

ARCHITECTURAL DESIGN KEYWORDS OF INCEPTION SPACE

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ABSTRACT

This paper explains the idea of inception space from Inception (2010), a movie directed by Christopher Nolan, to explore the inception space potential in designing architectural space. Inception space is an architectural space design mechanism that translates the essential experience of space users as an effort to implant idea in the form of positive emotions. In other words, the architectural space is a medium of inception to a space user or a target (mark). The main purpose of inception space design is to affect the target (mark) by planting the idea 'secretly'. The target is unaware of the intervention and considers the idea presented itself. This process becomes the beginning of an idea to grow in one's mind the beginning of mindset and behavior change. In other words, architects or planners can apply this mechanism to design and influence users so that the design success rate can be improved. The main design keywords as part of the inception process are perception, memory, scenario, layer, and labyrinth. The development of design methods of inception space can be explored and applied to different targets and contexts by applying these design keywords. For example, this design mechanism can be applied to people with dementia who experience memory and visuospatial deficit through wayfinding programming.

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Keywords: Perception, Memory, Scenario, Layer, Labyrinth

INTRODUCTION

The fascinating thing about the science fiction movie released in the summer of 2010 by director Christopher Nolan is the process by which an architect is able to create an architectural space in the layers of dreams only through the mind. In addition, through the design, the architect assisted by the inceptor able to implant a new idea to someone through his subconscious spaces or dream space called Inception. The planted idea is expected to change the mindset and behavior of the target in the real world.

There is a slightly different meaning between actual meaning and science fiction meaning. However, both have a common understanding that is a beginning process of something. Nolan (2010) reveals the same thing in the Inception movie by interpreting inception as the process of im-planting an idea to someone through his subconscious or subconscious. This process becomes the beginning of an idea to grow in one's mind the beginning of mindset and behavior change.

Starting from the idea exploration on Inception movie, the process of planting ideas to a per-son called a target (mark) can be applied in the architectural space design method. It is the research question of this study. This study negates the process of dreaming as it does on the Inception movie. This is because dreaming requires deeper research and very subjective. Additionally, subliminal stimulus is also not strong enough to influence one's thinking and behavior.

This paper aims to produce design mechanisms that can improve the success of program-ming in design. The success relates to how architects or planners influence space users in positive ways to follow the programming.

However, the limitation of this study is it limits only in design mechanism keywords search-ing explored from the Inception film without progressing to how this design mechanism is used on specific targets. These keywords are associated with literature studies to support the statement that it can influence users.

Nevertheless, this study tries to provide simple steps in applying keywords to architectural design. The users involved in this exploration

are people with dementia who have memory and visuospatial deficit. These design exploration steps are not elaborated too detail because it requires more specific and in-depth research.

INCEPTION SPACE

Extraction and Inception Process in Inception Movie

The movie Inception describes the extraction of classified stored information and the inception process that involves the unconscious mind of the target (marked individual). Both of these processes begin with an initiation process which involves research of the target background. The results of the initiation process are then translated into layers used to obtain the most basic information (extraction) and also to implant an idea that is capable to affect the target's behavior in the real world (inception). In designing these layers, the extractor or inceptor translates the memory as the target background into scenarios and settings with the labyrinth or maze rules. The diagrams below describe the process of inception on the exploration of the Inception movie.

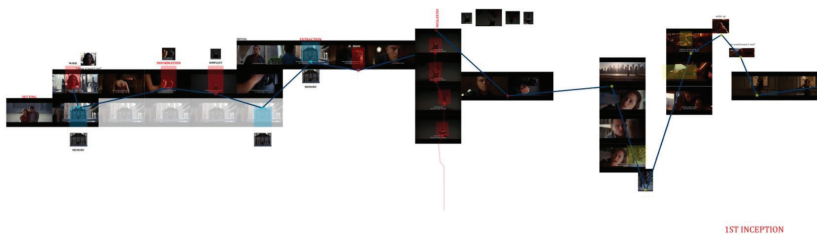


Figure 1: First Inception done by Cobb to Mal

As illustrated in Figure 1, initially the Inception process carried out by Cobb (the main character) to his wife, Mal. The process of finding the most essential objects of his wife and instilling the idea that the world currently lived in is not real. Therefore, Mal must immediately wake up and live life in the real world. The keywords involved in this layer are perception, memory, and setting. The perception that occurs in the user (Mal) is safe is the most important place to keep secrets. The concept of memory used is a dollhouse as a childhood memory in the middle of the city in the form a labyrinth setting.



Figure 2: Second Inception in the First Layer

In the first layer (Figure 2), the idea that will be instilled in the target is a statement "I will not follow my father's footsteps". The inception process in this layer involves keywords that are perception, memory about father and son relationships, settings, and scenarios. The designed setting was a warehouse space. The scenario used in the movie is the kidnapping process. In this process, the target was kidnapped and forced to remember a number combination of a safe. The targets are convinced that there are other parties who want confidential information stored in the safe.



Figure 3: Second Inception in the Second Layer

In the second layer, as shown in Figure 3, the idea that will be instilled in the target is a statement "I will creating something for my self". The inception process at this layer used keywords such as perception, memory, settings, and scenarios. The designed setting was a bar room and bedroom in a hotel. The scenario used involved Mr. Charles. The receptor convinced the target that he was in a dream world and someone was trying to extract confidential information from him. Indirectly, the target will go against his subconscious. The receptor helps the target to suspect someone who plans the previous kidnapping so that the projection will indirectly act according to what the target is expected.



Figure 4: Second Inception in the Third Layer

In Figure 4, the idea that will be instilled in the target is a sentence statement “My father does not want me to be him”. The inception process at this layer used keywords that are perception, memory, settings, and scenarios. The setting selected involved a patient treatment room in the fortress of military defense. The scenario used is a conversation between the target and his critical father's projections. The conversation continues by checking the contents of the safe that has been grabbed from the start, namely a paper windmill. The target experience was later translated positively in the form of the windmill.

Based on this exploration, there are five keywords involved in the process of inception space design. These keywords are perception, memory, scenario, layer, and labyrinth. Perception as part of the process of absorbing the quality of architectural space through sensation stimuli. These stimuli are transformed into neural representations to be compared with information already stored in the target information center. The information data are derived from experience or target memory. Perception, memory, and imagination are in constant interaction, where the domain of presence fuses into images of memory and fantasy (Pallasmaa, 2012, p.71). This memory can be revived through the scenario (program) and the setting of the architectural space. Finally, the setting follows the principles of the labyrinth or maze in layers that consists different scenarios.

The next section explains the design keywords based on the findings of the exploration from the Inception film. These keywords become important and as methods in designing an Inception space, a space that can influence users to follow architect or planner programming. These design keywords are further studied with some supporting literature.

Inception as Perception

“Our immediate awareness of the phenomenal world is given through perception” (Norberg-Schulz, 1974, p.27). Perception is the initial process of a user to experience consciously the quality of architectural space. The way a user responds to the stimulus which comes from the surrounding environment will affect how a user behaves towards the architectural space (Mlodinow, 2012). Human behavior is the product of an endless stream of perceptions, feelings, and thoughts, at both the conscious and the unconscious levels (Mlodinow, 2012, p.16). The comparing process between neural representations with information stored in the brain during the perception process has the potential to be incepted (Figure 1). As explained by Passer and Smith (2009) the so-called top-down process is highly dependent on information previously stored in the brain. In top-down processing, sensory information is interpreted in light of existing knowledge, concepts, ideas, and expectations (Passer & Smith, 2009, p. 150).

In other words, knowing what information is stored in one's information center (brain) makes it easy to do inception. Knowledge or information stored in the brain is the result of experience involving all senses in the human body.

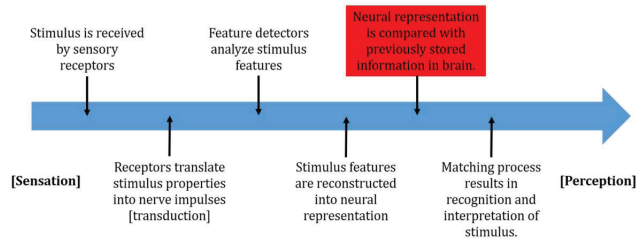


Figure 5: The Process of Perception

During the perception process, the visual senses are the most active senses that receive stimulation. A person is able to represent and behave towards his environment most influenced by stimuli received through the sense of sight. However, perceptions of architectural space are also built by other senses. This is supported by the statements of the Pallasma and Tuan that other senses are able to present the experience of the quality of

architectural space. According to Campbell (1966, as cited in Tuan, 2001), kinesthesia, sight, touch are sensory organs and experiences which enable human beings to have strong feeling for space and for spatial qualities. (.

The skin is able to convey certain spatial ideas and can do so without the support of the other senses, depending on the structure of the body and the ability to move (Tuan, 2001, p.14). Although the senses that best capture the quality of space are sensory kinetic organs, vision, and touch (can function without help from other senses), the olfactory and auditory sensory organs also offer that ability. For instance, “Odor is capable of suggesting mass and volume” (Tuan, 2001, p.13). Although, it is almost impossible to remember a perfume, smelling a similar fragrance will change our perception of an event because our perception is mediated through memories, past experiences, and desires (Dionne, 2011).

In addition, sounds though vaguely located, can convey a strong sense of size (volume) and of distance (Tuan, 2001, p.14). Someone will adjust the volume of the sound differently when speaking or relating to the source of listeners that have different distances in different sizes of space. Sound itself can evoke a spatial impression (Tuan, 2001, p.15). For instance, the echo sounds give a big impression and the sound of the creak of the door gives the impression of pinching and thinness. Thus, a comparison is made between the impressions produced by the sense of sight and the sense of hearing towards the relationship between a person and space. The sight makes us solitary, whereas hearing creates a sense of connection and solidarity; the gaze wanders lonesome in the dark depths of a cathedral, but the sound of the organ makes us realize of our affinity with space (Pallasma, 2008, p. 31).

Culture in which the subject grows affects perceptual experience (Passer & Smith, 2009, p. 164). Therefore, the experience of the target (mark) needs to be explored according to the culture where the target does spatial activities through everyday concepts. The everyday world is sensual. It does not only provoke sight but also touch, hearing, smell. Thus, architecture encompasses places known by their aroma, surfaces recognizable by their tactile qualities, positions established by echo and reverberation. (Berke, 1997, p. 223).

Inception as Memory

The inception process involves translating the target experience. This is closely related to the memory of the target. Hugo Munsterberge, a German psychologist, designed the theory of memory. According to him, we cannot record all the details we experienced so we will fill in the blank details with our other minds. There are three concepts about memory: (1) we only remember the essence of an event, (2) we fill in the missing details with the things that are made up, and (3) we will believe the memory. The idea that we can remember events that never happened is a key element of Philip K. Dick's story "We Can Remember It for You Wholesale," about implanting memory. "The memory of long-standing events is particularly easy to implant" (Mlodinow, 2012, p.75).

Not only visual, but the smell can also act as a trigger for the memory of architectural space elements. A particular smell makes us unknowingly re-enter a space completely forgotten by the retinal memory; "the nostrils awaken a forgotten image, and we are enticed to enter a vivid day-dream"(Pallasmaa, 2008, p.32).

Finally, architectural elements that are able to generate memory are needed in the process of inception. This memory helps scenario and setting to 'look' and 'feel' familiar. This situation makes the inceptor to be able to instill an idea into the target easily.

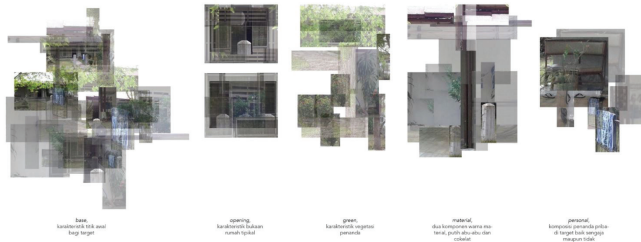


Figure 6: Typical House Exploration as Base

Figure 6 explains the exploration of a typical home as a base. The exploration looks for detailed elements that have the potential to be mnemonic and to manipulate memory. This exploration is one of the mechanisms in designing inception space as memory for dementia with memory and visuospatial deficit in wayfinding.

Inception as Scenario

A scenario is a description of what could possibly happen (merriam-webster.com). In other words, the scenario contains the action described. This understanding is closely related to the programme in architecture. No architecture without action, no events, no programs (Tschumi, 1998, p.121). The inception process depends on the scenario or action that has been described by the inceptor. One of the scenarios is how the target (mark) interacts with the projections and elements of the architectural space. So the real task of inception is not just to deliver ideas, but to deliver them surreptitiously to an unwilling recipient. Furthermore, he must adopt all these ideas as his own, as a basis for action, and as if he had arrived at them himself without intervention (Andersen, 2011). Therefore, the scenario or programme is described without making the target (mark) aware that he is being directed.

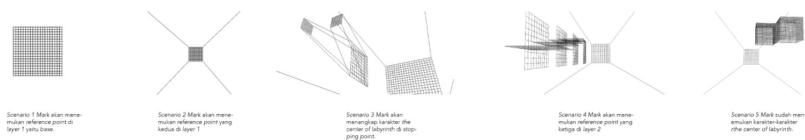


Figure 7: Target (mark) Scenario Diagram

Figure 7 is a simple diagram that explains how the visual target will be passed from base through finding characters of the center of labyrinth. This diagram explains five scenarios that will be carried out on the target as inception process.

Inception as Layer

In Inception movie, setting and scenarios are used by an inceptor on each layer of dream space during the inception process. There are various translations of target (mark) experience on each layer. On each layer, inception involves scenarios and settings both of which are translations of the target experience. The basic setting used is the labyrinth as one of the architectural paradox.

The film concludes that the process of inception looks impossible because everyone is equipped with a mind that will look for traces where an

idea existed. Therefore, this pure creation process involves high imagination, the ability to translate ideas that you want to plant into emotional concepts and does not require specific ideas. The process of translating ideas into positive emotions starts from uncovering the experience of the target.

Inception as Labyrinth

The architect in the Inception movie, Ariadne, designed the subconscious layout using the labyrinth or maze principles. The movie calls these two terms but the dream layout space follows the maze rules that have many paths and intersections so it requires challenges for visitors to choose the right path and make a decision. What Ariadne provides is a place for people to interact in a narrative context, interior, and the city. In other words, Ariadne builds a stage where the show will take place (Kapper, 2011).

Metaphorically, the labyrinth is referenced to a difficult, unclear, and confusing situation (Kern, 2000, p.23). There are several interpretations that Kern has brought to the labyrinth definition. However, this paper describes the interpretation associated with the Inception movie that is as a process of self-transformation.

This definition is not much different to the maze that Tschumi invented such as to create a different space or experience of space. Labyrinth as a sensual experience of space. A labyrinth is a place where all sensations, all feelings are enhanced, but where there is no presence of an overview to provide a clue as to how to exit (Tschumi, 1998, p.42).

In designing space for people with dementia, 'labyrinth' can be realized by applying the forward and backward mechanism (Figure 8) or in other words there is no distraction direction (red square). Distraction directions can be manipulated by designing reference or signing and in further exploration called the Slayer Oranye. The users are guided by architectural elements such as elements which have the same colors, shapes, etc from base to center of labyrinth. These directions guarantee and direct the user to the destination (center) without changing direction.



Figure 8: Space Experience from Base to the Center of Labyrinth

DESIGN METHOD

Inception as Architectural Concept

“Inception thinks through images. An image is not simply a representation of reality but also shows, through its movement, a complexity, a difficulty, and a truth” (Husson, 2011). The next discussion is the development of the inception space concept. Broadly speaking, the inception space consists of layers where each layer has specific scenarios and settings. These scenarios and settings involve the translation of experience from perception and memory.

Cobb in Inception film (2010) explained that “Dreams, they feel real while we are in them, right? It is only when we wake up that we realize something was actually strange.” Cobb’s statement, an extractor, and inceptor, suggests a setting from the inception space. An 'unusual' architectural space that feels strange will more easily affect the target. Therefore, the setting uncovers the potential elements of an architectural space that is 'unusual' or out of the box and probably it can be 'ugly'. A simple analogy is that the target will more likely 'remember' a setting in which the pedestrian pathway has a roof if compared to similar paths used by pedestrians. Another example is a cross sensation where light produces regular sound wave stimuli and music rhythms produce heat stimuli. Furthermore, the development of settings follows the concept maze or maze.

The initial stage of the development of inception space is the initial approach of a target (marked individual). Targets are identified by the target's daily approach in carrying out activities and creating space. This observation

is to find the most essential experience of the target. Essential experience is the most core experience that is able to be remembered by the target. If a transformation is made, it will affect the target mindset so that the inception process occurs indirectly in carrying out its daily activities. This initiation stage also includes exploration of the quality or memory images stored by the target. Additionally, this exploration can be done by analyzing elements of the architectural space as part of the activities carried out by the target.

Before the experience translation phase becomes a scenario and setting, keywords are needed to be used as a trigger. This trigger can be a theme or purpose of the idea that will be instilled in the target in the form of positive emotions. These positive emotions have a deeper effect on the target than negative emotions. The experience and memory are then translated into scenarios and settings on inception space design.

In addition, the design of architectural space consists of a labyrinth and layers of mazes in order to speed up the inception. However, the process leads to gain time. Each layer will offer a different time if the inception is carried out at the same speed. This layer as a setting keeps the target in the scenario process by following the principle of choosing the right path and deciding it correctly. Each layer will apply special programming based on the trigger that has to be achieved as one of the inception processes. This programming will be studied further from previous research. For instance, healing space to people with dementia.

These layers are synchronized by involving all potential senses of the target. These senses help the target to recognize settings better and store information about settings in the form of memory. As a result this memory will help the target to strengthen the ideas that have been planted.

If the target to be planted is in the form of an idea to a person with dementia who experiences memory and visuospatial deficit, the next step is to study the symptom. The study of previous research on dementia will produce several requirements that have to be fulfilled by inception space design later. This process is part of the initiation process of the target.

CONCLUSIONS

Through the exploration of Inception movie by director Christopher Nolan (Inception, 2010) and literary approaches, there are five key concepts involved in the process of inception to provide guideline to target as space users. Perception, memory, scenario, layer, and labyrinth are the main concepts of inception that can guide targets quietly.

Inception space is an architectural space that translates the essential experience of space users as an effort to implant ideas in the form of positive emotions. In other words, the architectural space is a medium of inception to a space user or a target (mark). It is possible that the development of design methods of inception space can be explored and applied to different targets and contexts. Finally, as the main purpose of the inception process, the target (mark) is unaware of the intervention of the designed space and assumes the main idea used in the concept comes by itself.

This research can be continued by providing a case study of specific targets and contexts. For example, through programming, how to assist dementia people, with memory and visuospatial deficit, to find their way (wayfinding) between their house (as a base) to the mosque (as the center of labyrinth). The area selected is the old East sector lecturer housing complex of Syiah Kuala University, Banda Aceh where the available houses almost have the same facade. These same facade will confuse users. It is hoped that through further research, Inception space design mechanism can contribute to the increasing success rate of architects or planners in influencing space users positive-ly in architectural design spaces.

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