

Use of Expansion and Projection in Research Paper

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Abstrak

Makalah ini berfokus pada penggunaan ekspansi dan proyeksi dalam studi latar belakang makalah penelitian yang ditulis oleh Mahasiswa. Makalah ini mengadopsi Systemic Functional Grammar untuk menentukan dan menganalisis kejadian Fungsi Logical. Berdasarkan data analisis, dapat ditemukan bahwa siswa menggunakan perluasan dalam elaborasi, ekstensi dan peningkatan. Kemudian mereka juga menggunakan proyeksi proyeksi. Dalam hal ini, proyeksi ide tidak tampak dalam makalah penelitian. Jumlah total juga menunjukkan bahwa peningkatan ekspansi adalah tipe dominan yang terjadi dalam studi latar belakang makalah penelitian. Dari temuan, dapat dipahami bahwa siswa mencoba untuk menguraikan ide, informasi secara detail tentang apa yang dimaksudkan dan alasan untuk memilih studi dengan menggunakan hubungan elaborasi, ekstensi dan peningkatan untuk menghindari salah tafsir. Ini juga menunjukkan bahwa siswa sangat jarang menggunakan proyeksi proyeksi seperti ide atau kutipan pelaporan. Bahkan, mereka hampir tidak menggunakan tipe ini. Namun, telah diketahui bahwa penggunaan proyeksi sangat penting bagi siswa untuk melihat apa yang dikatakan oleh pakar atau subjek penelitian tentang pentingnya penelitian mereka. Oleh karena itu, penelitian ini dapat digunakan untuk menggambarkan pemahaman yang lebih baik untuk pelajar bahasa Inggris dari logico-semantic, sehingga siswa dapat menulis makalah penelitian yang baik. Beberapa implikasi dapat terlibat dalam menulis dan membaca akademik serta penerjemah, siswa dan instruktur yang terlibat dalam menulis dan membaca pedagogi.

Kata kunci: Fungsi Logis, Kertas Penelitian

Abstract

This paper focuses on the use of expansion and projection in background study of research paper written by students. This paper adopts Systemic Functional Grammar to pinpoint and analyze the occurrences of Logical Function. Based on the analysis data, it can be found that the student uses expansion in elaboration, extension and enhancement. Then they also use the projection locution. In this case, the projection of idea doesn't seem in the research paper. The total number also shows that expansion enhancement is the dominant type which occurs in the background study of research paper. From the finding, it can be understood that the student tries to elaborate the idea, information in detail about what they are intended and reasoning for choosing the study by using relation of elaboration, extension and enhancement to avoid misinterpretation. It also display that the student is very seldom in using of projection locution such reporting idea or quoting. In fact, they are almost did not use this type. However, it has been known that the use of projection is very important for student to see what an expert or research subject say about the importance of their research. Therefore, this study can be used to describe a better understanding for the English learners of logico-semantic, so that the students can be able to write good research paper. Some implications can be implicated in writing and reading academic as well as translators, students and instructors involved in writing and reading pedagogy.

Key word: Logical Function, Research Paper

A. Introduction

In the article Non.Plagiarism (2010), they defined that research paper is a comprehensive essay that students are required to submit at the end of their academic semester. It attempts to see student's understanding of an academic course. From this, we can take a conclusion that research paper is students essay after learning from over their course in academic years.

A research paper actually tests the student's ability to research, collect information, write, compile, analyze and interpret a topic. It is an amalgamation of the student's total learning. as it is also defined by Rodriguez (2010) that the importance of research paper is that without scoring a decent grade, the student cannot pass the research defense and fail to get Sarjana degree.

Research paper generally is consists of five chapter. One of the preliminary steps to completing a research paper is the background study for it. According to Philip (2005:55), background of study is a state of art review of the field of study, including current developments. Controversies and breakthroughs, previous research and relevant background theory.

Kristyn Hammon in Sokogriv.com (2017) explained that background study is a comprehensive review of information surrounding and influencing the topic. He add that it includes reading books, academic journals, studies and other thesis materials relating to the topic or the situations connected to the topic. A few techniques get background study going and make the task much more manageable. Background study forms the foundation for thesis and provides the valuable sources for writing paper.

In the article Researchguide.com (2017) clarified that the background information should indicate the root of the problem being studied, appropriate context of the problem in relation to theory, research, and/or practice, its scope, and the extent to which previous studies have successfully investigated the problem, noting, in particular, where gaps exist that the study attempts to address.

B. Review of Literature

In spite of them, background of the study is also deals with the use of grammar in expressing of opinion or ideas. These expressions could be seen through the use of sentences, clauses or phrases etc. In writing background of the study are always use compound, complex sentences or clause complex and are packed with ideas which related to each other thing

logical relation and interdependencies. Therefore, good manner in writing will lead the students to excellent mark and brighten the future. Thus, it is demanded for all students to fulfill the good text. It should have logical connection and relation between the clause complexes.

Regarding to clause complex and its relation to meaning, Halliday (1985:193) interpreted the relations between clauses in terms of logical component of the linguistic system: the functional-semantic relations that make up the logic of natural language. It concludes that a clause complex should have a cohesive unit in which there is a logical relation regarding to a semantic view mentioned as logical semantic relation.

There are two systems involved in the formation of clause complexes. One is Tactic System or Interdependency and the other is Logico-Semantic relation and all of which operate within clauses. Clause complex can be consisted from two or more interdependent clauses. They are made by paratactically or hypotactically related clauses that are connected together in systematic and meaningful ways. When someone put many clauses together, the meaning is strengthened. As pointed out by Halliday and Matthiessen (2014:430) in Eid (2016:323) that semantically, the effect of combining clauses into a clause complex is one of tighter integration in meaning: the sequences that are realized grammatically in a clause complex are construed as being sub-sequences within the total sequence of events that make up a whole episode in a narrative.

Gerot & Wignell (1994:89) outline that a clause complex is a sequence of processes which are logically connected. These processes are verbs linked between clauses. The clauses can be combined through one of two logico-semantic relations: expansion or projection. Expansion links processes by providing additional information. It involves three types of relationship: elaboration, extension, and enhancement while projection links clauses by having one process projected another either by quoting or reporting. Both meanings (ideas) and wordings (locutions) can be projected. This projection closely relates to the system of transitivity or a clause as a representation.

From the definition above, it can be seen that it is very important to form the logical connection and relation between the clause complexes to express point of view, the interesting or reason in choosing of the study and also avoid the ambiguity. It is similar to Leech (1981: 30) that an expression is said to be ambiguous when more than one interpretation can be assigned to it. Regarding to these, the writer comes to investigate types of logic semantic relation and the dominant type of logic semantic relation in background study of students' research paper.

Over the objectives of the study realized as the visible outcomes, this research is theoretically expected to be useful and be significant that this analysis may help and support a study of logical semantic relation of clause complexes in the Systemic Functional Linguistics (SFL). This research is also expected to give a deeper understanding to everyone who wants to learn about clause complexes. Practically, this study will become a reference for students in writing a paper by using logical semantic relation. Furthermore, this study will give significant contribution and guidance for journalists or media workers to write their reports considering the logical semantic relation and its interdependence. Thus, their reports will elaborate information or facts and project opinions.

Logical Function

According in Halliday (1985) in saragih (2008:26-30) that logical function is devoted to the clause complex. An analysis of logical meaning is known as univariate analysis, since it applies only a clause complex from one point of view. A univariate analysis is done with aspect to two criteria of taxis and logico- semantic relation.

Halliday and Matthiessen (2014: 438) categorized the types of relationship between clause into two basic systems determine how one clause is related to another. (i) TAXIS (degree of interdependency); (ii) the LOGICO-SEMANTIC RELATION. We shall summarize these in the present section, and then go on to examine each in greater detail.

Taxis

Halliday and Matthiessen (2014:438) All clauses linked by a logico-semantic relation are interdependent: that is the meaning of relational structure – one unit is interdependent on another unit. Two clauses related as interdependent in a complex may be treated as being of equal status, as in the following example in Saragih (2008: 27)

Independent Status

As independent status indicates that a clause or clauses can stand individually when separated such as both of clauses in the following:

My brother eats fried rice and I drink coca cola.

The sentence above is called by independent status or termed by parataxis. Therefore, a parataxis relation is defined as a clause complex can stand individually. In traditional terminology, the relation is commonly known as coordinating relation.

b. Dependent status

Dependent status is termed as hypotaxis relation. In this case, one element of the clause complex is dependent on the other in the sense that one of the clause cannot stand by itself. Thus, one of clauses is dominant while the other is dependent. The clause complex of *she meets to Dr. Suryadi, who was an ear, nose and throat specialist* forms a hypotactic relation since it is only *she meets to Dr. Suryadi* which can stand alone by it whereas *who was an ear, nose and throat specialist* forms cannot. In other words, the latter is dependent on the former.

Logico - Semantic Relation

Halliday & Matthiessen in Adjei (2017: 13) explained that the second criteria of logical functions are logico semantics relation. It indicates the meaning formed when a clause is combined with another in a clause complex. Halliday in Toyetin in Academia.edu also explained that logico-semantics represents the basic nature of the relation between clauses and semantic motifs that run throughout the language as a whole.

There is a wide range of different logico-semantic relations, any of which may hold between a primary and a secondary member of a clause nexus. But it is possible to group these into a small number of general types, based on Haliday and Matthiesen (2014:443) that the two fundamental relationships of (1) expansion and (2) projection.

1. Expansion

Haliday and Matthiesen (2014:443) that Expansion relates phenomena as being of the same order of experience. The basic logico-semantic relation made by the grammar has come to be reflected in the conventions of comic strips. Expansion develops the text by linking the frames that make up the strip (and also events within frames); this constitutes the ‘horizontal’ development of the text.

It was suggested that there are essentially three ways of expanding a clause; elaborating it, extending it and enhancing it. These could be compared with three ways of enriching a building; (i) elaborating its existing structure; (ii) extending it by addition or replacement; (iii) enhancing its environment

Elaboration

Halliday and Matthiessen (2014: 444) defines elaboration as one clause expands another by elaborating on it (or some portion of it): restating in other words, specifying in

greater detail, commenting, or exemplifying. Simply, Halliday summarized the indication of Elaboration into the following:

Exposition, the second clause restates the thesis of the primary clause in the different words, to present it from another point of view or perhaps just to reinforce the message. for example:

That clock does not work, it's not working

Each arguments was fatal to the other; both could not be accepted

Exemplification, the secondary clause develops thesis or primary clause by becoming more specific about it, often citing an actual example, for example:

John is naughty, he used to cheat his friend

His face is the same as everybody has,- two eyes, nose in the middle, mouth under

The relationship between primary and secondary clause may be explicitly stated by conjunctives such as *for example, for instance, in particular, eg or by use of hypen (-)*

Clarification, the secondary clause clarifies the thesis primary clause by backing it up with some form explanation or explanatory comments as shown by the following examples

He never said anything to her, in fact his remark was evidently addressed to a tree

I was not surprised-it was what I had expected

Explicitly the relationship may be coded by conjunctives such as *in fact, actually, indeed, at least.*

Elaboration is also refers to Non Defining relative clause. This divides into finite and non-finite clauses. The finite elaboration indicates that the dominant clause functions to elaborate the meaning of independent clause in non-defining relative clause as shown in *my neighbors always quarreled at night, which often disturbed us.* The dominant clause may elaborate the independent one in either one of the following ways; whole clause of a part of the clause. As groupings, not as types finite elaboration clause includes:

Clauses with *which* whose domains is either the whole primary dominant clause or some part of it that is more than a nominal group such as;

His son graduated from oxford university, which gives a good reputation to the family.

Clause with *which, that, who or whose* domain is a nominal group such as;

My son bought a new Toyota car, which is a genuine Japanese car of the year

Clause with *when* or *where* which have as their domain of time or place such as

We need a cooling period, when the problems are becoming less important

Extension

Saragih (2008:21) defined that extension is One clause expands another by extending beyond it; adding some new element, giving an exception to it, or offering an alternative. Halliday and Matthiessen (2014: 405) categorized three major subtypes of Paratactic extension, (i) addition, (ii) variation and (iii) alternation.

(i) Addition, Here one process is simply adjoined to another; there is no implication of any causal or temporal relationship between them. Addition falls into three subtypes (a) ‘additive: positive’ (‘and’), (b) ‘additive: negative’ (‘nor’) and (c) ‘adversative’ (‘but’ — ‘and conversely’). Paratactic additions are often accompanied by cohesive expressions such as *too*, *in addition*, *also*, *moreover*, *on the other hand*..

Examples of Additive : positive

My father grows rice and my mother sells fruit

I said you look like an egg, sir and some eggs are very pretty you know

They did not come here, nor did their sons

Examples of clauses linked by an ‘additive: negative’ relation:

He could neither explain the whole situation to the editor nor could he accept his rebuke

Examples of clauses linked by an ‘adversative’ relation

We liked that breed of dog, but we felt we weren’t in a position

(ii)Variation, Halliday and Matthiessen (2014: 06) stated that one clause is presented as being in total or partial replacement of another. Variation falls into two subtypes — ‘replacive’ (‘instead’) and ‘subtractive’(‘except’). As shown in the example:

Examples of clauses linked by the ‘replacive’ relation

The vortex is not a uniform cylinder but has a shape that varies with altitude

Examples of clauses linked by the ‘subtractive’ relation:

He should have had them before, || only he hurt his shoulder at football

Here the secondary clause presents an exception to what has been said in the primary clause.

(iii) Alternation. Here one clause is presented as an alternative to another. Examples of clauses linked by the alternative relation:

Either you go ahead || and take the plunge || or you wait || till you think || you can afford it, || which you never will. ||

Here one clause is offered as alternative to another. The associated cohesive conjunctions include *conversely*, *alternatively*, *on the other hand*.

The second types of extension is hypotactic Extension. It is the combination of extension with hypotaxis also embraces (a) addition, (b) variation and (c) alternation, but with the extending clause dependent.

(i) Finite.

(a) Addition. Hypotactic clauses of addition are introduced by the conjunctions *whereas*, *while*. For example:

- *Whereas most children's fathers worked at an office, my father worked at the studio, so I went on the set.*

(b) Variation. There is no finite form for replacement. For subtraction the finite clause is introduced by *except that*, *but (for the fact) that*; for example:

Camera pulls back to show Kane and Susan in much the same positions as before, except that they are older.

(c) Alternation. The hypotactic form of the alternative relation is *if . . . not* (i.e. 'if not a, then b', with the dependent clause typically coming first). For example:

If they're not in their usual place they could have fallen through onto the

(ii) Non-finite. Non-finite hypotactic extending clauses involves both (a) addition and (b) variation. Two subtypes are absent from the non-finite system: 'negative additive' addition and 'alternative' variation. The non-finite form of hypotactic extending is an imperfective clause; for example :

We used to go away at the weekend, taking all our gear with us.

The non-finite clause is often introduced by a preposition or preposition group functioning conjunctively, e.g. *besides*, *apart from*, *instead of*, *other than*, *without*; for example;

Addition

additive

Apart from being amusing what else does The Nun's Priest's Tale do?

adversative

Until we do that, the opportunities may come and go without our having a compelling rationale for pushing commitment and action

(b) variation

replacive

Instead of finding the perpetrators, they criminally charged the Earth First! activist, who was left crippled for life.

subtractive

We call him a murderer, but for him there is no way out other than doing the deed.

With the additive and adversative, however, there may be no conjunctive expression; such clauses are therefore identical with non-finite elaborating clauses, except that in speech they are not marked by tone concord. Examples:

(additive)

So she wandered on, talking to herself as she went. ('and talked')

(adversative)

Hardly knowing what she did, she picked up a little bit of stick and held it out to the puppy. ('she hardly knew . . ., but she picked up . . .')

With the additive, the Process of a relational dependent clause may be implicit; the marker is the conjunctive preposition *with* (positive) or *without* (negative):

I told the whole story of the six-minute Louvre at The Kennedy Center with President Carter there, and I said, 'Mr. President, we have the man who brought the six-minute Louvre back to America

Without chlorine in the antarctic stratosphere, there would be no ozone hole. The sense here is 'and several thousand more are still expected to be found' and so

Enhancement

Halliday and Matthiessen (2014:410) defined that In enhancement one clause (or subcomplex) enhances the meaning of another by qualifying it in one of a number of possible ways: by reference to time, place, manner, cause or condition. As with extension, the parallel between parataxis and hypotaxis is very close, although there are certain gaps in the paradigm; the principal categories are set out in Table 7(10) together with the principal markers of enhancement.

Saragih (2008:32) simply defined that paratactic enhancement in a clause complex can give a notion coordination with a circumstantial feature. Typically clause complex with paratactic sense is expressed by either (1) the conjunctions *then, so, but, yet, still* (2) by conjunction group with *and then, and there, and thus, and so, and yet* (3) by and in combination with conjunctive that is cohesive devices-not structural such as *and at that time, and soon afterwards, and till then and in that case, and in that way.*

Note also that some conjunctives, such as *meanwhile, otherwise, therefore, however, nevertheless,* are extending their use in modern spoken English so as to become paratactic

structural conjunctions; in this function they are unaccented (spoken without salience). Some examples are given below.

Temporal; same time

It is the officer from the head office, now I have to talk to him

She fired two shoots, then the deer collapsed to the ground

later time

The three soldiers wandered about for a minute of two, and then quietly marched off

Spatial; same place

My son stood, and there he showed us his power

The man stared at me from small hole on the wall then I know him

manner; means

sit there and in that way you can observe their behaviors

Comparison

he looked at me and so did his companion

(iv) Causal- Conditional, cause: reason/purpose

(a) Cause ^ effect

In her books, Tove Jansson spoke initially to children, so the hero is himself quite young.

(b) Effect ^ cause

It is amazing how effective this system is for the tower stays as stiff as a ram-rod even in the most blustery condition

Condition: positive

I have stress at work, and then I sail and fly

Condition: negative

This is very much essentials, otherwise a lot of time is usually wasted for sighting the staff.

He must have had a fall the night before, otherwise why should there be bruises and clotted blood on his body?

Condition: concessive

(a) Concession ^ consequence

Through mounting irritation I kept telling him that I needed a cure for my son and nothing for myself; still I answered his questions with all the politeness I could muster.

(b) Consequence ^ concession

Well, because I've done a lot of television, I'm sort of a generalist. I'm not a pastry cook, but I've had to learn a certain amount about it. I'm not a baker, though I've had to learn how to do it

Saragih (2008:33) defined the principal markers of paratactic enhancement are summarized in table below;

Table III

Principal Markers and meanings of Paratactic Enhancement

Category	Meaning	Markers
Temporal		
Same time	A meanwhile B	(and) meanwhile, (when)
Different time; later	A subsequently B	(and) then, and + afterwards
Different time; earlier	A previously B	And/but + before that/first
Spatial	A there B	And there
Same place		
Manner		
Means	A is via/by means of B	(and) in that way, (and) thus
Comparison	A is like B	(and) similarly, (and) so, thus
causal – conditional		
cause ^ effect	Because A so result B	(and) so, (and) Therefore
Effect ^ cause	Because intention A so action B	For, because
Condition; positive	If A then B	(and) then, (and) therefore
Condition; negative	If not A then B	Or else, (or) otherwise
Concession ^ consequence	If A contrary to expectation B	But, (and) yet, still, but + nevertheless
Consequence ^ concession	Contrary to expectation A then B	(though)

Another one of enhancement is hypotactic enhancement, typically, hypotactically enhancing chains are limited to two clauses, with one clause (or sub-complex) qualifying another clause (or sub complex) for example:

I'd parted with the Zen master I was working with originally as had most of his senior students, so I was without a teacher.

Saragih (2008: 35) clarified simply that hypotactic enhancement is the combination of enhancement with hypotaxis is realized by the traditional formal grammar 'adverbial clauses. The finite hypotactic enhancement is typically marked by conjunctions commonly known as subordinate conjunction in traditional grammar. In the different way the non-finite hypotactic enhancement clauses are marked either by (1) preposition, such as *on, with, by, before, after* or (2) one of a subset of hypotactic conjunctions such as *when, while*.

(i) Finite. The following are some examples of hypotactic enhancing clauses which are finite:

(a) Time

Moomintroll, that chubby, cheerful being, came into existence as a family joke when Tove Jansson was a young girl

By the time I was to page sixty, I felt a certain click.

(b) Place

The lbo never accept anything [[which is rigid and final and absolute]]: 'wherever one thing stands, another thing will stand beside it.'

Arrows never fall where he places himself.

Abstract place

As a result, disagreement is carried out in the absence of an audience, where ideological and performance changes may be made without the threat of damage to the goals of the team, as well as the character of the individual.

Abstract place shading into matter

As far as it can, the Zoo tries to be self-supporting, and you will notice the names of companies and individuals on many of the cages [[who sponsor the animals]].

(c) Manner

Quality

As it happens, Margo was an extremely rich woman.

Limestone can form in many ways || as shown in Table 4-4.

Comparison

He just shakes his head and shoves it at her again and says 'Give Massin,' as if he knew | there'd be no problem at all.

Means

These theories include the solar theory, whereby periodically the amount of nitrogen compounds is enhanced.

(d) Cause-condition

Cause: reason

Gradually, they outgrow their baby shoes— if the expression is pardoned, as Snufkin is in fact the only one of them [[who uses footwear at all]].

The problem isn't simply going to go away because people are laughing.

There was no point since you got the same rate from him [[you did at the bank]].

Cause: purpose

Everyone at VES is working hard to change the law so that we will have voluntary euthanasia legalized in England within the next five years.

Cause: result

After that, the ozone hole developed rapidly, especially after September 5, so that by October 5, the ozone over the middle of Antarctica had dropped from 320 Dobson units (DU) to 120 DU.

Concession

Even though it was a somewhat silly book about the grand passions of college students, it really was a novel.

They stripped her clean of every bit of jewellery she ever had, though that's neither here nor there. [internal concession: 'I'm telling you although . . .']

Tempting as it may be, we shouldn't embrace every popular issue [[that comes along]].

Africans in Southern Rhodesia do not want to lose [[what they have gained in the past]], little though it may be.

Condition: positive

If I had a different view, then perhaps I would write more novels.

But if I can get into the House of Commons and talk to somebody and make a fuss somewhere;

if I can talk to the young doctors and the nursing people and impress upon them the reality of human suffering, then perhaps I will have an effect.

Condition: negative

You will cherish them on your bookshelves for a long time unless, of course, someone borrows them and somehow 'forgets' to return them.

The conjunction serves to express both the dependency (the hypotactic status) and the circumstantial relationship by Finite clause as well as simple conjunctions such as *because*, *when*, *if*, and conjunction groups like *as if*, *even if*, *soon after*, *so that*, there are three kinds of complex conjunction, one derived from verbs, one from nouns and the third from adverbs.

(a) Verbal conjunctions are derived from the imperative or from the present/active or past/passive participle + (optionally) *that*: *provided (that)*, *seeing (that/how)*, *suppose/supposing (that)*, *granted (that)*, *say (that)*. In origin these are projections; their function as expanding conjunction reflects the semantic overlap between expansion and projection in the realm of ‘irrealis’: ‘let us say/think that . . .’ = ‘if . . .’, as in *say they can’t mend it, shall I just throw it away?*.

(b) Nominal conjunctions include *in case*, *in the event that*, *to the extent that*, and *the* + various nouns of time or manner, e.g. *the day*, *the moment*, *the way*. These last have evolved from prepositional phrases with the enhancing clause embedded in them, e.g. *on the day when we arrived*; but they now function to introduce hypotactic clauses just like other conjunctions, e.g. *their daughter was born the day we arrived*, *the way they’re working now the job’ll be finished in a week*. Note that they no longer have the nominal group potential for modification; thus while we can say *on the beautiful day when we arrived*, it would be odd (or impossible) to say *their daughter was born the beautiful day we arrived*.

(c) Adverbial conjunctions are *as/so long as*, *as/so far as*, (*as*) *much as*, for example *as long as you’re here . . .*, *as far as I know . . .*, *much as I’d like to . . .* (compare non-finite *as well as*, which is extending not enhancing). In origin these express limitation, a particular point up to which a certain circumstance is valid.

(ii) Non-finite.

Some example of non-finite enhancing clauses.

(a) Enhancing relationship explicitly marked by a structural conjunction or conjunction:

Time

Follow the pathways around the landscaped gardens and over bridges before resting at the Tea House where the scent of lotus flowers mingles with that of freshly brewed tea and traditional cakes.

The issue was raised by elderly presidential adviser Sun Yun-suan, whom Chen visited while making traditional courtesy calls to influential figures in the current government.

Concession

Similarly Mr. G. S. Sawhney, largely due to the recommendation of Mr. K. K. Shah, then Governor of Tamil Nadu, was transferred from Collector of Customs, Bombay, to become Director of Revenue Intelligence, despite having himself been under investigation by the CBI and having been listed as a suspect in the Directorate of Revenue Intelligence.

Condition

I've found that I can't go more than three days without doing something physically invigorating, because it makes me uptight and tense.

Manner: means

Bacteria can also aid chemical precipitation of calcite by making the water more alkaline.

(b) Enhancing relationship left implicit:

Time

Catch a ride on the monorail to the ritzy shopping centre of Sydney, taking in the Queen Victoria

Building and Centre point on the way.

Leaving the Gardens, walk through Tumbalong Park with its fountains and groves of native eucalypts

Cause: purpose

He grew up in an orphanage and ran away from it seek Freedom and Adventure.

To jazz up the title, use the mouse to click on the text and type something new.

Cause: result

He was taken away from the city, never to be seen again.

In practice, these are blended to produce a practical classification as follows.

Thus much chert is recrystallized, || making the origin difficult to discern.

From explanation above, it can be noted that perfective non-finite clauses (e.g. *to jazz up the title*) typically express purpose, but they sometimes express result instead, just as finite clauses introduced by *so that* may express either result or purpose; in other words, purpose ('irrealize') may shade into result ('realize').

As with extending clauses, the non-finite dependent clause without a Subject is interpreted by reference to the Subject of the dominant clause. However, we also find examples where the Subject of the dependent clause is not co-referential with the Subject of the dominant clause; in such cases the dependent Subject typically refers to the speaker –

But, of course, << [Δ] having said that, >> the hope is that at least now we know.

but it may alternatively refer to the Agent in a ‘receptive’ clause (whether it is structurally present or not),

If this occurs in limestone, beautifully preserved fossils with delicate features intact can be recovered by [Δ] dissolving the limestone with acid.

or to some non-specific entity whose identity is treated as unimportant:

If the amount of carbon dioxide is reduced by [Δ] warming the water, as would occur in shallow tropical water, calcite may be precipitated.

The dependent clause often has an explicit Subject of its own; when this can show a contrast in case, it appears either in oblique (e.g. *him*) or in possessive (e.g. *his*) form:

In order for there to be curvature in space time, the time axis must be extended– it cannot be just one point, the present.

(In order) for him to take time off everyone has to work harder.

[With him / his taking time off || everyone has to work harder. |||

If the dependent clause is non-finite, the circumstantial relationship is made explicit by the structural conjunction or conjunctive preposition. The conjunctions are a subset of those occurring in finite clauses, and their meaning is essentially the same. The prepositions tend to be somewhat less specific, e.g. *in turning the corner, on thinking it over, with you being away, without John knowing*; and the meaning of the clause introduced by a preposition may vary according to the sense of the primary clause:

Without having been there I can’t say what happened.

(Cause: reason ‘because I wasn’t there’)

Without having been there, I know all that happened.

(Condition: concessive ‘although I wasn’t there’)

[Without having been there, I rather like the place.

Nevertheless, it is usually possible to assign these clauses to the categories of time, manner and cause, and to match the prepositions up in a general way with the conjunctions. Saragih (2008:35) summarized the markers of non-finite and finite hypotactic enhancement are summarized in the following table

Table III.

Principle Markers of Hypotactic Enhancement

Category	Finite	Non-finite	
	Conjunction	Conjunction	Preposition

temporal same time: extent same time: point same time: spread different time: Later Different time: earlier	As, while When, as soon as Whenever, every time After, since Before, until	While When Since until	In (the course/process On After Before
Spatial Same place: extent Same place: point Same place: spread	As far as Where Wherever, everywhere		
Manner Means Comparison	As, as if, like, the way	Like	By means of
Causal-conditional Cause; reason Cause; purpose Condition: positive Condition: negative Condition: Concessive	Because, as, since, in case, seeing that, considering In order that, so that If, provided that, as long as Unless Even if, although	If	With, through, by, as a result, because of, in case of (In order/so as)to, for, with aim of, for fear of In the event of But for, without Despite, in spite of, without

Projection

Halliday and Matthiessen (2014:509) categorized that there are different kinds of projection. There are in fact three systems involved in the differentiation of different kinds of projection: (i) the level of projection (idea vs. locution), (ii) the mode of projection (hypotactic reporting vs. paratactic quoting), and (iii) the speech function (projected proposition vs. projected proposal).

Level of projection. Through projection, one clause is set up as the representation of the linguistic ‘content’ of another – either the content of a ‘verbal’ clause of saying or the content of a ‘mental’ clause of sensing. For example, *that we should protect ozone over Antarctica* is the content of the ‘mental’ clause *policymakers believe*; and *she saw one young man open fire after a feud between youths became violent* is the content of the ‘verbal’ clause *Nakisha Johnson, 17, said*. There are thus two kinds of projection.

On the one hand, the projection may be a representation of the content of a ‘mental’ clause – what is thought; we call such projections ideas. On the other hand, the projection may be a representation of the content of a ‘verbal’ clause – what is said; we call such projections locutions. Projection may thus involve either of the two levels of the content plane of language – projection of meaning (ideas) or projection of wording (locutions). This distinction made by the grammar is reflected in the conventions of cartoons: ideas are represented in ‘clouds’, whereas locutions are represented in ‘balloons’

Mode of projection. Projection combines with the same set of interdependencies that have been shown to occur with expansion – (1) the two tactic interdependency relations of parataxis and hypotaxis and (2) the constituency relation of embedding. For instance, ‘*We really have to have mandatory child safety trigger locks, and photo license IDs for the purchase of new handguns,*’ is projected paratactically by *Gore told the crowd*. This means that the projection is represented as a quote. In contrast, *she saw one young man open fire after a feud between youths became violent* is projected hypotactically by *Nakisha Johnson, 17, said*. This means that the projection is represented as a report – as something that is dependent on the projecting clause and thus cannot serve on its own. We can see the contrast clearly if we consider the paratactic variant of the hypotactic projection: ‘*I saw one young man open fire ...*’. The distinction between these two modes of projection was recognized in traditional accounts as the contrast between direct and indirect speech; but as we have already noted, we need to take account of direct and indirect thought as well. In addition to the two tactic modes of projection – paratactic projection of quotes and hypotactic projection of reports, there is one further environment in which projected clauses occur – that of

embedding: *the witness's claim that she saw one young man open fire seems plausible*. Level of projection and mode of projection intersect to define four kinds of projection. They are paratactic idea, hypotactic idea, paratactic locution and hypotactic locution.

The speech functions of the projection. The projections in are all propositions; more specifically, they are all statements. But speech functions other than statements can also be projected. For example, *where the scissors are in Mum, do you know where the scissors are?* is a projected proposition of the question type; and *not to bloody do it in I told you not to bloody do it* is a projected proposal. Both these examples are instances of hypotactic nexuses. But we find the same speech functional range in the paratactic mode of projection.

In fact, paratactic projection allows for a greater range: we can quote not only propositions and proposals but also minor speech functions such as greetings and exclamations (e.g. *they said 'Goodbye, Mr Chips'*). This is part of the general principle whereby reporting reduces the potential for projecting dialogic features. For example, while Vocative elements can be quoted, as in *Gable said 'Frankly, my dear, I don't give a damn'*, they cannot be reported (cf. *Gable said that frankly he didn't give a damn* without the Vocative element; we cannot say *Gable said that frankly, my/his dear, he didn't give a damn*).

Table IV

Projection of propositions and proposals

Type of projecting process	projected speech function	Quote paratactic	Report hypotactic
		1 2	$\alpha \beta$
idea 'mental	major: proposition	1 '2 She thought, 'I can'	$\alpha \beta$ She thought she could
	major: proposal	He willed her 'Do'	He wanted her to do
locution "verbal	major: proposition	1 "2 She said, "I can"	$\alpha \beta$ She said she could
	major: proposal	He told her "Do"	He told her to do
	Minor	1 "2 She said, "Wow!"	

III. Method of Research

According to Crasweel (2012:3) that research is a process of steps used to collect and analyze information to increase our understanding of a topic or issue. Therefore, in conducting of the research, we need a research design. A research method is considered to be the most important part in a research because in this way a researcher should go through in order to find out the solution to the problem that she has formulated. The method will lead her to some steps in elaborating of the research design, determining the source of the data, collecting the data leading procedures and techniques of analyzing data as well as drawing conclusion.

This research is conducted by applying the descriptive method. According to Borg & Gall, 1989 in aect.org that descriptive studies are aimed at finding out "what is," so observational and survey methods are frequently used to collect descriptive data. Glass & Hopkins, 1984 in aect.org explained that descriptive research can be either quantitative or qualitative. It can involve collections of quantitative information that can be tabulated along a continuum in numerical form, such as scores on a test or the number of times. Descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection.

Source of the Research

To get the result of the research, the data is needed and chosen deals with the problem that is related to the study. In this study, the sources of data were taken from students' research paper and focused on background study.

Data Collection

Data is important in the field research, the data will give the writer to get information to collect the data, The data is taken by applying library research technique. After doing the library research, the data is collected by reading all clauses in background of study from student research paper

Technique for Analyzing Data

According to Halliday and Matthiessen, the basic unit for analysis is the clause at lower and higher ranks. Therefore, it is very prudent to identify how much the clause complex is used in the background of research paper and find the different syntactic and the

dominant choices employed and in their progressions in the paragraphs within the text of study. Therefore, the basic units for analysis of the data were clause complexes which were numbered and grouped into compound and complex sentences. In clear, the following are the procedure or techniques in analyzing of the data:

1. Reading all clauses in the background of research paper
3. Choosing the clause complex in the sentences
4. Putting the clauses based on the type of logico-semantic relation into a list,
5. Converting the occurrences into percentages.
6. Describing the findings of the study based on the statements available in the part of chapter I particularly at problems of study.

IV. Findings and Suggestions

From the data analysis, it can be found that there are two types of logico semantic relation coded in the background study of research paper written by students. The first type is expansion. The student uses expansion when they elaborate their ideas and detail information by forming of clause complex through exemplification. As it is found in the clause such as brain workout is a set of movement activities *such as crawling, drawing, tracing symbol in the air, yawning and drinking water*. This sentence shows that the student uses exemplification “such as” to expand or develop the idea in the primary clause becoming more specific about it. The student also uses non defining relative clause such as *that, who, which, whose* when define or develop the primary idea. As it is found in the clause such as brain workout is body movement that can stimulate brain work and situation. The use of “that” elaborate the meaning independent clause in non defining relative clause.

In expanding the meaning, the student also uses extension. They use one clause to extend the meaning of another by adding something new to it. It is did by addition such as *and, too, also, in addition, moreover etc.* As shown in the example of *students problem are difficult to work in team and suffer loss of concentration*. The addition of “and” here shows that the student adjoined another clause in one clause in giving information.

The use of enhancement is also used by student in reasoning of their idea such as in the example taken from student paper; “*Considering to the problem, the students become less active in English learning, especially speaking*”. The use of considering can be meant as the reason why they choose study analysis on speaking. Then, the analysis shows that the student mostly tends to use of expansion enhancement in writing of background study. From the

analysis, it can be understood that the student tries to elaborate the idea, information in detail about what they are intended and reasoning for choosing the study by using relation of elaboration, extension and enhancement to avoid misinterpretation.

The analysis also shows that the student is very seldom in using of projection locution such reporting idea or quoting. It can be seen from the result the data. It shows the lowest number in using it. In fact, they are almost do not use this type. However, it has been known that the use of projection is very important for student to see what an expert or research subject say about the importance of their research. So, they will have a good base in conducting of the research.

The last, the number and percentage in the analysis of the data is only the way to see the types of logico semantic relation to answer the problems of the study in this research. The findings of this study can be used to describe a better understanding for the English learners of logico-semantic, So that the students can be able to write good research paper. The writer is also suggested to be concerned about logical relationship between or among clauses in representing ideas. At last, It can be a reference to the next researcher who interest to conduct the research in other field.

References

- Anonym. 2001. What Is Descriptive Research? taken from <https://www.aect.org/edtech/ed1/41/41-01.html>
- Anonym, 2017. Research guide. Taken from <http://libguides.usc.edu/writingguide/background>
- Adjei, Amma Abrafi. 2017. The Expansion Relations of Clause Complexing (CC) in the Editorials of the Daily Graphic. *Journal of Literature, Languages and Linguistics*. Vol.30
- Almurashi, Wael Abdulrahman. 2016. An Introduction to Halliday's Systemic Functional Linguistics. *Journal for the study of English Linguistics*. Vol.4.No. 1: assessed from <http://dx.doi.org/10.5296/jsel.v4i1.9423>.
- Bloor T, Bloor M, 2004. *The Functional Analysis of English*. London: Hodder Arnold.
- Crasweel, John W. 2012. *Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. 4th Edition. Pearson: USA
- Derntl, Michael. 2014. Basics Of Research Paper Writing And Publishing. *Int. J. Technology Enhanced Learning*, Vol. 6, No. 2
- Downing, A. and Locke, P. 2006. *English Grammar. A University Course Second edition*: London and New York: Routledge Taylor & Francis Group.
- Eggs, Suzanne., 1994. *An Introduction to Systemic Functional Linguistics*. London: PINTER Publisher.
- Eid, Fahd Mohammed Sagheer. 2016. Functional Analysis Of Clause Complex In The Language Of News Websites Texts: A Comparative Study Of Two Articles. *International Journal Of Scientific And Research Publications*, Volume 6, Issue 6
- Feng, Zhiwen. 2013. Functional Grammar and Its Implications for English Teaching and Learning. *English Language Teaching*; Vol. 6, No. 10
- Gerot, L. and Wignell. P.1994. *Making Sense of Functional Grammar*. Sydney: Gerd Stabler.
- Guazzieri, Annavaleria. 1998. M.A.K Halliday and the Context Of Situation. CUP: Language to Language
- Halliday, M.A.K. 1985. *Introduction to Functional Grammar*. London: Edward Arnold
- Halliday, M., and Matthiessen. (2004) *An Introduction to Functional Grammar* (3rd Editions), London: Arnold.

Halliday, M., and Matthiessen. (2014) *An Introduction to Functional Grammar* (4th Editions), London: Routledge.

Hammon, Kristyn. 2017. *What is background Study*. Assessed from Sokogriv.com

Jamali, H. and Nikzad, N. 2011. Article title type and its relation with the number of downloads and citations', *Scientometrics*, Vol. 88

Leech, Geoffrey. 1981. *The Study of Semantic*. Second Edition. England: Penguin Book

Muliani & Hasibuan Juli Rachmadani. 2016. Logico-Semantic Relation In Sri Mulyani Indrawati's Speech. *Digital Repository Unimed*. Assessed From Jurnal.Unimed.Ac.Id

O'Donnell, Mick, 2011. *Introduction to Systemic Functional Linguistics for Discourse Analysis*, Madrid: Universidad Autónoma de Madrid

Phillips, E.M. and Pugh, D.S. 2005. *How to Get a PhD*, 4th ed, Buckingham, UK: Open University Press.

Rodriguez, Malia. 2017. What is the importance of Research Paper Writing?. taken from <https://www.quora.com/What-is-the-importance-of-Research-Paper-Writing>

Saragih, Amrin. 2008. *Discourse Analysis*. Medan: Universitas Negri Medan

Schleppegrell, Mary J. 2004. *The Language Of Schooling A Functional Linguistics Perspective*. New Jersey: Lawrence Erlbaum Associates, Publishers

Siahaan, Sanggam etc. 2014. The logical meanings of the traditional wedding speeches of the Batak Toba people. *International Journal of Language and Linguistics* 2(5). Available at <http://www.sciencepublishinggroup.com/j/ijll>

Srino, Udom & White, Peter. 2007. Clause Complex Analysis On Thai University Students' English Essays In A Longitudinal Genre Based Course. *Proceedings of the International Conference: Doing Research in Applied Linguistics*

Sulistyaningrum, Siti Drivoka & Rasyid, Yumna. 2015. The Logico-Semantic Relation Of Students' Presentation In Acceleration Program Of Sma Labschool Jakarta. *International Journal Of Language Education And Culture Review*, Vol. 1, No. 1, Taken From: <Http://Pps.Unj.Ac.Id/Journal/Ijlecr>

Taverniers, Merriem, 2002. *Systemic Fucntional Linguistics and the Notion of Grammatical Metaphor*. Belgium: Doctoral Dissertation, University of Gent: department of English

Toyetin, Francis. 2017. Semantic Relation in Three Extracts Nigerien Newspaper. Taken from http://www.academia.edu/35700533/FRANCIS_MEMOIRE