

Causation from the Perspective of Systemic Functional Linguistics

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To cite this article:

Hui Zou. (2024). Causation from the Perspective of Systemic Functional Linguistics. *International Journal of Language and Linguistics*, 12(1), 53-57. <https://doi.org/10.11648/ijll.20241201.17>

Received: December 25, 2023; **Accepted:** January 12, 2024; **Published:** February 5, 2024

Abstract: This paper explores the intricacies of causative constructions within the Systemic Functional Linguistics (SFL) framework, emphasizing their significance in understanding the relationship between processes and the individuals affected. Delving into diverse theoretical perspectives on causation, the study provides an overview of causative expressions, highlighting the formalist view and its proponents such as Nash and Pykkänen. Cognitive linguists, like Langacker, contribute to the discussion with the action chain model, emphasizing the transfer of energy between entities in the causal chain. After discussing these clashing positions, the paper critiques previous studies that equate agency with causation within the transitivity system. SFL communities have also debated how causation simultaneously fits in the whole transitivity system along with the subsystems of agency and process type. This study revisits the debate and offers an overview of different positions among SFL scholars such as Lavid and Arús, and García. The relationship between agency and causation is discussed while considering the complexity of the transitive and the ergative perspectives. After fully discussing the advantages and disadvantages of the opposing viewpoints of these scholars, this paper suggests extending the agency system to include analytic and synthetic, which interact with the causation system to form analytic causation, supporting the idea of a comprehensive causation system within the transitivity system. Finally, the paper suggests future avenues for research, endorsing the incorporation of corpus-based analyses to complement qualitative approaches in understanding causative constructions fully.

Keywords: Causation, Agency, Transitivity System, Systemic Functional Linguistics

1. Introduction

From the perspective of SFL, describing causation is an important area for understanding the connection between the process and the person affected by it, as causation, according to Parsons [20], involves a kind of relationship between two propositions. A causative expression is about a structure composed of causing event and a caused event. For example,

(1) I sent Mary to the school.

(Causer) (Causee)

The sentence in (1) is referred to as a causative expression, because it demonstrates that Mary attended the school after I sent her and it introduces the Causee—Mary—who would not have attended the school if I had not sent her.

The complex nature of causative constructions has received much attention from different theoretical perspectives since the 1970s. While some studies have

investigated the semantic properties of causative verbs or constructions [23] and the different traits of the Causer [8, 14], others have focused on the structural aspects of causative constructions [2]. Along this line, Dik [6] provides a more functional description by combining both syntactic and semantic aspects of causation. This is achieved by proposing a formation rule about causative predicates. According to Dik, a causative construction is composed of two parts: a given predicate and an added Causer, along with an extra argument. Dik's research laid a solid foundation for the study of the formation of causative constructions. Another functional account of causation is provided by SFL, which forms the focus of the present work.

Following the introductory section, Section 2 will provide an overview of the different theoretical approaches to the causation construction, which has laid a good foundation for the argument for the SFL approach to the construction.

Clashing positions on the causation system within the SFL framework are discussed in Section 3. In Section 4, a discussion of the advantages and disadvantages among different SFL scholars is provided. A summary of this article within the SFL framework follows the above discussion in the conclusion section.

2. Background

After a short introduction, this section offers a brief overview of causative expressions from different theoretical approaches and argues for a systemic functionalist perspective. Several theoretical approaches to causative constructions have attempted to derive causative meaning by combining syntactic elements. A formalist view of the causative construction is presented in works by Nash [19], Doron [7], Harley [13], and Pylkkänen [21], among others. It is widely held that the causative head v_{CAUSE} is combined with a root (a verb). An external argument is interpreted as a Causee instead of an Agent. This interpretation relies on the presence of this specific causative head as the verbalizing, event-introducing element.

The formalist approach to causative constructions is grounded in the assumption that causative meaning arises from a specialized head, denoted as CAUSE. According to formalist scholars, two heads that introduce events are considered triggers for causatives. A dynamic agentive event is introduced by v_{DO} in the higher structure. The external argument is treated as the agent of the action, with the manner of its action left unspecified. The external argument DP is perceived as the entity instigating the event (refer to Figure 1). Additionally, the complement of the causative head does not play a substantial role in the causative meaning.

Nash is one major proponent of the assumption that causatives are regarded as the derivation from two event-introducing heads. Since the stative event is the lexicalization of the verb, Nash [19] argues that the object is interpreted as the specifier of the stative event predicate v combined with the root. However, even in situations where CAUSE heads select roots as complements, Pylkkänen [21] argues for a bi-eventive interpretation of causatives.

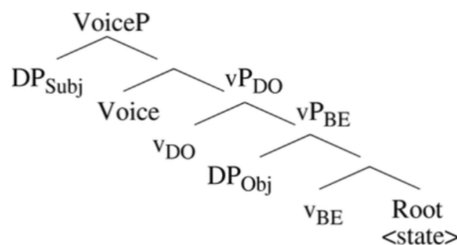


Figure 1. Causatives (from Cuervo [3]).

Cognitive linguists have also made contributions to the study of causative constructions. Langacker's [15] action chain model provides a useful framework for studying causatives. In this model, a first entity is responsible for causing a second entity to carry out an action, which then has the potential to affect a third entity. Through the transfer of

energy between entities, researchers can discern that the action chain is intricately linked to the account of relationships within the causal chain of occurrences. Following Langacker's model of energy flow, an event or action is triggered when a Causee interacts with an energy flow initiated by a Causer. Therefore, the Causer and the Causee assume distinct force-dynamic positions, enabling the Causee to manifest varying levels of resistance [24].

To conclude, while some studies have focused on syntax-driven approaches to causative construction, others have delved into causation from the perspective of cognitive linguistics and various other theoretical frameworks have also been explored. In recent years, a significant theoretical approach has been the discussion of the causation system within SFL. However, the research from SFL is not yet sufficient, leaving the issue of how the entire causation subsystem is mapped out in the transitivity system still open. Therefore, this article specifically addresses the causation system within SFL, with a particular focus on the relationship between agency and causation, as well as the complexity of the transitive and ergative perspectives.

3. Clashing Positions on the Causation System in SFL

The SFL research into causative constructions originated from Halliday, who analyzed this relation by introducing the notion of "inherent voice" [11] to discuss the relationship between participants and processes in non-middle causatives. According to Halliday, verbs in non-middle causatives (lexically causative) are "inherently passive" [11]. This means that the process in non-middle causatives is not engendered by the affected participants but is rather supervised by them. It displays properties of an involuntary process or an aided process, depending on the animacy of the participant. For example, in the sentence 'John marched the prisoners', the process of marching is dealt with involuntarily and automatically by the affected John, who is a living being. However, "inherently passive" is not what the name suggests; it is different from passive constructions. Halliday regards "inherently passive" as a form of a happening, known as a "supervention" [11]. However, the process-affected relation is more than just a supervention, especially when it comes to the *make* form of causatives, which does not alter the inherent voice of the process.

There is also a different realization of 'doing' and 'happening' in line with Halliday's notion of supervention, as demonstrated in the clauses 'the glass broke and the ball rolled'. We can ask the question 'what did the ball do' but typically not 'what did the glass do' [9]. These examples have also clearly illustrated that there is a distinct 'doing' voice feature, separate from the supervention or 'happening' feature, in the relationship between processes and affected participants in the non-middle causatives.

Halliday's description has been the inspiration for many studies on causation. Within the framework of SFL, previous

studies have focused on establishing a causation subsystem in the agency system [1, 22]. They correctly point out that causation is an important subsystem of the transitivity system but incorrectly equate the notion of agency with that of causation.

However, relatively little research has been conducted to explore the place of causation in the entire transitivity system, along with the subsystems of agency and process type. Halliday and McDonald's [12] description of the Chinese transitivity system has shown that the phase system is of great significance in Chinese and can be further classified into directional and resultative phases. The phase system interacts simultaneously with that of the process type. For example, mental processes usually can take phasal categories, as seen in an example such as 'speak finish'.

Lavid and Arús [16] point out that the presence of the *agent* feature is not necessary to imply causation. They propose a model of nuclear transitivity consisting of three simultaneous systems: a system of AGENCY (concerned with the presence or absence of the feature Agent), a system of PROCESS TYPE (concerned with the semantic type of process involved), and a system of CAUSATION (concerned with the variable of instigation). This latter system establishes a distinction between transitive and ergative processes.

However, there have been some criticisms of Lavid and Arús' analysis of the transitivity system. Firstly, their notion of causation is limited to ergative/non-ergative pairs using the same lexical items. One problem with their hypothesis is that their analysis of causation relies too much on lexical ergativity [9]. For example, problems occur when considering analytic causation, due to Lavid and Arús' reduction of the causation system to lexical causation. When we consider the analytic causation, their hypothesis must be revised. Secondly, Lavid and Arús's basic notion is that agency is wholly distinct from external causation. They propose an independent simultaneous system: the causation system. However, they fail to recognize that not all clauses are always causatives. Thirdly, they provide a general picture of the two subsystems of causation but overlook the complexity of the transitive versus ergative perspectives. This classification under the causation system is too general and needs further development to explain the differences between transitive and ergative causation. Consider the following examples from Lemmens [18].

(2a) The government starved the children.

Instigator Process Medium

(2b) The general marched the soldiers.

Initiator Process Actor

There are some differences between these two examples. We can make a distinction between the instigation of the process and the instigation of the action, as illustrated in (2a) and (2b). In other words, different process-affected configurations are reflected in the above examples, with one being Process •Medium and the other Process •Actor.

García [9] disagrees with Lavid and Arús and proposes that we should differentiate instigation (e.g., the baby's broken the DVD) and the variable 'Initiation' (e.g., The

general marched the soldiers) by expanding the sub-system of agency in lexical ergativity delicacy. García also claims that causation can be realized through different participant-process structures, such as the operative receptive (e.g., the boy was bitten). However, García fails to acknowledge the necessary distinctions between agency and causation, which are not equivalent. For example, when someone says 'Paul ate the apple', he or she does not mean that the agent Paul caused the eating action to happen. Instead, it clearly shows that we cannot analyze the clause as causative and that the presence of an agent does not always imply causation.

4. Discussion

To address these issues, adjustments can be made to Lavid and Arús' system. This can be achieved by extending the agency system to include analytic and synthetic, which have the potential to interact with the causation system to produce analytic causation. Thus, in this section, we discuss the extent to which causation fits into the transitivity system, interacting with the subsystems of agency and process type.

We can easily observe that the presence of an agent does not automatically suggest causation, as in the case of 'lily' in the clause 'Lily ate an apple'. Therefore, the choice between causation and non-causation should be the first subsystem in the causation system to account for the difference between the statements 'Lily ate an apple' and 'The baby's broken the DVD'. It is not hard to establish that causation is what lexical ergativity most often refers to. Building on the work of Davidse [4, 5] and Lavid and Arús [16, 17], the distinction between non-causation and causation is predominantly observed in transitive clauses. Within the subsystem of transitivity, a clear distinction exists between non-causation and causation, as depicted in Figure 2.

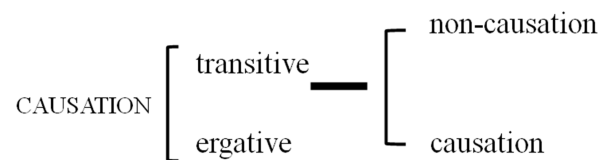


Figure 2. Causation subsystem.

Following Davidse's line, Qi [22] proposes a hypothesis comparable to that of Lavid and Arús. Qi presents two paradigms, transitive and ergative, at work in the causation system, and then extends each paradigm to include synthetic and analytic causation. This system proposed by Qi is general and needs to be classified in delicacy, as Qi has highlighted the need to develop a detailed system network for the generation of English causative structures. For example, one fascinating field of research is determining how processes in causation are related to their experiential environment. The process verb *rub* is followed by an adjective *smooth* as an attribute to show the qualitative in the clause 'we rub the woodwork smooth'. Qi proposes to classify the analytic transitive causation into three groups: caused-motion, caused-attribute, and caused-role, a classification that forms

the primary basis for the analysis of the effect.

In the realm of transitive analytic causation, Qi's discussion offers a possible explanation for what enters the causation system. However, the effect and its connection to the process of causation are not explained in greater detail. For example, an instance of negative causation, like 'She prevented us from crossing the river', is excluded from her causation system. These examples can be expected to be causatives if we take into consideration the meaning of 'do not keep'. Lemmens [18] has offered an analysis of the distinction between middle ergative and non-effective ergative constructions as shown in the following examples quoted from Langacker and Lemmens [15, 18]:

(3a) The window opened only with great difficulty. [15]

(3b) Asthmatic patients choke easily. [18]

(3a) may have a reading with Medium [+self-instigating] or with Medium [-self-instigating]. (3a) can be interpreted as the window opening itself or someone opening the door. However, (3b) is more likely to have the self-instigation reading with little implication of an instigator. Hence, the instigation is a determining factor in the differentiation of (3a) and (3b).

One argument from Lemmens to show the distinction between instigation and initiation in ergative causation can be the different levels of self-instigation of the medium. For example,

(4a) John broke the glass.

(4b) The glass broke.

(5a) John rolled the ball.

(5b) The ball rolled.

It is observed that (4b) is more likely to be understood to have the meaning that somebody broke the glass with little possibility of a reading that the glass broke itself. But in (5b), the ball can be interpreted as the target of somebody's rolling, or it is understood that the ball is the agent of the rolling. In other words, the ball is rolling itself.

5. Conclusion and Future Perspectives

To some extent, the distinction between self-instigation of the medium and non-self-instigation can explain why the probe question 'what did the glass do' lack effectiveness, while the probe question 'what did the ball do' appears more grammatically acceptable.

This article primarily explores the correlation between agency and causation, an interaction observed through the lenses of both the transitive and ergative perspectives. Comparable research has been conducted by various SFL scholars in the SFL domain. Consequently, each SFL scholar contributes uniquely to the development of the causation system. Achieving a comprehensive causation system within the transitive system requires the amalgamation of diverse perspectives, as every SFL scholar's viewpoint holds value for others.

Although there exist corpus-based discussions on causative constructions from a functional perspective [10], relying solely on qualitative analysis proves inadequate for fully

understanding causative constructions. Therefore, avenues for future research should explore corpus-based analyses, complementing traditional qualitative analyses to enhance researchers' better understanding how causative constructions operate.

Abbreviations

SFL: Systemic Functional Linguistics

Conflicts of Interest

The authors have declared that no competing interests existed at the time of publication.

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