly
Participant	Process	Circumstance: manner, degree

 [FF/C17]

(iv) Cause

Example 26.a

As he could not lift the whole pailful of water at once,	he	fetches	a milk jug, and ladled quarts of water	into the pail	by degrees
Circumstance: cause, reason	Participant	Process	Participant	Circumstance	Circumstance

[MT/C98]

Example 26.b

She	even bought	a sweet-pea bonnet	to please the Morning Glory Ladies
Participant	Process	Participant	Circumstance: cause, purpose

 [FF/C36]

Example 26.c

Do	any of your characters	ever speak	for you?
Pro-	Participant	-cess	Circumstance: cause, behalf

[Halliday & Matthiessen, 2004, p. 271]

(v) Contingency

Example 27.a

In the event of a fire,	the building	should be evacuated
Circumstance: contingency, condition	Participant	Process

[Thompson, 2004, p. 110]

Example 27.b

In the absence of any prior agreement between the parties as to the rate of salvage payable,	the amount	is assessed,	as a rule,	by the Admiralty Court.
Circumstance: contingency, default	Participant	Process	Circumstance	Participant

[Halliday & Matthiessen, 2004, p. 272]

Example 27.c

and,	though he was half afraid of Big White Bear	he	was	also	very hungry
-	Circumstance: contingency, concession	Participant	Process	Circumstance	Participant

[LW/C222]

(vi) Accompaniment

Example 28.a

he	had been living	for a long time	with his mother	off the bounty of Big White Bear	[LW/C342]
Participant	Process	Circumstance	Circumstance: accompaniment, comitative	Circumstance	

Example 28.b

and	(he	was)	very curious	besides to see where Big White Bear kept his pantry	[LW/C248]
-	Participant	Process	Participant	Circumstance: accompaniment, additive	

(vii) Role

Example 29.a

and	(he)	dreamed,	as little folks will in the springtime	[LW/C344]
-	Participant	Process	Circumstance: role, guise	

Example 29.b

Proteins	are	first	broken down	into amino acids.
Goal	Pro-	Circumstance	-cess	Circumstance: role, product

[Halliday & Matthiessen, 2004, p. 275]

(viii) Matter

Example 30

She	almost cried	about it	[FF/C19]
Behaver	Process	Circumstance: matter	

(ix) Angle

Example 31.a

According to the phlogistic theory,	the part remaining after a substance was burned	was	simply the original substance deprived of phlogiston.
Circumstance: angle, source	Token	Process	Value

[Halliday & Matthiessen, 2004, p. 276]

Example 31.b

To Miss Lewisham	this	had been	a great relief
Circumstance: angle, viewpoint	Participant	Process	Participant

[Thompson, 2004, p. 111]

While the samples given above may look structured, Thompson (2004) posits that there has been no principled way of analysing the effect of circumstantiation. Most of the time this area is neglected and overlooked, as opposed to process types and participants. However, for the purpose of the current study, circumstantiation is put central to the transitivity analysis as it can significantly “contribute to the overall meanings” of the texts used in the current study (Thompson, 2004, p.112). The following Section 3.2 will describe the methods and procedures used to carry out the research.

3.2 Research Methodology

The methodology undertaken in carrying out the current study involves five steps as shown in Figure 3.2 below.

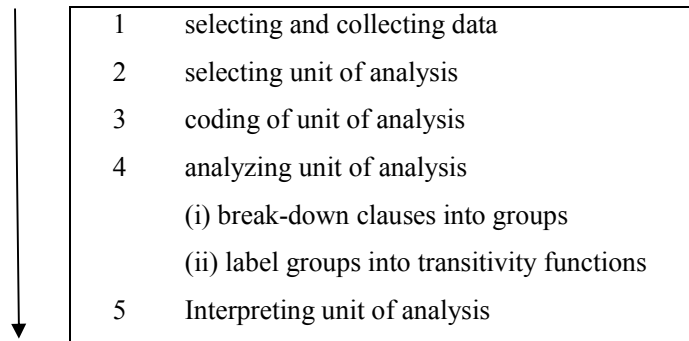


Figure 3.2 Steps in carrying out research

Details of the methodology will be described in the following sub-sections.

3.2.1 Data Selection and Description

The current study draws on data from the early 20th century animal fantasy stories. Animal fantasy is a sub-genre of fantasy in children’s literature (Lynn, 1995; Tunnel & Jacobs, 2000). The early 20th century is chosen because this era was regarded as the golden age of children’s fiction (Georgiou, 1969; Hunt, 1994; Knowles & Malmkjær, 1996). Numerous well-loved books were published in this era; therefore, there is a wide range of selection. To attain the current study’s aims, four animal stories are selected, which are two stories of each focalizing a frog, and two stories of each focalizing a fox. These stories are downloaded from the Project Gutenberg website (<http://www.gutenberg.org>) which provides free ebooks for public use.

The fictions selected are highly anthropomorphic. When a fiction is highly anthropomorphic, the characters are almost human like where the animals are seen to be wearing clothes, performing human concrete and physiological actions, and bearing human emotions. These fictions are also intended to be read aloud to young children of about two to six years due to their rich language structure. These fictions

are in the form of picture storybooks where there are some illustrations depicting the main characters. According to Glazer (2000, p. 10), a picture story book “has a definite plot, a problem to be solved and interrelatedness of events”. In selecting these stories, the gender of authors and the linguistic variants (British or American) were not a consideration. Table 3.6 below provides the details of the data used in the current study.

Table 3.6 Description of data

Title	Author	Publication Year	Textual Form	Linguistic Variant
The Tale of Mr. Jeremy Fisher	Beatrix Potter	1906	short story	British
How Freckle Frog Made Herself Pretty	Charlotte B. Herr	1913	short story	American
The Tale of Mr. Tod	Beatrix Potter	1912	extended short story	British
Little White Fox and His Arctic Friends	Roy J. Snell	1916	extended short story	American

Table 3.6 shows that the stories selected were published between 1906 and 1916 and they are in the form of short story and extended short story. As reflected in the title of the stories, Mr. Jeremy Fisher (JF) and Freckle Frog (FF) are the frog protagonists of concern in the current study, while Mr. Tod (MT) and Little White Fox (LW) are the fox protagonists of concern in the current study. Table 3.7 below gives a brief account of each story mentioned above.

Table 3.7 Brief account of data

Title	Brief account
The Tale of Mr. Jeremy Fisher	JF wanted to go fishing during a rainy day. If he caught more than five fish, he would invite his friends to dinner. During fishing, he struggled with and got snapped by some fish. In the end, he did not manage to catch a single fish. Since then, he told himself he would never dare go fishing again. But, his friends still came for dinner and he offered them something else instead.
How Freckle Frog Made Herself Pretty	FF loved pretty things. One day she was invited to Mr. Robin Redbreast's party. So, she prepared herself to look as pretty as she could. She went to see the Morning Glory Ladies to borrow one of their dresses but her request was turned down. She thought that she had offended them. One day she planned to throw a party herself especially to befriend the Morning Glory Ladies. She invited the Morning Glory Ladies and they accepted her invitation. It made her feel very happy. She realized that being pretty was not of a great concern as long as everyone liked her.
The Tale of Mr. Tod	MT was disliked by many and he liked no one. Due to his wandering habit, he had a lot of houses at different places. This caused terror and fright to his neighbours. One day when he was not around, the bedroom in one of his houses was occupied by Tommy Brock the badger. So, he planned a trick on Tommy Brock. He brought in a clothes line and a rope and hung a pailful of water on Tommy Brock's head with the intention of undoing the rope and letting the pail fall on Tommy Brock. But, when he opened the door, Tommy Brock was sitting at the kitchen table. Then they started wrestling with each other.
Little White Fox and His Arctic Friends	LW liked to be out of the house all the time. One day, he went out looking for his dear friend, Tdariuk the reindeer, to make sure if he was really dead. On the way he met Miss Ptarmigan, the penguins, the other little foxes, Barred Seal, and Mr. Lemming. Next time, he went on a strange journey and he got lost. He then looked for someone he knew to lead him back home. Finally, he came back home safely. As a result, he would be careful in the future. After all he thought that there was no better place like home and no one in this world as good as his mother.

3.2.2 Selection of Unit of Analysis

The current study follows closely the method of selecting clauses described by Montgomery (1993, pp. 136-137). The unit of analysis for the current study are clauses pertaining to the depiction of human characteristics related to the character of concern (the protagonist). This includes the characterization aspects detailed by Glazer (2000) and Mohammad and Rosli (2000) which denote what a protagonist does, thinks, says, and what others say and think about the protagonist. Clauses which

are significantly animal-like are disregarded. Below is an example of how the particular clauses are selected from the excerpt of *The Tale of Mr. Tod*.

Nobody could call Mr. Tod "nice." The rabbits could not bear him; they could smell him half a mile off. **He was of a wandering habit** and he had foxey whiskers; **they never knew where he would be next. One day he was living in a stick-house in the coppice, causing terror to the family of old Mr. Benjamin Bouncer. Next day he moved into a pollard willow near the lake, frightening the wild ducks and the water rats.** In winter and early spring he might generally be found in an earth amongst the rocks at the top of Bull Banks, under Oatmeal Crag. **He had half a dozen houses, but he was seldom at home.**

From the excerpt above, the boldfaced ones are the clauses selected as they are clauses related to the protagonist who is *Mr. Tod*, as well as expressing human characteristics. For elliptical non-finite clauses, ellipses are shown in brackets (see Figure 3.3). Once clauses are selected, they are then coded as in step 3 shown in Figure 3.2.

3.2.3 Coding of Selected Unit of Analysis

The coding of the selected clauses is according to the name of the protagonist to be analysed from each story and also to the sequence of clauses selected. First, coding is done to the protagonist of concern from each story. Table 3.8 below shows the code for the protagonist in each story.

Table 3.8 Story title and code

Story title	Protagonist	Code
The Tale of Mr. Jeremy Fisher	Mr. Jeremy Fisher	JF
How Freckle Frog Made Herself Pretty	Freckle Frog	FF
The Tale of Mr. Tod	Mr. Tod	MT
Little White Fox and His Artic Friends	Little White Fox	LW

Having a code for each protagonist, each selected clause is then coded in sequence. Based on the story excerpt in Section 3.2.2 above, each selected clause (boldfaced) is coded as follows:

Coding of Selected Clauses
MT/C1 - Nobody could call Mr. Tod “nice”.
MT/C2 - The rabbits could not bear him
MT/C3 - He was of a wandering habit
MT/C4 - they never knew where he would be next
MT/C5 - One day he was living in a stick-house in the coppice
MT/C6 - (he was) causing terror to the family of old Mr. Benjamin Bouncer
MT/C7 - Next day he moved into a pollard willow near the lake
MT/C8 – (he was) frightening the wild ducks and the water rats
MT/C9 - He had half a dozen houses
MT/C10 - but he was seldom at home

Figure 3.3 Sample coding of selected clauses from the excerpt of *The Tale of Mr. Tod*

Once all the selected clauses are coded, they are prepared for the analytical process. The following Section 3.2.4 will describe the transitivity treatment on the selected clauses as in step 4 shown in Figure 3.2.

3.2.4 Analysis of Selected Unit

Analyses of the selected unit are done manually as some clauses need semantic reasoning in defining the categories of the transitivity function. The complete analyses are attached as appendix.

To undertake the syntactic analysis, first, the selected clauses are broken down into groups: verbal group (VG), nominal group (NG), adjectival group (Adj.G),

adverbial group (Adv.G) and prepositional phrases (PP). Clauses MT/C1, 4, 5, 6 and 10 in Figure 3.3 are used to illustrate the examples.

Example 32

(NG)	(VG)	(NG)	(Adj.G)
Nobody	could call	Mr. Tod	“nice”.

Example 33

(NG)	(VG)	(NG)
they	never knew	where he would be next

Example 34

(Adv.G)	(NG)	(VG)	(PP)
One day	he	was living	in a stick-house in the coppice

Example 35

(NG)	(VG)	(Adj.G)	(PP)
(he)	(was) causing	terror	to the family of old Mr. Benjamin Bouncer

Example 36

-	(NG)	(VG)	(Adj.G)
but	he	was	seldom at home

From Examples 32, 33, 34, 35 and 36 above, to recapitulate, in transitivity, NG and Adj.G are expressed as *participants*, VG is expressed as *process type*, and Adv.G and PP are expressed as *circumstances*. Thus, the groups are then labelled into their transitivity functions in accordance to the process type of each clause, together with their codes. However, “modal and conjunctive Adjuncts” such as *probably*, *and*, *but* and *because* “do not have a transitivity function” (Thompson, 2004, p. 109) (see Example 41). Examples 37, 38, 39, 40 and 41 below have the illustration.

Key: Pr : Process

Cir : Circumstance

rel, attrib : relational, attributive

Example 37 – verbal clause

MT/C1	Nobody	could call	Mr. Tod	“nice”.
	Sayer	Pr: verbal	Receiver	Verbiage

Example 38 – mental clause

MT/C4	they	never knew	where he would be next
	Senser	Pr: mental, cognitive	Phenomenon

Example 39 – material clause

MT/C5	One day	he	was living	in a stick-house in the coppice
	Cir: location, time	Actor	Pr: material	Cir: location, place

Example 40 – material clause with ellipses

MT/C6	(he)	(was) causing	terror	to the family of old Mr. Benjamin Bouncer
	Actor	Pr: material	Goal	Recipient

Example 41 – relational clause with conjunctive Adjunct

MT/C10	but	he	was	seldom at home
	-	Carrier	Pr: rel, attrib	Attribute

In addition to this, some process types may be categorized as fuzzy (mentioned earlier in Section 3.1.1). To verify the process type, the context of the story and the nature of the target characters are used as grounding. For example, the clause MT/C1 - *Nobody could call Mr. Tod “nice”* is categorized as a verbal clause in the current study. From another interpretation, it can also be categorized as a relational clause as follows:

Example 42 – relational interpretation of clause MT/C1

MT/C1	Nobody	could call	Mr. Tod	"nice."
	Assigner	Process: relational, identifying	Token	Value

In the context of the story, the current study interprets clause MT/C1 as more of a comment of other characters about Mr. Tod, rather than a direct exposition on his attribute as in Example 42 above. Therefore, in the current study, clause MT/C1 is interpreted as a verbal clause.

Finally, based on the transitivity analyses, interpretations are carried out guided by the research questions of the current study. Section 3.2.5 will describe the interpretation procedure of the analysed clauses.

3.2.5 Interpretation of Unit of Analysis

The transitivity analyses (see Appendix B1, B2, B3 and B4) are used to answer the research questions (RQs) in the current study as follows:

- 1.a How are human characteristics in the frog protagonists characterized through the system of transitivity?
- 1.b How are human characteristics in the fox protagonists characterized through the system of transitivity?
- 2.a Do the frog protagonists in both stories carry similar human characteristics?
- 2.b Do the fox protagonists in both stories carry similar human characteristics?

For RQs 1.a and 1.b, interpretations are carried out according to each of the six types of clauses – material, mental, relational, verbal, behavioural and existential clauses - which will include the process types, their assigned participants, and the

accompanying circumstantial elements. Findings from RQ1.a and 1.b are then used to interpret RQ2.a and 2.b in terms of making comparisons between the two frog protagonists and the two fox protagonists. A more detailed method of interpreting will be provided in Chapter 4. The following Section 3.2.6 will provide a sample analysis and interpretation of the current study.

3.2.6 Sample Analysis and Interpretation

Sample analysis (Example 43) and interpretation (Example 44) below are based on an extended excerpt of *The Tale of Mr. Tod*.

Excerpt – *The Tale of Mr. Tod*

Mr. Tod came in and out of the bedroom. Twice he brought in his walking-stick, and once he brought in the coal-scuttle. But he thought better of it, and took them away.

When he came back after removing the coal-scuttle, Tommy Brock was lying a little more sideways; but he seemed even sounder asleep. He was an incurably indolent person; he was not in the least afraid of Mr. Tod; he was simply too lazy and comfortable to move.

Mr. Tod came back yet again into the bedroom with a clothes line. He stood a minute watching Tommy Brock and listening attentively to the snores. They were very loud indeed, but seemed quite natural.

Mr. Tod turned his back towards the bed, and undid the window. It creaked; he turned round with a jump. Tommy Brock, who had opened one eye—shut it hastily.

The snores continued.

Mr. Tod's proceedings were peculiar, and rather uneasy, (because the bed was between the window and the door of the bedroom). He opened the window a little

way, and pushed out the greater part of the clothes line on to the window sill. The rest of the line, with a hook at the end, remained in his hand.

Example 43 – Sample analysis

Key: Pr : Process

rel, attrib : relational, attributive

Cir : Circumstance

MT/C49	Twice	he	brought in	his walking-stick
	Cir: extent, frequency	Actor	Pr: material	Goal

MT/C50	and	once	he	brought in	the coal-scuttle
	-	Cir: extent, frequency	Actor	Pr: material	Goal

MT/C51	But	he	thought	better	of it
	-	Senser	Pr: mental, cognitive	Cir: manner, quality	Phenomenon

MT/C52	and	(he)	took	them	away
	-	Actor	Pr: material	Goal	Cir: location, place

MT/C53	he	was not	in the least afraid of Mr. Tod
	Carrier	Pr: rel, attrib	Attribute

MT/C54	Mr. Tod	came back	yet again	into the bedroom	with a clothes line
	Actor	Pr: material	Cir: extent, frequency	Cir: location, place	Cir: accompaniment, comitative

MT/C55	He	stood	a minute
	Behaver	Pr: behavioural	Cir: extent, duration

MT/C56	(he)	(was) watching	Tommy Brock
	Behaver	Pr: behavioural	Phenomenon

MT/C57	and	(he)	(was) listening	attentively	to the snores
	-	Behaver	Pr: behavioural	Cir: manner, quality	Phenomenon

MT/C58	Mr. Tod	turned	his back	towards the bed
	Actor	Pr: material	Goal	Cir: location, place

MT/C59	and	(he)	undid	the window
	-	Actor	Pr: material	Goal

MT/C60	he	turned round	with a jump
	Actor	Pr: material	Cir: manner, quality

MT/C61	Mr. Tod's proceedings	were	peculiar, and rather uneasy
	Carrier	Pr: rel, attrib	Attribute

MT/C62	and	(he)	pushed out	the greater part of the clothes line	on to the window sill
	-	Actor	Pr: material	Goal	Cir: location, place

MT/C63	The rest of the line, with a hook at the end,	remained	in his hand
	Value	Pr: rel, ident	Token

Example 44 – Sample interpretation (on material clauses)

Material processes were the most utilized process type for MT. As text MT was about MT carrying out a trick on Tommy Brock, he was found to have performed a lot of forceful and transitive concrete actions. As Actor, he was found, among others, to be *bringing in* his walking-stick and coal-scuttle [MT/C49 and 50 respectively], *undoing* the window [MT/C59], and *pushing out* the clothes line [MT/C62].

The material processes of MT were further described by circumstance of location (place) and manner (quality). Circumstance of location (place) signifies *where* the concrete actions of MT were carried out, for instance, turning his back *toward the bed* [MT/C58], and pushing out the clothes line *on to the window sill* [MT/C62]. On the other hand, circumstance of manner (quality) denotes *how* the concrete action was performed, for example, turning around *with a jump* [MT/C60].

3.3 Chapter Summary

This chapter has explained the applications of the transitivity functions for the analysis of data. This chapter also has detailed out the procedures undertaken in carrying out the research. For the analysis, the transitivity framework of Halliday and Matthiessen (2004) is drawn upon as the major tool. The current study also integrates the transitivity explications provided by Thompson (2004), Bloor and Bloor (2004) and Eggins (2004). The following chapter will present the findings of the current study.