

The Use of Ergative Verbs to Background the Role of the Agent in two Selected Short Stories: A Syntactico-Semantic Study

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Abstract

Key words

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1.

Introduction

Fairclough (2013) suggests that there is no one-to-one relationship between language's form and meaning: one form can be used to convey a number of meanings and different forms can convey one meaning; hence, various meanings can be represented in the same event expressed in different forms. English distinguishes transitive and intransitive verbs according to standard English grammar (Quirk et al. 1972) on the basis of the role of the verb within a sentence. In order to complete its meaning, transitive verbs require an object: "*She gave food to the cat*". Objects do not require intransitive verbs: "*The house collapsed*." Some verbs can be transitive as well as intransitive: "*The tree collapsed the house*". Thus, in order to promote the possible interpretation of transitivity, Halliday & Matthiessen (1994) differentiate between 'ergative verbs' and 'unergative verbs'. Ergativity is a feature historically identified with Ergative languages, such as Basque or Eskimo languages, for their attribution of

Ergative (ERG) or Absolute (ABS) cases to their verbal arguments in direct contrast to the accusatory languages, such as Indo-European languages and thus English, assigning nominative (NOM) or accusative (ACC) cases. For what reason can we then argue that English is not an Ergative language? The answer lies in the assignation of case to the verbal arguments in the statement by (Levin, 1983, p. 10-11; Lyons, 1968, p. 355-356): in Indo-European languages, subjects (S), either in intransitive or transitive constructions, gain NOM case and objects (O) gain ACC case. When an analytical language can be found in English, the difference between the NOM and the ACC case is seldom morphologically marked as in synthetic languages such as Latin, but by placing the statements in the sentence (i.e. word order). Ergative languages, on the contrary, have a separate case-system in which the assignment of ERG or ABS cases depends on criteria other than syntactic placement, i.e. on semantic considerations such as agency or passivity, as demonstrated by the so-called Ergative

Hypothesis of Marantz: ERG case is connected to the S of a transitive structure and ABS case to the S of an intransitive and to the O of a transitive. The study aims at examining whether the change in pattern alter the meaning of the context of clauses. It also aims at investigating the genre in which ergative processes are used most frequently to de-emphasize the role of the agent in the selected short stories, as well as surveying whether the selected short stories have the same dominant ergative structure. It is hypothesized that the change in pattern will alter the ergative process from one group of meaning to another. It is also hypothesized that the role to background the role of the agent is only found in the horror stories. Moreover, the dominant type of ergative structure in each short story differs from one to another. Finally, the four ergative structures are found in each of the two selected short stories.

2. Definition of Ergativity

Ergativity is a feature historically associated with ergative languages (e.g. Basque language or Eskimo languages) for assigning their verbal arguments to the ergative (ERG) or absolute (ABS) case in direct contrast to accusative languages (e.g. Indo-European languages and thus English) assigned to the nominative (NOM) or accusative (ACC) case (Aldridge, 2008, p. 966; Bobaljik, 1993, p.45-51; Lyons, 1993, p. 45-51) For what purposes should we argue that English is not an ergative language? The issue lies in assigning the case to the verbal arguments in the sentence: in Indo-European languages, subjects (S) acquire NOM case and objects (O) get ACC case in either intransitive or transitive constructions (Levin, 1983, p.10-11; Lyons, 1968, p. 355-356):

(1a) Mary (NOM) hits him (ACC)

(1b) John (NOM) runs away

As can be seen, the distinction between the case of NOM and ACC is hardly

morphologically marked in English, an analytical language, as in synthetic languages such as Latin, but by means of the placing of the arguments in the sentence (i.e. word order). Ergative languages, on the other hand, have a distinct case-system in which the assignment of the case of ERG or ABS depends on factors other than syntactic placement, that is, on semantic factors such as agency or passivity, as evidenced by the Ergative Hypothesis of Marantz (Levin, 1983, p. 10): the case of ERG is attached to the S of a transitive construction and the case of ABS to the S of a transitive construction.

Bobaljik (1993, p. 6) has posited an obligatory case from a generative point of view. In N/A (NOM/ACC) languages, case X is NOM (=ERG) and in E/A (ERG/ABS) languages, case X is ABS (=ACC)" is the parameter for the type of structural case that is assigned to a given language, depending on whether it is an ACC or an ERG language. Curiously enough, it has been suggested that accusative and ergative languages actually share the same underlying structure in recent minimalist approaches (Aldridge, 2008, p. 973).

Nonetheless, we must stress that the phenomenon of ergativity is not a characteristic exclusive of ergative languages. In fact, although in a discreet vein, it also demonstrates itself through the presence of certain verbs which display ergative-like characteristics in accusative languages (Biber et al, 1999, p. 147-148; Huddleston & Pullum, 2002, p. 306; Jespersen, 1927, ch. 16.4, 16.5, 16.7; Lyons, 1968, p. 351-356; Quirk et al, 1985, p. 1169). Ergativity in English is usually linked to a type

of intransitive verbs undergoing a "causative transformation" from a syntactic point of view (Lyons, 1968, p. 352) in which the patient S becomes the O in the transitive variant and a S with agentive features is included.

(3a) The window broke → (3b) Mary broke the window (Levin & Rappaport-Hovav, 1995, p. 79)

2.1 Ergative verbs in the English language

Having briefly discussed the problem of ergativity in loose terms, let us continue by discussing the general linguistic literature with a tentative approach to English ergative verbs.

According to Lyons (1968), ergative verbs are, from a purely formal point of view, regarded one-place predicates that can be transitive through a syntactic transformation, known as an "ergative or causative transformation" (p. 352) or as Hale & Keyser (1986) refers to as a "causativization process" (p. 620) and both constructions, the intransitive and the transitive, are considered to be identical in that they that they hold a tight syntactic-semantic correspondence (Hale & Keyser, 1986, p.620; Huddleston & Pullum, 2002, p.306; Lyons, 1968, p.352; Quirk et al, 1985, p. 1169): a causative transformation has been applied in example (3) whereby a causative S (+/-animate) has been introduced to express agency and the S of the intransitive (affected or patient position of the action) has become the O of the transitive equivalent. Lyons left it uncertain if the S inserted in the ergative construction could be inanimate, which Levin & Rappaport-Hovav (1995, p. 84, 103) presumed to be possible as

seen in their cited example "*the earthquake broke the window*" in which an inanimate or external agent conducts the S, also considered "force" by Quirk et al (1985, p. 744-745), which corroborated this presumption. Moreover, it should be observed that in the main grammars, various labels have been assigned to ergative verbs. They are referred to by Huddleston & Pullum (2002, p. 306) as "non-agentive dynamic intransitives" and Quirk et al (1985, p.1169) merely spoke of a general category of "transitive verbs" including both ergative verbs and "mutual participation" verbs (e.g. meet).

Huddleston & Pullum (2002) claim that we may very often acquire copular or passive constructions or pseudopassive constructions, especially those mentioned by Jespersen (1927, p. ch. 16.4.), with "verbs of motion and change," all of which express a state as a consequence of the dynamic process that characterizes ergative verbs (p. 306). The following examples are taken from Huddleston & Pullum, 2002, p. 306)

(14a) Copular construction: The window opened → I opened the window → The window was open:

(14b) Copular construction The hole widened → I widened the hole → The hole was wide(r)

(14c) Passive construction or "pseudopassive construction" My pants tore → I tore my pant → The pants were torn (Quirk et al, 1985, p. 169-171)

Huddleston & Pullum (2002, p. 307) and Levin & Rappaport-Hovav (1995, p.85) noted that lexical collocation imposes additional selection limitations on the syntactic distribution of ergative verbs. It is important to

note that a *collocation* is a relationship within a syntactic unit among individual lexical elements [...], according to The Concise Oxford Dictionary of Linguistics (3rd ed.)." Specifically used when terms go together specifically or usually: e.g. blond collocates with hair in blond hair or Their hair is blond; drunk with lord as in drunk as a lord[...] (Matthews, 2014).

(15a) break the law does not accept an intransitive construction *The law broke.

(15b) break an arm chooses an affected/patient S rather than a causer (certainly, in the most common sense).

(15c) *grow* obstructs a transitive construction if referring to children or animals, only enabling this transitive construction when referring to plants. (Huddleston & Pullum, 2002, p.307).

With reference to morphology, in contrast to other languages such as Turkish, English ergative verbs demand zero morphological marks to express a causative sense, at least at the surface level (Lyons, 1968, p.353). However, the fact that some ergative verbs are obtained by morphological processes involving derivation such as affixation (e.g. soft (A) soften(V)) or transformation (e.g. warm (A) warm (V)) (Lyons, 1968, p. 360) should not be neglected.

The lexical alternation between two semantically-related lexemes (e.g. die - kill, Lyons, 1968, p. 359-360) or the introduction of a causative verb such as make or cause (e.g. Mary made the tea boil) includes other causative processes. In his list of "verbs derived from adjectives" and "causatives and inchoatives" respectively, Jespersen (1927, p. ch. 16.4 & 16.5) already identified

these causative processes, and presented examples of a rich morphological process in Old English which could help to express causativity through the suffix -jan added to verbs (Jespersen, 1927, p. 340).

Ergative verbs describe events or actions with a certain degree of self-inflicted or self-originating meaning in intransitive usage as far as semantics is concerned, represented in the usage of an adjunct such as itself (Levin & Rappaport-Hovav, 1995, p.88).

(16) The window opened by itself
And with a clear causative nuance in the transitive counterpart, as one might have observed in example (3).

It may be necessary at this point to present lists of ergative verbs on the basis of the contributions made by the major grammars. Jespersen (1927, p.332-347) distinguished many verb classes with a high degree of overlap and ambiguity, and what we now consider as ergative verbs refer to:

a) verbs denoting movement and change (ch. 16.4): alter, bend, circulate, dash, diminish, embark, fade, form, freeze, gather, increase, issue, melt, separate, shake, start, thaw, twist, upset, shut, lock, spoil, move, roll, change, drop, improve, grow, ...etc.

b) "verbs derived from adjectives" (ch. 16.5): bleach, brighten, clear, close, cool, empty, fill, heal, open, warm, (and many others verbs derived from adjectives by the addition of the suffix -en: weaken, darken, etc.), solidify, intensify (a few verbs derived by the addition of the suffix -ify: "verbs in -fy are nearly always transitive, but intensify is occasionally used intransitively", p.338-339)

c) "causatives and inchoatives" (ch. 16.7): some pairs of lexical alternates: sit-set (though set uses have been vanishing as the causative counterpart of sit), lie-lay, rise-raise; sink, grow, ring, starve, etc. (341-347), all of which share a clear causative sense in their transitive or counterpart use in the case of lexical alternatives.

3. Transitivity Versus Ergativity: Two Perspectives on One reality

Transitivity, in this perspective, is characteristic of the whole clause (Lemmens, 1998, p. 47). Since, as is the case in some formal models, it is not the number of participants that is important for assessing whether a clause is transitive or intransitive, but the systematic interaction between the participants.

There are intransitive/transitive pairs, like the tourist hunted the tourist hunted the lion, where the tourist is Actor in both. But the majority of verbs of high frequency in the language yield pairs of the other kind like, the tourist woke /the lion woke the tourist, where the relationship is an ergative one. (Halliday, 1985, p.145)

In fact, the ergative relationship is conceived as an alternative to the traditional deed & extension transitive model, because Halliday

suggests that any clause can also be explained in terms of cause & effect. Specifically, this means that the transitivity system helps us to organize our perception from two distinct viewpoints; on the one hand, there is the transitive perspective (where extension is the variable) and on the other, there is the ergative perspective (where extension is not the variable, but causation). Therefore, we have to restructure our thought to understand it, rather than to restructure our interpretation when looking at a figure that can be perceived as either "concave or convex" (Halliday, 1985, p.145).

A number of examples supporting Halliday's arguments are given in table (3.1) below, which should also explain how particular functional terminology is applicable to concrete language data. The labels Medium and Agent are used for the ergative approach, instead of Actor and Goal, which are used for the transitive model. Halliday describes the Medium as the "the nodal participant which always participates directly in the process and is critically involved" (1985, p.147), i.e. there will be no process without a Medium. The process itself and the medium together form the nucleus of the clause. In exchange, this distinct nucleus can also be enlarged or, better still, the nucleus can include a second participant, one that is not crucially active, but one that simply instigates the action, namely the Agent.

Table (3.1) One reality with two interpretations

Examples	the water	boiled	Mary	boiled	the water
	the door	opened	Sara	opened	the door
Transitive interpretation	Actor	Process	Actor	Process	Goal
Ergative interpretation	Medium	Process	Agent	Process	Medium

The clause Mary boiled the water does not clearly indicate that Mary stood by her pots and pans waiting until the water boiled, on the contrary; one might suppose that all Mary did was put on a kettle, i.e. perform a punctual action that causes the water to boil, and that

Mary, in the meanwhile, sliced some vegetables or performed another activity (Davidse, p. 1992). Thus the ergative approach suggests that the Agent participant is optional, and that the Medium is obligatory and therefore also nuclear (1985). The key

differences between Halliday's transitive and ergative interpretation are summarized in table (3.2).

Table 3.2 Halliday's transitive and ergative interpretation

	TRANSITIVE	ERGATIVE
VARIABLE	EXTENSION.	CAUSATION
KEY PARTICIPANT	ACTOR	MEDIUM
OPTIONAL PARTICIPANT	GOAL	AGENT
1. PARTICIPANT (MIDDLE)	ACTOR – PROCESS	MEDIUM – PROCESS
	THE LION RAN	THE RICE COOKED
2. PARTICIPANTS (EFFECTIVE)	ACTOR – PROCESS – GOAL	AGENT – PROCESS – MEDIUM
	THE LION CHASED THE TOURIST	PAT COOKED THE RICE
VISUAL REPRESENTATION		
TRANSITIVE	ERGATIVE	
LINEAR ACTION CHAIN MODEL	NUCLEAR CAUSATIVE MODEL	

It may seem a little strange at first sight to regard the entity that triggers the action as optional, because no action can take place without an agent at all. Let's go back to our last example, If Mary hadn't put a kettle on the fire, then the water would probably still be in the bottle on a shelf in Mary's kitchen. We have claimed, however, that it is the Medium (i.e. the water) that is necessary to shape an ergative point of view and that there will not be a process without a Medium. In fact, if we were to suggest that Mary is crucially involved, both claims are right, then this would be a transitive interpretation, i.e. the Actor as a nodal participant. If you were to say, on the other hand, that the water is crucially involved, since the actual boiling process does not take place without the water, then we follow an ergative view, i.e. the Medium as a nodal participant.

4. The Janus-headed Actions and Events Grammar

Davidse (1992) implies that both the transitive construal and the ergative construal have their own particular reality rather than seeing transitive / ergative as two different approaches to one reality, as Halliday does. A dichotomy is thus present within the space of material processes. In other words, material processes are either transitive or ergative, and this is also why the image of the two-faced Roman god Janus is invoked. For Davidse depicts the grammar of actions and events as Janus-headed that it has multiple faces to it. It is not an accident that this appears familiar. For a moment, let us return to Halliday. 'Ergativity' is defined as an alternative to transitivity, i.e. as an alternative to the traditional view of subject and object, since the essential differences do not always seem to be captured. Metaphorically speaking, one can either put on a pair of 'ergative glasses' or 'transitive glasses,' it doesn't matter whether or not the sun is shining, i.e. there is no special preference for either one to wear. For Davidse, however, there is convincing proof

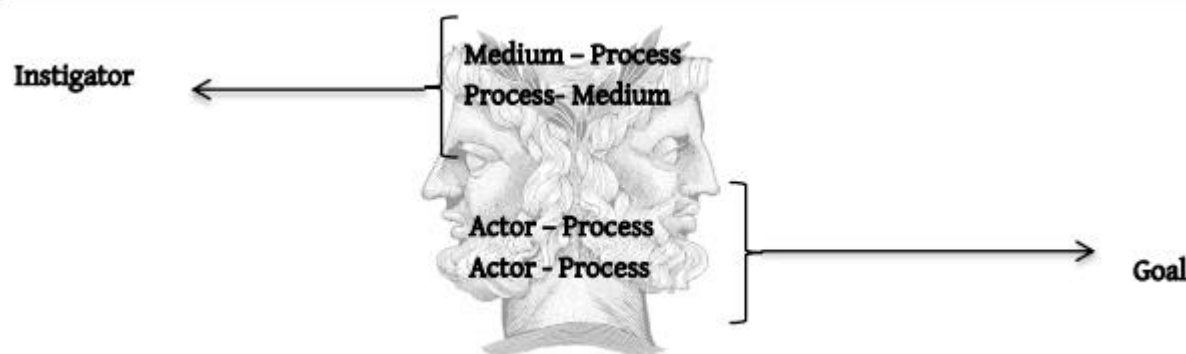
why we should put our 'ergative glasses' on. She argues that ergative alignment rather than transitive alignment occurs by systematic analysis of the relationship between participants and the process.

In fact, some verbs change the meaning of the clause when used intransitively (without a grammatical object). The transitive clause "Sara increased the interest" does not correlate to "Sara increased" as this would mean that Sara would only increase, perhaps in size or length. This kind of usage is exceedingly uncommon in semantic terms. Sara, being human, does not constitute a community of entities that can increase. Generally, one can only assume that they can increase in observable physical quantities, such as volume (decibel). Davidse therefore argues that verbs such as 'increase' should be differentiated from other verbs where such a semantic oddity is created by removing the

grammatical object (or goal as Halliday put it). Consequently, a language such as English which does not have ergative case alignment can realize ergativity through the specific patterning of its constituents:

The ergative and transitive construals have different grammatical centers and different 'directionalities'. The transitive system is Actor-centered: its most central participant is the Actor, and the Actor-Process complex is grammatically more nuclear and independent. "The basic Actor-Process frame can be extended only to the right to include a Goal". In contrast, the ergative system is medium-centered, with the medium as the core of the nuclear participant and a more nuclear-independent medium-process complex. To add the Instigator, the simple Medium-Process constellation is opened up to the left, (Davidse: 1992, p. 110).

Fig. 3.1 Two directionalities of the Janus-headed grammar of actions and events



Source image: <http://www.creationoutreach.com/id104.html>

The fact that she suggests this type of dichotomy is also the reason why we are especially interested in the theory of Davidse.

There are causative verbs that do not permit anti-causative uses, i.e. lexemes of the transitive process are obviously aimed at some goal. There is also a good number of verbs indicating processes that cannot go without a goal, in addition to the ergative process lexemes within the semantic space of material processes, although the goal is often not clearly specified, e.g. "The girl is drinking". If we say that "the girl drinks", it is clear that this action is obviously targeted at some other entity. Davidse considers these

as innately guided goals, (1992, p.108). Thus, object deletion does not significantly alter the meaning of the clause for certain material processes. From now on, clauses of certain processes that are inherently goal-guided would be considered transitive. Thus, material processes are either transitively or ergatively centered; we will only discuss the usage and application of the latter in this paper.

However, the ergative / transitive discrepancy is a very tricky dichotomy, for all material processes behave pretty much alike at a surface level, only systematic study will reveal the core concepts that govern the

grammar of actions and events. Davidse uses the word 'phenotypical pattern' to refer to the clause's surface level (i.e. actual formal realization), 'cryptotypical grammar' on the other hand, refers to the underlying semantic values that affect formal realization, which only come to the surface through systematic observation (1992). So, like Halliday, Davidse assumes that grammar, since it is driven by cryptotypical semantic values, is meaningful in itself. Hence, syntax is not independent of semantics; they are not seen as two independent components, but as tightly associated frameworks that construct meaning in the clause together (1992), thus the concept functional lexicogrammar.

Davidse agrees with Halliday that a 'PROCESS AND EXTENSION' model is generated by the transitive paradigm, while an 'INSTIGATION OF PROCESS' model is generated by the ergative paradigm, i.e. both authors regard the same parameters appropriate, 'extension' and 'instigation' alike (Davidse: 1992, p. 108-109). We have primarily discussed the similarities between Halliday and Davidse so far, so we will now examine the differences in more depth. In addition, we will again attempt to contextualize the formal non-accusative / unergative distinction within the theoretical context of Davidse, in particular, we will address why intransitive verbs are uniformly put in the transitive paradigm as described in the formal tradition, i.e. as the argument structure of which contains only the subject (despite of its semantic nature).

5. DATA COLLECTION AND METHODOLOGY

5.1 Data Collection

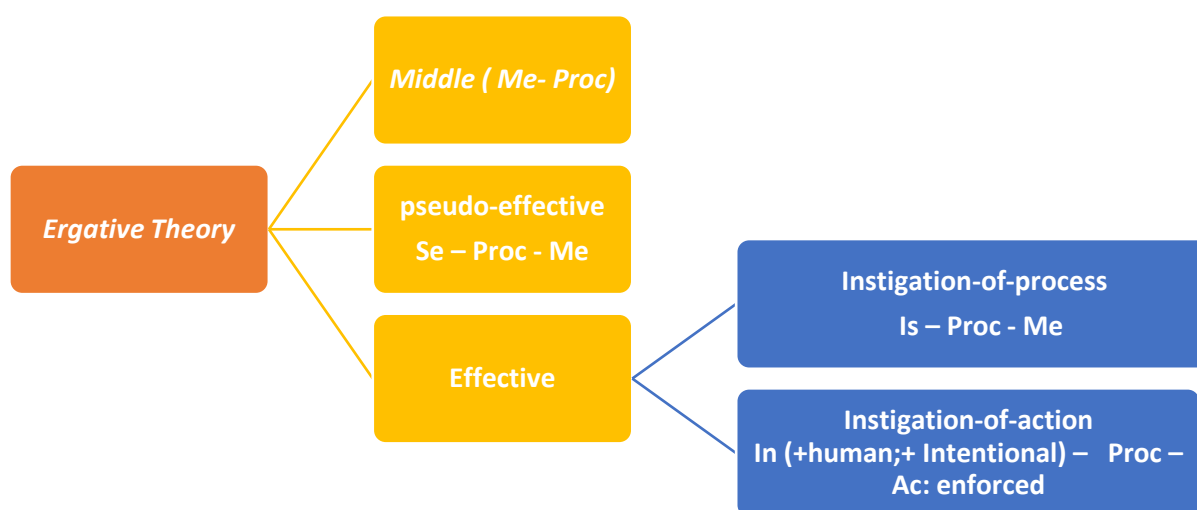
Two short stories are selected to be analyzed. These two short stories are written by various writers. In addition, they are of variant styles: horror story, and fiction for children. This

variety of styles will serve to demonstrate for readers how Ergativity and its processes are operated in each type. "The Invisible Man" by G. K. Chesterton is a detective story, which concerns the essence of the offenses perpetrated by one James Welkin who, without ever being seen, harassed Laura Hope and threatened his romantic rival, Isidore Smythe (someone he would later murder). "Terra Infirum" is a scientific fiction one talking about the end of the world because of a geological Crystal infection (virus) impacts the Terra Infirum.

5.2 Model of Analysis

The researcher has chosen an eclectic model for analysis; Davidse (1992) and COBUILD (1996). This is because each model is incomplete in itself to cover all aspects of the study. The combination of these two models may facilitate the analysis of the selected data. Davidse divides the ergative theory into: instigator, middle, pseudo-effective, effective, and non-effective. "Effective" is used to designate ergative and transitive two-participant constructions, while "non-effective" is used as a cover term for ergative and transitive one-participant constructions. Davidse states that "Medium" is an entity that is affected by the process, yet is at the same time, also an agentive participant". "Instigator" designates the causer of an action, externally contributing to the nucleus conceptualization of <MEDIUM-PROCESS. Consequently, COLLINS COBUILD classifies ergative verbs according to their group meanings. Each group of verb is then divided into several sub-groups, depending on the pattern. The figure (5.1) shows Davidse's division of the Ergativity system arranged by the researcher.

Figure (5.1) Division of the Ergative Theory by Davidse



6. DATA ANALYSIS AND FINDINGS

This section presents selected parts of the two short stories. In view of the ergativity system, these parts comprise an analysis of the short stories. texts of the shorts.

6.1 “The Invisible Man” by G.K Chesterton

[In the cool blue twilight of two steep streets in Camden Town, the shop (*medium*) at the corner, a confectioner's, glowed like the butt of a cigar. One should rather say, perhaps, like the butt of a firework, for the light was of many colours and some complexity, broken up (*process: the 'divide group'*) by many mirrors and dancing on many gilt and gaily-coloured cakes and sweetmeats.] **Middle**

He was a tall, burly, red-haired young man, with a resolute face but a listless manner.

[He carried under his arm a flat, grey portfolio of black-and-white sketches (*medium*), which he (*instigator*) had sold (*process: the 'clean' group*) with more or less success to publishers ever since his uncle (who was an admiral) had disinherited him for Socialism, because of a lecture

which he had delivered against that economic theory.] **Effective / Instigation-of-process**

[The dark young lady (*medium*) rose from her chair and walked (*process: The 'gallop' group*) to the window, evidently in a state of strong but not unsympathetic cogitation.] **Middle** When at last she (*medium*) swung round (*process: the 'detach' group*) again with an air of resolution she was bewildered to observe that the young man was carefully laying out on the table various objects from the shop-window.] **Middle** They included a pyramid of highly coloured sweets, several plates of sandwiches, and the two decanters containing that mysterious port and sherry which are peculiar to pastry-cooks. In the middle of this neat arrangement he had carefully let down the enormous load of white sugared cake which had been the huge ornament of the window.

6.2 Christopher R. Mucato's “Terra Infirum”

[They (*instigator*) should have started (*process: the 'start' and 'stop' group*) this

(medium) from the beginning. From the very beginning.] **Effective** /

[Max (setting) rolled (process: the 'clench' and 'relax' group) his eyes (medium)] **Pseudoeffective** [as the television (setting) flashed (process: the 'detonate' and 'play' group) another story about Terra Genesis (medium).] **Pseudoeffective** [Another rocket (medium) launched (process: other groups)] Middle, [another grid of humanity (medium) evacuated (process: the 'dissolve' and 'solidify' group).] **Middle** Send enough seeds into the wind, and maybe one will take root.

"Well," Max shrugged, hands still in his pockets, ["the crystal (medium) spreads (process: the 'leak' group) by infecting an entire celestial body] **Middle** [until that body (medium) explodes (process: the 'break' group)] **Middle**, [sending (process: the 'leak'

6.3 Findings and Discussion of the Short Stories

6.3.1 Findings and Discussion of "The Invisible Man"

Table (6.1) Ergative Structure Types Used in "The Invisible Man" Story

No.	Type of Ergative Structure	Total frequencies of ergative structures	Total percentages of ergative structures
1	Effective/instigation-of-process	10	22,22 %
2	Effective/instigation-of-action	3	6.66%
3	Pseudoeffective	0	0%
4	Middle	32	71,11%
Total Results		45	99.98%

Table (6.2) The Distribution of Ergative Processes According to their Group Meaning in "The Invisible Man" Story

No.	Ergative Process Group	Total frequencies of ergative processes Group	Total percentages of ergative Group
1	The gallop group	3	6,66%
2	The clean group	2	4,44%

group) shards of crystal (medium) in every direction] **Effective/instigation-of-action** [and increasing (process: the 'expand' and 'compress' group) the chance of infecting more planets (medium).] **Effective/instigation-of-action** It's copying itself just like any virus, but on a much larger scale."

["While I agree that we (instigator) must act to prevent (process: the 'start' and 'stop' group) the geovirus (medium)] **Effective/instigation-of-action** [the geovirus (instigator) from disrupting (process: the 'break' group) our future (medium) as it has our present] **Effective/instigation-of-action**, I believe that the best solution is planetary immunization. My proposal is that we use samples of infected crystallized Earth to introduce the recrystallization process on whatever new planets or moons we inhabit.

3	The detach group	5	11,11%
4	The blister group	1	2,22%
5	The change group	1	2,22%
6	The hoot group	1	2,22%
7	The dissolve and solidify group	1	2,22%
8	The obsess group	3	6,66%
9	The open and close group	6	13,33%
10	The develop group	1	2,22%
11	The drain group	2	4,44%
12	The smash group	1	2,22%
13	The detonate group	1	2,22%
14	The overwork group	1	2,22%
15	The bleach group	1	2,22%
16	The expand and compress group	1	2,22%
17	The divide group	1	2,22%
18	Other groups	13	28,88%
Total Results		45	99,95%

The analysis of the story "The Invisible Man" reveals that the dominant type of ergative structure is the middle structure, amounting to (71,11%), as it is identified in (32) clauses, followed by effective/instigation-of-process structure that records (22,22 %), as it is used (10) times, and then effective/instigation-of-action structure that registers (6,66%), which shows (3) times of use. The pseudoeffective structure is not used in this story, and hence records (0 %). Moreover, concerning the various groups the ergative processes belong to, other groups is the dominant one as it is found in (13) clauses, and amounts to (28,88%), followed by the open and close group which records (13,33%) and which shows (6) times of use. The detach group registered (5) uses, amounted (11,11%), whereas the gallop group was found (3) times, that is (6,66%). Finally, the clean group (2 times, 4,44%) and the blister, change, hoot, dissolve and solidify, obsess, open and close, develop, drain divide, smash, detonate, overwork, bleach, expand and compress groups (each one used 1 time, amounting 2,22%) are almost near to each other.

The domination of middle structures in the story "The Invisible Man" indicates that

most processes are performed without an external instigator, for example:

[The little car (*medium*) shot up (*process: the 'smash' group*) to the right house like a bullet...] **Middle**

Hence, since it is a crime story, then we find that the author tries to hide the doer of the actions until the end of the story, to create a sense of suspense. This is explaining why the middle structure has been used most frequently in this story.

The second most used ergative structure in the story is Effective (instigation of process), which indicates the physical activities done by the characters. So, the story shows the physical efforts done by the characters, by using the effective structure, as shown in the following example:

[he (instigator) jangled (*process: the 'hoot' group*) a great gold watch chain (*medium*)]
Effective/Instigation-of-process.

Furthermore, concerning the meaning of the processes used in the story, the results reveals that the (45) ergative processes are distributed among different types of groups, depending on their meaning. However, the study has revealed some processes that do

not exist in the groups displayed by the model of COBUILD, and hence they are referred to as “other groups”. The dominant processes used in “The Invisible Man” are those that belong to the “*other groups*”. These processes that belong to this group of meaning indicate the outer experiences experienced by the medium. These processes interpret a quantity of change in the stream of events that indicate a physical energy. This physical energy is both produced and affects the medium, which is the central participant in the ergative paradigm. For example:

[I can't help feeling pleased the poor little chap (*medium*) has fallen (*process: other groups*) on his feet]

Some process used in The Invisible Man story belongs to the detach group. When these processes are used with middle structure, they indicate, according to COBUILD's model, someone or something moving, but not under their own guidance. When they are used with the effective structure, on the other hand, it means that the instigator is the one making someone or something moving, or putting them somewhere. However, the study has revealed that these processes are used to indicate the

movement of someone or something but under their control, as displayed in the following example:

[An instant before the girl (*medium*) could turn away (*Process: detach' group*) he added, "Also, I want you to marry me."]
The example indicates that the girl turned away under her own control. There was nothing that forced her to turn away

One ergative process belongs to the clean group. It is used in the effective structure: [He carried under his arm a flat, grey portfolio of black-and-white sketches (*medium*), which he (*instigator*) had sold (*process: the 'clean' group*) with more or less success to publishers ever since his uncle (who was an admiral) had disinherited him for Socialism, because of a lecture which he had delivered against that economic theory.]

The process *sold* is used in the effective structure. This indicates that he medium is affected by an instigator, such as being prepared, cleaned or removed. The author is referring to the grey portfolio of black-and-white sketches (the middle) as having a desirable quality of being easily sold, to be easily exchanged for money.

6.3.2 Findings and Discussion of “Terra Infirum”

Table (6.3) Ergative Structure Types Used in ” Terra Infirum” Story

No.	Type of Ergative Structure	Total frequencies of ergative structures	Total percentages of ergative structures
1	Effective/instigation-of-process	3	3,896 %
2	Effective/instigation-of-action	27	35,064 %
3	Pseudoeffective	9	11,688 %
4	Middle	38	49,350 %
Total Results		77	99,99 %

Table (6.4) The Distribution of Ergative Processes According to their Group Meaning in” Terra Infimur” Story

No.	Ergative Process Group	Total frequencies of ergative processes Group	Total percentages of ergative Group
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1	The start and stop group	12	15,584 %
2	The clench and relax group	4	5,194 %
3	The detonate and play group	2	2,597 %
4	The dissolve and solidify group	9	11,688 %
5	The centre group	3	3,896 %
6	The open and close group	2	2,597 %
7	The break group	10	12,987 %
8	The detach group	6	7,792 %
9	The expand and compress group	3	3,896 %
10	The bleach group	2	2,597 %
11	The smash group	3	3,896 %
12	The develop group	4	5,194 %
13	The assemble and disband group	1	1,298 %
14	The leak group	6	7,792 %
15	The clean group	3	3,896 %
16	The gallop group	2	2,597 %
17	The divide group	1	1,298 %
18	The quicken and slow down group	1	1,298 %
19	Other Groups	3	3,896 %
Total Results		77	99,99 %

The analysis of the short story under study exhibits that the middle structure is the controlling type, in which it registers (49,350 %) and used in (38) clauses. The characters (mediums) enact their physical performance, expressing their actions and at the same time they are affected by their own actions:

[Another rocket (medium) launched (process: other groups)] Middle

The use of the middle structure in the instance above clearly indicates that the author is trying to background the role of the agent who is performing or leads to the performance of these processes. Terra Infirum is a science fiction which is about a geovirus that is trying to destroy the planet earth, and to end the life in it. So, the author is describing the events as if they are happening by themselves, that there is no one held responsible for this

geovirus and what damage it brings to humanity. Each one of the processes above requires an external instigator who is responsible for the doings and happenings. In the first example, the author tells us that a rocket launched. However, he does not tell us who launched this rocket, as if the rocket (the object) performed the action by itself. The same thing is for the second example. The story tells us that “*another grid of humanity evacuated*”, but it does not tell us who led to this process, as if humans evacuated by themselves.

The second predominant type is effective (instigation-of-action) that is identified in (27) clauses, amounting to (35,064 %) The narrator of the story is a ghost. The use of the effective structure (instigation-of-action) in this story indicates that since it is a science

fiction, most processes are usually performed by an external instigation, but this external instigation requires the semantic feature (+human), since most processes, most actions, are controlled by human beings, and the medium is thus an enforced participant. This story is about a virus that is about to damage the earth, so most processes should be controlled by the humans in order to control this virus and save their planet, to save the humanity, the existence of life on earth:

[Most of the shops (medium) were boarded up (process: the 'open' and 'close' group)] Effective/instigation-of-action

The above example indicates that the process requires a human instigator to perform the action. In the example, the shops were closed by the human beings, as their planet was being destroyed. Such process cannot be done without the effort of a human being.

The pseudoeffective structure records (11,688 %, 9 times). One of the instances of this structure is listed below:

[The combined heat and pressure (setting) fragmented (process: the 'divide' group) the molecular integrity of these crystals (medium)] Pseudoeffective

The subject in the above instance indicates that it is not held responsible for the action done. *The heat and pressure* in example is not a real participant that is responsible for the process of division of the crystals. As a result, it is treated as a setting instead.

Finally, the effective(instigation-of-process) structure is used less than the other groups, as it is found in (3 clauses, 3,896 %). This structure indicates that the sentence has an instigator (whether it is a human being or a thing) which is held responsible for the action. This structure can be found in the following instance:

[Not long after the asteroid (instigator) struck (process: the 'smash' group) Mars (medium).] Effective/instigation-of-process

The 77 ergative process in this story are distributed among 19 various groups.

The *break* group, is used in (10) clauses, i.e. (12,987%). These processes are used to indicate any kind of damage. When it is used with the middle structure, it refers to the thing that is being damaged, whereas when it is used with the effective structure, it refers to someone or something that damages the medium. For instance:

[until that body (medium) explodes (process: the 'break' group)] Middle

The instance above refers to a kind of damage. In this example we have the process explodes, which carries the meaning of bursting with great violence. In this sentence, the author is referring to the celestial body which is being infected by the crystal until it explodes.

The *dissolve and solidify* group is the third most commonly used group of processes in this story, as it is identified in (9) clauses, amounted for (11,688%). These types of processes are used to refer to something that changes physically. When it is used with the middle structure, it refers to the medium that is being changed, otherwise, when used with the effective structure, it refers to someone or something that brings the change to something:

["The whole world (medium) has gone black (process: the 'dissolve' and 'solidify' group)," Harry mumbled.] Middle

The sentence above is an instance of the use of the processes that belong to the dissolve and solidify group. As seen from the example, these process is used with the middle structure for the most time, since these physical changes are best described with this structure. The world has turned into black, it has lost all the beautiful colors of the trees, flowers, grass, etc... This change refers to the damage caused by the virus, and the author choose

these descriptions to show the reader the extent of this damage which has destroyed the earth and people's life.

Some processes belong to a group called the *clench and relax group*.

These processes indicate the movements of parts of the body or any change in the behavior. With the middle structure, the medium represents the change in the aspect of behavioral or the part of the body. However, with the effective structure, the instigator represents the one "whose body or behavior is involved". The Subject indicates the part of the body or aspect of behavior. For instance:

[Max (setting) rolled (process: the 'clench' and 'relax' group) his eyes (medium)]
Pseudoeffective

The instance above indicates that the process of this group is used with the pseudoeffective structure. This means that the subject, or the participant, is treated as *setting* and not a real participant who can be held responsible for the action. Max is the pseudo-participant with a practical relation to circumstances. In the pseudoeffective structure, it is important that there should be a principle of 'inalienable possession' between the subject and the complement. The subject corresponds with the possessor, the possessed complement. The ergative pseudoeffective structure is a middle constellation, both grammatically and semantically. With its one real participant, the medium, its nucleus consists of an ergative process while its subject is mapped to the pseudoeffective setting.

7. CONCLUSION

1. In the construction of clauses, two central elements are the pattern and meaning, in which any change in the pattern might change the meaning of the process from one group to another. The meaning has the same impact on pattern. However, the current

study has revealed that the change in the sentence pattern does not affect the meaning of the process and the group to which it belongs. Hence, hypothesis No. 1 is not verified.

2. Eliciting the findings of the analyses, it has been deduced that the role of middle structure to background the role of the agent is used in the science fiction short story, *Terra Infirum*. This does not verify hypothesis No.2, as the researcher hypothesized that the middle structure is used to hide the role of the agent only in "*The Invisible man*".
3. The current study has revealed that by using ergative processes to narrate the different stories, writers are given the chance to present the events in three various ways: via transitive/active voice clause, intransitive/active voice and through the transitive/passive voice.
4. The findings reveal that writers use ergative processes to demonstrate a particular action or deed either from the point of view of the person or thing which performs the action (through the effective structure), or from the viewpoint of the thing that is both involved and affected by the process (i.e. via the middle structure).

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