

An Application of Causal-Chain Windowing Theory to the Teaching of Writing

Ting Wang

School of Foreign Languages and Literatures, Chongqing Normal University, Chongqing, China

Abstract—Causal-chain windowing is a kind of cognitive process of having the sense of causality in mind, and the cause and result are windowed and attract the attention. Given the appropriate context, the reader can infer the remainder of the event, and different expressions of the same scene, windowed in several different ways, may result in different effects on readers' mind. Therefore causal-chain windowing theory is useful for the teaching of writing, relating to not only static descriptions as expository writing, but also dynamic ones as narrative writing, through proper application of the theory. Although many previous linguists and teachers have applied many other theories to the teaching of writing from several angles, few have applied causal-chain windowing theory to the teaching of writing. And the author aims to find a relatively new angle in the old topic – teaching of writing. This paper sets about from some key notions and introduces causal-chain windowing theory, and applies the latter in two aspects, windowing of attention and causal chain. The paper attempts to illustrate the advantages of applying causal-chain windowing theory to the teaching of writing with some examples and claims that causal-chain windowing theory gives clues to writing “different” articles. The aspect of windowing of attention directs students to change sentence patterns and paragraph constructions, and the other aspect, causal chain, leads them to use proper words to express right causal relationship.

Index Terms—Talmy, windowing of attention, causal chain, teaching of writing

I. INTRODUCTION

Causal chain (causal continuum) is a sequence of linked “events” or “subevents”; windowing of attention (distribution of attention) refers to a cognitive process that puts the noticed part foregrounded and places the remainder part backgrounded. “The portions that are foregrounded by inclusion are windowed and the portions that are backgrounded by exclusion are gapped” (Talmy, 2000, p. 257). Causal-chain windowing is one type of the windowing of attention proposed by Talmy (2000). In causal-chain windowing, the cause and result are windowed and attract the attention.

This type of windowing of attention includes causation event-frames, which will be illustrated in Part Two. Causal-chain windowing is the most interesting one, as it gives people another approach to semantic analysis, in which cognitive linguistics is involved. “Talmy’s approach thus provides a comprehensive cognitive view of how real-world situations are processed in people’s mind and are rendered linguistically” (Ungerer & Schmid, 2001, p. 231).

Causal-chain windowing theory plays a positive role in cognitive semantics and it can be applied to the teaching of writing. A good command of causal-chain windowing theory can help students to write good articles in many aspects such as right grammar and new sentence patterns, strengthen the rigorousness of construction, and make articles have stronger stringency. In short, the proper application of causal-chain windowing theory is not only helpful to the expression of correct causal relationship between subevents, but also good for the writing of several types of articles which need rigid frames. Moreover, it can help students change their prototypical sentence patterns into new ones and thus improve their writing skills.

This paper aims to apply causal-chain windowing theory to the teaching of writing. The application of causal-chain windowing theory can be further divided into two parts: the application of windowing of attention and the application of causal chain, for each can give teachers some clues to improve students’ writing skills. Windowing of attention exerts a subtle influence on the distribution of attention and even on readers’ understanding or emotion, since different expressions of the same scene may have different effects on readers’ mind. Causal-chain windowing theory can direct writing not only in the aspect of windowing of attention, but also in the field of causal-chain. The theory will help students to write compositions with relatively new patterns and compact constructions.

This paper is to demonstrate that applying causal-chain windowing theory to the teaching of writing will be helpful to improve students’ writing skills. When writing articles, some students may have the view that a simple word such as a preposition is not important. This paper attempts to change the view and argues that even a simple word may play a vital role.

In a word, this paper is to apply causal-chain windowing theory to the writing classroom and to make efforts to improve students’ writing skills.

II. THE THEORY OF CAUSAL-CHAIN WINDOWING

Causal-chain windowing theory, introduced by Talmy into cognitive linguistics, gives people a window from which the cognitive system and linguistic device of a speaker can be further searched. Causal-chain windowing, one type of the windowing of attention, is just one fragment of the broader cognitive system. This chapter aims to present the theory of causal-chain windowing, serving as a theoretical basis for its application to the teaching of writing.

A. Notions Related to Causal-Chain Windowing Theory

Although the theory of causal-chain windowing is relatively new, there have appeared some other notions not quite strange such as window, frame, event-frame and windowing of attention which are related to causal-chain windowing theory. Therefore, in order to know this theory better, these notions should be illustrated one by one first. Among them, the most important and basic one is window.

(a). Window

Window, in online dictionary of *Collins*, originally refers to “a space in the wall of a building or in the side of a vehicle, which has glass in it so that light can come in and you can see out” (<https://fanyi.baidu.com/?aldtype=85#en/zh/window>), and from the window, the scene can be observed. In Talmy’s theory, the part of speech of the word *window* is changed into verb, and it means “to distribute attention” or “to focus attention on”. What people pay attention to is just like the scene they look from the window. That is to say, the scene or the event which people look at is in the window of a moving train, and it is just like the content of the photo taken from a sequential event. Therefore, *window* is a verb, and Talmy uses *windowing*, a noun, to refer to the cognitive process – distribution of attention. Talmy (2000) further uses the term *windowing of attention*, in which “one or more (discontinuous) regions within a referent scene are allocated greater attention, while the remainder of the scene receives lesser attention” (p. 76). And this term *window* will be further explained later.

(b). Frame

“The notion of frame was introduced into linguistics by Charles Fillmore in the middle of the 1970s” (Ungerer & Schmid, 2001, p. 206). Fillmore claims that speakers have folk theories about the world, based on their experience and rooted in their culture. “These theories are called frames by Fillmore” (Saeed, 2000, p. 38). In *Longman Dictionary of Contemporary English* (1998), *frame* is “a firm border or case into which something is fitted or set, or which holds something in place” (p. 598). *A Dictionary of Linguistics and Phonetics* states that *frame* refers to “expressional structure, expresses the knowledge about conventions and situations, and regulates the components of such situations and the roles of the participants” (Crystal, 1997, p. 148). “Fillmore proposes that a *frame* is a schematization of experience (a knowledge structure), which is represented at the conceptual level and held in long-term memory” (Evans & Green, 2006, p. 222). Take the frame of BUY as an example.

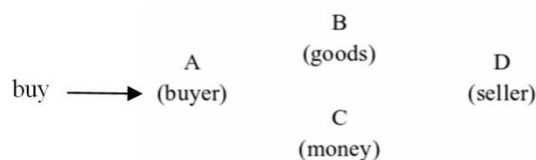


Figure 1. The [BUY] Frame (Ungerer & Schmid, 2001, p. 207)

When thinking about the event of BUY, people consider that there must be a buyer, a seller, goods and money, as is shown in Figure 1. None of the four can be missing, or the buy-event does not come to existence. The notion *frame* is the basis for understanding *event-frame* which is suggested by Talmy.

(c). Event-Frame

As is said above, the notion event-frame is put forward by Talmy on the basis of the frame theory; Talmy (2000) gives the definition of event-frame (p. 259):

A set of conceptual elements and interrelationships that in this way are evoked together or co-evoked each other can be said to lie within or to constitute an event-frame, while the elements that are conceived of as incidental – whether evoked weakly or not at all – lie outside the event-frame.

Event-frames may include an object’s path, a causal chain and an interchange of entities, which are prominent examples. However, there are other components not included in an event-frame, such as the day on which the event occurs, the place where the event occurs, and the temperature of the place, though such factors are certainly part of the event. On the basis of the notion *event-frame*, Talmy (2000) sets forth five types of event-frames: motion event-frames, causation event-frames, cyclic event-frames, participant-interaction event-frames, and interrelationship event-frames, and this paper focuses on the causation event-frames.

Comparing the two notions Fillmore’s *frame* and Talmy’s *event-frame*, it can be found that they are close to each other, but Talmy (2000) states that there are mainly two differences. First, while Fillmore emphasizes mainly the

co-presence of certain interrelated conceptual elements, Talmy stresses the exclusion of other conceptual elements. Second, Fillmore's *frame* only suits a particular language or a set of languages, and it is only fitful in a particular context, while Talmy's *event-frame* is more generic and universal across languages. Moreover, *event-frame* corresponds to the structuring in other cognitive systems such as visual perception.

(d). *Windowing of Attention*

"Linguistic forms can direct the distribution of one's attention over a referent scene in a certain type of pattern and the placement of one or more windows of greatest attention over the scene" (Talmy, 2000, p. 258). Given the appropriate context, the reader can infer the remainder of the event, and different expressions of the same scene, windowed in several different ways, may result in different effects on readers' mind.

The notion of *windowing of attention* is brought up by Talmy (2000), who gives a very detailed definition (p. 259):

This study sets forth the system with which languages can place a portion of a coherent referent situation into the foreground of attention by the explicit mention of that portion, while placing the remainder of that situation into the background of attention by omitting mention of it. Terminologically, the cognitive process at work here is called the windowing of attention, ..., the portions that are foregrounded by inclusion are windowed, and the portions that are backgrounded by exclusion are gapped.

People's linguistic device mediates the cognitive process that people always pay their attention to what is worthy of focusing on. Then, in an event-frame, the portions people focus on are put into the foreground and windowed, while the other portions people are not concerned for are placed into the background and gapped. For example, in path windowing, the path of a moving object attracts the attention, whereas in causal-chain windowing the cause and result are windowed and attract the attention.

For better understanding, a whole event can be considered as a scene or a sequential film, and people just take a picture of what they focus on. The content in the picture is foregrounded and windowed and it will be the window for the addressee to know the whole event. And different expressions (windowed stages) of the same scene may cause different effects on readers' mind, so windowing of attention can give teachers some clues to improve students' writing skills.

As is said above, someone may consider attention and windowing of attention as the same concept. In fact, although they overlap to some extent, they are different for their field of study. Evans and Green (2006) state that "a very general cognitive ability that human beings have is attention" (p. 41). In other words, attention is a kind of cognitive ability or power (to concentrate mentally). It is a relatively abstract concept in a usual frame and mainly refers to the ability and phenomena. However, Talmy's notion windowing of attention is more concrete and refers to the profiling in language, especially in event-frames. Evans and Green (2006) use one sentence to distinguish the two concepts: "The pattern of distributing attention is called the windowing of attention" (p. 198). Window is a verb here and means to pay attention to something. Attention originally appeared in the psychological field and Talmy first brought it into cognitive linguistics, and then he put forward the theory of windowing of attention on the basis of attention. Moreover, he divided windowing of attention into five types: path, causal chain, cycle, participant interaction, and interrelationship. Each of them refers to different events of distributing attention.

From the illustration above, it is clear that causal-chain windowing theory mainly focuses on events, so to study the process of events in causation event-frames should be necessary. What's more, the process of the whole event is just like a segment of a line which has the start point and the end point. In the process, the agent's intention is the start point while the result of the event is the end point.

B. *The Agent's Scope of Intention*

In common situations, before the cognitive agent causes the whole or part of the body to do something, he first intends that an event will or can occur, and the event must be caused by his action. After the agent makes volition, he causes the whole-body or part-body to move in the area where his physical action can reach. The resulting bodily motion is a subevent, which is the direct cause of the second subevent. And the second subevent causes the third, ..., until the penultimate subevent, the direct cause of the result. For better understanding, a figure and its description will be given to show the agent's scope of intention as follows (Talmy, 2000, p. 272):

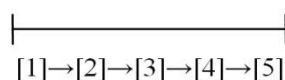


Figure 2. Agent's Scope of Intention

- [1] Agent's act of volition that activates bodily motion
- [2] Bodily motion of the agent (particular body part(s) or whole body) that initiates the physical causal chain
- [3] Intermediate causally chained subevents
- [4] Penultimate subevent = immediate cause of final result
- [5] Final resulting subevent = agent's intended goal within scope of intention

As is shown in Figure 2, there are totally five stages in a causal event. The first stage is agent's act of volition that he

or she wants to do something and can be called initiating stage. The second is the activating stage, which is the motion of the agent's body that causes the event initiatively. The third is the processing stage, in which intermediate subevent happens and stirs the next subevent. The fourth is the penultimate subevent that immediately causes the final result, which can be named as immediate causing stage. And the last is the resulting stage and makes the agent's intended goal to come true. Moreover, stage [3] may be omitted and [2] directly coincides with [4]; stages [3] and [4] may be away and [2] correlates with [5]. However, no matter how many stages are absent, the remainder stages are firmly chained with each other, one by one, in determinate order.

Ungerer and Schmid (2001) give a table with an example *John broke the window with a stone* to show the five stages of a causation event-frame. Through the example, they have made each stage clearer to readers.

TABLE 1
THE STAGES OF CAUSAL EVENT-FRAMES (UNGERER & SCHMID, 2001, P. 230)

Stages of causal event-frames	Ex. <i>John broke the window with a stone.</i>
1. Agent intends to act	1. The agent makes up his mind that he is going to break the window.
2. Agent sets parts of his body or his whole body in motion and thereby initiates the causative event	2. He bends his knees, moves his hand to the ground to grasp a stone..., releases the stone from his hand thus propelling it forward.
3. Intermediate subevent(s) which are causally related to each other (optional)	3. The stone sails through the air.
4. Penultimate subevent = immediate cause of final result	4. The stone forcefully makes contact with the window.
5. Final resulting subevent = agent's intended goal	5. The window breaks.

From the table above, it is obvious that a simple sentence about an event includes complex actions. As is said in the preceding sections, people's linguistic device mediates the cognitive process in which people always pay their attention to what is considered valuable for focusing on, and in causal-chain windowing the cause and result are windowed and attract the attention. The whole event can be considered as a scene or a sequential film, and people just take a picture of what they focus on. The content in the picture is foregrounded and windowed and it will be the window for the addressee to know the whole event. In Table 1, the example sentence *John broke the window with a stone* is just the picture people take. In the sentence, the windowed parts are the agent's volition, the intermedium (a stone) and the resulting subevent. Although the other parts are gapped, people can imagine and reconstruct the whole event from the picture taken. That is, people can imagine bodily motions the agent undertakes to execute the intention and the immediate cause of the final result, though the parts have not been contained in the sentence. Among the windowed stages, the subject *John*, the initiating stage, is a more windowed one, because usually the subject of a sentence is considered more important and catches more attention.

C. Discontinuous Causal-Chain Windowing

When communicating, people manage to express ideas as much as they can while they try their best to use least words, so discontinuous causal-chain windowing exists and is common in the discourse. As is said above, some stages can be absent from the causation event-frame, and the causal-chain windowing will become discontinuous. There are mainly three cases as follows (Talmy, 2000, p. 272).

- a. [3] may be absent.
- b. [3] may be absent and [2] may coincide with [4].
- c. [3] and [4] may be absent and [2] may coincide with [5].

As the extensions of the body and mechanics, the intermedium (e.g. stone) can be absent. For example, *John broke the window*.

Moreover, people manage to express ideas as much as they can while they try their best to use least words, and they often pay little or no attention to mediating actions and events. Therefore, the intermediate portion in a causation event-frame is sometimes gapped, only the agent and the last subevent windowed. For instance, in the standard causative construction like *John broke the window*, one may take it for granted that the initiatory agent *John* directly brings about the final subevent *the window broke*.

Therefore, a new case is most common in daily writing: "agent+result". For example, in *John broke the window*, *John* refers to the initiative agent, *the window broke* is the final subevent, which is the agent's intended goal, but there are no bodily motions in the sentence, as "he bend his knees, move his hand to the ground to grasp a stone..., release the stone from his hand thus propelling it forward". And there are no intermediate causally chained subevents as "the stone sailing through the air" or penultimate subevent as "the stone interacting with the window".

Sometimes the immediate cause will exist as "agent + result (+immediate cause)" for disclosing the immediate cause and the intended result. Of the gapped materials in "agent + result", the immediate cause is the portion next-most-ready for expressions of penultimate subevent in the causal chain. This portion is easily expressed as "by-clause", and to explain, Talmy (2000) has shown a group of sentences about by-clause as in the following example (p. 273):

- I broke the window
- a. *by grasping a rock with my hand.
 - b. *by lifting a rock with my hand.
 - c. *by swinging a rock with my hand.

- d. *by propelling a rock through the air.
- e. *by throwing a rock toward it.
- f. ?by throwing a rock at it.
- g. by hitting it with a rock.

In the example, it is clear that sentences *a* to *e* are wrong because the *by*-clauses are not the immediate cause of the intended result. It is impossible to break the window by doing one of them.

Sentence *f* is questionable and Talmy has not given his opinion. In this paper, the author does not consider it as right. In *Longman Dictionary of Contemporary English* (1998), *throw (at)* means “to cause (something) to move rapidly through the air by a sudden movement or straightening of the arm” (p. 1612). From the definition, the emphasis of *throw (at)* lays on moving through the air. It refers to the moving process in the air, but not the end point, and the preposition *at* just emphasizes the direction. In other words, *I* throw the stone in the direction of the window, but maybe it can not touch and break the window. The process of motion through the air is not the immediate cause of the intended result.

Sentence *g* is right without question. *Hitting the window with a rock* makes the rock contact with the window and immediately causes the window to be broken.

From the example above, it is clear that only the penultimate subevent can be the “*by*-clause”, and even a simple word such as a preposition may be very important. Causal-chain windowing theory gives some clues to learn to use right logical relationship to link the “events” or “subevents” in a causal event. Besides, it can direct the attention of the addressee (the reader), since different expressions of the same scene may have different effects on readers’ mind.

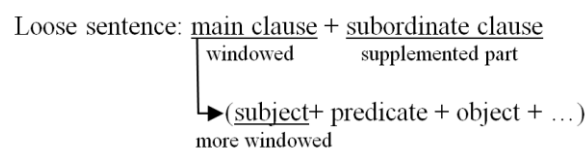
III. THE TEACHING OF WRITING: AN APPLICATION OF CAUSAL-CHAIN WINDOWING THEORY

Causal-chain windowing theory, as is mentioned in Part Two, is helpful for students to write with good content and especially rigorous construction (right causal chain). And as different expressions of the same scene may have different effects on readers’ mind, the portion windowed should be considered. In all, causal-chain windowing theory includes two factors, windowing of attention and causal chain, one static and the other dynamic.

A. The Application of Windowing of Attention

As is said above, the subject or the part put first in a sentence will attract readers’ attention and the important words should be written firstly, and different expressions (different windowed stages) of the same scene may cause different impressions in their mind. Therefore, a writer can make full use of this point, and achieve the effects he wants in readers’ mind through proper expressions. The application of windowing of attention is useful for the sentence patterns, the construction of paragraphs and the whole essay.

Initially, to begin with a sentence, the main clause or the main part attracts the attention and is windowed; in the main clause or the main part, the subject is more windowed. No matter whether the sentence is loose or periodic¹, readers’ attention is distributed on the main idea. Cite a sentence pattern, a loose sentence, as an example about windowing of attention:



Take the introducing sentence in an expository essay about *how to make chocolate chip cookies* as an example. The following thesis statement, *I really like chocolate chip cookies, and I will tell you how to make them*, is unfocused. The subject of the sentence is *I* rather than *chocolate chip cookies*. The attention, then, is distributed on the writer rather than on the topic. Therefore, the thesis statement can be rephrased as *Chocolate chip cookies are a delicious treat and can be made in five easy steps*. The clues from windowing of attention tell students that when writing expository essays, it is better to stay away from first and second person pronouns.

Secondly, the application of windowing is also helpful to the construction of paragraphs and whole essays. Different from sentences, readers always pay attention to the rear of a paragraph or an essay, because human beings is full of curiosity, which may urge them to discover the result of an event, the cause of the effect, etc. For example, some detective films use flashbacks, starting from the middle or even the end of the story and then going back to the beginning, to arouse the audiences’ interest. Similarly, a narrative involves careful organization. Although the event is usually presented in chronological order, that is, in the order they occur, using flashbacks appropriately can make readers too impatient to wait and finish the narration in one breath.

¹ A loose sentence puts the main idea before all supplementary information; in other words, it puts first things first, and lets the reader know what it is mainly about when he has read the first few words. The main idea of a periodic sentence is expressed at or near the end of it, and it is not grammatically complete until the end is reached. For example, “She decided to study English though she was interested in music” and “Although she was interested in music, she finally decided to study English” are respectively loose sentence and periodical sentence (Ding et al., 1994, pp. 47-48).

Students usually write in a cause-effect relationship, but sometimes the style of effect-to-cause can better stir readers' interest. The example sentence written by a student is as the follow:

When I was a child, I was afraid of fire, even the fire of a match, as I think it would hurt me. If you were just afraid of tiger or snake, I would think you are brave.

If it is spoken or written in a dull or flat way like this, readers may feel no interest. Afterwards, the student changed the sentence:

When you were young, you might be afraid of some animals like tiger or snake, but I just feared a match.

This kind of introduction may make readers feel strange and want to know the cause, since being afraid of a match is out of common sense.

Therefore, it is important for students to break conventionality and write fresh compositions so that they can successfully attract readers' attention. When writing an argumentation, students like to use the following prototypical pattern (three-part pattern):

Introduction: Thesis statement (paragraph 1)

Body: Pro idea 1 (paragraph 2)

Pro idea 2 (paragraph 3)

Pro idea 3 (paragraph 4)

Conclusion (paragraph 5)

Since almost everyone uses this kind of pattern to write an argumentation, readers will feel aesthetically tired, for they, without interest, may feel difficult to focus on the composition. Applying windowing of attention to writing essays may solve this problem. Take writing an argumentation as an example. If students divide each paragraph in the body part into two parts, the first to arouse readers' interest and the second to tell the answer, the argumentation will be specific to readers. Here is a new pattern of writing an argumentation:

Introduction: Thesis statement (paragraph 1)

Body: Con idea 1 → Refutation (paragraph 2)

Con idea 2 → Refutation (paragraph 3)

Con idea 3 → Refutation (paragraph 4)

Conclusion (paragraph 5)

For instance, a student will write the argumentation entitled "Homeschooling: A Shortcut to the Society" and his thesis statement is to support homeschooling. In each paragraph of the body part, he first shows the con idea and then presents his refutation to support his statement. Take paragraph 2 as an example (Wang et al., 2007, p. 60):

Some critics have criticized that homeschooling does not fulfill the social aspect of education. Since the child is studying alone at home, it does not give him/her the opportunity to pick up social skills. However, studies have shown quite the opposite. Public school children are put under fiercely competitive school environments. The net result is that they lack the confidence to initiate or hold a conversation. They do not know how to interact with other age group people.

As is known, the dispraise-to-praise process is to emphasize the praising part, just like leaving somebody at large the better to apprehend him. In fact, the student is to support homeschooling, but the paragraphs in the body part firstly give con ideas, which may make readers feel strange, since the ideas are opposite to his title. And readers will be eager to go on reading and to find out the writer's original ideas. This kind of writing style arouses readers' interest, distributes their attention on the latter part in each paragraph, emphasizes the latter part and makes the whole essay more convincing.

In all, the application of the first aspect, windowing of attention, to the teaching of writing gives students some clues to change sentence patterns and paragraph construction. The teacher should help students to break away from conventions, observe the environment from a new angle and create different versions of a composition. Moreover, different expressions of the same scene may cause different effects on readers' mind, so a good writer can achieve his intended effects with proper windowed stages. Therefore, the application of windowing of attention is helpful to students' writing.

Generally speaking, the aspect of windowing of attention will help students to have the view of creativity all the time and the teacher should indoctrinate the students with the view of creativity. The steps of applying windowing of attention to the teaching of writing are concluded as follows:

a. Putting forward the notion: windowing of attention

The teacher simply introduces the general knowledge of windowing of attention, since it is new to students.

b. Analyzing the example sentences

Through analyzing some example sentences, which are about different expressions of the same scene, the teacher helps students to learn different windowed stages.

c. Introducing the influences

The teacher teaches students the influences and gives some examples about applying windowing of attention to sentences and essays, so that students can know more "different" sentence patterns and paragraph construction.

d. Writing independently

The teacher requires students to write from new angles and write differently from conventional patterns. Students are allowed to imitate and write to get readers' interest and catch their attention.

e. Getting a feedback from a peer

The teacher asks a student to exchange the essay with a partner, who will help to comment on the writing, so that the positive suggestions and comments from a peer can further help the student improve his or her essay.

The application of the first aspect, windowing of attention, makes the best of people's cognitive and linguistic device. As different expressions may cause distinct effects, a student can achieve the effects he wants on readers' mind, as long as he appropriately applies windowing of attention in his writing.

B. The Application of the Second Aspect – Causal Chain

Causal chain, as is said in Part Two, is actually "causal continuum" and coherent causal relationship between several linked "events" or "subevents". The first subevent is the cause, the second one the result, while the second subevent is the cause of the third, ..., and it touches upon a causal chain. The term causal chain visually describes the relationship between each subevent in a causal event, the whole of which is just like a chain and each subevent is like a ring in the chain. They button each other firmly by the causal relationship. If the causal relationship is wrong and does not exist, the chain will collapse. Therefore, each ring is specific and can not be replaced by other rings.

However, it is not necessary for people to write the whole process of an event; instead, they just write the windowed portions. In path windowing, the path of a moving object is windowed and attracts the attention, whereas in causal-chain windowing, the cause and result are windowed and attract the attention. This is certainly important for students who want to write articles with good content and rigorous construction. Causal chain can direct students' diction and lead them to write compositions without any bugs, which is really important and helpful to students' writing.

Before introducing the notion of causal chain, the teacher can show an example about by-clause (Ungerer & Schmid, 2001, p. 233):

- The rabbit was killed
- a. *by Peter's taking his gun along.
 - b. *by Peter's raising his gun.
 - c. *by Peter's aiming at the rabbit.
 - d. *by Peter's pulling the trigger.
 - e. ?by Peter's shot.
 - f. by the bullet.

Before the teacher tells students the answer of *a* to *f* in the example, students may choose the wrong choices. After knowing the right answer and the reason, they may conclude that English writing does not rely on intuition; instead, they need think carefully about the choice of a word, a verb and a preposition, since a right causal chain helps to write with good content and especially rigorous construction. As causal chain reflects the relationship between several subevents, causal chain is mainly helpful to the writing of sentences. In practical writing, students tend to write a sentence about a causal event in time order:

the immediate causing stage + and + the resulting stage

Such sentences are very common. For example:

- a. John fell down and broke his leg.
- b. The water constantly dripped on the stone and the stone was run through.
- c. Sam waved his hand and the taxi stopped.

It is certain that there are no grammatical mistakes in the sentences above, and the causal chain is right, but they are too common to impress readers. Moreover, since most students tend to write in the same way, with uncompact construction, such sentences may make readers feel dull. Therefore, Talmy's "by-clause" gives the teacher some clues and helps students to try to choose a relatively new sentence pattern, when they are writing a sentence about events:

the resulting stage + by/from/after + the immediate causing stage

And the three sentences above can be respectively changed into:

- a. John broke his leg by his falling down.
- b. The stone was run through from the water's constantly dripping on it.
- c. The taxi stopped after Sam waved his hand.

Moreover, such a sentence pattern can cause the sentence to be briefer and refiner and the construction seems more compact, which are the necessary characteristics of news report, a type of narrative writing. Such sentences can be found in newspapers as follows:

- a. A young man and three boys sexually attacked a girl of 13 from threatening her with a bread knife. (Quoted from the news "Girl of 13 Raped After Threat With Bread Knife", The Times, 19th Oct., 1987)
- b. Tensions ran especially high after a Chinese jet clipped the EP23 over Hainan Island. (Quoted from the news "Beijing's Latest Look", Time, 1st Feb., 2001)
- c. Highlighting this need for greater awareness is the fact that more than 48% of respondents thought they

could contract HIV from a mosquito's biting, and over 18% by having an HIV positive person sneeze or cough on them. (Quoted from the news "African Judge Assists AIDS Challenge in China", China Daily, 31st Oct., 2008)

As a whole, the application of the second aspect, causal chain, helps the teacher to teach students to learn to use right causal relationship to link the "events" or "subevents" in a causal event. On one hand, right causal chain can help students to write with rigorous logic and content. When writing compositions, students need to weigh their words carefully, even a verb, a noun and a preposition, or a simple word may influence the causal logic. On the other hand, the proper use of "by-clause" is also helpful to students' writing. Putting the immediate causing stage and the resulting stage in just one independent sentence can make the content relatively fresh and the construction more compact. When writing an essay, students can use different sentence patterns to express the causal relation.

In this process, the teacher plays a vital role to indoctrinate the students with the view of causation. The steps of applying causal chain to the teaching of writing are concluded as follows, which are slightly different from the steps of applying windowing of attention:

a. Putting forward the notion: causal chain

The teacher asks students what a causal chain is in their mind and briefly specifies the general knowledge of it.

b. Analyzing the example sentences

Through analyzing some example sentences, the teacher helps students to learn the stages of causal event-frames and the corresponding subevents.

c. Introducing the influences

It is necessary for the teacher to ask students to discuss in groups about the examples of "by-clause". And then the teacher may teach students the influences and give some examples about applying causal chain to writing.

d. Writing independently

The teacher should require students to write in new sentence patterns and write differently from conventional ones. Students are allowed to imitate and write logically rigorous essays.

e. Getting a feedback from a peer

The step of feedback is also needed to help the student improve his or her essay.

Through the examples and the contrast between different sentence patterns, teachers can make students know the influence of causal chain and its use when applying it to writing. Students will learn to write better compositions with fresh sentence patterns and more compact construction.

IV. CONCLUSION

People's "cognition has the capacity to select particular portions out of an event frame and to direct greatest attention to those portions while placing the remainder of the event frame in the background of attention" (Talmy, 2000, p. 306). Everyone has such a cognitive device, which has exerted a subtle influence on language, so it is useful to apply the cognitive device to writing.

Causal-chain windowing, one type of windowing of attention which is proposed by Talmy, is a common linguistic phenomenon, though it sounds new to most of people. Windowing of attention is a cognitive process in which the language places a portion of an event into "the foreground of attention by the explicit mention of that portion, while placing the remainder of that situation into the background of attention by omitting mention of it" (Talmy, 2000, p. 259). And in causal-chain windowing, the cause and result are windowed and attract the attention. Since people's attention is limited, their linguistic device can mediate the cognitive process, in which people always pay their attention to what is considered to be worthy of focusing on. The portions which attract people's attention are windowed and the remaining parts are gapped. On one hand, for readers, different expressions of the same situation may cause distinctive impressions in their mind. On the other hand, for writers, it is good to apply the two aspects, windowing of attention and causal chain, to improve their writing skills. This paper has strived to apply causal-chain windowing theory to the teaching of writing, for the sake of improving students' writing skills from a new perspective.

This paper has made a beginning effort in the application of causal-chain windowing theory to the teaching of writing. As a tentative step, it is far from satisfaction. However, the author hopes it can be of some value for the future study of the teaching approaches to English writing.

REFERENCES

- [1] Crystal, D. (1997). *A Dictionary of Linguistics and Phonetics*. Blackwell Publishers.
- [2] Ding, W. D., Wu, B., Zhong, M. S., & Guo, Q. Q. (1994). *A Handbook of Writing*. Foreign Language Teaching and Research Press.
- [3] Evans, V. & Green, M. (2006). *Cognitive Linguistics: An Introduction*. Edinburgh University Press.
- [4] Saeed, J. I. (2000). *Semantics*. Foreign Language Teaching and Research Press.
- [5] Talmy, L. (2000). *Toward a Cognitive Semantics Vol I: Concept Structuring System*. The MIT Press.
- [6] Ungerer, F. & Schmid, H. J. (2001). *An Introduction to Cognitive Linguistics*. Foreign Language Teaching and Research Press.
- [7] Wang, H., Wang, H., Zhang, L. X., & Guo, R. (2007). *Practical English Writing for College Students*. Beijing Institute of Technology Press.

- [8] *Longman Dictionary of Contemporary English*. (1998). The Commercial Press.
[9] *Collins*. Retrieved December 18, 2023, from <https://fanyi.baidu.com/?aldtype=85#en/zh/window>



Ting Wang, born in Dazhou, Sichuan Province on Mar. 6, 1984, got master's degree about English Linguistics in Chongqing Normal University, Chongqing, China in June, 2009.

From July, 2009, after graduation, she has worked as an English teacher in School of Foreign Languages and Literatures, Chongqing Normal University for over 14 years. In those years, she has published 8 academic theses, mainly on English teaching, in journals. Her current research interest is application of some theories in English teaching, especially college English writing.

Ms. Wang has won Teaching Excellence Award for 4 times, and got Third Prize in Classroom Skills Competition for Young Teachers in Chongqing Normal University in 2017, and the Excellence Coach Award in the Chongqing Provincial Final of the 2012 "FLTRP Cup" English Public Speaking Contest.