VERBS OF COGNITION IN MENTAL PROCESSES IN THE ENGLISH CLAUSES:
A FUNCTIONAL GRAMMAR APPROACH

Nike Puspita Wanodyatama P. , Eva Tuckyta Sari Sujatna & Bima Bayusena.

Universitas Padjadjaran Bandung
Alamat Korespondensi: gemgirl_paris24@yahoo.com

ABSTRACT

In this research, researcher concerns with one of the language metafunctions only that is the representation clause. This research is entitled “Verbs of Cognition in Mental Processes in the English Clauses.” The method used is descriptively and the study is focused on emotion verbs in mental process in the novel of Heart Beat which is written by Danielle Steel in 2008 from which source. The research shows the mental processes which are process of sensing, it describes as follow; perception, cognition, emotion, and desideration. In this research, the writer will focus on verbs used in mental processes, namely verbs of cognition. There are three main elements in Mental Processes; Process, Participants, and Circumstances.

Keywords: Clause as Representation, Mental Processes, Verbs of Cognition, Participants, Circumstances.

I. Introduction

When people use language to express meanings, they do in specific situations. The English language develops globally and, hence, gives opportunity for the emerging of new theories. Functional grammar is one example.

Functional grammar is first stated by Halliday, especially in his book of An Introduction of Functional Grammar (2004). In this book, he proposes that functional grammar, also called systemic functional linguistic, views language as a tool to convey meaning. Furthermore, Eggins (2000: 3) stated that functional grammar is “the kind of grammar most likely to have useful things to say to language learners and teachers.” In other words, functional grammar not merely sees grammar as the construction of language, how language is structured, but also sees how language is used to deliver meaning.

The rationale discusses the reasons for choosing Functional Grammar as the main theory. The writer would like to start with the term functional grammar itself. The term functional grammar is used to refer to the kind of grammar that has been developed by systemic functional linguists, the scholars who devoted themselves in
the field of Systemic Functional Linguistics (SFL). Functional grammar is also known as Systemic Functional Grammar (SFG). According to Halliday (2004: 29), language is a system of meaning. That is to say that, when people use language, their language acts are the expression of meaning. From this point of view the grammar becomes a study of how meanings are built up through the use of words and other linguistic forms. We need a grammar that can also account for conversations or other types of spoken English and written English.

The clause as a grammatical means of encoding patterns of experience, conceptualized as a situation type is then the most significant grammatical unit. It is the unit that enables us to organize the wealth of our experience into a manageable number of representational patterns or schemas. Our personal of each individual situation are then selected from these patterns. Situation types comprise three main types. They are Material, Mental, and Relational.

In general, there are four types of verbs used in mental process, namely verbs of cognition, perception, emotion, and desiderative. Process is realized by verbs. The type of process determines the nature and number of the participants. The valency of the verb specifies the number of inherent participants of any process, and by reduction indicates the result of one or more participants.

The decision to focus on the mental process is chiefly triggered by the very fact that this process type, according to systemic linguists, bears on the assumptions of the participants. In general, there are two participants in mental process, namely Senser and Phenomenon. Senser is someone that senses something and Phenomenon is something that which is sensed.

(1) You like ice cream.

(2) She didn’t remember what happened last night.

In sentence (1), we have You as Senser and ice cream as Phenomenon. The verb used, like, is in positive form. On the other hand, in sentence (2) we can see the word remember as the verb used is in negative form. Therefore, we have what happened last night as Phenomenon and she as Senser.

The writer uses her research topic as a point of entry for further exploration of the Functional Grammar in the future. Moreover, the academic reason. The topic of verbs of cognition in mental processes in the English clauses can be approached by functional grammar. The writer would like to discuss how the verbs of cognition in mental process are realized in the form of English clauses in which there is a process.

This condition makes the writer curious of and interested in investigating in events and especially in human verbs and participants involved, what they do or say, with the assumption that researcher will be able to see different styles of writing, and therefore. The writer believes that the analysis will be helpful as the basic clues to further understanding the complexity of the difference ideas in English Grammar especially in Traditional and Functional approach.

To analyze this process, researcher took some data from the novel “Heart Beat which is written by Danielle Steel in 2008”. Based on the rationalization, the writer entitled this research “Verbs of Cognition in Mental Processes in The English Clauses.”
II. The Research Method

The method applied in this research is qualitative method, in which the research based on descriptive data. In doing this research, the researcher does library research to expand the theories and references to sustain the analysis. The collected data are analyzed in accordance with theories chosen, and described based on the systemic functional grammar points of views.

III. Theoretical Outline

The researcher obtains the theories from the linguists of functional grammar. There are numerous theories used, as the grand theories are from Halliday and Matthiessen (2004), and the supporting theories are form Bloor and Bloor (1995), Gerot and Wignell (1994), Lock (1996), Thompson (1996), Eggins (2000).

IV. Discussion

4.1 Three Lines of Meaning in The Clause

According to Halliday and Matthiessen (2004: 58-59), there are three lines of meaning in clause. First, the theme functions in the structure of the clause as a message. A clause has meaning as a message, a quantum of information; the Theme is the point of departure for the message. It is the element of the speaker selects for ‘grounding’ what he is going on to say. Second, the subject functions in the structure of the clause as exchange. A clause has meaning as an exchange, a transaction between, speaker and listener; the Subject is the warranty of the exchange. It is the element the speaker makes responsible for the validity of what he is saying. Third, the actor functions in the structure of the clause of the representation. A clause has meaning as a representation of some process on human experience; the Actor is the active participant in that process. It is the element the speaker portrays as the one that does the deed.

4.2 Clause as Representation

According to Halliday and Matthiessen (2004: 172), there are seven different Process types in clause in representation.

<table>
<thead>
<tr>
<th>Material</th>
<th>Doing</th>
<th>Bodily, physically, materially</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral</td>
<td>Behaving</td>
<td>Physiologically and psychologically</td>
</tr>
<tr>
<td>Mental</td>
<td>Sensing</td>
<td>Emotionally, intellectually, sensorily</td>
</tr>
<tr>
<td>Verbal</td>
<td>Saying</td>
<td>Lingually, signally</td>
</tr>
<tr>
<td>Relational</td>
<td>Being</td>
<td>Equal to, or some attribute of</td>
</tr>
<tr>
<td>Existential</td>
<td>Existing</td>
<td>There exists</td>
</tr>
<tr>
<td>Meteorological</td>
<td>Weathering</td>
<td></td>
</tr>
</tbody>
</table>

78
4.3. Mental Processes

Mental processes are ones of the six processes proposed by Halliday and Matthiessen (2004: 197). These processes involve “the clauses of feeling, thinking, wanting, and perceiving.” In other words, Bloor et al. (1995: 116) states that mental processes involve “not material action but phenomena best described as states of mind or psychological events.” Furthermore, he states that these processes “tend to be realized through the use of verbs like think, know, feel, smell, hear, see, want, like, miss, please, admire, enjoy, frighten.” For example:

<table>
<thead>
<tr>
<th>Senser</th>
<th>Process: mental</th>
<th>Phenomenon</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>do not like</td>
<td>it</td>
</tr>
</tbody>
</table>

(3)

<table>
<thead>
<tr>
<th>Senser</th>
<th>Process: mental</th>
<th>Phenomenon</th>
</tr>
</thead>
<tbody>
<tr>
<td>The quiet</td>
<td>puzzles</td>
<td>me</td>
</tr>
</tbody>
</table>

Halliday and Matthiessen (2004: 200) state that mental processes “are not kinds of doing and cannot be probed or substituted by do.” Moreover, Eggins (2000: 241) states question patterns that can be used to differentiate mental process (“What do you think/feel/know about x?”) from material processes (“What did x do to y?”). For example, from the clause She loved him, we cannot as “What did x do to y?”

(5) What did she do to him? She loved him.
And it will be make more sense to ask “What do you think/feel/know about x?”

(6) What did she think about him? She loved him.

As mentioned previously, processes are realized by verbs. Regarding to mental processes, Halliday and Matthiessen (2004: 208) divide four classes of verbs that are included in mental processes, namely cognition, perception, desiderative, and emotion. Cognition processes convey ‘thinking’. Verbs of cognition include the verbs of thinking, knowing, and understanding. For example, the word know in (7) I do not know her name. Perception processes convey ‘perceiving through the five senses’ (Gerot and Wignell, 1995: 58). Verbs of perception include the verbs of hearing, seeing, tasting, and smelling. For example, the word hear in (8) Simon heard it on the news.

Regarding to desideration type, Halliday also mentions this as one of the types of mental processes in his latest version of An Introduction to Functional Grammar that was published in 2004. On the other hand, instead of using the same term, he uses the term desiderative as the type of verb such as want, desire, and wish. As stated by Halliday and Matthiessen (2004: 208), verbs of emotion are like, love, and miss. Moreover,
Matthiessen (1995: 263) states emotion processes convey ‘how someone feels about an object or an event’. For example, the word miss in (9) I miss my sister. In this research, the writer will focus on verbs used in mental processes, namely emotion.

4.4 Verbs of Cognition

<table>
<thead>
<tr>
<th>Senser</th>
<th>Process: mental</th>
<th>Phenomenon of thing</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>know</td>
<td>that he lied to me</td>
</tr>
</tbody>
</table>

There are three main elements in Mental Processes; Process, Senser, and Phenomenon. There is also one more element that occurs in mental processes, which is Circumstance, but this element is optional. In other word, the element of Circumstance does not always have to exist in mental processes, different from three elements that have been mentioned before.

4.5 Participants

There are two participants in mental processes, namely Senser and Phenomenon. Halliday and Matthiessen (2004: 201) state that Senser is “the conscious being that is feeling, thinking, wanting, or perceiving” and that Phenomenon is “that which is ‘sensed’— felt, thought, wanted or perceived” (2004: 203). Furthermore, Martin et al. (1997: 104) explains that Senser is “endowed with consciousness, nominal groups serving as Senser which denote non-conscious entities have to be construed metaphorically as ‘personified’, and that a Phenomenon is the one that can be any kind of entity entertained or created by consciousness—a conscious being, an object, a substance, and institution, or an abstraction...acts (I like swimming) and facts (I like the facts that he apologized)”.

Halliday and Matthiessen (2004: 205) state that Phenomenon in emotion verbs in mental processes is typically a thing, fact and situation. Mental processes usually constitute by Senser that is followed by Process and Phenomenon. This pattern of participants order constituent can be accepted as an active form of mental processes, as in data (11). On the other hand, Halliday and Matthiessen (2004: 200) state if there is an active form in mental process, there is also a passive form of mental process, with phenomenon as the fronted element, followed by Process and of course, Senser, as in data (12).

<table>
<thead>
<tr>
<th>Senser</th>
<th>Process: Mental</th>
<th>Phenomenon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mia</td>
<td>liked</td>
<td>the song</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phenomenon</th>
<th>Process: Mental</th>
<th>Senser</th>
</tr>
</thead>
<tbody>
<tr>
<td>The song</td>
<td>was liked</td>
<td>by Mia</td>
</tr>
</tbody>
</table>
4.6 Circumstances

Circumstances are elements that can be found in all six processes in functional grammar, especially in mental processes. Yet, Circumstances are optional participants in mental processes. It means that it is nothing necessarily needed for a mentally process to have a Circumstance element.

As stated by Halliday and Matthiessen (2004: 260), Circumstances refer to examples such as the location of an event in time or space, its manner, or its cause, and these notions of when, where, how, and why the things happens provided by... explanation, by linking circumstance to the four WH-forms that were adverbs...

Eggins (2000: 237-239) states that there are seven elements of circumstantial that can be found in processes, as follow:

1. Extent

Circumstantial element of extent answers the question about duration (How long? and How many times?) and spatial distance (How far?).

2. Location

Circumstantial element of location answers the question about temporal (When?) and spatial (Where?).

3. Manner

Circumstantial element of manner answer the question about means (How? and What?), quality (How? and How –ly?), and comparison (What... like?).

4. Cause

Circumstantial element of cause answers the question about cause (Why?), reason (What for?), and behalf (Who for?).

5. Accompaniment

Circumstantial element of accompaniment answers the question with whom?

6. Matter

Circumstantial element of matter answers the question what about?

7. Role

Circumstantial element of role answers the question what as?

V. Data Analysis

The data are taken from a novel with the title Heart Beat which is written by Danielle Steel in 2008.

Data 1

I would appreciate a little help.

In this data, there is one single clause. We can find the participants in the clause. The role of senser is realized by noun group I. As we know, senser is always a person and a noun group. In this clause, the role of senser is presented by noun group. Senser must always be animate and is usually human. Thus, the word I here is a representation of senser. Moreover, the role of phenomenon is realized by noun group a little help, with the word help as head, that functions as
phenomenon of thing. In other words, in this mental process, noun group \(I\) as Senser, who senses a little help, as a thing phenomenon, that follows the process that is realized by the word appreciate.

In this data, mental process is signified by the verbal group would appreciate. The word appreciate functions as the head of the group.

The detail analysis is as follows:

<table>
<thead>
<tr>
<th>I</th>
<th>would appreciate</th>
<th>a little help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Se</td>
<td>Pr</td>
<td>Ph: Thg</td>
</tr>
<tr>
<td>NG</td>
<td>VG</td>
<td>NG</td>
</tr>
</tbody>
</table>

Data 2

You don’t believe me on this score.

In this data, there is one single clause. We can find the participants in the clause. The role of senser is realized by noun group you. As we know, senser is always a person and a noun group. In this clause, the role of senser is presented by noun group. Senser must always be animate and is usually human. Thus, the word you here is a representation of senser.

Prepositional phrase of on this score realizes the role of matter as circumstance because it answers the question of what about.

The detail analysis is as follows:

<table>
<thead>
<tr>
<th>You</th>
<th>don’t believe</th>
<th>me</th>
<th>on this score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Se</td>
<td>Pr</td>
<td>PH: Thg</td>
<td>Cir: Mat</td>
</tr>
<tr>
<td>NG</td>
<td>AG</td>
<td>NG</td>
<td>PP</td>
</tr>
</tbody>
</table>
Data 3

I didn’t understand much that was going on at the time.

In this data, there are two clauses with I didn’t understand as the main clause and that was going on at the time as dependent clause. We can find the participants in the clause. The role of senser is realized by noun group I. As we know, senser is always a person and a noun group. In this clause, the role of senser is presented by noun group. Senser must always be animate and is usually human. Thus, the word I here is a representation of senser. Furthermore, the second participant is phenomenon, which is filled by the word that, as the indication of fact as phenomenon. The clause that was going on at the time, it represents the notion of fact. In other words, in this mental process, noun group I as Senser, who senses that was going on at the time, as a phenomenon of fact, that follows the process that is realized by the word understand. The role of circumstance is realized by conjunction group much.

The role of circumstance is realized by the conjunction group much functions as circumstance of manner. It is because the phrase answer the question about quality, that becomes one characteristics of manner as circumstance.

In this data, mental process is signified by the verbal group understand. Here the word understand is an cognition verb which is verbal group understand refers to knowledge. On the other hand, something that is being sensed by I that functions as noun group or phenomenon is that was going on at the time that functions as phenomenon of fact.

The detail analysis is as follows:

<table>
<thead>
<tr>
<th>I</th>
<th>didn’t understand</th>
<th>much</th>
<th>that was going on at the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Se</td>
<td>Pr</td>
<td>Cir: Man</td>
<td>Ph: F</td>
</tr>
<tr>
<td>NG</td>
<td>NG</td>
<td>AG</td>
<td>Fact clause</td>
</tr>
</tbody>
</table>

Data 4

When Edward officially left for the evening, I wondered who was out in the downpour.

In this data, there are two clauses with I wondered and who was out in the downpour as dependent clause. We can find two participants in the clause. The first participant, senser is represented by the pronoun I, and which is a noun group. As we know, senser is always a person and a noun group. In this clause, the role of senser is presented by noun group. Senser must always be animate and is usually human. Thus, the word I here is a representation of senser. Furthermore, the second participant is phenomenon, which is filled by who the wh-clause, as the indication of situation as phenomenon. The clause who was out in the downpour that functions as phenomenon of thought. In other words, in this mental process, noun group I as Senser, who senses who was out in the downpour, as a phenomenon of thought, that follows the process that is realized by the word wonder.

The role of circumstance is realized by the wh-clause of when Edward officially left for the evening realizes the role of circumstance, matter in this case.
In this data, mental process is signified by the verbal group wonder. Here, the word wonder is an cognition verb which is verbal group wonder refers to feel curious about something. On the other hand, something that is being sensed by senser I that functions as noun group or phenomenon is who was out in the downpour that functions as phenomenon of thought.

The detail analysis is as follows:

<table>
<thead>
<tr>
<th>When Edward officially left for the evening</th>
<th>I</th>
<th>wondered</th>
<th>who was out in the downpour</th>
</tr>
</thead>
<tbody>
<tr>
<td>cir: mat</td>
<td>se</td>
<td>pr</td>
<td>ph: tht</td>
</tr>
<tr>
<td>ng</td>
<td>vg</td>
<td>wh-clause</td>
<td></td>
</tr>
</tbody>
</table>

VI. Result
In this chapter the researcher will make conclusions based on the analysis of the data. The researcher has analyzed five data in the previous part. According to the data, there are five positions of participants and process namely, Senser + Process + Phenomenon: Thing in data 1, Senser + Process + Phenomenon: Thing + Circumstance: Matter in data 2, Senser + Process + Circumstance: Manner + Phenomenon: Fact in data 3, and Circumstance: Matter + Senser + Process + Phenomenon: Thought in data 4.

Generally, the data provides the elements of mental process. Every data has participants, process, and circumstance. The verbs of emotion based on the data are appreciate, believe, understand, and wonder.

References
Bloor, Thomas and Bloor, Meriel.

London.

Deterding, David H. and Poedjosodoarmo, Gloria R.

Dジャスダマルマ, T. F.

Downing, Angela and Locke, Philip.

Gerot, Linda and Wignell, Peter.  

Halliday, M.A.K. and Matthiessen, Christian.  

Lipson, Maxine.  

Lock, Graham.  


*) Nike Puspita Wanodyatama P.  
The Student of The Graduate School of English Linguistics Universitas Padjadjaran Bandung  
Email: gemgirl_paris24@yahoo.com