

**TRANSITIVITY ANALYSIS OF THE NATIONAL GEOGRAPHIC
NEWS**

THESIS

**Presented in partial fulfillment of the requirements
for the completion of strata 1 program
of the English Language
specialized in Linguistics**



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MOTTO

- 1. You can do anything you set your mind to –Eminem-**
- 2. Speak kindly, care deeply, love generously, live simply, and be friendly to nature -Akrom.M-**

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ABSTRACT

This thesis entitled “*Transitivity Analysis of the National Geographic News in the Topic of Cave Fossil Find: New Human Species or “Nothing Extraordinary?”*”. The researcher exposed the data into the system of transitivity and segmented into clauses, and afterwards they were categorized into their transitivity system by using the theory of Functional Grammar.

The method applied in this final project is qualitative. The object of this study is news, downloaded from the website of National Geographic which was the most popular news in March 2012.

Finally, the findings show that there are 26 paragraphs which consist of 99 major clauses. The most dominant processes are material processes (35.6%). In line with the domination of material process in the study, Actor and Goal significantly dominate over the other participants. For the circumstance, the circumstances of manner (5.3%) significantly dominates over the other circumstances.

The use of material process is appropriate to the structure of the news, that is elaborating the events. Material process are used in retelling the events, what happened to the participants involve in the news in certain circumstances. the circumstance of manner is significantly dominated to develop the news. Because the use of the circumstance of manner itself is appropriate to the structure of every kind of text.

The researcher hopes this study will be beneficial for the students, readers, and other researcher who want to know about transitivity analysis of any kind of text.

Key words : Circumstance, National geographic, Process, Participant

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CHAPTER I

INTRODUCTION

1.1 Background

Language is central to the ways of thinking, feeling and interacting with others. It is the main medium to form and maintain relationship with one another and the medium through which experiences are shaped and exchanged. According to Webster (1990:162-173), “language is a systematic means of communicating feelings or ideas by the use of conventionalized signs, sounds, gestures or marks having understood meanings.”

The investigation of the languages always come to an end that the true function of language is to combine human ideas into verbal expression so that they can convey meaning to another and create the so called ‘communication’.

As a device for communication, language is an effective means of expressing ideas and feelings both in spoken and written form. Robins (1980:8-9) states that “language is a unitary activity; people speak and write; and understand what is spoken and written in their own language, without necessarily being aware of such things as grammar and pronunciation.”

In doing communication, people need another person, who will become our hearer as well as our partner of speaking at the same time. This action will cause a variation of language.

Language varies not only according to who is speaking -its users- but also according to the situation in which, it occurs -its uses, because the existence of this variation, it is doubtless that the misunderstanding between the hearer and the speaker often happens, especially when both of the participants in the communication are all non-native speaker. Also, misperception from what is meant by the writer to what is accepted by the reader in writing media. For that reason, it seems that we need a model of language that helps us understand how texts work to make meaning.

Functional grammars view language as a resource for making meaning. These grammars attempt to describe language in actual use and focus on texts and their contexts, either context of culture or context of situation, to facilitate learners' interpretation and production of text. Gerot and Wignell (1994:10-11) state, "context of culture determines what we can mean through being, doing and saying. Context of situation can be specified through use of field, tenor and mode." When people hear or read a text, we can reconstruct its context of situation. The specification of the context of situation encodes three types of meaning, ideational meaning, textual meaning and interpersonal meaning. The types of meaning related to the topic here is ideational meaning.

Ideational meanings are meaning about phenomena, about things (living and non living, abstract and concrete), about goings on (what the things are or do) and the circumstances surrounding these happenings and doings (Gerot and Wignell 1994:12).

Ideational meaning involves looking for the process in the text and whatever goes with them. The field of discourse most centrally influences meanings of this kind. It refers to what is happening to the nature of the social action that is taking place. Through the field of discourse, people will understand the significance of the linguistic features, which realize a certain genre.

In this research, the National Geographic news is analyzed because it contains various types of information, so that the three semantic categories that arise in transitivity i.e. processes, participants, and circumstances will vary. Secondly, the three categories in the transitivity system of the functional grammar view point could be used to understand more of National Geographic website through its news, and beside that, people sometimes think that 'learning a language' is a simple matter of learning vocabulary and grammar but anyone who has visited a country where an unfamiliar language is spoken can tell you this is only part of the story. Our daily lives are conducted in situations that are part of our context of culture which is partly how people recognize and understand other's people meaning. Whenever people speak or write, people make selections from the entire lexical and grammatical system of English to produce appropriate meanings for the fields of a context of situations. When people first operate in a second language people may know the words, not only words and grammar but also which words and which grammatical choices are appropriate for a situation.

Due to the above reasons the researcher decided to conduct a transitivity analysis of the national geographic news in the topic of Cave Fossil Find: New Human Species or “Nothing Extraordinary?”

1.2 Statements of the Problem

In this research, the statement of the problems are:

1. What process, participants, and circumstances are found in National Geographic News?
2. How is the field of discourse of National Geographic News?

1.3 Scope of the Study

The study of discourse analysis is so much complex, thus in this study, the researcher wants to limit the discussion in the transitivity analysis found in the content of website of National Geographic news in the topic of Cave Fossil Find: New Human Species or “Nothing Extraordinary?”. Therefore, the National Geographic news analyzed here is the object of the study. It covers the processes, participants, and circumstances found in the News of National Geographic and its field of discourse.

1.4 Objectives of the Study

Dealing with the problem statement above, The researcher would like to achieve the following objectives:

1. To find out the process, participants, circumstances found in National Geographic News.
2. To describe the field of discourse of National Geographic News.

1.5 Significances of the Study

The researcher expects that the results of this analysis and study can be of significant in the following ways:

1. Enriching the researchers' attention to the technique analysis of transitivity. So that it can add knowledge to them in understanding the transitivity analysis in news.
2. Providing an additional reference pertaining to transitivity analysis for the students of the English Department, Faculty of Humanities, Dian Nuswantoro University.
3. Encouraging the readers to understand transitivity and the researcher hopes that the analysis could be applied by anyone who wants to analyze a written text this way.

1.6 Thesis Organization

This thesis is organized into the following chapters:

Chapter 1 is introduction, which describes background of the study, statement of the problem, scope of study, objective of the study, significance of the study, and thesis organization.

Chapter 2 discusses review of related literature. This covers the grammar, metafunction, ideational meaning, transitivity, types of processes, and field of discourse on which the data analysis is based.

Chapter 3 contains research method that includes research design, unit of analysis, source of data, technique of data collection, and technique of data analysis.

Chapter 4 presents research finding and discussion.

Chapter 5 consists of conclusions and suggestions.

CHAPTER II

REVIEW OF RELATED LITERATURE

Before analyzing the news based on the statements of the problem mentioned in the previous chapter, chapter II presents some references from several books and from internet that support this study, so that grammar comes up firstly as the reference to support this chapter.

2.1 Grammar

Language is not always the same, but changes according to different situation. Language always has variation according to its speaker and its situation. Also, every language has its own rule. The rule of language is called grammar. One approach sees grammar as a set of rules, which specify all the possible

Grammar is the structure of a language. Grammar itself includes the arrangement of words and the internal structure of words, as stated by Coulthard (1977:1) that “the term grammar is understood to refer to all aspects of language, which include pronunciation, word formation and sentence formation among other.”

There are three schools grammar, which have had a major influence on study of language. Those are traditional grammar, formal grammar and functional grammar. According to Gerot and Wignell (1994:5), “traditional grammar focuses on rules of for producing correct sentences.” In so doing, it has two main weaknesses, the rules it

prescribes are based on the language of a very small group middle-class English speakers, and the rules deal only with the most superficial aspects of writing.

The formal grammar primarily concerns with the forms of grammatical structure and their relationship to one another (Lock, 1996:1). However, the formal grammarian is primarily interested in finding the best abstract representation of the structure of the sentence and how it might be related to the structure rather than the meaning of the sentence. However, functional grammar is different from both two types of grammar. According to Lock (1996:3), the primary aim of a functional grammatical analysis is to understand how the grammar of a language serves as a resource for making and exchanging meaning. Traditional and formal grammar label the elements of the clause according to its word class, while functional grammar labels them in terms of the function each is playing in that clause.

There are three types of meaning within grammatical structures that can be identified; those are experiential meaning, interpersonal meaning and textual meaning (Lock, 1996:9). Experiential meaning or ideational meaning has to do with the ways language represents our experience (actual and vicarious) of the world as well as the inner world of our thoughts and feelings. It is in line with Martin, Matthiessen and Painter (1997:5) that “ideational meaning involves looking for the process in the text.” Meanwhile, the interpersonal meaning has to do with the ways in which we use act upon one another through language-giving and requesting information, getting people to do things, and

offering to do things ourselves –and the ways in which we express our judgments and attitudes– about such things as likelihood, necessity and desirability. The textual meaning has to do with the ways in which a stretch of language is organized in relation in its context, and in organizing the textual meaning, the grammar itself needs metafunction.

2.2 Metafunctions

According to Halliday as the citation in Butt *et al* (2001:5) developed a theory of the fundamental functions of language, in which he analyzed lexicogrammar into three broad metafunctions: ideational, interpersonal and textual. Each of the three metafunctions is about a different aspect of the world, and is concerned with a different mode of meaning of clauses.

2.2.1 Ideational Metafunction

The ideational metafunction uses language to represent experience. There are two parts to this representation: experiential meaning encodes the experiences and logical meanings show the relation between them, but logical meaning are not fully discussed, according to Butt *et al* (2001:5).

In describing the experiential functions of language we must have a set of terms to show how the clause can be broken down into three functional constituents: participant, process, and circumstance. The participant constituent can be further described in terms of various participant roles such as actor, agent, goal, carrier, sayer. The process is divided into three basic process types: material, relational and projecting. other grammatical terms

you will find in this and subsequent chapters include labels for the group and phrases of our rank scale: nominal group, verbal group, adverbial group, and prepositional phrase. As people look more closely at the structure of the group and phrases various labels such as epithets, classifier, thing, and event.

The interpersonal metafunction uses language to encode interaction, to show how defensible people find our prepositions, to encode our ideas about obligation and inclination and to express the attitude. One of the most basic interactive distinctions concerns the kind of commodity being exchanged; that is, the difference between using language to exchange information and using it to exchange goods and services. A second distinction concerns the type of interaction taking place; that is, the difference between demanding and giving. In other words, people can demand information or people can give it and people can demand goods and services or give them. These interpersonal meaning from the semantic level of language are realized in the wordings of the lexicogrammatical level.

2.2.2 Textual metafunction

The textual metafunction uses language to organize our experiential, logical and interpersonal meaning into a coherent and, in the case of written and spoken language, according to Butt *et al* (2001:5) To organize any text into coherent whole, writers and speakers need to keep their readers and listeners well informed about where they are and where they are going. Fortunately they are grammatical resources to signpost the way

through clauses, clause complexes and paragraphs, from beginning to the end of a text. The first signpost must be at the beginning of a text, paragraph or clause: it tells readers and listeners what the speaker or writer has in mind as a starting point. The signpost realizes textual meaning.

2.2.3 Interpersonal Metafunction

Interpersonal metafunction covers two main areas: one concern the type of interaction taking place and the kind of commodity being exchanged, and the other concerns the way speakers take a position in their messages.

Interacting with language is one of the most basic interactive distinctions concerns the kind of commodity being exchanged; that is, the difference between using language to exchange information and using it to exchange goods and services. A second distinction concerns the type of interaction taking place; that is, the difference between demanding and giving.

Demanding and giving information are meanings at the semantic level which are most often realized at the lexogrammatical level by asking questions or making statements. Certain contexts will motivate these meanings in a text.

2.3 Ideational Meaning

The ideational meaning represents our experience of the world. It will consider the clause from the point of view of its experiential meaning. In experiential terms, the clauses refer to the action that has happened and the thing that the action was done to and also refer to the do of the action (Thompson, 1996:29). Martin, Matthiessen and Painter (1997:5) strengthen the statement above by explaining that ideational meaning involves looking for the processes in the text and whatever goes with them. The ideational meaning realized in the field of the text, that is what to be talked and written about; the long and the short term goals of the text.

Gerot and Wignell (1994:12) point out “ideational meanings are meanings about phenomena, about things (living and non-living, abstract and concrete) about goings on (what-the the things are or do) and the circumstances surrounding these happenings and doings.” Mainly, to get the ideational meaning, we have to understand the processes being referred to, the participants in these processes and the circumstances -time, cause, etc. In other words, it is about the clause as representation. At the simplest level from the experiential perspective, Thompson (1996:76) states that language reflects our view of the world as consisting of ‘goings-on’ (verbs) involving things (noun) which may have attributes (adjectives) and which go on against background details of place, time, manner, etc. (adverbials). The classification of the different kinds of processes can be explored through the system of transitivity.

The system of transitivity belongs to the experiential metafunction and is the overall grammatical resource for construing goings on. It construes the experience in terms of configuration of processes, participants involved in them and attendant circumstances. Processes are realized by verbs and traditionally verbs have been defined as doing words. But, some verbs are not doing words at all but rather express states of being or having (Gerot and Wignell, 1994:54). The process types differ both from the process itself, the number, and the kind of participants involved. While circumstances essentially encode the background against which the process takes place.

Processes are central to transitivity (Gerot and Wignell, 1994:54). From this point of view it can be seen that different processes make different order of meaning. For example, to write a funny story, to tell a funny story and to hear a funny story, are three different orders of meaning.

The different types of processes can be decided through the conformity between the common sense of goings on that we can identify and the grammar.

Nominal group realizes the participants in a process in the grammar. A participant can be a person, a place or an object (Thompson, 1996:77).

Adverbial groups or prepositional phrases realize the circumstances in a process in the grammar. Circumstances function to illuminate the process in some way. Among other things, they may locate the process in time or space, suggest how the process occurs or

offers information about the cause of the process. So that the transitivity comes to adjust.

2.4 Transitivity

The ideational metafunction engenders resources for construing our experience of the world around us and inside us; the ideational system at clause rank is transitivity. Transitivity is concerned with construing one particular domain of our experience in the world, both the external world of happenings and events, and our own internal world of our thoughts and feelings.

In describing the ideational metafunction we must first have a set of terms to show how the clause can be broken down into three functional constituents. Those are participant, process, and circumstance.

2.4.1 Participants

A participants can be a person, a place, or an object. And in the grammar of a clause the participant is most commonly realized by a NOMINAL GROUP. At the nucleus of the nominal group structure is the word that most generally represents the thingness concept that is being talked about, typically a noun or pronoun. We call this nucleus the Head of the nominal group; that is the THING element in the nominal group structure. And the participant constituent can be further described in terms of various participant role such as *actor, goal, senser, phenomenon, carrier, attribute, token, value, behavior, sayer, existent*. The process is divided into seven types: material process, mental process, behavioral

process, verbal process, relational process, existential process, and meteorological process. There is also metalanguage set that allows us show final function distinctions within the circumstance constituent.

Sometimes a single word is all that is needed to signify the concept under discussion, for example when we say “trees are beautiful” or “beer tastes bitter”. But we often want to be specific in some way, for example by pinning down some trees as “those trees” or by qualifying them as “those trees on the hill”. So the thing may stand alone or be preceded and followed by other words in the group which modify it in some way. In other words, we can have premodification before the thing and postmodification after it. (Butt *et al.*2001:67-68)

2.4.1.1 Premodification

1. DEICTICS which point to, or in some way select, the noun functioning as thing.

Deictics include:

for example:

articles

a, the

possessive

this, these, that, those

demonstratives

my, her, their, my father's

a view non-specific pointers

some, both, all

2. NUMERATIVES which tell how many of the thing there are or in what order they

occur.

Numeratives include:	for example:
cardinal numbers	one, three, a thousand
ordinal numbers	first, second, third, last

3. EPITHETS which describe a quality of a thing.

Epithets include:	for example:
adjectives	young, red, dirty, exciting, disgusting, wonderful

4. CLASSIFIERS which establish the thing as a member of a class.

These may be:	for example:
adjectives	financial, public
nouns acting as classifier	cedar tree, car pool

The premodification can be functionally divided into several parts. You will notice that the four broad groups reflect the structure of premodification in a group.

2.4.1.2 Postmodification

Postmodification function to qualify the thing in more detail. It is functionally labeled as *qualifier* and it gives more detail about the thing by means of clause or propositional phrase. As the clause or prepositional phrase is functioning as a Qualifier within a group, it is said to be embedded in that group and has no independent status as a phrase and clause. here are example of nominal group containing Qualifiers (the Qualifiers

are in Bold type):

the house **on the hill**

snow **on mount eiger**

the car **that came hurtling down the road**

the tall woman **who parks her car outside number 16**

In fact, the Qualifier is by far the most intricate part of nominal group, and it can be extremely complex. Take the following example:

**the desk which you bought at the shop near the bakery which sells those cakes
your father like**

2.4.2 Processes

Process is realized in the grammar of the English clause. Here verbal groups model the experience of eventness in English – whatever is happening, acting, doing, saying, or simply being. As with nominal group, the verbal group may consist of one word or of a group of words. Just as the Head of nominal group (which expresses thingness in English) typically involves a noun or pronoun, the word at the heart of the verbal group (which expresses eventness) most generally represents the concept of eventness. This is typically a member of the word class verb, and is known as the Event in the verbal group structure. The event is thus the central verb and signifies the activity taking place. In an English verbal group, the Event may stand alone or be preceded by other words in the group. The Event is shown in bold in the examples below: (Butt *et al.*2001:69-70)

Participant	Process
Nominal group	Verbal group
	Event
The string	broke
The cat	has been sleeping
My car	was being towed
The other team	might have been slacking
The premises	could have been being watched

The elements that precede the Event itself are a quite limited set of forms known as auxiliary verbs or auxiliaries. They express aspects of the event such as:

Location in time (tense)	will eat, did eat
Completeness or continuousness of the event (aspect)	is eating
The speaker's judgment of the certainty of the event (modality)	may eat
passive (voice)	Active or was eaten (by..)

The first auxiliary in the verbal group is sometimes called the FINITE, because of its special role in the grammar of English. Note, for example, that it is the Finite that is echoed in tag questions:

Your car **was** being towed at the time, **wasn't** it?

and that it is the Finite that moves position to make the difference between a question and a statement:

Your car **was** being towed at the time

Was your car being towed at the time?

The auxiliary verb(s) and the main Event verb are sometimes separated in the word patterning of the English clause. In each of following examples there is just one process realized by a verbal groups, but in each case there is an adverb functioning as circumstance intervening in the linear structure of the verbal group. The verbal groups are in bold type:

I **can** clearly **remember**

They **seem to have** totally **lost** the plot

They **must have been** completely **confused** by your directions

The functions of auxiliary verbs in general, and the role of the Finite in particular, relate much more to the interpersonal aspect of grammar than to the experiential.

2.4.3 Circumstances

Circumstances are realized by adverbial groups, prepositional phrases and event by nominal group. We will look at the structures of each of these in turn.

2.4.3.1 Adverbial group

The adverbial group, like any other group, can be one word or several. It has as internal structure that allows same premodification and postmodification as demonstrated in the following list:

	quickly
fairly	quickly
very	quickly
ever so	quickly
so	quickly (that we couldn't catch him)
as	quickly (as she could)
as	quickly (as possible)

At the head of the adverbial group is an adverb. This may be premodified by some kind of INTENSIFIER (a word that modifies the meaning of the head adverb). Words like *quite, so, very, too, all too* are among the common premodifiers of adverbial groups.

The postmodifiers in the adverbial group is similar to the Qualifier in the nominal group in both structure and function. Structurally it may be an embedded clause or, less commonly, a prepositional phrase, and it functions to extend the definition of the head word in the group or to pin down its meaning more specifically. However, unlike the nominal group, as you will notice from the examples above, there is often a structural relationship between the pre- and postmodifiers in the adverbial group, for example *so... that, as ... as*.

2.4.3.2 Prepositional phrase

The prepositional phrase has the structure PREPOSITION + NOMINAL GROUP. The nominal group may be quite simple:

Preposition	Nominal group
--------------------	----------------------

in	the morning
on	Wednesdays
at	home

or may contain embedding:

preposition	Nominal group
in	the house (that had been their home for 20 years)
on	that fateful Wednesday (which changed their lives)
under	the flag (that fluttered bravely in the breeze)

Remember that prepositional phrase can serve not only as circumstance in a clause but also as qualifier within a nominal group or as postmodifier in an adverbial group. Notice that inside the prepositional phrase example there are four other prepositional phrases, three of them within the one overarching prepositional phrase structure:

for 20 years
in the breeze
to them
of their endeavour

2.4.3.3 Nominal groups

Finally, there are some groups of word that function as circumstance but do not appear to fit the pattern of either adverbial group or prepositional phrase. For example:

all week	three weeks ago
----------	-----------------

six months later

some time recently

all the time

home

many times

a different

Some of these look like, and indeed are, nominal groups (*all weeks, many times, home*), others seem to be adverbial groups with premodification by a nominal group instead of by an intensifier of some kind (*three weeks ago, some time recently*). What is important here is to be able to recognize a circumstance element of a clause by its function; that is, the role it is playing in conveying the meaning of the message. Compare, for instance, the function of the word *home* in the following two messages:

home is a cave in the hills

the troops are coming home

In the first of these clauses, *home* is a nominal group functioning as thing; in the second it is functioning as Circumstance.

2.5 Types of Process

A process is typically expressed by the verbal group in the clause, and is the central component of the message from the ideational perspective. Halliday in Gerot and Wignell (1994:54) identified that there are 7 different process types, those are: material, mental, behavioral, verbal, relational, existential and meteorological processes.

2.5.1 Material Process

Material processes express the notion that some entity physically does something- which may be done to some other entity (Gerot and Wignell, 1994:55).

Material clauses construe doings and happenings, concrete and abstract phenomena (Martin, Matthiessen and Painter, 1997:103). The material clauses show the changes in material world such as motion in space and changes in physical make up.

Example : She drove down the coast

Actor	Pr : Material	Circ : Place
-------	---------------	--------------

Prices fell throughout this period

Actor	Pr : Material	Circ : Time
-------	---------------	-------------

(Martin, Matthiessen and Painter, 1997:103)

The participants involve in material clauses are Actor, Goal, Beneficiary and Range. Actor is the one doing the material deed. Any material process has an actor, even though the Actor may not actually be mentioned in the clause. It can happen by the choice of a passive clause.

example : The oil is added drop by drop

Goal	Pr : Material	Circ : Manner
------	---------------	---------------

(Thompson, 1996:81)

However, the Actor may also be inanimate or abstract entity.

example : The fire had destroyed everything

Actor	Pr : Material	Goal
-------	---------------	------

(Thompson, 1996:81)

The second participant is called the Goal that is a participant impacted by a doing (the one done to or with). According to Gerot and Wignell (1994:55), the Goal is an entity to which the process is extended or directed. The Goal is brought into existence by the doing or it exists prior to the doing. There is also participant benefiting from the doing (the one given to or done for) called Beneficiary. It occurs in clauses without a Goal. Gerot and Wignell (1994:63) state that the Beneficiary is the one to whom or for whom the process is said to take place. In material processes the Beneficiary is either the Recipient or the Client. The recipient is the one to whom goods are given. The client is the one for whom services are provided.

example : I sold the car to john

Actor	Pr : Material	Goal	Receipient
-------	---------------	------	------------

They trew a farewell party for jane

Actor	Pr : Material	Goal	Client
-------	---------------	------	--------

(Gerot and Wignel, 1994:64)

Range is a participant specifying the scope of a happening. The Range in material process typically occurs in the middle clauses, those with Actor only, no Goal.

example : She drop a curtsy

Actor	Pr : Material	Range
-------	---------------	-------

(Garot and Wignel, 1994:64)

Another distinction is that material process with Goals can take resultative

attributes, while material process with Range cannot.

example : Kelly shot fuller dead

Actor	Pr : Material	Goal	Resultative Attribute
-------	---------------	------	-----------------------

(Garot and Wignel, 1994:65)

Also, in material process with Goals, the Goal can be changed into an appropriate pronoun and still make sense in context, while in material process with Range it does not work.

Example :

Kelly shot fuller dead

Actor	Pr : Material	Goal	Resultive Attribute
-------	---------------	------	---------------------

Kelly shot him dead

Actor	Pr : Material	Goal	Resultative Attribute
-------	---------------	------	-----------------------

He dropped a curtsy

Actor	Pr : Material	Range
-------	---------------	-------

He dropped it

Actor	Pr : Material
-------	---------------

(Gerot and Wignel, 1994:65)

According to Gerot and Wignell (1994:56), there are two types of material process:

1. Creative type

In creative type, the process brings about the goal.

Senser	Pr : Mental	Phenomenon
--------	-------------	------------

(Martin, Matthiessen and Painter, 1997:105)

The Phenomenon may represent the content of sensing. However, this content is not always represented as a participant within the clause. It may also be represented by a separate clause.

Example : David thought the moon was the baloon

Senser	Pr : Mental	Phenomenon
--------	-------------	------------

(Martin, Matthiessen and Painter, 1997:106)

Gerot and Wignell (1994:58) divide mental processes into three types:

1. Affection or reaction or feeling

Mark likes new clothes

Senser	Mental : Affection	Phenomenon
--------	--------------------	------------

2. Cognition (thinking, process of deciding, knowing, understanding, etc.)

I realize the difficulties

Senser	Cognitive	Phenomenon
--------	-----------	------------

(Gerot and Wignell, 1994:58-59)

3. Perception (perceiving through the five senses, seeing, hearing, etc.)

He couldn't see anything

Senser	Perceptive	Phenomenon
--------	------------	------------

(Thompson, 1996 : 85)

In mental clauses, there is at least one human participant. Even if an inanimate

participant is represented in the clause, a degree of humanness is given on that participant. The Phenomenon in mental clauses can act as participant in a material clause. It can be a person, a concrete object, an abstraction and so on.

Moreover, many mental clauses are reversible, that is, it is equally possible to have the subject role filled either by the human participant or by the Phenomenon.

Mental clauses have the potential to project. Projection occurs when a clause suggest that something was thought or said (the projecting clause) and another separate clause indicate what it was, thought or said (the projected clause). The projecting or projected clauses are each analyzed in their own right.

For example :

I know the man who called on you

The projecting clause		Projected Clause			
Senser	Ment : Cog	Phenomenon			
Senser	Ment : Cog	Phenomenon	Actor	Material	Goal

(Garot and Wignel, 1994:60)

2.5.3 Behavioral Processes

Behavioral clauses construe behavior including mental and verbal behavior (Martin, Matthiessen and Painter, 1997:109). Saying and sensing are construed as activity in behavioral clauses. Behavioral processes are like mental ones in that one participant is endowed with human consciousness, that is the Senser in the case of mental process. It is called Behavior.

Behaviorals include categories reflecting the mental and verbal ones: perception,

cognition, affection and verbal. These also include more material-like subtypes. The border area between material processes and behavioral ones is covered by two main types, physiological processes-twitch, shiver, tremble, sweat, etc.-and social processes-kiss, hug, embrace, dance, etc. Both of these shade into the verbal type, from different angles physiologically: cough, gasp, stutter, etc. and socially: chat, talk, gossip, etc.

There is another participant that typically functions as Complement, but it occurs only in some clauses. This is the Range, which is not a real participant but merely adds specification to the process.

For Example : She waved her hands helplessly

Behaver	Behavioral	Range	Circ : Manner
---------	------------	-------	---------------

(Thompson, 1996 : 100)

2.5.4 Verbal Processes

Verbal clauses represent process of ‘saying’, but this category includes not only the different modes of saying, but also semiotic processes that are not necessarily verbal (Martin, Matthiessen and Painter 1997:108). In one way, verbs are intermediate between mental and material processes: saying something is a physical action, which reflects mental operation.

Halliday (1994:140) states that verbal processes are processes of saying and are expressed by verbs such as, say, tell, ask, reply, or more accurately, of symbolically signaling. The ‘content’ of saying may be represented as a separate clause (a locution)

quoting or reporting what was said. This quoted or reported clause is called a projected clause.

The central participant is the Sayer -the participant saying, telling, stating, and so on. It can be a human or human-like speaker, but it can also be any other symbolic source. A verbal clause represents the addressee of a speech interaction as the Receiver. The Receiver is a verbal beneficiary, and can often be marked by ‘to’, while the target is one acted upon verbally (insulted, complemented, etc.). Another participant is the Verbiage that is named for the verbalization itself.

For example : John told jenny a rude joke

Sayer	Verbal	Receiver	Verbiage
-------	--------	----------	----------

She keeps rubbishing me to the other people in the office

Sayer	Verbal	Target	Receiver	Circ : Place
-------	--------	--------	----------	--------------

(Thompson, 1996:98)

2.5.5 Relational Processes

Relational clauses construe being (Martin, Matthiessen and Painter, 1997:106).

There are two relational clause types, with different sets of participant roles:

1. Attribute Clauses

Attribute clauses are clauses with carrier and attribute.

For example : Maxim is energetic

Carrier	Attribute	Attributive
---------	-----------	-------------

(Martin, Matthiessen and Painter, 1997:106)

2. Identifying Clauses

Identifying clauses are clauses with token and value.

For example :

Maxim is the goalie

Token	Identifying	Value
-------	-------------	-------

The goalie is maxim

Value	Identifying	Token
-------	-------------	-------

(Martin, Matthiessen and Painter, 1997:106)

The easiest way to distinguish them is that identifying process is reversible. It is also possible for relational clauses to involve an additional meaning feature, possessive or circumstantial.

For example : Max has lots of enemy

Carrier/Possessor	Pr : Attributive & Possessive	Attribute/Possession
-------------------	-------------------------------	----------------------

Max owns the property

Token/Possessor	Pr : Attributive & Possessive	Value/Possession
-----------------	-------------------------------	------------------

The trees are around marry

Carrier	Pr : Attributive	Attribute/Location
---------	------------------	--------------------

The trees surround marry

Token	Pr : Identifying & Circ.	Value
-------	--------------------------	-------

(Martin, Matthiessena and Painter, 1997:107)

2.5.6 Existential Processes

Existential clauses construe a participant involved in a process of being, but differ from relational ones that there is only one participant, the Existent, which is thereby introduced into the text (Martin, Matthiessen and Painter, 1997:109). Existential processes are expressed by verbs of existing: ‘be’, ‘exist’ and the Existent can be a phenomenon of any kind. Gerot and Wignell (1994:72) state that existential processes are processes of existence. For example :

There will be a real bunfight at the next meeting

Existential	Pr : Existential	Existent	Location : Temporal
-------------	------------------	----------	---------------------

(Martin, Matthiessen and Painter, 1997:109)

2.5.7 Meteorological Process

Meteorological clauses construe a participant involved in the earth’s atmosphere and its changes, used especially for forecasting weather. Also, they can be used to indicate time.

For example : It’s windy

Meteorological

It’s five o’clock

Meteorological

(Gerot and Winell, 1994:73)

In meteorological processes there is only one participant, 'Meteorological' and the word 'it' has no representational function, but does provides a subject.

2.6 Field of Discourse

The existence of text and context is always continuum. As we explore the relation between text and context is dynamic and reversible, with context being realized in texts revealing contexts. Actually, a text always occurs in two contexts, one within the other. The outer context around a text is known as the *context of culture (genre)*, and between text and context of culture there is *context of situation (register)*.

Context of situation can be specified through the use of register variable: *field, tenor and mode*.

1. The field of a text can be associated with the realization of experiential/ideational meanings; these ideational meanings are realized through the *Transitivity* patterns of the grammar.
2. The mode of a text can be associated with the realization of textual meanings; these textual meanings are realized through the *Theme* patterns of the grammar.
3. The tenor of a text can be associated with the realization of interpersonal meanings; these interpersonal meanings are realized through the *Mood* patterns of the grammar.

Due to the fact that the research just focuses on transitivity, the context of situation (register) that will be analyzed is the field of discourse. The field of discourse concerns with what's going on, the social processes and the domains of subject matter created by language in the realization of these social processes. Eggins (1994: 67) defines the field of discourse as the situational variable that has to do with the focus of the activity in which we are engaged. Sometimes the field of the discourse can be glossed as the "topic" of the situation, but Martin's (1984: 23, 1992a: 536) broader definition in terms of institutional focus, or social activity type is more useful to capture the field in situations where language is accompanying action.

The description of the field of discourse in the text can be realized by identifying:

1. Experiential domain: all about the processes, participants, and circumstances
2. Short term goal: the immediate purpose of the text's production.
3. Long term goal: the text's place in the larger scheme of thing

Below is the example of the field of discourse taken from: Butt *et al.* (2001: 188-189).

A simple ball game

- | |
|-------------------------------|
| 1. O.K, I want you to go over |
|-------------------------------|

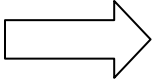
2. And get the ball....
3. Now sit down there....
4. Sit down over there....
5. Now roll it
6. Roll it over the Tiffany
7. And she'll push it back to you
8. There you go (LAUGHTER)
9. And back again (LAUGHTER)
10. And back again (LAUGHTER)
11. Oh not too hard (WARNING)
12. You'll hurt her
13. There you go (LAUGHTER)
14. Oh! O.K, pick it up
15. And throw it ... like that
16. Oh (DISMAY) Go and get it

The description of the field of discourse can be represented in table 2.1

Table 2.1 Field of Discourse

Lexicogrammatical analysis

Contextual description

Experiential meanings		FIELD OF DISCOURSE	Commentary
<p>Process types: mainly material – go, get, roll, pick up, throw, push, sit</p> <p>participants – actor: the addressee, Tiffany Goal: the ball</p> <p>Circumstances – place: over there manner: like that</p> <p>time and modality: highly modalised text</p>	<p>As a result of our analysis and knowledge of context of culture we can write up our description</p> 	<p>Experiential domain: Two children learning to roll a ball back and forth</p> <p>short-term goal: teaching how to play the game gently</p> <p>long-term goal: maintenance of family roles?</p>	<p>This discussion omits the mother as Senser and the mental process in clause one</p>

Source: Butt *et al.* (2001: 194)

2.7 National Geographic News

News is usually found in newspaper or other media and it includes main events, elaboration and comments from the participants that take part in the sequence of happenings. National Geographic News is one of the sub-part of national geographic website. It reports our world daily: original nature and science coverage. National Geographic News consists of environment news, ancient world news, animal news, space and tech news, and weird news.

The National Geographic, headquartered in Washington, D.C. in the United States, is one of the largest non-profit scientific and educational institutions in the world. Its interests include geography, archaeology and natural science, the promotion of environmental and historical conservation, and the study of world culture and history. The National Geographic Society's logo is a yellow portraitframe, rectangular in shape which appears on the margins surrounding the front covers of its magazines and The National Geographic Society began as a club for an elite group of academics and wealthy patrons interested in travel. On January 13, 1888, 33 explorers and scientists gathered at the Cosmos Club, a private club then located on Lafayette Square in Washington, D.C., to organize "a society for the increase and diffusion of geographical knowledge." After preparing a constitution and a plan of organization, the National Geographic Society was incorporated two weeks later on January 27.

CHAPTER III

RESEARCH METHOD

This chapter discusses research design, unit of analysis, source of data, technique of data collection, and technique of data analysis. They are important elements particularly in providing answers to the questions presented in the introduction and in paving the way to the process of unfolding the construal of the transitivity system.

3.1 Research Design

To search the answers for the objectives of the study, that is to find the process, participant, circumstance and field of discourse as the result of analyzing its transitivity, the researcher has chosen to use qualitative research. Qualitative research is designed to obtain information concerning the current status of phenomena. It is directed towards determining the real situation, as it exists at the time of the study. The aim is to describe the result of the analysis of a certain condition or situation in terms of qualitative description. In other words, the administration is not testing a hypothesis but is seeking information to assist in decision-making.

The source of data was in the form of documents that was the news taken from the website of National Geographic. Qualitative research presented the data and research in the form of qualitative description. Analysis of this type was done with words to describe conclusion.

3.2 Unit of Analysis

The unit of analysis in this final project is the clauses in the news. As Eggins (1994:220) states, the organization of the clause is realized in experiential meaning, instead of ideational and textual meaning. Therefore, the researcher focused his analysis on the clauses that represent experience.

3.3 Source of Data

The data source of this study was from the website of National Geography News which consists of 26 paragraphs, and it was the most popular news and frequently read in March 2012, and the news was taken from <http://news.nationalgeographic.com/news/2012/03/120314-new-human-species-chinese-plos-science-red-deer-cave/>.

3.4 Techniques of the Data Collection

The steps in collecting data are :

1. Searching

In this first step, the researcher searched the topic in the website of National geographic.

2. Selecting

After searching the topic, the researcher selected an article that was frequently read in the website of National Geographic news, especially, the one which became the

headline for two months, in February and March. Selecting the data itself was aimed to reveal what the dominant transitivity used to develop the news.

3. Downloading

Downloading the selected news was the next step, and it was aimed to collect the data.

3.5 Techniques of Data Analysis

In analyzing the data, the researcher used the framework of transitivity analysis.

Meanwhile the steps of analyzing data were:

1. Reading the National Geographic News
2. Segmenting

In this step, the researcher segmented the selected data into clauses.

Example: The "mystery human fossils" might even represent an entirely new species

3. Identifying

The researcher identified the process, participant, and circumstance of each clause.

Example:

The "mystery human fossils"	might	even	represent	an entirely new species
<i>Actor</i>				<i>Goal</i>
		<i>Material</i>		

4. Classifying

Classify the transitivity types in every clause found in the news using the theory of

systemic functional grammar.

Example:

The function of the first participant '*the "mystery human fossils"*' is the Actor which is the one doing the material. What the Actor 'do' is the material process '*represent*'. The second participant functions as the Goal '*an entirely new species*'. '*an entirely new species*' as the goal is like the direct object, which follows the transitive verb. '*The "mystery human fossils"*' should be labelled actor because it did the action in the material process '*might even represent*'.

5. Describing

The researcher described the field of discourse of the text.

6. Drawing the conclusion

CHAPTER IV

FINDING AND DISCUSSION

In this chapter, the researcher presents the result of the data analysis of transitivity analysis. Then, the researcher discusses the dominant process and its role in developing the news. The analysis was based on the data taken from the website of National Geographic News. The results are the answers to the problems that arise in this study. They cover the processes found in every clause in the news and also the participants and circumstances. There are 26 paragraphs which consist of 99 major clauses (subject to analysis). The major clauses were then analyzed into the transitivity system. The researcher found six types of process that develop the news. Those are material process, mental process, behavioral process, verbal process, relational process, and existential process. The five kinds of processes color the nuance of the biography that the field of discourse can be construed.

4.1 Finding

After analyzing the national geographic news in the topic of Cave Fossil Find: New Human Species or “Nothing Extraordinary?” published in March 2012, and the researcher found six types of process that develop the news. Those are material process, mental process, behavioral process, verbal process, relational process, and existential process. The mental process are divided into mental affective and mental cognitive and the relational

process are divided into relational attributive and relational identifying. The table is as follows:

Table 4.1 Types of Processes and participants in National Geographic News

No	Process	Participant	F		%
1.	Material	- Actor - Goal - Beneficiary	30 30 1	36	35.6
2.	Mental Affection	- Senser - Phenomenon	8 6	7	6.9
3.	Mental Cognition	- Senser - Phenomenon	1 1	1	0.9
4.	Behavioral	- Bahaver - Range	1 1	1	0.9
5.	Verbal	- Sayer - Target - Verbiage	23 1 1	25	24.7
6.	Relational Attributive	- Carrier - Attribute	19 19	19	18.8
7.	Relational Identifying	- Token - Value	7 8	9	8.9
8.	Existential	- Existent	1	1	0.9
Σ				99	100

Table 4.1 above reveals that material and verbal process totally dominates over the other kinds of processes. The least processes are mental cognitive and behavioral, and the researcher did not find any meteorological process in the news. The news in this analysis, the news reports, informs to the readers about new human species. This is in line with Gerot and Wignell's statement (1994:200) that process in mainly news, are usually material (acting, behaving text) with some verbal (saying) and mental (feeling, thinking) process. The use of material process is appropriate to the structure of the news, that is elaborating

the events. To elaborate the news, the material process are used, since the material process is process of doings and happenings (Martin, Matthiessen and Painter 1997:103). Material process are used in retelling the events, what happened to the participants involve in the news in certain circumstances. The material process are elaborated in past tense. In addition to my analysis, I found that the news I analyzed are elaborated in past tense, but the title of the news is in present tense. It is because the title is what might be read first by the readers. The title is intended to raise the readers mind about the content of the news.

4.2 Discussion

This sub chapter discusses the types of process and participant found in the news.

4.2.1 Process and Participant

Basically, the participants in a process are realized in the grammar by nominal group and sometimes by prepositional phrases or embedded clauses, and the processes themselves by verbal groups.

4.2.1.1 Material Process

Material process are process represents doing and happening. The process tells about action. It answer the question what *did X do?* Or *what happened?* How researcher put a clause into its transitivity pattern containing a material process is demonstrated as follows:

Excerpt 1 - Clause 2, 1st paragraph

The "mystery human fossils"	might	even	represent	an entirely new species
<i>Actor</i>				<i>Goal</i>

The potential participant roles in a clause containing a material process are actor which is the doer of the process and goal which is the thing affected by the process. The function of the first participant '*the "mystery human fossils"*' is the Actor which is the one doing the material. What the Actor 'do' is the material process '*represent*'. The second participant functions as the Goal '*an entirely new species*'. '*an entirely new species*' as the goal is like the direct object, which follows the transitive verb. '*The "mystery human fossils"*' should be labelled actor because it did the action in the material process '*might even represent*'.

Excerpt 2 - Clause 8, 5th paragraph

Until	the study team	removed and reconstructed	It
	<i>Actor</i>	<i>Material</i>	<i>Goal</i>

The function of the first participant '*the study team*' is the Actor who is the one doing the material. What the Actor 'do' is the material process '*removed and reconstructed*'. The second participant functions as the Goal '*it*'. '*It*' as the goal is like the

direct object, which follows the transitive verb. *'the study team'* should be labelled actor because it did the action in the material process *'remove and reconstructed'*.

Excerpt 3 - Clause 3, 16th paragraph

<u>Erik Trinkaus</u>	described	the findings as	"an unfortunate overinterpretation and misinterpretation of robust early modern humans, probably with affinities to modern Melanesians"
<i>Actor</i>	<i>Material</i>	<i>Goal</i>	<i>Projected clause</i>

The function of the first participant *'erik trinkaus'* is the Actor who is the one doing the material. What the Actor 'do' is the material process *'described'*. The second participant functions as the Goal *'the finding as'*. *The finding as'* as the goal is like the direct object, which follows the transitive verb. *'Eric trinkaus'* should be labelled actor because it did the action in the material process *'described'*.

Excerpt 4 - Clause 1, 18th paragraph

<u>Philipp Gunz, of Max Planck Institute for Evolutionary Anthropology</u>	in Germany	isn't convinced by	the study team's interpretation either
<i>Goal</i>	<i>Circ: Place</i>	<i>Material</i>	<i>Actor</i>

The passive construction presents the Actor and Goal in reverse order to the active construction. The actor of a passive clause is often described as the Agent rather than the Actor. The passive construction allows the possibility of omitting the Agent altogether. The verb *'convinced by'* indicates a material action or doing that it is categorized as material

process. 'Philipp Gunz, of Max Planck Institute for Evolutionary Anthropology' as the goal is like the direct object, which follows the transitive verb. 'The study team's interpretation either' should be labelled actor because it did the action in the material process 'convinced by'.

Excerpt 5 - Clause 4, 5th paragraph

Some of which	Were	likely	used to prepare	the deer for dinner
<i>Actor</i>		<i>Circ: Manner</i>		<i>Beneficiary: Client</i>
		<i>Material</i>		

The function of the first participant 'some which' is the Actor which is the one doing the material. What the Actor 'do' is the material process 'used to prepare'. 'The deer for diner' is the recipient of the goal done by the material process of the clause that it is labelled beneficiary.

Excerpt 6 - Clause 4, 16th paragraph

Indigenous peoples of Pacific islands	stretching	from New Guinea to Fiji
<i>Actor</i>	<i>Material</i>	<i>Range</i>

The function of the first participant 'Indigenous peoples of Pacific islands' is the Actor who is the one doing the material. What the Actor 'do' is the material process 'stretching'. 'It' is a participant of the material process 'from New Guinea to Fiji' but is neither the doer nor the affected thing. It is not even the recipient of the goal done by the material process of the clause that it could be labelled range.

4.2.1.2 Mental Process

Mental process represents anything that deals with human sense. Thinking and feeling words describe the inner world of cognition, perception, emotion, and desire and has the potential for projecting our inner world as thought so that it can be apprehended by others. They are known as projecting clauses and can be subdivided into mental affection and mental cognition.

1. Affection

Mental inclination refers to the feeling words or something liking/disliking which tend to human sense. The sample analysis is demonstrated using:

Excerpt 7 - Clause 3, 7th paragraph.

such as	Neanderthals	are thought to have	died out
	<i>Senser</i>	<i>Mental: Affective</i>	<i>Phenomenon</i>

The potential participant roles are senser which is the doer of the mental process and phenomenon which is the object-like participant of the mental process. They realized by a nominal group or embedded clause which sums up what is thought, wanted, perceived, or liked/disliked. The participant roles in Mental processes are *Senser and Phenomenon*. The senser is by definition a conscious being, for only those who are conscious can feel, think,

or see. The verb phrase *'are thought to have'* implies a feeling that the researcher should categorize the verb as a mental affection. *'neanderthals'* is the doer of the mental process *'are thought to have'* that it is labelled senser, and *'died out'* is the object-like participant of the mental process *'are thought to have'* that it is labelled phenomenon.

Excerpt 8 - Clause 3, 20th paragraph

I	would expect	a mixture of comments
<i>Senser</i>	<i>Mental: Affective</i>	<i>Phenomenon</i>

The verb *'would expect'* implies a feeling that the researcher should categorize the verb as a mental affection. *'i'* is the doer of the mental process *'would expect'* that it is labelled senser, and *'a mixture of comments'* is the object-like participant of the mental process *'would expect'* that it is labelled phenomenon.

2. Cognition

Unlike the mental inclination, mental cognition does not use human senses but rather uses human brain conduct the activity. The clause 1, 10th paragraph may demonstrate that the verb is a mental cognition.

Excerpt 9 - Clause 1, 10th paragraph

Even so	Curnoe	thinks
	<i>Senser</i>	<i>Mental: Cognitive</i>

'Curnoe' is the doer of the mental process 'thinks' that it is labelled senser. The verb 'thinks' implies a brain activity and encodes experiences in the inner world of consciousness that the researcher should categorize the verb as a mental cognition.

4.2.1.3 Behavioral Process

Behavioral process are process of psychological and psychological behavior. The main participant, the BEHAVER, is generally a conscious being and, if it is not, the clause is considered to be personification. The sample analysis is demonstrated using:

Excerpt 10 - Clause 3, 12th paragraph.

That	very modern-looking people	Lived	the same time immediately to the east and south		
	<i>Behaver</i>	<i>Behavioral</i>		<table border="1"> <tr> <td><i>Circ: Manner</i></td> </tr> </table> <p style="text-align: center;"><i>Range</i></p>	<i>Circ: Manner</i>
<i>Circ: Manner</i>					

The verb "lived" is a participant known as behavioral, which extend the process, and here 'very modern-looking people' is the behavior because participant 'very modern-looking people' indicates the physiological and psychological behaviour of the participant done through the process 'lived'.

4.2.1.4 Verbal Process

Verbal processes are process of saying, and encodes the experiences of bringing the inner world outside by speaking. How the researcher put a clause into its transitivity pattern containing a verbal process is demonstrated as follows:

Excerpt 11 - Clause 5, 5th paragraph

Researchers	Say
<i>Sayer</i>	<i>Verbal</i>

The projecting clause encodes a signal source ‘*researcher*’ as *sayer* and a signaling ‘*say*’ as verbal. The verb ‘*say*’ displays the articulator-based activity that it could be categorized as a verbal process.

Excerpt 12 - Clause 6, 22nd paragraph

"plot very close, or even within, the modern human range of variation,"	Gunz	Added
<i>Projected clause</i>	<i>Sayer</i>	<i>Verbal</i>

The verb ‘*added*’ displays the articulator-based activity that it could be categorized as a verbal process, and the projected clause is not always being analyzed.

Excerpt 13 - Clause 2, 7th paragraph

The team	says	a time by which all other human species
<i>Sayer</i>	<i>Verbal</i>	<i>Verbiage</i>

The potential participant roles of the verbal process are *sayer* which is the doer of the process and *verbiage*, what is said in the nominal group or embedded clause. The verb ‘*says*’ displays the articulator-based activity that it could be categorized as a verbal process.

the participant ‘*the team*’ is verbalizing something and thus categorized as sayer. Something which is verbalized by the verb ‘*says*’ is ‘*a time by which all other human species*’ that it is labelled verbiage.

Excerpt 14 - Clause 1, 21st paragraph

Just	Tell	us
	<i>Verbal</i>	<i>Target</i>

Target is the participant which is the object of the talk. Receiver, on the other hand is addressee of the speech. The verb ‘*tell*’ displays the articulator-based activity that it could be categorized as a verbal process, and ‘*us*’ as a target is the one acted verbally.

4.2.1.5 Relational process

Relational processes tell about what things are, what they are like and what they possess. They are two types of relational process, attributive relational (assign attribute of something) and identifying relational (identify one participant by equating it with another participant).

1. Attributive

Relational attributive has a function to ascribe an attribute. The analysis can be illustrated as follows:

Excerpt 15 - Clause 2, 2nd paragraph

Whose skulls	are	an unusual mosaic of primitive features	like those seen in our ancestors hundreds of thousands of years ago
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>	<i>Circ: time</i>

The participant roles of the following clauses are carriers and attributes. Carrier functions as the subject of a relational attributing process and attribute functions as the complement of the same type of process. The verb ‘*are*’ ascribe an attribute ‘*primitive features*’ to the carrier that the verb ‘*are*’ could be categorized as a relational attributive. Relational attributive relates a participant to its general characteristics or description. In attributives these are Carrier and Attribute. The participant ‘*whose skulls*’ is the carrier of the clause and ‘*an unusual mosaic of primitive features*’ is the attribute, which assign a quality of ‘*are*’ as the attributive.

Excerpt 16 - Clause 1, 5th paragraph

Among the human remains	Was	an abundance of bones	from an extinct species of giant deer
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>	<i>Circ: Role</i>

The verb ‘*was*’ ascribes an attribute ‘*an abundance of bones*’ to the carrier that the verb ‘*was*’ could be categorized as a relational attributive. Relational attributive, which relate a participant to its general characteristics or description. In attributives these are Carrier and Attribute. The participant ‘*the human remains*’ is the carrier of the clause and ‘*an abundance of bones*’ is the attribute, which assigns a quality of ‘*was*’ as the attributive.

Excerpt 17 - Clause 2, 5th paragraph

The cave people	were	hunters with a taste for venison
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

The verb *'were'* ascribes an attribute *'hunters with a taste for venison'* to the carrier that the verb *'were'* could be categorized as a relational attributive. Relational attributive relates a participant to its general characteristics or description. In attributives these are Carrier and Attribute. The participant *'the cave people'* is the carrier of the clause and *'hunters with a taste for venison'* is the attribute, which assigns a quality of *'were'* as the attributive.

Excerpt 18 - Clause 2, 11th paragraph

They	Look	very different to all modern humans	whether alive today or in Africa	150,000 years ago
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>	<i>Circ: Place</i>	<i>Circ: time</i>

The verb *'look'* ascribes an attribute *'very different to all modern humans'* to the carrier that the verb *'look'* could be categorized as a relational attributive. Relational attributive relates a participant to its general characteristics or description. In attributives these are Carrier and Attribute. The participant *'they'* is the carrier of the clause and *'very different to all modern humans'* is the attribute, which assigns a quality of *'look'* as the attributive.

2. Identifying

Relational identifying has a function to identify. The analysis could be demonstrated using as follows:

Excerpt 19 - Clause 1, 6th paragraph

The Red Deer Cave dwellers' unusual features	included	a flat face, a broad nose, a jutting jaw
<i>Token</i>	<i>Rel: identifying</i>	<i>Value</i>

The participant roles of the following clauses are tokens and values. Token functions as the subject of a relational identifying process and value functions as the complement of the same type of process. The verb '*included*' functions to identify the token that it could be categorized as a relational identifying. Relational identifying, relates a participant to its identity, role or meaning. In identifying process, the participant roles are Token and Value. The potential participant roles of the following clause are Token '**the red deer cave dwellers' unusual features**' and value '**a flat face, a broad nose, a jutting jaw**'.

Excerpt 20 - Clause 1, 9th paragraph

This	Is	one of the main reasons
<i>Token</i>	<i>Rel: Identifying</i>	<i>Value</i>

The verb '*is*' functions to identify the token that it could be categorized as a relational identifying. Relational identifying relates a participant to its identity, role or meaning. In identifying process, the participant roles are Token and Value. The potential participant roles of the following clause are Token '**is**' and value '**on the main reason**'.

Excerpt 21 – clause 1, 14th paragraph

Alternatively	if	These people	were	members of the wider Stone Age population	in East Asia
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<i>Circ: Manner</i>		<i>Token</i>	<i>Rel: Identifying</i>	<i>Value</i>	<i>Circ: Place</i>
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The verb ‘*were*’ functions to identify the token that it could be categorized as a relational identifying. Relational identifying relates a participant to its identity, role or meaning. In identifying process, the participant roles are Token and Value. The potential participant roles of the following clause are Token ‘**were**’ and value ‘**members of the wider stone age population**’.

4.2.1.6 Existential Process

Existential processes are processes of existence. The analysis could be demonstrated using as follows:

Excerpt 22 - Clause 1, 17th paragraph

There	Is	Nothing extraordinary
	<i>Existential</i>	<i>Existent</i>

Because the function of existential process is to construe being as simple existence, there is only one participant known as the EXISTENT. These clauses demonstrate the analysis on existent. The existent is the only participant of existential clause. In the above clause ‘*nothing extraordinary*’ is the existent. While the existential processed by verb of existing ‘*is*’. ‘*There*’ in the clause above, does not function as a location circumstances, it is required because of the need for a subject in English.

4.2.2 Circumstance

Circumstances answer such questions as when, where, why, how, many, and as what. They realize meaning about time, Place, Manner, Cause, Accompaniment, Matter, and Role. The table below presents the whole circumstances employed in the news.

Table 4.2

No	Circumstances	f	%
1.	Time	10	3.8
2.	Place	10	3.8
3.	Role	1	0.4
4.	Manner	14	5.3
5.	Matter	2	0.8
6.	Purpose	1	0.4
Σ		38	100

The news demonstrates interesting circumstances which ranges from extent to manner quality. Manner significantly dominates over the other circumstances. Place and Time also dominate but not too significant. As we can see in table 4.2, the circumstance of manner is significantly dominated to develop the news. Because the use of the circumstance of manner itself is appropriate to the structure of every kind of text.

4.2.2.1 Time

The circumstance of time tells when and is probed by when? How often? How long?

Excerpt 23 - Clause 6, 5th paragraph

The team	also	analyzed	a partial skeleton found	in 1979	in neighboring Guangxi Province
<i>Actor</i>		<i>Material</i>	<i>Goal</i>	<i>Circ: Time</i>	<i>Circ: Place</i>

The excerpt 23 above presents clearly that the following clause only contains a circumstance of time is 'in 1979'. It explains when the 'goal' is found.

Excerpt 24 - Clause 2, 11th paragraph

They	Look	very different to all modern humans	whether alive today or in Africa	150,000 years ago
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>	<i>Circ: Place</i>	<i>Circ: time</i>

Excerpt 24 is one of the example of a clause which has an adverbial phrase as the circumstance of time.

4.2.2.2 Place

The circumstances of place tells where and is probed by where? How far?

Excerpt 25 - Clause 6, 5th paragraph

The team	also	analyzed	a partial skeleton found	in 1979	in neighboring Guangxi Province
<i>Actor</i>		<i>Material</i>	<i>Goal</i>	<i>Circ: Time</i>	<i>Circ: Place</i>

The excerpt 25 above presents clearly that the following clause only contains a circumstance of place is ‘*in neighboring Guangxi Province*’. It explains where ‘goal’ is found.

Excerpt 26 – Clause 1, 4th paragraph

The study	was principally based on	the remains of at least three individuals	from Maludong (or Red Deer Cave) in <u>Yunnan Province</u> (<u>map</u>) fossils
<i>Goal</i>	<u>Circ: manner</u> <i>Material</i>	<i>Circ: Role</i>	<i>Circ: Place</i>

Excerpt 26 is one of the example of a clause which has an adverbial phrase as the circumstance of place.

4.2.2.3 Role

The circumstances of role tells what as and is probed by as what?

Excerpt 27 - Clause 1, 4th paragraph

The study	was principally based on	the remains of at least three individuals	from Maludong (or Red Deer Cave) in <u>Yunnan Province</u> (<u>map</u>) fossils
<i>Goal</i>	<u>Circ: manner</u> <i>Material</i>	<i>Circ: Role</i>	<i>Circ: Place</i>

The excerpt 27 above presents clearly that the following clause only contains a circumstance of role is ‘*least three individuals*’. It explains that it is probed by the Actor.

4.2.2.4 Manner

The circumstance of manner tells by what means and is probed by what with?

Excerpt 28 - Clause 4, 5th paragraph

Some of which	Were	likely	used to prepare	the deer for dinner
<i>Actor</i>		<i>Circ: Manner</i>		<i>Beneficiary: Client</i>
			<i>Material</i>	

The excerpt 28 above presents clearly that the following clause only contains a circumstance of manner '*likely*'. It explains the action done by the Actor .

Excerpt 29 - Clause 2, 10th paragraph

The evidence	is	slightly	weighted	towards the Red Deer Cave people representing a new evolutionary line
<i>Goal</i>		<i>Circ: Manner</i>		<i>Actor</i>
			<i>Material</i>	

Excerpt 29 is one of the example of a clause which has an adverbial phrase as the circumstance of manner.

4.2.2.5 Matter

The circumstance of matter tells about what or with reference to what and is probed by what about?

Excerpt 30 - Clause 3, 2nd paragraph

Evolutionary biologist <u>Darren Curnoe</u> of the University	said	via email
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of New South Wales		
<i>Sayer</i>	<i>Verbal</i>	<i>Circ: matter</i>

The excerpt 30 above presents clearly that the clause only contains a circumstance of matter is '*via email*'. It explains how Verbal verbalizes the Sayer.

4.2.2.6 Purpose

The circumstance of purpose tells the purpose and is probed by what for?

Excerpt 31 - Clause 3, 24th paragraph

That	involved	different populations of modern humans	to make a convincing case for their new human
<i>Actor</i>	<i>Material</i>	<i>Goal</i>	<i>Circ: Purpose</i>

The excerpt 31 above presents clearly that the clause only contains a circumstance of purpose is '*to make a convincing case for their new human*'. And it explains the purpose of identifying.

4.2.3 Contextual Description of the Field of Discourse

To explain the contextual description of the news the researcher used the main metalanguage: field of the discourse which involves the experiential domain of the discourse, the short term goal of the discourse production, and the long term goal of the discourse.

4.2.3.1 Field of the discourse

The field of the discourse supports the context of situation of a text or discourse. This explains how the experiential or ideational meanings are realized through the transitivity pattern of the grammar, and thus explains the contextual configuration of the particular text. In this study the description is as follows:

4.2.3.1.1 Experiential domain

Experiential domain explains what the text is all about. This could be understood by analyzing the text into the pattern of transitivity system. Based on the analysis the researcher could say that the experiential domain of the discourse is New human species. The news tends to employ mostly material processes (35.6%). Besides, the news also employs processes such as relational attributive (18.8%), relational identifying (8.9%) and verbal processes (24.7%). The participant is dominated by actor and goal. The circumstance is dominated by circumstance of manner (5.3%), place (3.8%) and time (3.8%).

Here is some excerpts from the news to strengthen this experiential domain:

Excerpt 1

The "mystery human fossils" might even represent an entirely new species that existed alongside our own as recently as 11,500 years ago, according to a team of Chinese and Australian researchers.

Excerpt 2

"Their skulls are anatomically unique. They look very different to all modern humans, whether alive today or in Africa 150,000 years ago," the anthropologist said.

The excerpt 1 and excerpt 2 represent that the experiential domain of the discourse is New human species. It can be seen in every piece of the excerpt, *an entirely new species that existed alongside our own as recently as 11,500 years ago and they look very different to all modern humans.*

An entirely new human species shows clearly that the experiential domain is New human species and *they look very different to all modern humans* indicates that *they* is new human species because *they* here is different with modern humans.

4.2.3.1.2 Short term goal

This explains the immediate purpose of the production of the news text. The short term goal of the text is the author of the news wanted the readers to know that the new species was found.

Excerpt 1

A previously unknown type of human jut jawed, heavy-browed, deer-eating cave dwellers—may have been identified via Stone Age bones from southern China.

Excerpt 2

"We have discovered a new population of prehistoric humans whose skulls are an unusual mosaic of primitive features, like those seen in our ancestors hundreds of thousands of years ago,"

It represents clearly in the excerpt above that short term goal of the text is the author of the news wanted the readers to know that the new species was found. It can be seen in every process of the excerpt. Those both processes are Material process. First excerpt **may have been identified** and second excerpt *discovered*.

4.2.3.1.3 Long term goal.

The long term goal describes the larger scheme of the news text, i.e. the effect created by the experiential or ideational meaning of the news text. The author might expect that after reading the news, the reader would know that the fossils which have been found might represent an especially early migration of so-called modern human from Africa to East Asia and they persisted until almost 11 yaers ago.

Excerpt 1

Or the fossils might represent an especially early migration of so-called modern humans from Africa to East Asia.

Excerpt 2

"Second, the very fact they persisted until almost 11,000 years ago—when we know that very modern-looking people lived at the same time immediatly to the east and south—suggests they must have been isolated from them,"

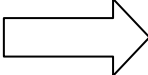
With the news, the author might expect that the readers would know the happenings, events, goings on, doings, and the beings of the actor in the news text within the life time of new human species that had been found. Those excerpt show that the the reader would know that the fossils which have been found might represent an especially early migration of so-called modern human from Africa to East Asia and they persisted until almost 11 yaers ago.

The above description on the field of the discourse could be represented in a table below:

Table 4.3 Field of discourse

Lexicogrammatical analysis

Contextual description

Experiential meanings		FIELD OF DISCOURSE	Commentary
<p>Process types:</p> <p>mainly material (33) – published, removed, reconstructed, described, detailed..</p> <p>participants –</p> <p>Actor : the fossils, the study, the team...</p> <p>Goal : so in a limited way, then sample an early migration to East Asia, an early and unknown dispersal of modern humans....</p> <p>Circumstances –</p> <p>Manner (12): principally, likely, slightly, immediately, alternatively, etc.</p> <p>Place (10): in east asia, southern china, in Yunnan province..</p> <p>Time (8): Until now, and mostly related to year : in 1989, 13.000 years ago..</p> <p>time and tense: mostly simple past</p>	<p>As a result of our analysis and knowledge of context of culture we can write up our description</p> 	<p>Experiential domain:</p> <p>The experiential domain of the discourse is New human species</p> <p>Short-term goal:</p> <p>While the short term goal of the discourse is that the author wanted the readers to know that the new species was found.</p> <p>Long-term goal:</p> <p>The long term goal of the discourse is that the author might expect that after reading the news, the readers would know that the fossils which has been found might represent an especially early migration of so-called modern human from Africa to east asia.</p>	<p>The news of cave Fossil find has done its jobs as to unfold the new human species by involving related material processes, actors, goals, manner, place, and time.</p> <p>Simple Past Tense was used to unfold the news.</p>

CHAPTER V

CONCLUSION AND SUGGESTION

This last chapter preserves the important points from whole discussions in the study. Besides it also suggests some recommendations for the readers for further researcher.

5.1 Conclusion

The discussion from the previous chapter is to be summarized to accomplish the objective of the study. The summary may be concluded as follows:

1. After analyzing the transitivity in the news, the researcher found six types of process: those are material, mental, behavioral, verbal, relational, and existential process. By classifying the process, the researcher found that the material process is the dominant process used to develop the text. In line with the domination of material process in the study, for the participant – Actor and Goal significantly dominate over the other participants. The least participants encountered in the news were range (material), beneficiary, behavior, range (behavioral), verbiage and target. For the circumstance, circumstance of manner significantly dominates over the other circumstances.

2. The field of the discourse is realized through the lexicogrammatical features – the ones concluded in points 1 and 2, and through the realization of experiential domain, the short term and long term goals. The experiential domain of the discourse is new human species, while the short term goal of the discourse concludes that the author of the news wanted the readers to know that the new species was found. The long term goal of the discourse concluded that the author might expect that after reading the news, the readers would know that the fossils which have been found might represent an especially early migration of so-called modern from Africa and to East Asia.

5.2 Suggestions

Some suggestions in this section are addressed to the readers who want to do same study:

1. Those who are interested in conducting a similar analysis are suggested to analyze the three metafunctions: mood, transitivity, and theme rheme, so they may get a complete description of the contextual situations of a certain discourse.
2. The same study should be conducted to improve the learners' attentions to transitivity analysis of written text.

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Appendix A

Cave Fossil Find: New Human Species or "Nothing Extraordinary"?

A previously unknown type of human jut jawed, heavy-browed, deer-eating cave dwellers—may have been identified via Stone Age bones from southern China, according to a controversial new study. The "mystery human fossils" might even represent an entirely new species that existed alongside our own as recently as 11,500 years ago, according to a team of Chinese and Australian researchers. Or the fossils might represent an especially early migration of so-called modern humans out of Africa and into East Asia, the team suggests.

(Related: "New Type of Ancient Human Found Descendants Live Today?")

Primitive Humans Held On Past Heyday?

"We have discovered a new population of prehistoric humans whose skulls are an unusual mosaic of primitive features, like those seen in our ancestors hundreds of thousands of years ago," evolutionary biologist Darren Curnoe of the University of New South Wales, said via email.

"In short, they're anatomically unique among all members of the human evolutionary tree," added Curnoe, a co-author of the new study of the "Red Deer Cave people," published online today in the journal *PLoS ONE*.

The study was principally based on the remains of at least three individuals from Maludong (or Red Deer Cave) in Yunnan Province (map) fossils that had been excavated in 1989 but hadn't been studied until now.

Among the human remains was an abundance of bones from an extinct species of giant deer suggesting the cave people were hunters with a taste for venison. Stone and antler tools were also found, some of which were likely used to prepare the deer for dinner, researchers say. The team also analyzed a partial skeleton found in 1979 in neighboring Guangxi Province. That human specimen had been encased in stone until the study team removed and reconstructed it.

(Read "Malapa Fossils: Part Ape, Part Human" in *National Geographic* magazine.)

The Red Deer Cave Look

The Red Deer Cave dwellers' unusual features included a flat face, a broad nose, a jutting jaw that lacked a chin, large molar teeth, a rounded braincase with prominent brow ridges, and thick skull bones, the researchers say. Their brains were "moderate in size," Curnoe added.

Despite this seemingly primitive human design, radiocarbon dating of charcoal from the fossil deposits suggests the Red Deer Cave people lived just 14,500 to 11,500 years ago, the team says a time by which all other human species, such as Neanderthals, are thought to have died out. That date would make the Red Deer humans even more recent than the famous *Homo floresiensis* from the Indonesian island of Flores itself a disputed potential human species. Discovered in 2003, the Flores "hobbits" are dated to no later than 13,000 years ago.

(Read "The People Time Forgot: Flores Find" from *National Geographic* magazine.)

Potential New Human Species?

The study team is so far reluctant to call their find a new human species. "One of the major ongoing questions for scientists studying human evolution is the lack of a satisfactory biological definition of our own species, *Homo sapiens*," Curnoe said.

"This is one of the main reasons why we have been cautious about classifying the Red Deer Cave people at this time," he said.

Even so, Curnoe thinks "the evidence is slightly weighted towards the Red Deer Cave people representing a new evolutionary line.

"Their skulls are anatomically unique. They look very different to all modern humans, whether alive today or in Africa 150,000 years ago," the anthropologist said.

"Second, the very fact they persisted until almost 11,000 years ago—when we know that very modern-looking people lived at the same time immediately to the east and south—suggests they must have been isolated from them," Curnoe added.

"We might infer from this isolation that they either didn't interbreed or did so in a limited way," which would have staved off their "absorption" into the mainstream human lineage.

Alternatively, if these people *were* members of the wider Stone Age population in East Asia, they may represent an early and unknown dispersal of modern humans from Africa, the study team argues.

(See "[Oldest Modern Human Outside of Africa Found.](#)")

"The Red Deer Cave people might then sample an early migration to East Asia: people who interacted in a limited way, perhaps didn't contribute at all, to the founding populations of living East Asians," Curnoe said.

"Nothing Extraordinary" About Mystery Humans

The team's suggestion that the Red Deer Cave people are somehow evolutionarily unique is receiving a skeptical reception from other scientists.

Physical anthropologist, [Erik Trinkaus](#) described the findings as "an unfortunate overinterpretation and misinterpretation of robust early modern humans, probably with affinities to modern Melanesians" indigenous peoples of Pacific islands stretching from [New Guinea to Fiji \(map\)](#).

"There is nothing extraordinary" about the newly announced fossil human, added Trinkaus of Washington University in St. Louis, via email.

[Philipp Gunz](#), of Max Planck Institute for Evolutionary Anthropology in Germany, isn't convinced by the study team's interpretation either.

"I would be surprised if it really was a new human group that was previously undiscovered," said, Gunz, also a physical anthropologist.

Responding to the criticism, study co-author Curnoe said, "That's fine. I would expect a mixture of comments."

It Takes All Kinds

The odd appearance of the Red Deer Cave people probably "just tells us that modern humans are a very diverse species," Max Planck's Gunz suggested.

"Modern humans are exceptionally variable, especially if you compare modern humans to our closest fossil relatives, the Neanderthals," who seem to have had a comparatively

narrow range of appearances, he said. While unusual, the skull features detailed in the new study "plot very close, or even within, the modern human range of variation," Gunz added.

"I would say it's not completely unexpected for a modern human at that age, so my gut feeling is that this is not a new species."

Gunz does, however, think the Chinese fossils might be evidence of multiple migration waves out of Africa that involved different populations of modern humans.

(Related: ["China's Earliest Modern Human Found."](#))

Missing Code

To make a convincing case for their new human, the study team will need genetic evidence, Gunz said. "It should be fairly easy to extract DNA from these fossils, and then we will know for sure how related they are to us as a modern human species," he said.

Attempts to obtain DNA from the Red Deer Cave remains haven't been successful to date, however. New attempts are under way, "involving three of the world's major ancient DNA laboratories and cutting-edge techniques," according to study co-author Curnoe.

"We'll just have to wait and see."

Appendix B
The Analysis of Transitivity

1st Paragraph

Clause 1

A previously unknown type of human jut jawed, heavy-browed, deer-eating cave dwellers	may have been identified	via Stone Age bones	from southern <u>China</u> , according to a controversial new study
<i>Goal</i>	<i>Material</i>	<i>Circ: manner</i>	<i>Circ : place</i>

Clause 2

The "mystery human fossils"	might	even	represent	an entirely new species
<i>Actor</i>				<i>Goal</i>
			<i>Material</i>	

Clause 3

That	existed	alongside our own	as recently as 11,500 years ago, according to a team of Chinese and Australian researchers
<i>Actor</i>	<i>Material</i>	<i>Goal</i>	<i>Circ: time</i>

Clause 4

Or	the fossils	might represent	an especially early migration of so-called modern humans out of Africa and into East Asia
	<i>Actor</i>	<i>Material</i>	<i>Goal</i>

Clause 5

The team	suggests
----------	----------

<i>Sayer</i>	<i>Verbal</i>
--------------	---------------

2nd Paragraph

Clause 1

We	have discovered	a new population of prehistoric humans
<i>Actor</i>	<i>Material</i>	<i>Goal</i>

Clause 2

Whose skulls	are	an unusual mosaic of primitive features	like those seen in our ancestors hundreds of thousands of years ago
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>	<i>Circ: time</i>

Clause 3

Evolutionary biologist <u>Darren Curnoe</u> of the University of New South Wales	said	via email
<i>Sayer</i>	<i>Verbal</i>	<i>Circ: matter</i>

3rd Paragraph

Clause 1

In short	they	are	anatomically unique	among all members of the human evolutionary tree
	<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>	<i>Circ: place</i>

Clause 2

Added	Curnoe
<i>Verbal</i>	<i>Sayer</i>

Clause 3

A co-author of the new <u>study of the "Red Deer Cave people,"</u>	published	online	today	in the journal <u>PLoS ONE</u>
<i>Actor</i>	<i>Material</i>	<i>Circ: manner</i>	<i>Circ: time</i>	<i>Circ: Place</i>

4th Paragraph

Clause 1

The study	was principally based on	the remains of at least three individuals	from Maludong (or Red Deer Cave) in <u>Yunnan Province (map)</u> fossils
<i>Goal</i>	<i>Circ: manner</i> <i>Material</i>	<i>Circ: Role</i>	<i>Circ: Place</i>

Clause 2

That	had been excavated	in 1989
<i>Goal</i>	<i>Material</i>	<i>Circ: Time</i>

Clause 3

But	hadn't been studied	until now
	<i>Material</i>	<i>Circ: Time</i>

5th Paragraph

Clause 1

Among the human remains	was	an abundance of bones	from an extinct species of giant deer
<i>Attribute</i>	<i>Rel: Attributive</i>	<i>Carrier</i>	<i>Circ: Role</i>

Clause 2

The cave people	were	hunters with a taste for venison
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 3

Stone and Antler tools	were	also	found
<i>Goal</i>			<i>Material</i>

Clause 4

Some of which	Were	likely	used to prepare	the deer for dinner
<i>Actor</i>		<i>Circ: Manner</i>	<i>Material</i>	<i>Beneficiary: Client</i>

Clause 5

Researchers	Say
<i>Sayer</i>	<i>Verbal</i>

Clause 6

The team	also	analyzed	a partial skeleton found	in 1979	in neighboring Guangxi Province
<i>Actor</i>		<i>Material</i>	<i>Goal</i>	<i>Circ: Time</i>	<i>Circ: Place</i>

Clause 7

That human specimen	had been encased	In stone
<i>Goal</i>	<i>Material</i>	<i>Circ: Place</i>

Clause 8

Until	the study team	removed and reconstructed	It
	<i>Actor</i>	<i>Material</i>	<i>Goal</i>

6th Paragraph

Clause 1

The Red Deer Cave dwellers' unusual features	included	a flat face, a broad nose, a jutting jaw
<i>Actor</i>	<i>Material</i>	<i>Goal</i>

Clause 2

That	lacked	a chin, large molar teeth, a rounded braincase with prominent brow ridges, and thick skull bones
<i>Actor</i>	<i>Material</i>	<i>Goal</i>

Clause 3

The researchers	Say
<i>Sayer</i>	<i>Verbal</i>

Clause 4

Their brains	were	"moderate in size"
<i>Attribute</i>	<i>Rel: Attributive</i>	<i>Carrier</i>

Clause 5

Curnoe	Added
<i>Sayer</i>	<i>Verbal</i>

7th Paragraph

Clause 1

Despite this seemingly primitive human design	radiocarbon dating of charcoal from the fossil deposits	suggests	the Red Deer Cave people lived just 14,500 to 11,500 years ago
	<i>sayer</i>	<i>Verbal</i>	<i>Verbiage</i>

Clause 2

The team	says	a time by which all other human species
<i>Sayer</i>	<i>Verbal</i>	<i>Verbiage</i>

Clause 3

such as	Neanderthals	are thought to have	died out
	<i>Senser</i>	<i>Mental: Affective</i>	<i>Phenomenon</i>

Clause 4

That date	would make	the Red Deer humans	even more recent than the famous <i>Homo floresiensis</i> from the Indonesian island of Flores itself a disputed potential human species
<i>Actor</i>	<i>Material</i>	<i>Goal</i>	<i>Circ: Place</i>

Clause 5

<u>Discovered in 2003</u>	The Flores "hobbits"	are dated	to no later than 13,000 years ago
<i>Circ: Time</i>	<i>Goal</i>	<i>Material</i>	<i>Circ: Time</i>

8th Paragraph

Clause 1

The study team	is	so far reluctant to call their find a new human species
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 2

One of the major ongoing questions for scientists studying human evolution	is	the lack of a satisfactory biological definition of our own species, " <i>Homo sapiens</i> "
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 3

Curnoe	Said
<i>Sayer</i>	<i>Verbal</i>

9th Paragraph

Clause 1

This	Is	one of the main reasons
<i>Token</i>	<i>Rel: Identifying</i>	<i>Value</i>

Clause 2

Why	we	have been	cautious about classifying the Red Deer Cave people at this time
	<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 3

He	Said
<i>Sayer</i>	<i>Verbal</i>

10th Paragraph

Clause 1

Even so	Curnoe	Thinks
	<i>Senser</i>	<i>Mental: Cognitive</i>

Clause 2

The evidence	is slightly weighted	towards the Red Deer Cave people representing a new evolutionary line
<i>Goal</i>	<i>Circ: Manner</i> <i>Material</i>	<i>Actor</i>

11th Paragraph

Clause 1

Their skulls	are	anatomically unique
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 2

They	Look	very different to all modern humans	whether alive today or in Africa	150,000 years ago
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>	<i>Circ: Place</i>	<i>Circ: time</i>

Clause 3

The anthropologist	said
<i>Sayer</i>	<i>Verbal</i>

12th Paragraph

Clause 1

Second	the very fact	they	persisted	until almost 11,000 years ago
		<i>Actor</i>	<i>Material</i>	<i>Circ: Time</i>

Clause 2

When	We	Know
	<i>Senser</i>	<i>Mental: Affective</i>

Clause 3

That	very modern-looking people	lived	the same time immediately to the east and south	
	<i>Behaver</i>	<i>Behavioral</i>	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td><i>Circ: Manner Range</i></td> </tr> </table>	<i>Circ: Manner Range</i>
<i>Circ: Manner Range</i>				

Clause 4

They	must have been isolated	from them
<i>Goal</i>	<i>Material</i>	<i>Actor</i>

Clause 5

Curnoe added	Added
<i>Sayer</i>	<i>Verbal</i>

13th Paragraph

Clause 1

We	might infer	from this isolation
<i>Senser</i>	<i>Mental: Affective</i>	<i>Phenomenon</i>

Clause 2

They	either	didn't interbreed or did	so in a limited way
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<i>Actor</i>		<i>Material</i>	<i>Goal</i>
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Clause 3

Which	would have staved off	their "absorption" into the mainstream human lineage
<i>Actor</i>	<i>Material</i>	<i>Goal</i>

14th Paragraph

Clause 1

Alternatively	if	These people	were	members of the wider Stone Age population	in East Asia
<i>Circ: Manner</i>		<i>Token</i>	<i>Rel: Identifying</i>	<i>Value</i>	<i>Circ: Place</i>

Clause 2

They	May represent	an early and unknown dispersal of modern humans	from Africa
<i>Actor</i>	<i>Material</i>	<i>Goal</i>	<i>Circ: place</i>

Clause 3

The study team	Argues
<i>Sayer</i>	<i>Verbal</i>

15th Paragraph

Clause 1

The Red Deer Cave people	might	then sample an early migration to East Asia
<i>Actor</i>	<i>Material</i>	<i>Goal</i>

Clause 2

People	Who	interacted in	a limited way
<i>Actor</i>		<i>Material</i>	<i>Goal</i>

Clause 3

Perhaps	didn't contribute at	all to the founding populations of living East Asians	
	<i>Material</i>	<i>Goal</i>	

Clause 4

Curnoe	Said
<i>Sayer</i>	<i>Verbal</i>

16th Paragraph

Clause 1

The team	Is	Suggestion
<i>Carrier</i>	<i>Rel: Attr: Possessive</i>	<i>Attributive</i>

Clause 2

That	the Red Deer Cave people	are	somehow evolutionarily unique
	<i>Token</i>	<i>Rel: Identifying</i>	<i>Value</i>

Clause 3

<u>Erik Trinkaus</u>	described	the findings as	"an unfortunate overinterpretation and misinterpretation of robust early modern humans, probably
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			with affinities to modern Melanesians"
<i>Actor</i>	<i>Material</i>	<i>Goal</i>	<i>Projected clause</i>

Clause 4

Indigenous peoples of Pacific islands	stretching	from New Guinea to Fiji
<i>Actor</i>	<i>Material</i>	<i>Range</i>

17th Paragraph

Clause 1

There	is	Nothing extraordinary
	<i>Existential</i>	<i>Existent</i>

Clause 2

The Newly	announced	fossil human
<i>Circ: Manner</i>	<i>Verbal</i>	<i>Phenomenon</i>

Clause 3

Added	Trinkaus of Washington University in St. Louis	Via email
<i>Verbal</i>	<i>Sayer</i>	<i>Circ: Matter</i>

18th Paragraph

Clause 1

Philipp Gunz, of Max Planck Institute for Evolutionary Anthropology	in Germany	isn't convinced by	the study team's interpretation either
<i>Goal</i>	<i>Circ: Place</i>	<i>Material</i>	<i>Actor</i>

19th Paragraph

Clause 1

I	would be surprised
<i>Goal</i>	<i>Material</i>

Clause 2

If	it	Really	was	a new human group
	<i>Carrier</i>	<i>Circ: Manner</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 3

That	was	previously	undiscovered
<i>Actor</i>		<i>Circ: Manner</i>	<i>Material</i>

Clause 4

Said	Gunz	also	a physical anthropologist
<i>Verbal</i>	<i>Sayer</i>		<i>Sayer</i>

20th Paragraph

Clause 1

“Responding to the criticism, study co-author”	curnoe	Said
<i>Projected clause</i>	<i>Sayer</i>	<i>Verbal</i>

Clause 2

That	is	fine
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 3

I	would expect	a mixture of comments
<i>Senser</i>	<i>Mental: Affective</i>	<i>Phenomenon</i>

21st Paragraph

Clause 1

Just	tell	Us
	<i>Verbal</i>	<i>Target</i>

Clause 2

That	modern humans	are	a very diverse species
	<i>Token</i>	<i>Rel: Identifying</i>	<i>Value</i>

Clause 3

Max Planck's Gunz	Suggested
<i>Sayer</i>	<i>Verbal</i>

22nd Paragraph

Clause 1

Modern humans	are	exceptionally	variable
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Circ: manner</i>	<i>Attribute</i>

Clause 2

Especially	if	you	compare	modern humans to our closest fossil relatives
<i>Circ: manner</i>		<i>Actor</i>	<i>Material</i>	<i>Goal</i>

Clause 3

The Neanderthals	who	seem	to have had a comparatively narrow range of appearances
<i>Carrier</i>		<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 4

He	Said
<i>Sayer</i>	<i>Verbal</i>

Clause 5

While unusual	the skull features	detailed	in the new study
	<i>Actor</i>	<i>Material</i>	<i>Goal</i>

Clause 6

"plot very close, or even within, the modern human range of variation,"	Gunz	Added
<i>Projected clause</i>	<i>Sayer</i>	<i>Verbal</i>

23rd Paragraph

Clause 1

I	would say
<i>Sayer</i>	<i>Verbal</i>

Clause 2

It	is not	completely unexpected	for a modern human at that age
<i>Senser</i>		<i>Circ: Manner</i> <i>Mental: Affective</i>	<i>Phenomenon</i>

Clause 3

So	My gut feeling	is	that
	<i>Token</i>	<i>Rel: Identifying</i>	<i>Value</i>

Clause 4

This	is not	a new species
<i>Token</i>	<i>Rel: Identifying</i>	<i>Value</i>

24th Paragraph

Clause 1

Gunz	Does
<i>Actor</i>	<i>Material</i>

Clause 2

However think	the Chinese fossils	might be	evidence of multiple migration waves out of Africa
<i>Mental</i>	<i>Token</i>	<i>Rel: Identifying</i>	<i>Value</i>

Clause 3

That	involved	different populations of modern humans	to make a convincing case for their new human
<i>Actor</i>	<i>Material</i>	<i>Goal</i>	<i>Circ: Purpose</i>

25th Paragraph

Clause 1

The study team	will need	genetic evidence
<i>Actor</i>	<i>Material</i>	<i>Goal</i>

Clause 2

Gunz	Said
<i>Sayer</i>	<i>Verbal</i>

Clause 3

It	Should be	fairly	easy to extract DNA from these fossils
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Circ: Manner</i>	<i>Attribute</i>

Clause 4

and then	we	will know	for sure how related
	<i>Senser</i>	<i>Mental: Affective</i>	<i>Phenomenon</i>

Clause 5

They	are	to us as a modern human species
<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 6

He	Said
<i>Sayer</i>	<i>Verbal</i>

26th Paragraph

Clause 1

Attempts	to obtain DNA
<i>Material</i>	<i>Goal</i>

Clause 2

From	the Red Deer Cave remains	haven't been	successful to date
	<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 3

However	New attempts	are	under way involving three of the world's major ancient DNA laboratories and cutting-edge techniques according to study co-author Curnoe
	<i>Carrier</i>	<i>Rel: Attributive</i>	<i>Attribute</i>

Clause 4

We	will just have to wait and see
<i>Senser</i>	<i>Mental: Affective</i>