The Sequential Schematic Scene-building Theory in Dan Brown's The Da Vinci Code: A Cognitive Semantic Study

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Abstract

Everything in the universe is movable or being moved, starting from galaxies and planets to the smallest object, such as the atom. But how can we conceptualize the motion of such entities and what are the basic elements of sequential scene? To do that, a theory of the sequential schematic scene-building has developed to treat this issue. This theory deals with the basic dynamic, on-line, or real-time perceptual processes by which we build a scene. The study focuses on the schematic, not conceptual, elements of sequential scenes which deal with the highly abstracted, primitive system. Such system is considered as the skeleton or building blocks of any sequential scene. To make the theory more applicable, the study selects a scene from Dan Brown's The Da Vinci Code to be analyzed in terms of the theory developed. The study arrived at a conclusion that the moveable scene can include a group of sequential schematic structures, such as the mover, motion, causality, geometrical structures, and containment. All these elements work together sequentially in the sense that they are inherently consolidated.

Keywords: scene, scene-building theory, sequential scanning, motion, causality

1. Introduction

We motivate our bodies and other objects to move, and there are also several entities that can move independently in our world. Even entities that are completely stationary can convey a feeling of motion or they play an essential role in affecting a moving entity. In short, motion forms an integral part of our daily lives. Since everything in the universe is movable or being moved, how can we conceptualize the motion of entities around us and what are the basic elements of sequential scene? As such, a theory of the sequential schematic scene-building has developed to treat this issue. This thory deals with the basic dynamic, on-line, or real-time perceptual processes by which we build a scene.

The current study is framed within the field of cognitive linguistics which deals with the connection of the human language and mind with world knowledge. The study focuses on the schematic, not conceptual, elements of sequential scenes. That is, it deals with the highly abstracted, primitive system which is considered as the skeleton or building blocks of any sequential scene.

It is necessary to provide a comprehensive general overview to the concept of scene and its structure by developing a configurational theory of dynamic scene structure. Therefore, this study is divided into two parts. The first seeks to answer the following questions: What does the scene mean? How does it structure? What is the difference between scene and event? What are the main elements of a scene? How are such elements arranged? And what is the difference between summary and sequential scenes? The second part, on the other hand, deals with the explanation of the theory developed to analyze the selected scenes.

2. Scene

A scene is a perceptual unit that can be defined as a series of actions happened in the same spatiotemporal situation. In other words, it occurs in a single place without a break in time. A scene is linguistically determined in the sense that it can be a word, sentence or text. A single scene may include an action or a group of actions and the combination of scenes structures an event.

Most of cognitive studies do not differentiate between scene and event. Instead, they consider every clause or sentence as an event. Gisborne (2020: p. 4) defines events in terms of cognitive linguistic perspective as "verb meanings within conceptual structure. That is, they are mental representations of verb meanings". It is rather misleading to state that scene and event are synonymous. The key difference between scene and event is that the latter is wider than a scene, consisting of different, but related, scenes. In other words, an event is a series of two or more scenes that are related in a coherent way, while a scene is an action or a group of actions that occur in the same place and time. Another difference is that event, unlike scene, includes a change in time, place, theme and participant(s). Any penetration or change in these four characteristics leads to the transition to another scene and thus the formation of a new event.

The current study segments a scene into three levels of analysis: macro, micro, and nano scenes. Macro scene (henceforth MAS) is a

unified agglomeration of a scene. It contains a group of related actions that are organized sequentially. It carries the general idea of a scene. In other words, the whole scene is understood through its major actions and entities, without reference to its details. Although a scene may include various actions and entities, the principal participants, motion actions and causal relations of a scene play a vital role in perceiving that scene.

The second level of analysis is called 'micro scenes' (henceforward MISs). Unlike MAS, MISs are individual fragments. They are a group of subscenes that are arranged sequentially in such a way that the first MIS cannot be preceded by the second and vice versa. The combination of these scenes leads to understand the scene as whole, and thus to form a unified scene (i.e., MAS). Each MIS complements another as an inseparable chain. If a MIS is truncated, however, the arrangement of MISs will be different, the whole scene will be affected, and so it will be difficult to understand.

The third level of analysis, termed 'nano scenes' (henceforth NASs), is related to the segmentation of a scene into implied cognitively meaningful scenes. NASs can be defined in terms of three facts. First, they are implied scenes, which means that they are not linguistically represented in a scene. Instead, NASs can be understood and determined logically. In other words, our minds can perceive NASs without representing them clearly. Second, they rely heavily on simulations of every motion in a MIS, and the combination of those primitive motions configurates this larger scene (MIS). Third, they are indivisible, primitive, or atomic in the sense that they cannot be divided into smaller conceptually meaningful chunks.

These three levels of analysis are applied to motion scenes, not static scenes. Therefore, the study suggests a theory called "the sequential schematic of scene-building" to analyze the dynamic scenes according to the three levels of scene mentioned above.

The sequential schematic of scene-building theory

The analysis of scenes in terms of scene-building theory is carried out through the processes of schematization which is a system concerned with the sequential schematic elements of a moveable scene. Croft and Cruse (2004) define schematization as describing "the conceptualization of the topological, meronomic and geometrical structure of entities and their component parts" (p. 63). It deals with the most primitive components with which we can build any sequential scene. It is a common fact that human mind has the same mechanism to configurate moveable scenes. That is to say, motion is generally understood as a change of location of an object from one place to another. This change involves a series of sequential schematic structures that deal with the basic dynamic schematic elements of a scene. At the schematic level, these ingredients that come to the fore are mover, motion, causality, geometrical structures, and containment. Such elements are elaborately classified in the following sections.

Mover

'Mover' is a moving entity that migrates from one place to another. In CL, mover is usually called 'figure' (Talmy, 1975) or 'trajector' (Langacker, 1987). In the movable scene, we have differentiated between three types of movers: animate, self-animated and inanimate mover.

Animate mover is classified either as human (as in 1) or animal (as in 2). This kind of mover can also be part of human or animal body (e.g., hand, head, eyes, etc.) where the part of the body that moves, not the whole body (as in 3). Animate mover is self-moving or being moved by an external force.

- 1. The girl opens the door.
- 2. The cat climbs the wall.
- *3. He pointed his hand at the painting.*

The second type of mover, i.e., *self-animated mover*, is the kind that moves as if it is an animate mover without being a real stimulator, inside or outside the scene, causing the motion. This type includes volcanoes, winds, floods, earthquakes and other natural factors and disasters, as in:

- 4. The wind blew from the south.
- 5. Snow crunched under her feet.
- 6. The old building has completely collapsed.

In all these scenes, the mover motivates itself to move due to external factors.

By contrast, *inanimate mover* relates to the mover that lacks consciousness or power of motion. It can be motivated, explicitly or implicitly, by an animate or self-animate mover as a first trigger.

- 7. The driver drives the bus to the station.
- 8. The ship heads towards the island.
- 9. The wind threw the ball away.

In (7), *the driver* motivates *the bus* to move explicitly; while in (8), the stimulator (which may be *the ship's captain*) is not clearly visible in the scene. In the last scene, *the ball* is the inanimate mover that is stimulated by the self-animate *the wind*.

A scene can consist of more than one mover, in the process known as moving multiplicity. This can take place through two ways. First, it

happens when both the actor and undergoer of a scene refer to different moving entities (as in 10 and 11). This means that the moving object may not only be the actor of a scene, but it can also be represented as its undergoer. Second, a scene can compose of multiplex movers when the doer and/or the undergoer involves multiple entities (like in 12)

- 10. The players pass the ball to each other.
- 11. Alice chased butterflies in the garden.
- 12. lumberjacks cut trees.

In (10), both *the players* and *the ball* constitute the movers of that scene. But they form two different kinds of movers: the first includes a group of human movers; while the second mover refers to an inanimate mover motivated by human movers. The example (11) also consists of two movers which are classified as animate movers. One is categorized as human; and the other as animal, consisting of several animal movers. The last scene represents multiple human movers, that is, various performers of that scene.

In all three scenes above, the mover is either motivated to move or stimulator in terms of force. This can be studied through the process of causality.

2.1 Causality

From the study perspective, causality means motivation. It is not the effect of one entity on another in a clause, as the traditional theory of causality claimed, but the effect of one or more than one scene on another one. In other word, the occurrence of the second scene (the result scene) is wholly dependent on the occurrence of the first scene (i.e., the caused scene). Thus, these causal relations continue between the scenes (micro and nano scenes) in succession until causal chain is completed to form the macro scene.

Causality is, therefore, defined as how a scene is motivated by someone (usually outside the scene) to cause someone or something else to move from one place to another. On this basis, the study divides the causal elements into five primitive elements: stimulator, causer, caused verb, causee and result.

- **Stimulator** is the first initiator or trigger in a scene that should be an animate. It can be *known* when it is clearly determined inside a scene or in previous or subsequent scenes, or unknown when it is implicit, but logically determined outside a scene.
- **Causer** is an animate or inanimate that is motivated by a stimulator. Sometimes the stimulator also acts as the causer, meaning that the stimulator is the same as the causer (as in 35). It can be hidden, especially in the passive structure. Causer can also be *inside* or *outside* of a scene.
- Caused verb is the action that carries causality and being achieved by the causer.
- Causee is the entity that undergoes the action, viz., the one that is caused by the causer.
- **Result** is the consequence of the caused action, and usually comes after caused scene.

These five elements of causality can be summarized as '*M* motivated *Y* to cause *C* to do *S*'. Consider the following examples:

- 13. The driver was driving a car at high speed along a curve before it hit a tree around 10:15 p.m.
- 14. Tom threw the ball into the basket.

In (13), the stimulator is *the driver* who stimulated *a car* to move, which in turn caused an accident when it hit *a tree* (the causee). However, in (14), *Tom* is the stimulator and the causer simultaneously, and *the ball* is the causee on which the action occurred.

The two elements (stimulator and causee) can be accomplished by a single animate entity. This means that such animate entity can both motivate themselves and play the role of the causee on whom the action is executed at the same time (as in 15 and 16). We call this kind of causation *reflective causation*. This type happens when a scene consists of only a single animate entity.

- 15. Max killed himself.
- 16. What I did pissed me off.

Although Max (in 15) and I (in 16) play the same role of the stimulator and causee, there is a hidden causer in each scene: a tool used to kill Max (in 15), and the thing that pissed me off (in 16).

Causative relations are executed in a sequential order, in the process known as *causative transitionality*. This process occurs when the second scene is triggered or caused by the first one, the third by the second scene and so one.

2.2 Motion

Motion representation is a very complicated system in CL. It is one of the most basic phenomena in our being that plays a vital role in human linguistic conceptualization due to its omnipresent nature. Since it is central to human cognition and experience, motion has attracted a great deal of attention in several cognitive frameworks, currently among them: Fillmore, (1968) Jackendoff (1983, 1990), Radden (1988), and Talmy (1975, 1985, 1996, 2000). The term 'motion' is defined as "In essence, spatial motion is nothing else than a series of consecutive changes in the relationship of location holding between a given object and its domain." (Rudzka-Ostyn, 1988: p. 517). In other words, it is the sequential change from place A at a given time to place B at certain subsequent time.

There are two different ways of representing motion: 'factive' and 'fictive' motion. This distinction depends on our perception of a scene.

That is, the mover can physically or fictivity moves from one location into another. Factive motion takes place when there is physically an actual perceived motion in the sense that the dynamic scene is represented concretely in the real world.

However, fictive motion is non-veridical motion which happens when a non-moving entity is fictively moving: no observable physical motion. The notion of 'fictive motion' has attracted a great deal of attention in recent times, under different names, such as pseudo-motional locatives (Dowty, 1979); subjective motion (Langacker, 1986 and Matsumoto, 1996); abstract motion (Langacker, 1987); meander verbs (Levin, 1993); fictive motion (Talmy, 1996); virtual motion (Langacker, 1999); and simulated motion (Matlock, 2004). To note how different cognitive linguists study the phenomenon of fictive motion, see Abdulkareem and Al-Jashamy (2021).

Classifying motion on the basis of its form and direction is not an easy matter. This is because the forms of motion vary whenever actions change. Flexibility of moving entities can make thousands of different forms of movements. But it may be possible to group all these movements under the main forms which are the basis for all movements. Therefore, the current study classifies the forms of movement into three main types:

- A. Verticality concerns with the vertical axis of movement which is classified according to the upward or downward movements of entities, and it is of two types. First, *up-down*, like drop, fall, plop, etc., can be described by the adverb 'down'. Second, *bottom-up*, such as raise, lift, elevate, etc., can be described by the adverb 'up'.
- B. Horizontality relates to the horizontal axis of movement. It can be categorized into three types.
 - **Directional movement** occurs when the moving entity is moving in a particular direction. It, in turn, is divided into four groups: *left-right, forward-backward, converging-diverging* (e.g., hug and separate), and *arrival-departure* (e.g., go and come).
 - **Cyclic movement** is the movement that has a random, irregular pattern, meaning that it has no specific direction (e.g., *draw, dance, work*, etc.).
 - **Frictional movement** is the resisting force, result from rubbing one object against another (e.g., vibrate, shake, tremble, etc.).
- **C. Trajectory** is the curved movement of the object. This form combines vertical and horizontal movement. For example, in the scene "He fell forward", *falling* is a vertical movement, and *forward* is considered as horizontally directional one. The result is an arc-like form called 'trajectory'.

2.3 Geometrical Structural Schemas

Geometrical structures of a scene relate to the spaciotemporal analysis of motion scenes. Although we imagine as if there is motion from one place to another, the spatiotemporal geometric structures are not moving structures. Instead, they are stations through which a moving entity passes.

In the scene 'The bird is flying over the house', for instance, there is a starting point (Source), a continuous set of steps (Path), the destination where the mover reaches. These three geometrical elements are synthesized in the formula 'Source-Path-Goal schema' which is related to the "means of moving from one location to another" (Evan and Green, 2006: p. 185). The internal relation of Source-Path-Goal schema emerges as a coherent whole. However, the three components may not be explicitly present in a scene, but there is no dynamic scene without being a source, a path and a target for the moving object.

2.4 Containment Schema

Another schematic aspect of dynamic scene is the notion of 'containment' which concerns with the spatial boundary of an entity. Containment schema is grounded in the human embodied experience independently of language, from experience of being physically located ourselves within bounded locations like house, room. bed, etc. (Dodge and Lakoff, 2005). Two rules govern the containment schema. First, the contained entity is either inside or outside the container. Second, if the container is located in another container, the entity is within both, as in:

17. Jack went to his room and lay on his bed.

In this scene, there are two containers where Jack is within both: *the room* container (macro container) and *the bed* (micro container). Johnson (1987) summarizes this idea saying "If I am in bed, and my bed is in my room, then I am in my room" (p. 21). Another fact of containment schema is that it limits the motion of entity within the container. This schema contains three main elements: interior, boundary, and exterior. Interior represents the entity located within boundary which is the area presented in the form of circle. The exterior is the area outside the container.

Linguistically, the notion of contained and container can be described through spatial prepositions which are used to express the location of an entity. On this basis, we classify containment into three main schemas:

- A. In-out/Out-in: is the case where a moving entity spatially leaves or enters a boundary of a container, as in:
 - 18. Bill went out of his room. (In-out)
 - 19. Jack entered his room. (Out-in)

- **B.** Surface: is the case where an entity is in contact with a surface, as in:
 - 20. The librarian put the book of linguistics on the table.
- C. Linearity: is the case where an entity is on a straight line:
 - 21. The train went to the station.

In sum, all components of a dynamic scene work together and they are inherently consolidated in their nature. Figure 1. summarizes the components of sequential scene-building theory.

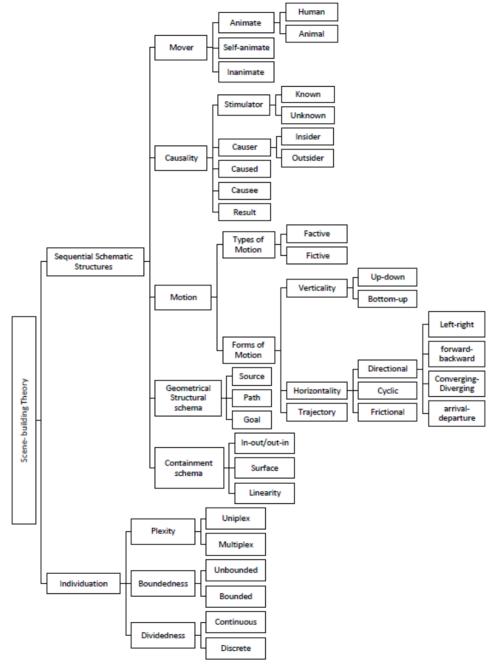


Figure 1. The components of sequential scene-building theory

3. Research Data

The data of the study involve the analysis of a scene selected from Dan Brown's *The Da Vinci Code* to be analyzed in terms of the theory developed, known as 'the sequential schematic scene-building theory'. The scene is selected depending on the four features of a scene (time, place, participant(s), and theme), discussed before. The author in the selected scene maintains the unity of these four categories. In other words, the time of an action is at 10:46 p.m. The location of the scene is set in the city of Paris, exactly in Louvre Museum.

The scene revolves around two participants: the curator Jacques Sauni àre and his albino attacker. Because he is pursued, the curator grabs a Caravaggio painting from the wall to trigger the automated alarm and prison himself inside the Grand Gallery. As result, the iron gate is dropped around the suite. Beyond the iron bars, the albino asks him to reveal where 'the ancient secret' is. The curator at first pretends that he does not know, but eventually he is at gunpoint. However, Sauni àre has lied about the secret that he has carefully rehearsed many times. His attacker replies that the other three *s én échaux* had said the same lie. Then he shoots Sauni àre in the stomach and leaves him to die. The curator realizes that his three brethren are dead, and he has only a few minutes to live. Therefore, he must pass on his important secret.

4. Scene Analysis

In order to build a scene, it is important to begin with analyzing the abstract conceptual representations (i.e., image schema) which are the building block of any scene. The suggested theory of scene-building process differentiates between two main schematic categories: sequential schematic structures and individuation. To analyze these two categories, it is meaningful to go through the three essential levels of analysis: *Macro scene, Micro scenes*, and *Nano scene*. These three important levels should be given the attention prior to embarking on the task of analysis. Consequently, the following three sections are assigned to analyze the selected scene according to such division.

4.1 Macro Scene

As readers, we can understand the whole scene through its major actions and entities, without reference to its details. That is, the general idea of the selected scene can be summarized through two major parts:

- 1. Because he was chased by the albino, the curator staggered through the vaulted archway of the museum's Grand Gallery, and lunged for the nearest painting, a Caravaggio to trigger the automated alarm. As a result of the alarm ringing, a thundering iron gate fell nearby, blocking the entrance led to the suite, and therefore, the parquet floor shook.
- 2. The albino aimed the barrel through the bars at the curator's head, and the bullet released to lodge in his stomach.

The strategy of *causative transitionality* plays a role in determining these two fundamental parts. These two major parts as well as their subscenes are arranged as causal chains. The type of causality used in this scene is *multi-causative relations*, since it is done by two animate stimulators, *the curator* and *the albino*, who are the responsible for all the actions happened in that macro scene.

In the first part, although *the curator* is considered as the stimulator that causes the actions of staggering, lunging, ringing, falling, blocking, and shaking, he was pursued, and therefore motivated, by *the albino*. The causal has shafted when *the curator* grabs *a Caravaggio painting*. In this sub-scene, the causer becomes *the curator* and the *painting* is the causee. The chain continues when *the painting* comes to be the causer when it triggers *the automated alarm* to ring which is in turn responsible for the falling of *the iron gate*. The causee *iron gate* has shifted to be causer when it stimulates the floor to shake (see Table 1).

In the second part, *the albino* is the first stimulator, who aimed *the barrel*, beyond the iron bars, *at the curator's head*. Thus, *the albino* is represented as the stimulator and the causer at the same time, while the latter (*the curator's head*) as the causee. However, the entity *the barrel* has causally shifted from the causee to become the causer in the next action. While *the barrel* is the causer, *the bullet* is treated as the causee to be lodged in *the curator's stomach*. These *causal chains* and changes have been represented in the following table:

Causer	Causee	Caused	Result
The albino>	the curator	staggered	lunged for the nearest painting
(Stimulator)			
\checkmark			
The curator>	the painting	lunged	triggering the automated alarm
V			
$\xrightarrow{\mathbf{V}}$ The painting \longrightarrow	the automated alarm	To ring	Falling of the iron gate
\checkmark			
The automated alarm	the iron gate	fell	the blocking of the entrance
V			
The iron gate>	the floor	shook	Shaking of the floor
the albino	the barrel	aimed	releasing the bullet
(Stimulator)		anneu	releasing the bullet
the barrel	the bullet	released	lodging in the curator's stomach

Table 1. The causative transitionality of the selected MAS

It is important to highlight that these two parts form the major picture of the selected scene as a whole. They are arranged sequentially in the sense that the transfer among these actions takes place in sequence. In other words, it will be messy and incomprehensible if their schematic order is rearranged. The sequential arrangement of the two parts is mapped as in the following schematic diagram:

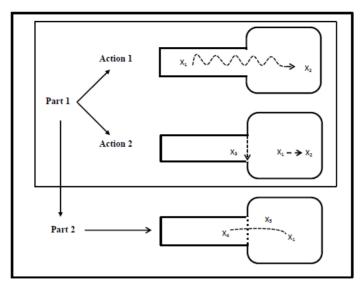


Figure 2. The sequential motion of the selected MAS

The diagram shows the process of mapping of the two parts. Rectangle and square symbolize both *archway* and *the Grand Gallery*. In part one, action 1 consists of four elements: *the curator, the painting, the archway* and *the Grand Gallery*. *The curator* (X_1) moves indirectly from *the archway* toward *the painting* (X_2) in *the Grand Gallery*. In action 2 of part one, another element is added which is *iron gate*. While X_1 grabs X_2 inside *the Grand Gallery*, X_3 which stands for *iron gate* coincidently blocks the entrance, moving from the roof to the floor. In the second part, the entity X_4 which refers to *the albino* is onstage and X_2 and X_3 are offstage. Behind X_3 , X_4 releases *the bullet* (X_5) toward X_1 .

Different locations in this scene have been alluded to, such as *Paris, Louvre Museum, archway* and *the Grand Gallery*. These are conceptualized as the containment of the selected scene on different levels. This scene consists of three levels of containment: super macro, macro and micro container. Within these levels, there are various contained entities: *the curator, the painting, iron gate, the albino, the barrel* and *the bullet*. The container and contained entities are schematized as follow:

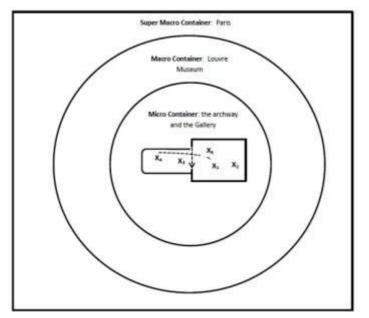


Figure 3. The scene container

To clarify, the process can be likened to the layers of an onion. The whole scene occurs in the museum's *archway* and *Gallery* and this is the core of the scene in which all onstage contained entities are involved. This level of container is called micro container. The level of

macro container is conceptualized as the inner layer which refers to *Louvre Museum* itself, while the level of super macro container which refers to *Paris* as the outer layer. Hence, the skin on the outside, i.e., *Paris*, represents the container to the micro and macro container.

Although the two parts mentioned above represent the general actions of the selected MAS, there are several detailed scenes (MISs) used to build the whole scene.

4.2 Micro Scenes

This section concerns the analysis of a series of sequential minor scenes that determine and affect the overall scene. MISs are defined as a group of scenes that are arranged sequentially, leading elaborately to understand the scene as whole. It should be made clear that, for each scene, conceptually different processes take place. The combination of these scenes and processes leads to form a unified scene, i.e., MAS. The shift from one MIS to another can be realized through the shift in causality. In other words, whenever the causal relation changes, the MIS changes as well.

Five MISs are selected under study to be analyzed in terms of scene-building theory, as explicated below.

MIS 1: Renowned curator Jacques Sauni ère staggered through the vaulted archway of the museum's Grand Gallery.

In this scene, the schematization consists of an animate mover which is *the curator*. The starting point takes place from *the vaulted archway* toward *the Grand Gallery*. The mover is forced to move because he is pursued by the attacker. This can be described in the following formula:

> Mover {curator} => from P^1 {archway} to P^2 {Gallery}

The type of motion is factive in the sense that it is an actual perceived motion. It takes the form of horizontality, directional, backward and indirect. This is because *the curator* (the mover) moves unsteadily from *archway to Gallery*.

The causal relationship of this scene befalls when *the curator* is conceptualized as the causee because he is pursued by *the albino* who is treated as the stimulator as well as the causer of that action. The action *staggered* is regarded as caused which leads to the result "*lunged for the nearest painting*", as represented in the following way:

Stimulator/Causer (the albino) \rightarrow caused (staggered) \rightarrow causee (the curator) \rightarrow result (lunged for the nearest painting)

The expression 'the vaulted archway of the museum's Grand Gallery' is represented as the container and *the curator* is contained. It is necessary to clarify that the container is static and the contained is movable. This can be illustrated in the following diagram, where rectangle and square indicate container and x is the contained entity:

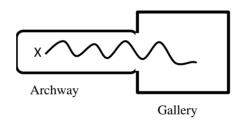


Figure 4. The containment of the action staggered

MIS 2: He lunged for the nearest painting he could see, a Caravaggio.

In this scene, the mover is conceptualized as the animate human *the curator* who dashes off from *the archway*, as the source of motion, towards *the nearest painting* in *the Gallery* which is its goal. In this scene, there is a physical transfer of the mover from one place (*archway*) to another one (*Gallery*). The following formula illustrates the form of action:

Mover {curator} => from P¹ {archway} to P² {Caravaggio}

The transfer of the object in this scene is real, and therefore, it is described as factive motion rather than fictive. Furthermore, this motion takes the form of horizontality. The direction is forward and in direct way.

To represent the causative relationship, *the curator* is viewed as the causer who is motivated to move by *the albino*; the act of *lunging* is described as caused; and *the painting* is referred to as causee. The result can obviously be shown in the following scene (scene 3), i.e., *lunging for the nearest painting* gives rise to tear it. This relation can be symbolized as follow:

Stimulator (the albino) \rightarrow Causer (the curator) \rightarrow caused (lunged) \rightarrow causee (the painting) \rightarrow result (to tear it)

Since the curator moves in a straight line from the archway toward the painting, the containment schema used in this scene is linearity.

MIS 3: Grabbing the gilded frame, the seventy-six-year-old man heaved the masterpiece toward himself until it tore from the wall and Sauni ère collapsed backward in a heap beneath the canvas.

Different movers and motions have been clustered in this scene, among them are *Grabbing* and *heaved*. In these two sub-scenes, two movers are recognized: the animate human mover (i.e., *the seventy-six-year-old man*), and the inanimate mover (i.e., *the painting*). The man pulled out *the painting* from the wall, and then heaved it. This motivates *the painting* to move from the wall toward the man. This means that the wall is source motion and the man is the destination where *the painting* reaches. This can be formulated as follow:

> Mover {the man and the painting} => from P^1 {{the wall} to P^2 {himself}

The direction of motion is towards *the masterpiece* to be grabbed and heaved. In both, motions are factive and vertical. The action *Grabbing* is categorized as Up-down, while heaved as Bottom-up, as diagramed in Figure 5.

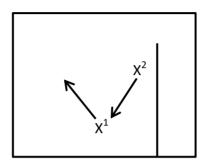


Figure 5. Grabbing and heaved form of motion

This diagram shows the sequential motions of *the painting*. The first mover, *the curator*, is represented by X^1 , while the entity X^2 refers to *the painting*. The right line is *the wall* which is the source of motion. The scenario is that the man first grabs the painting, motivating it to move toward himself, forming the movement of Up-down. Then, he heaves it to take the form of Bottom-up.

In both mentioned actions (grabbing, and heaved), the curator is the container of the painting which is contained. Thus, the painting is represented as landmark, while the curator as trajector. Schematically, the containment comprises three elements: interior, boundary and exterior. In this scene, the boundary is the wall, on which the painting is hung; the interior is represented by the painting; and the exterior by the curator.

In the action *tore,* the inanimate mover is *the masterpiece*, is physically forced to be torn. As the source of motion, this action starts from *the wall* directly toward *the curator*. This can be schematically shown in the following structure:

> Mover {the masterpiece} => from P^1 {the wall} to P^2 {the curator}

The motion is factive in the sense that there is a real moving from P^{1} to P^{2} . This motion is vertical in the form of Up-down.

The causative construction of the acts *grabbing*, *heaving* and *tore* happens when the causer (*the man*), who is also the stimulator, caused the action of *grabbing* and *heaving*. In this scene, the causee (*the masterpiece*) undergoes a change of state and the result is its tearing *from the wall*. This relation can be illustrated in the following way:

> Stimulator/Causer (the man) \rightarrow caused (grabbing and heaving) \rightarrow causee (the masterpiece) \rightarrow result (tearing it)

The container image schema of the *tore* action is *the wall* which is here described as both the boundary and interior. *The painting*, by contrast is schematized as contained in terms of exterior trajector. This can be diagramed in Figure 6.

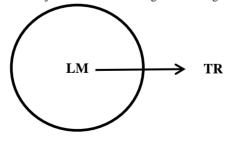


Figure 6. The containment of the tore action

In this diagram, the landmark (LM), represented by the circle, includes two components: the interior (the area within the boundary) and the boundary itself. The exterior is the area outside the boundary, involved within the square which refers to the place (*the Gallery*). The container (*the wall*) is represented as the LM, while the exterior (*the painting*) as the TR.

The final action of this MIS is collapsed. In this action, there is an external physical force to make the mover transfer from the first

position (P^1) to the second one (P^2). That is, *the curator* (or *Sauni ère*) has forced to fall backward. Hence, *the wall* is represented as the source from which the moving object, *Sauni ère*, starts. The direction of motion is the falling *in a heap beneath the canvas*. This can be illustrated in the following formula:

Mover {Sauni \check{e} => from P¹ {the wall} to P² {a heap beneath the canvas}

The motion of the MIS collapsed backward is factive and takes the form of trajectory, as illustrated in the Figure 7.

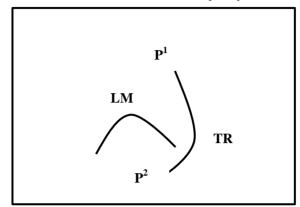


Figure 7. The trajectory motion of collapsed backward

In this scene, *the curator* goes through two steps, moving from P^1 to P^2 which is under *a heap of the canvas*. This can be applied to the containment of Out-In. The TR the curator, which is the entity that undergoes motion, moves from P^1 (Out) to P^2 (In) inside the LM. Moving from P^1 to P^2 involves an arc-like trajectory. Accordingly, *a heap of the canvas* is conceptualized as a container (LM) and *the curator* as contained (TR).

In the causality of the act *collapsed*, the first stimulator is *Sauni àre*, since he motivates *the masterpiece* to be grabbed in relation to the previous scene. As such, *the masterpiece* is triggered to be the causer which is responsible for the action. The causee is *Sauni àre*; although he is assigned as the subject and stimulator of that action. The caused action is the process of *collapsing backward*; and the result is the falling under *the canvas*. The relationship between causer and causee can be conceptualized as follow:

Stimulator (Sauni $\check{\sigma}e$) \rightarrow Causer (the masterpiece) \rightarrow caused (collapsed) \rightarrow causee (Sauni $\check{\sigma}e$) \rightarrow result (falling under the canvas)

MIS 4: As he had anticipated, a thundering iron gate fell nearby, barricading the entrance to the suite.

In this scene, the mover *iron gate* is deemed as inanimate. It undergoes an external force to be fallen. The source of motion is the roof of the entrance, whereas the goal is the floor of the Gallery. The motion, which is factive, is vertical in the form of Up-down: the actions *fell* and *barricading* are conceptualized as moving from top to bottom (See Figure 8.). The MIS of *falling* is structured as follow:

Mover {iron gate} => from P^1 {the roof of the entrance} to P^2 {the floor of the Gallery}

Although *the curator* is the first stimulator in this scene, the ringing of an alarm triggers *the gate* to fall. This is because *the curator* draws *the painting* which motivates *the alarm* to ring which in turn motivates *the gate* to fall, this is what we have called *causative transitionality* (see Figure 9.). The caused action is described by the verb *fell;* and the result is *the blocking of the entrance*. The causative transfer can be shown in the following way:

Stimulator (the curator) \rightarrow causer (the alarm) \rightarrow caused (fell) \rightarrow causee (the iron gate) \rightarrow result (the blocking of the entrance)

The LM *the floor of the suite* represents as the surface in this scene, and thus, as the container. The contained TR, on the other hand, is lexicalized by *iron gate*. In other words, the TR moves from a position outside the LM to occupy a location inside the LM. This container image schema can be described in Figure 8.

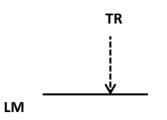


Figure 8. The containment of the *fell* action

In this diagram, two entities are remarkable: the *iron gate* and *the floor*. The latter is viewed as a surface (container) in which the contained TR, which is indicated by *iron gate*, falls to contact with the surface.

MIS 5: The parquet floor shook. Far off, an alarm began to ring.

This scene consists of two dynamic actions: *shook* and *to ring*. In both, the motion is conceived as factive in which there is a real motion from P^1 to P^2 . In the *shook* action, the mover is *the parquet floor* which undergoes the action of *shook*. Put differently, the fall of *iron gate* forces the floor to be shaken. What makes the *shook* action distinct from other is that there is no direction and goal in its motion, although *the parquet floor* is conceptualized as the mover and the source of motion at the same time. Moreover, the reason why motion does not have specific direction and target is that its form is horizontally frictional.

The causality in this scene can be taken place through the representation of the five causative elements. The stimulator is *the curator* and the causer is *the iron gate*, as represented in the previous scenes, because its fall triggers the floor to shake. Therefore, the causee is *the floor*, and the caused action is *shook*. The result of the causer's action is the shake of the floor. This causative transitionality can be illustrated in Figure 9 and formulated as follow:

Stimulator (the curator) \rightarrow Causer (the iron gate) \rightarrow caused (shook) \rightarrow causee (the floor) \rightarrow result (the shake of the floor)

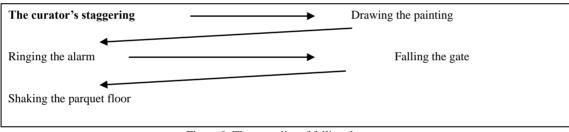


Figure 9. The causality of falling the gate

The expression 'the parquet floor' is depicted as the surface containment. That is, it is the LM which embraces the iron gate. The parquet floor is, therefore, the container in terms of surface and the iron gate is the contained matter.

The MIS to ring, by contrast, is highly abstract, as the source of motion is *the alarm* and the mover is *the sound* coming from that alarm towards *archway* and *Gallery* (representing the destination of motion). There is also a physical transfer of a sound from *the alarm* to the target object. Such motion is non-directional in the sense that it is characterized as cyclic motion. This is typified in the coming structure:

Mover {the sound} => from P^1 {the alarm} to P^2 {archway and Gallery}

In this scene, the causative verb is *the curator*'s tearing out the painting which gave rise to another action to happen (*ringing of an alarm*), as its result. The first stimulator and causer of this action is *the curator* who motivated, through tearing out *the painting, the iron gate* to fall down which in turn stimulated *the floor* to shake and *the alarm to ring*. While *the curator* is the first causer, *an alarm* is the causee that undergoes the action. The causality of this scene can be translated as follow:

Stimulator/Causer (the curator) \rightarrow caused (tearing out the painting) \rightarrow causee (an alarm) \rightarrow result (began to ring)

While the TR (*the sound*) emerges from the LM (*the alarm*); the containment of Out-In can be applicable. *The alarm* is represented as the container from which the sound is emanated and spread 'out' into the surround world. In other word, the mover moves from inside the LM to occupy a location outside: from P^1 (In) to P^2 (Out).

4.3 Nano Scenes

The last level of analysis is related to the mental segmentation of a scene into implied meaningful scenes. In other words, a scene can be divided into conceptually distinct meaningful chunks that can be logically determined. Extracting from the scene of attacking against *the curator*, two instances of MISs are selected to analyze their implied NASs:

1. He lunged for the nearest painting he could see, a Caravaggio.

This MIS can be divided into five conceptually distinct spatiotemporal NASs, as in:

- a. He stood somewhere.
- b. He started running.
- c. He saw the painting of a Caravaggio.
- d. He lunged towards it.
- e. He collided with it.

These NASs are sequentially arranged and their collection forms the whole scene. The agent (*the curator*) is the maker of that scene. The story began with static scene when he stood somewhere inside the museum, in scene (a). Scene (b) extended scene a when *the curator* started running moving from the place he was standing towards the Grand Gallery. In scene (c), from a group of paintings, he caught his gaze on the painting of a Caravaggio. Then, the curator continued moving and lunged towards the painting in scene (d). In the final scene, the scenario ended with blocking of motion when he collided with it.

2. The albino drew a pistol from his coat and aimed the barrel through the bars, directly at the curator.

This scene can be broken down into six smaller conceptual NASs. These are represented as follow:

- a. The albino stood behind the bars.
- b. He reached for his pistol.
- c. He grabbed it.
- *d. He drew it from his coat.*
- e. He directed the pistol forward.
- f. He aimed the barrel through the bars, directly at the curator.

In parallel, these NASs are collected in the way that form wider MIS. Furthermore, the order of these NASs is occurred sequentially in the sense that we cannot favor one over the other or manipulate their arrangement. In NAS (a), *the albino* stood behind *the bars* inside the museum. Then, in NAS (b), he moved his hand to reach for *his pistol*. Extending NAS (b), he grabbed *his pistol* in scene (c) and drew it from his coat in scene (d). Finally, through the bars he directed *the pistol* forward in scene e and aimed its barrel, directly at the curator.

5. Conclusion

The sequential schematic scene-building is a theory developed to study the schematic components of moveable scenes and their arrangement in a scene. The theory has arrived at the following tenets:

- 1. The theory distinguished between scene and event, which was one of the terminological problems in CL. It stated that an event is wider than a scene, consisting of different, but related, scenes.
- 2. A scene can be classified into three levels of analysis: macro, micro, and nano scenes. Each scene has to be taken place at the same time and space, and the same theme and participant(s). Any change of one of these four features means moving into another scene.
- 3. The MISs and NASs are arranged sequentially in the way that the first scene cannot be preceded by the second and vice-versa. The combination of these minor scenes leads to understand the scene as whole, and thus to form a unified scene (i.e., MAS).
- 4. MAS and MISs are stated and described explicitly, while nano scenes are implicitly expressed.
- 5. The theory also stated that the moveable scene can involve a group of sequential schematic structures, such as the mover, motion, causality, geometrical structures, and containment. These elements work together in separately and sequentially.
- 6. All types of movers are classified under three groups: animate, self-animated and inanimate. In addition, a scene can contain multiple movers, as the actor and/or undergoer. Such process is known as *moving multiplicity*.
- 7. The scene-building theory considered causality as motivation in the sense that a scene motivates another scene to do something. These series of causal relations continue between MISs and NASs in succession until causal chain is completed to form MAS, in the process called *causative transitionality*.
- 8. The theory has also expressed that motion, whether fictive or factive, has specific forms. It distinguishes between three main forms of motion: Verticality (including up-down and bottom-up), horizontality (including directional, cyclic, and frictional movement) and Trajectory.
- 9. A scene can consist of different layers of containment: super macro, macro and micro container. Within each layer, there are various contained entities. This means that a container can be contained to another container.
- 10. Practically, to make the theory more applicable, a MAS has selected from Dan Brown's The Da Vinci Code to be analyzed in terms of the three levels of scene analysis.

- 11. The result is that the schematic structures were applied in the selected scene.
- 12. Finally, the scene-building theory arrived at the idea that the sequential components of a dynamic scene work together and in successive way.

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Appendix (1)

Prologue

Paris, Louvre Museum, 10:46 P.M.

- 1. Renowned curator Jacques Sauni re staggered through the vaulted archway of the museum's Grand Gallery.
- 2. He lunged for the nearest painting he could see, a Caravaggio.
- 3. Grabbing the gilded frame, the seventy-six-year-old man heaved the masterpiece toward himself until it tore from the wall and Sauni ère collapsed backward in a heap beneath the canvas.
- 4. As he had anticipated, a thundering iron gate fell nearby, barricading the entrance to the suite.
- 5. The parquet floor shook. Far off, an alarm began to ring.
- 6. The curator lay a moment, gasping for breath, taking stock.
- 7. He crawled out from under the canvas and scanned the cavernous space for someplace to hide.
- 8. On his hands and knees, the curator froze, turning his head slowly.
- 9. Only fifteen feet away, outside the sealed gate, the mountainous silhouette of his attacker stared through the iron bars.
- 10. The albino drew a pistol from his coat and aimed the barrel through the bars, directly at the curator.
- 11. "I told you already," the curator stammered, kneeling defenseless on the floor of the gallery.
- 12. "You are lying." The man stared at him, perfectly immobile except for the glint in his ghostly eyes.
- 13. The curator felt a surge of adrenaline.
- 14. The man leveled his gun at the curator's head. "Is it a secret you will die for?"
- 15. The man tilted his head, peering down the barrel of his gun.
- 16. The attacker aimed his gun again.
- 17. The gun roared, and the curator felt a searing heat as the bullet lodged in his stomach.
- 18. He fell forward... struggling against the pain.
- 19. Slowly, Sauni er rolled over and stared back through the bars at his attacker.
- 20. The man was now taking dead aim at Sauni ère's head.
- 21. Sauni ère closed his eyes, his thoughts a swirling tempest of fear and regret.
- 22. The click of an empty chamber echoed through the corridor.
- 23. The curator's eyes flew open.
- 24. The man glanced down at his weapon, looking almost amused.
- 25. He reached for a second clip, but then seemed to reconsider, smirking calmly at Sauni e's gut.
- 26. The curator looked down and saw the bullet hole in his white linen shirt.
- 27. It was framed by a small circle of blood a few inches below his breastbone. My stomach.
- 28. Almost cruelly, the bullet had missed his heart. As a veteran of la Guerre d'Alg érie, the curator had witnessed this horribly drawnout death before.
- 29. For fifteen minutes, he would survive as his stomach acids seeped into his chest cavity, slowly poisoning him from within.
- 30. Alone now, Jacques Sauni ère turned his gaze again to the iron gate.
- 31. He was trapped, and the doors could not be reopened for at least twenty minutes.
- 32. By the time anyone got to him, he would be dead. Even so, the fear that now gripped him was a fear far greater than that of his own death.
- 33. Staggering to his feet, he pictured his three murdered brethren.
- 34. Shivering, he pulled himself to his feet.
- 35. He was trapped inside the Grand Gallery, and there existed only one person on earth to whom he could pass the torch.
- 36. Sauni ere gazed up at the walls of his opulent prison.

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