

The Proper Understanding of Precedents in Landscape Architecture for Knowledge Production

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Abstract | A proper understanding of precedents in architectural design as a common practice, suffers from the taboo of “imitation”, on the one hand, and, is also accused of “heresy”, on the other hand.

In this regard, three issues have been studied until now: “Extracting the backgrounds of applied knowledge”, “Defining the proper understanding of precedents” and “Clarifying the difference between an educational or a research-based case study”.

What still requires further research for defining the “proper understanding of landscape architecture precedents” is the inevitability of interpretation due to the role of humans as a “subject” in landscape architecture. So the question here is what effect does the inevitability of interpretation have on the meaning and method of proper understanding of landscape architectural background knowledge? This study aims to reduce the theoretical difficulties that could impair the ability of knowledge production in this field of study. To do this, the concept of “knowledge production” is first thoroughly examined, then, “the conditions of precedents as a source of knowledge” together with the “researcher’s conditions as an intervening subject” are determined as the main components of “understanding” in a theoretical framework. Finally, the standing point of landscape architecture is explained in comparison with this framework. The results show that to produce knowledge in landscape architecture, in addition to four common forms of understanding/perception in the field of architecture including “Irregular”, “Superficial”, “Deep” and “Structural”, which have already been determined in previous architectural research, another level should also be considered that is generally known as “Continuous” understanding. By focusing on this level of understanding and using the two techniques of “Triangulation” and “Crystallization”, it can open up new horizons in landscape architecture to address issues with multiple interpretations of subjectivity and to validate the findings.

Keywords | *Landscape Architecture, Understanding the Precedents/Background Knowledge, Case Study, Research Design, Holism.*

Introduction | In architecture, as much as understanding the background knowledge known as precedents is common, creativity is equally emphasized. In this condition, “a proper understanding of precedents” is

important for society, professionals, and researchers; because the process of emerging creativity from determining concepts is complex in somehow and it can also put the understanding under the charge of “imitative” or “heretical”. Based on this, the researchers have addressed three main issues so far in this regard: “How to extract

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the applied knowledge from a background as a systematic educational tool?”, “Defining the proper conception of theorizing and evaluation” and “Clarifying the difference between educational or research cases study”. What makes the definition of perception in architectural landscape an unclear issue that requires further research, is the inevitability of interpretation due to the role of subject in architectural landscape.

According to the theory of representation, people with different specializations and the lifeworld represent the landscape in different ways. For example, according to Corner (1992), a painter, an environmentalist, a mining engineer, an architect and a poet, etc. represent a landscape in different ways. Now considering that a landscape architect is all of them, but none of them (Doherty & Waldhiem, 2015), the question here is, what should the representation in landscape architecture look like? Moreover, the time for a landscape cannot be a static issue, but must be a continuous one. If it is not so, it's look like seeing a dynamic place from just one point of view; Beside this, the landscape architect, unlike a painter, who himself represents the landscape in a painting frame, does not have direct access to the landscape, and they are people who make the landscape (Corner, 1992); Furthermore, what is the criteria for interpreting [the precedents] and the role of landscape architect in situations where representational forms are incomparable, contradictory, or conflicting? (Fig. 1).

So the research question here is about the way in which the inevitability of interpretation affects the meaning and method of properly understanding the precedents of landscape architecture to produce knowledge? The research hypothesis states that the proper understanding of landscape architecture's background has semantic and methodological differences compared to its adjacent disciplines, which place less emphasis on the role of the subject. Failure to pay attention to these differences can reduce the ability to produce knowledge in landscape architecture and might disrupt the comprehension of complex issues that this field is faced with. The reason is

that the landscape architecture need to produce strong knowledge to play its role in society as a discipline. In other word, the inevitability of interpretation in this regard, does not imply that any interpretation is valid, however it does not necessarily deny the infinity.

Research background

The precedents [in architecture] means that the previous designs of other architects are being used as a source of knowledge for the art of design to be exploited in future applications and creativity. The use of these backgrounds can play both a destructive or constructive role in creativity (Mahmoodi & Zakeri, 2011). In recent research studies, unlike the classical approach, the application of background knowledge is inevitable. Today's issue is to study the “conditions of perceptions/understandings” from which creativity emerges from the background (Crilly, 2015, 2019; Sio & Kotovsky, 2015).

Alipour, Faizi, Mohammad Moradi & Akrami (2017), while referring to the discussion of “research design” and focusing on “the conceptual model of input, process, and output” (Fig. 2), have defined the proper understanding of architectural precedents as: “Achieving the creative level through the structural understanding” (Table 1). They have proposed two criteria for evaluating the proper understanding of the background in the above sense:

1. Evaluating the creativity of an idea (quality, innovation, diversity, and quantity);
2. Having a structural similarity with the background knowledge/prototype which is reviewed by experts.

But considering that in today's world most of the landscape architects are trying to be holistic (Thompson, 2017), there are still some ambiguities in this regard. Although, holism overthrows any dualism, including object and subject, but, it also conveys the meaning of “synergy” as “something beyond the algebraic sum of the components.” In other words, it bears a Gestalt quality in itself (Sadeghi, 2019) which, according to Deleuze's definition, is related to the difference between “part and whole” and “general and specific” (Deleuze, 1968). Therefore, what has not

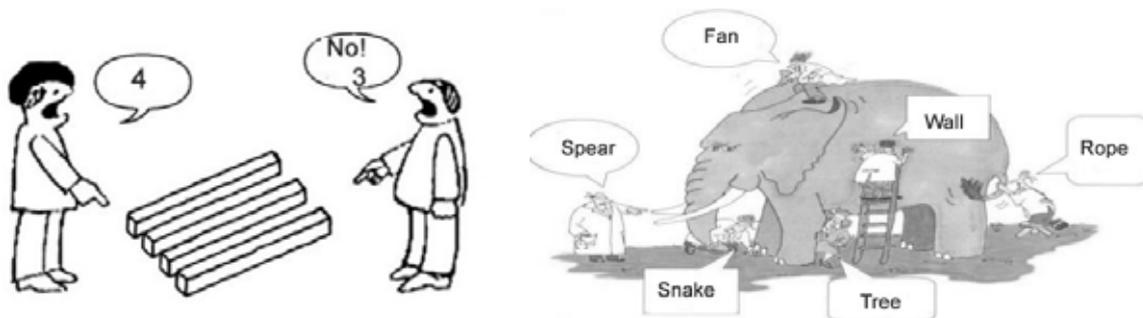


Fig. 1. The ambiguity of the correct understanding is due to the inevitability of interpretation. Source: Adopted from www.slideshare.net

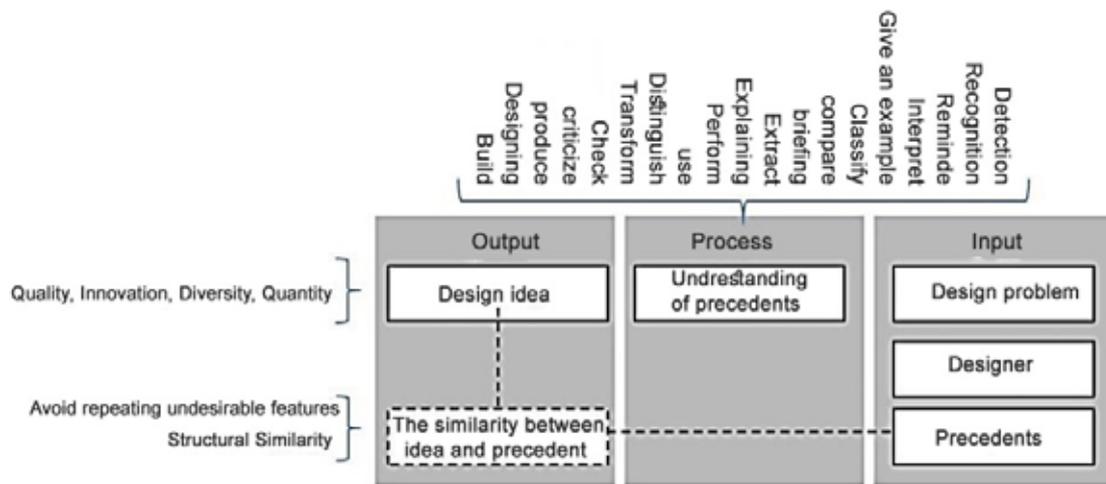


Fig. 2. The main components of proper understanding of background knowledge based on the 'input, processing and, the output' structure of a design. Source: Alipour et al., 2017.

been considered in discriminating between the types of understanding backgrounds in Table 1 is the concept of “synergy” as another level of source than “components” and “relations”, that knowledge can be established on. Moreover, in previous research studies, the role of interpretation by a researcher/designer has not been considered that much. That is, the transmission of something from the source through the subject (researcher) is assumed to be a neutral activity; for this reason, in the input section of Fig. 2, no condition has been considered for the designer and the design issue; this situation is not inconsistent with the landscape architecture theory. It is because, the meanings in landscape architecture are not independent, constant, absolute, antecedent, and abstract, but rather are dynamic, conditional, incidental and concrete (Thompson, 2017). Therefore, it is required to redefine first the types of backgrounds perception by addressing two components, the “precedents as a source of knowledge” and the “role of the subject in research/design”, and then determine the standing point of landscape architects towards these two components in producing knowledge.

The theoretical foundations and research method

The two components, “the way of knowledge establishment in background” and “the role of the subject in research/design” can be categorized from different perspectives. Therefore, it is necessary to first determine a third component, as a scale or structure for classification according to the research question. In this study, considering that “knowledge production” as the aim of interpretation, first its concept is going to be defined as a necessary structure for classification; then based on this, the standpoint of “precedents” and the condition of “subject” in relation to it are discriminated and the possible relations will be analyzed (Fig. 3).

To do this, a qualitative research approach has been selected. First, according to the research question, the literature of three main areas of “case study”, “landscape architecture theory” and “research and design” have been reviewed. In this way, the concept of “knowledge production” is first explored. Then, by analyzing the qualitative content of the experts’ opinions, the

Table 1. Different Types of understanding the precedents. Source: Adopted from Alipour et al., 2017.

	Type	Definition
Proper understanding	Structural	Transferring the relations between the “components” of the source
Improper understanding	Superficial	Transferring the “components” of the source
	Deep (copy)	Transferring both of these sources, “components” and “relations”
	Irregular	Failure to transfer ... correctly from source

“precedents” and “subject” conditions are classified in the form of theoretical foundations. Finally, by using the logical reasoning, while redefining the possible types of understanding precedents, the position of landscape architecture is analyzed and presented as the goal of knowledge production.

• Knowledge Production

The precedents are considered by two groups:

1. The professionals with a focus on work;
2. The theorists with a focus on theory. Although, the separation of these two groups, at least in landscape architecture, does not mean the absolute separation of theory and work (Deming & Swaffield, 2011). This is not to say that merely the theory as [the component of] the knowledge can empower a discipline; in other words, the production of a theory is only one component of knowledge production in a systematic form. In this regard, instead of addressing the bipolarity of “Profession and Knowledge” or “Work and Theory”, we should pay attention to the difference between the concept of “Project Research” and “Research Project” (Bruns, Brink, Tobi & Bell, 2017), or the difference between an ‘Idiographic’ and ‘Nomothetic’ concept (Groat & Wang, 2012). That means, is there any attempt to expand the results in the Knowledge Network, according to Fig. 4? Or is there any effort to equip the action in other situations beyond the individual situation of doing research or making a design?

In this regard, Malekafzali (2019) has focused on the ambiguity that Langrish (1993) has mentioned about “training and research differences” and “the meaning of research” as two sources of confusion for a case study. In his view, the difference between training (a project research) and research (a research project) can be demonstrated in a range of seven scales. The highest level in this range is the transition from training, and achieving the ability of not being satisfied with the [available] precedents and create conditions for their transformation (Fig. 5). Based on this, it can be said that the level of knowledge production (regardless of the structure shown in Fig. 4) is determined according to the situation of two components: “The appropriateness of precedents to use” and “The intention

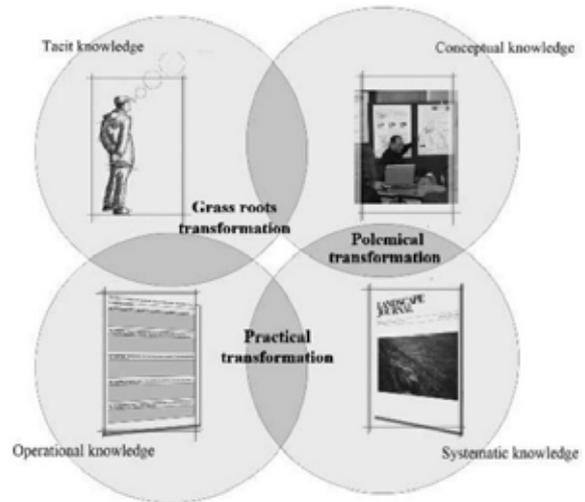


Fig. 3. The Theoretical foundations of the research problem. Source: authors.

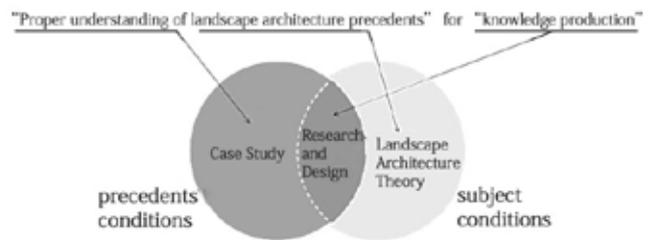


Fig. 4. The Complex relations between profession and knowledge. Source: Deming & Swaffield, 2011.

and requiring a level for keeping the familiarity with the precedents”.

- The condition of precedents

The previous research studies have pointed to many of the “precedents” conditions as a source of data, but what is being pursued here is to have a focus on “the actual and appropriate level of precedents to use”.

Soltani, Mansouri & Farzin (2012) in their hypothesis claim that precedents are “pattern” rather than a [constant] example for imitation. They have shown that the precedents can be addressed in different ways, depending

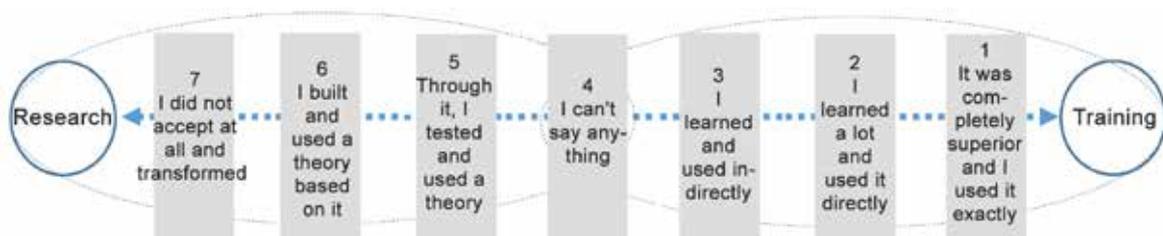


Fig. 5. A range of seven scales ‘from training to research’ for knowledge production. Source: Malekafzali, 2019.

on how they transfer the human achievements to the next generation as: “principles”, “schema”, “archetype”, “general solution”, “typology”, “paradigm”, “prototype”, “model” and “symbol”. Khozaei & Khalouee (2017) have described the precedents in three forms: “perfect model”, “partial model” and “source of inspiration”; Alipour et al. (2017) have shown that the precedents as a “source of knowledge” include “transferable components and relations”.

Svengren (1993) points out that the precedents are not necessarily a “controllable” [entity], but rather bears a “valuable objectivity”. According to Deming & Swaffield (2011), precedents include varieties that are not breakable into components, and if they have been classified into groups and carry specific names, are called ‘Type’. If beyond this classification, include a kind of hierarchical relation, they can be called “Taxonomy”. On condition that the precedents follow an abstract or graphic-mathematical algorithm, they are known as “Topo”. Ultimately, these researchers refer to precedents as “Archetypes” with a kind of confusion. While introducing “archetype”, they only refer to the open identity of it, besides having the principles

Scott (2018) has paid more attention to precedents as an archetype; To him, they are never static and neutral. They are something like physical and concrete entities that are set to decay. Only “Style” is immortal, however, it is not apart from the physical and concrete form. So some sort of intangible essence within the precedents’ style can resist decay. The precedents have a multi-capacity nature that would be interpretable through the chosen approach. The precedent of a translatable text is always open and beyond its prosodic weight, has a beating heart. In Scott’s view, the precedent as archetype is a compact mixture of all possible examples, both in the past and future. This compact mixture is necessarily grounded in a sample, pattern, or model of a style. Svengren (1993), Francis (1999), Johansson (2003), Prominski (2017) and Swaffield (2017) also do not suggest any other conditions for precedents than what has been said here.

Thus, in general, based on the different levels of “actuality

and readiness for use”, precedents can be divided into a range of four-step from “formed and closed” to “unformed and open”. The different forms of knowledge presence in the precedents (as a source of knowledge) according to this range of assortment can be called “Non-systematic”, “Type”, “Topo” and “Arche”, respectively (Fig. 6).

• The subject conditions

The previous research studies have frequently pointed to the “subject” conditions in a research, but what is being pursued here is to have a focus on “the requiring or intention level to keep maintaining the familiarity with the precedents”.

Some researches (e.g. Mahmoodi & Zakeri, 2011; Mahmoodi & Nari Ghomi, 2014; Soltani et al., 2012; Alipour et al., 2017) in their hypothesis believed that the intent of a researcher is to extract applied knowledge from the backgrounds with the help of a specialized and experienced model. Through this process, besides acquiring the creative solutions, the formal atmosphere of design studios that are virtual and non-compliant with the real needs of the environment and users will be prevented. According to this study, a researcher/designer is an experienced and knowledgeable expert who is able to apply the familiar patterns to separate the components and relations of precedents, and prepare them to get transferred to other situations. Indeed, some degree of destruction, interpretation, and alteration by the researcher is allowed. For instance, it has been suggested that the researcher should not repeat the exact style of the background pattern, but instead, the recurrence of them in the form of theory is highly recommended. Therefore, some degree of de-familiarization with the precedents is admitted, as long as its historical order and identity will be kept; however, the extent and role of the researcher as a “subject” has not been discussed according to the ‘representation theory’.

Some other researches expand the role of the researcher from “passive consumer” to “leader” or “pioneer”. These research groups, by shifting to the design research as a new paradigm of knowledge, practically consider the

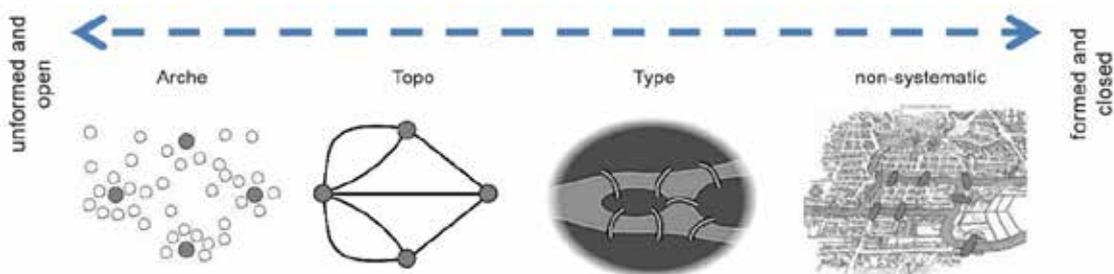


Fig. 6. The different forms of knowledge establishment in precedents in terms of readiness for use. Source: authors.

researcher's effective role as an active intervener (e.g. Deming & Swaffield, 2011; Lenzholzer, Duchhart & Brink, 2017). Most of these researches recommend using the "triangulation" technique to deal with unfamiliarity in design/research problems (e.g. Johansson, 2003; Groat & Wang, 2013; Deming & Swaffield, 2011; Swaffield, 2017). Among this group of studies, Armstrong (2000) specifically referred to the difference between "triangulation" and "crystallization" concerning the representation theory. In this context, she first explains that Metaphor and Imagery as a design activity means to reverse the familiarization process: the rendering of familiars unfamiliar, not making the unfamiliar acquaint. She then describes "triangulation" as a kind of study and interrogation of different views (including theories, methods, data sources, etc.) which are accepted for qualitative research studies. That is, for example, in a design studio, the students, tutors, and users as different subjects represent the design problem from different perspectives. In this way, different representations are criticized to render a complete and valid picture of the problem and the solution. Despite this, she argues that "triangulation" is a limited way of evaluating creative works; and believes that the 'crystallization' is able to overcome this limitation. In crystallization, the hierarchy of tutor and student is largely eliminated. It means, the hierarchical relation of "general and specific" will be substituted by the non-hierarchical relation of "part and whole". According to her definition, crystallization rejects the 'positivist ideas of a well-resolved position' or 'the best solution for problem solving' and most focus on the importance of the struggle, ambiguity, and contradiction; So crystallization is kind of 'de-familiarization' in which, the role of a researcher as the subject is defined to enter into an open process and allow the examination of different aspects without the disintegration of the whole concept. The aim of crystallization is to reveal a complete novel situation to achieve a non-reflective object. With this technique, the subject tries to reach something non-representational and resisting against assuming the familiar information as an eternity achievement. Therefore, the subject position against the "tendency for keeping familiarity with the precedents", can be divided into a range of four-step position: from "keeping

familiarity" to "leaving familiarity". The different roles of the researcher/designer as a subject according to this range can be defined as "Non-theoretical", "Theoretical-disinterestedness", "Combined theory in Communicative/ Participatory form" and "Combined theory in Differential/ Resistance form", respectively (Fig. 7).

The Theoretical Framework

Relying on the theoretical foundations, by combining the assortments of "establishing the knowledge in the precedents" (See Fig. 6) and "the role of a researcher/designer" (See Fig. 7), the varieties of background's interpretations can be represented in the form of a theoretical framework (Fig. 8). According to this framework, all the possible types of properly understanding the background perception, including the "irregular", "superficial", "deep (or copying)" and "structural" that previously been discussed by researchers (Mahmoodi & Zakeri, 2011; Alipour et al., 2017) the "continuum" perception can also be considered.

According to the comparison made in this framework (See Fig. 8), it can be seen in "superficial understanding" that only activities such as photography without any rules are considered, the researcher irregularly transfers the "components" without any intervention or even awareness.

In "deep understanding," which includes the use of a unit or specialized model for analyzing, the researcher consciously transfers both "the components and relations" in the precedents with the least defect to the similar conditions. In "structural understanding" which involves abstracting the backgrounds by taking the time and space out of it, the researcher as a subject has the possibility of comparing a large number of 'unknowns', 'differences', and 'variations' from all reflecting views, based on the triangulation method. In this way, the researcher transfers "no components, but the relations" while making the necessary changes.

In "continuum understanding", which includes activities in order to "turning the familiar into unfamiliar" and "leaving the reflecting attitude", the new subjectivities and forms of lifeworld allow the possibility of signifying and communicating the precedents for making new differences in Arche style, as the most constant

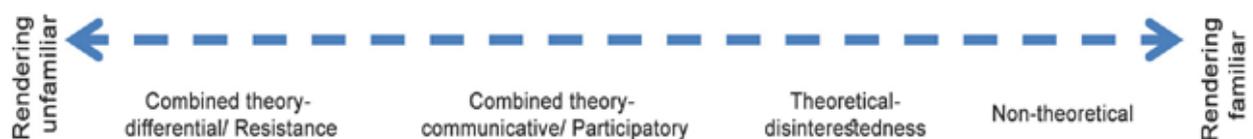


Fig. 7. The different roles of researcher/designer as a subject in terms of keeping familiarity with precedents. Source: authors.

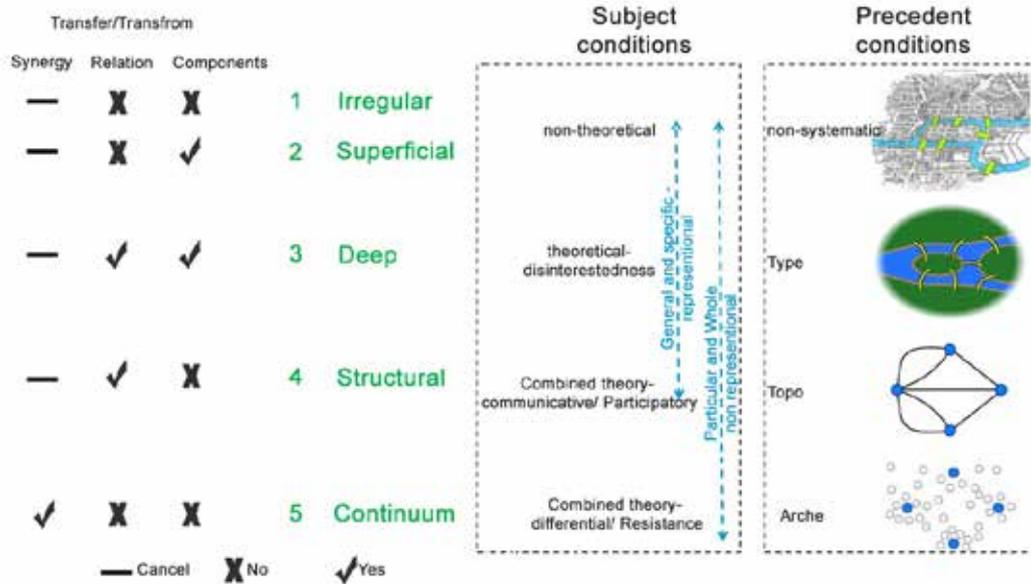


Fig. 8. Redefining the types of precedent understanding/perception. Source: authors.

background (a continuum amorphous entity). It means, in addition to “repeating something specific from a general item” through “comparing”, it has the possibility of making changes in the “synergy” of the whole. So, the “crystallization”, as a non-reflective and non-structural interpretation approach transforms not merely the ‘components’ or ‘relations’ alone, but also the ‘whole entity’ as a complex of differences that is ‘synergy’, through resisting against a reflecting view toward the landscape.

Discussion and analysis

Now, through the theoretical framework described earlier (See Fig. 8), the landscape architecture position can be determined to identify the correct perception of the precedents in knowledge production. The most experts in the field of research methodology and landscape architecture theory, argue that it has a multidisciplinary and combined position with a borderline or return situation that includes a range of choices between 3 and 4 groups of paradigms (Table 2).

This combined position is because of addressing the

ambiguities in this field, with a high level of complexity, uncertainty, and significant value difference among the beneficiaries (Backhaus, Fryd & Dam, 2017). The process of comprehending issues is the same as understanding the nature of the problem, which is also referred to as “framing the problem through design” (Shariatrad & Nadimi, 2017). This is why the landscape architecture is considered to be a design-based discipline (Giro, 2013), in which research design is considered as a new paradigm of knowledge production (Lenzholzer et al., 2017; Armstrong, 2000); Of course, in this context, it is recommended that the science advantages should not be merged with the scientism (Thompson, 2017).

Therefore, in landscape architecture, intellectual views, close to post-positivism are presented only as a point of view and are not individually considered as an excellent level of knowledge production, since, according to it, the objectivity is assumed to have no value. The current debate in landscape architecture is about setting criteria for distinguishing knowledge from deception, fault and its belongings to expand it in a world where interpretation is an inevitable affair. Based on this, totally three conceptual

Table 2. The available valid paradigms in landscape architecture research. Source: authors.

References	Paradigm groups			
Swaffield (2002)	Fundamental	Hermeneutics	Critical	
Deming & Swaffield (2011)	Objectivist	Constructivist	Subjectivist	
Thompson (2017)	Natural science	Humanities	Art	
Lenzholzer et al. (2017)	(post) positivism	Constructivism	Transformative	Pragmatism

range of validated interpretation can be observed. In this case, some consider ‘benefit’ and others “considering/ counting the unconsidered/uncounted issues” as an extremity for diagnosis (Table 3).

Accordingly, in landscape architecture, three ranges of ‘validated interpretation of precedents’ are considered. The first position, as a minimum, is “the basis of a combined approach”, which is not a matter of controversy. The second position considers “structures” to be the ultimate limit for ‘destructing, interpreting, and transforming’ the precedents and, the third position points to the ‘admission limit’ for exposing the structure removal in order to reveal what is behind its shadow. Because the only way to reveal the intrinsic differences between each landscape, and the way to produce powerful knowledge at the highest level is uncovering of what has been remained unconsidered under the cover of any structure. Hence, there is a controversy between the second and third positions about the maximum allowable level of destruction, interpretation, and transformation.

Accordingly, the lowest and highest recognized range for a proper understanding of the landscape architecture’s precedents can be arranged according to Fig. 9. In this relation, the production of knowledge in each of the positions has the same seven ranges of training-research that was mentioned earlier in Fig. 5; it is because the transformation and creation can occur in either of “Types” (relations and components), “Topos” (relations) or “Arche” (synergies). The example shown in Fig. 9 presents only one layer. Depending on the desired type of representation for a researcher/designer in the process of understanding the precedents, the overlapped layering should be considered.

Conclusion

The findings show that it is inevitable to interpret and understand the landscape architecture precedents and to face with the multiplicity of different forms of representation in their interpretation. In this situation,

to provide credibility for academic rigor a methodology to be reliable and creative, the landscape architects, proposing “crystallization” to be applied in addition to “triangulation”. The difference between these two forms of rigor [approaches] makes not only the “irregular” and “superficial” understanding unfavorable in landscape architecture, but it also demands a research attempt beyond the “deep understanding” as the minimum, to evaluate the necessity and possibility of “continuum understanding,” which is another concept that differs from the “structural understanding.”

In “triangulation”, the landscape architect determines the commonalities among all the possible representations available in the precedents; then he/she tries as a mediator to classify and prioritize the most agreed representations to find out the most effective solution. That is, it adopts an approach that has several uses but also includes specific meanings; To the extent that the concept of “being useful” is not impaired based on the current rationality.

In “crystallization,” the landscape architect rearranges all the [possible] representations, not for exploring the common aspects among them but to identify what is absent in the representations. In this way, the role of the landscape architect seems to be a signifier. He/she is looking for the most discriminating representation which has not yet been considered in classifying a problem. That means, it is an approach that is something apart from the “general and specific” order. It tries to reveal a particular uncovered concept as another remaining representation, that in the communicative/ participatory process has not been able to play its singular role in emerging a new synergy, as a component of the whole in the precedents.

In sum, what has been concluded is the existence of concepts such as “Arche”, “Non-representational theory” and “Crystallization”, represent that at the position of a landscape architecture, the “structural understanding” is not necessarily the proper understanding as should

Table 3. The available differences in positioning towards the meaning of combined approaches in the inevitable conditions of interpretation in the field of landscape. Source: authors.

Some references	Some of the referred philosophers	Criterion	Approach
Corner (1992) Armstrong (2000) Thompson (2017)	Popper, Heidegger, Habermas, Derrida	Use	The best performance, based on the existing structures is considered as the best possible option. Gradually, the problems of the structure are solved.
Meyer (1997) Boano (2017) Berque (2020)	Deleuze, Heidegger, Agamben, Rancière	Counting/ Considering the Uncounted/ Unconsidered	Subtraction of the subject from the apparatuses which consciously or unconsciously made an agreed domination; Not just for a moral gesture, but because of a need to understand the problem and make a change in the whole set.

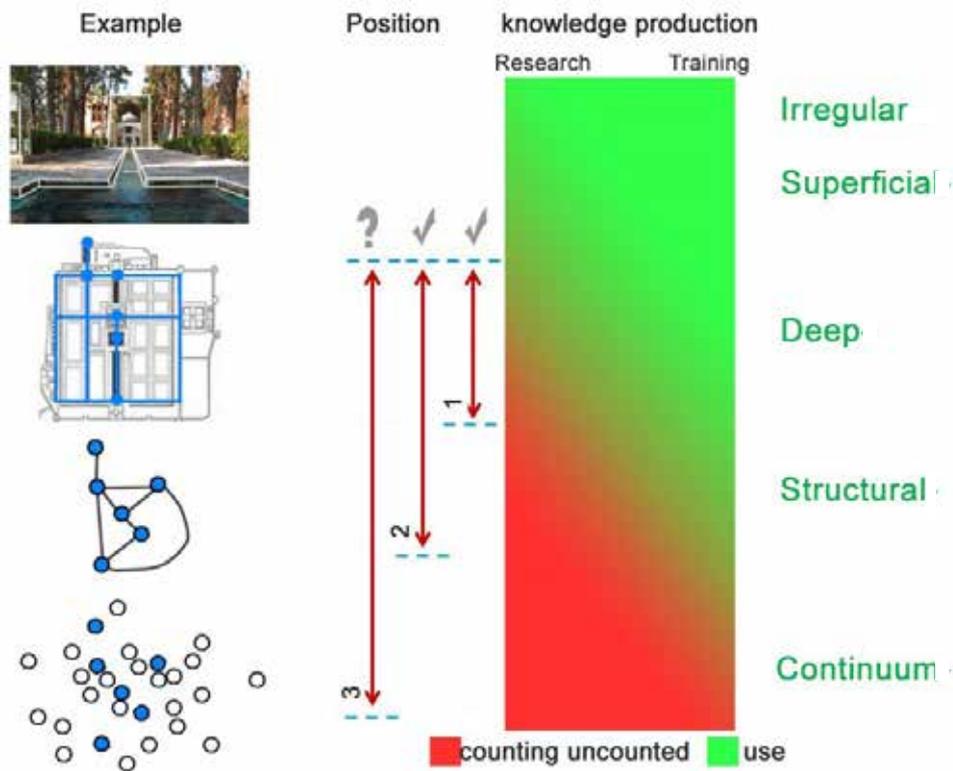


Fig. 9. The comparison of landscape architecture position with different redefined types of understanding the precedents. Source: authors.

be. In landscape architecture, to produce knowledge at its highest level, attempts are being made to ensure that the “structural understanding” does not ignore the concept of “continuum understanding”; otherwise, the

discipline’s capacity would be limited to address the ambiguity problems in design-based concepts in which local and global knowledge are sometimes in conflict with each other.

Endnote

*This paper is extracted from Ph.d. Thesis of “Seyed Amir Hashemizadegan” entitled “The role of hermeneutic understanding of a case in landscape’s phenomenological design” which is being conducted under supervision of Dr. Seyed Amir Mansouri and Dr. Nasser Barati, in Faculty of Architecture, university of Tehran, Tehran. Iran.

Reference list

- Alipour, L., Faizi, M., Mohammad Moradi, A. & Akrami, Gh. (2017). The True Mapping from Precedents in Architectural Ideation. *Honar-ha-ye Ziba*, 21(3), 81-90.
- Armstrong, H. (2000). Design as Research: Creative Works and the Design Studio as Scholarly Practice. *Architectural Theory Review*, 5(2), 1-13.
- Backhaus, A., Fryd, O. & Dam, T. (2017). The Urban Water Challenge. In A. Brink, D. Bruns, H. Tobi & S. Bell (Eds.), *Research in Landscape Architecture: Methods and Methodology*. New York: Rutledge press.
- Berque, A. (2020). What do we have in common in the landscape? *MANZAR*, 11(49), 58-65.
- Boano, C. (2017). *The Ethics of a Potential Urbanism: Critical Encounters between Giorgio Agamben and Architecture*. New York: Routledge.
- Bruns, D., Brink, A., Tobi, H. & Bell, S. (2017). Advancing Landscape Architecture Research. In A. Brink, D. Bruns, H. Tobi & S. Bell (Eds.), *Research in Landscape Architecture: Methods and Methodology*. New York: Routledge press.
- Corner, J. (1992). Representation and Landscape. In S. Swaffield (2002). *Theory in Landscape Architecture: a Reader*. Philadelphia:

university of Pennsylvania press.

- Crilly, N. (2015). Fixation and Creativity in Concept Development: The Attitudes and Practices of Expert Designers. *Design Studies*, 38, 54-91.
- Crilly, N. (2019). Creativity and Fixation in the Real World: A Literature Review of Case Study Research. *Design Studies*, 64, 154-168.
- Deleuze, G. (1968). *Difference and Repetition*. (Translated from French to English by P. Patton). New York: Columbia University Press.
- Deming, M. E. & Swaffield, S. (2011). *Landscape Architectural Research: Inquiry, Strategy, Design*. New York: Wiley press.
- Doherty, G. & Waldhiem, C. (2015). *Is Landscape...? Essays on the Identity of Landscape*. London: Routledge.
- Francis, M. (1999). *A Case Study Method for Landscape Architecture*. Washington DC: University of California and ASLA foundation.
- Girot, C. (2013). *Topology: Topical Thoughts on the Contemporary Landscape*. Berlin: jovis.
- Groat, L.N. & Wang, D. (2012). *Architectural Research Methods*. (Translated from English to Persian by A. Einifar). Tehran: University of Tehran.
- Groat, L. & Wang, D. (2013). *Architectural Research Methods*. (Second edition), New Jersey: John Wiley & Sons, Inc.
- Johansson, R. (2003). Case Study Methodology. *A key Note Speech at the International Conference "Methodologies in Housing Research"*. Stockholm: the Royal Institute of Technology in cooperation with the International Association of People-Environment Studies.
- Khozaei, F. & Khalouee, M. (2017). Do Design Precedents Encourage Copy- Paste or Creativity in Landscape Design? *MANZAR*, 8(37), 14-21.
- Langrish, J. (1993). Case Studies as a Biological Research Process. *Design studies*, 14(4), 357-364.
- Lenzholzer, S., Duchhart, I. & Brink, A. (2017). The Relationship between Research and Design. In A. Brink, D. Bruns, H. Tobi & S. Bell (Eds), *Research in Landscape Architecture: Methods and Methodology*. New York: Routledge press.
- Mahmoodi, S.A.S. & Zakeri, S.M.H. (2011). Influence of Design Precedents of Creativity. *Honar-ha-ye Ziba*, 3(47), 39-50.
- Mahmoodi, S.A.S. & Nari Ghmoi, M. (2014). Post Occupancy Evaluation: An Educational Goal and Tool in Architecture. *Honar-ha-ye Ziba*, 19(1), 71-82.
- Malekafzali, A. (2019). Shenasaei va Sanjesh-e Fonon-e Rayej dar "Mota'le-ye Moredi baraye Tarahi-ye Me'mari" [Assessing the Common Techniques of "Case study for architectural design"]. manuscript accepted for publication in *Soffeh*.
- Meyer, E. (1997). The Expanded Filed of Landscape Architecture. In S. Swaffield (2002). *Theory in Landscape Architecture: a Reader*. Philadelphia: university of Pennsylvania press.
- Prominski, M. (2017). Design Guidelines. In A. Brink, D. Bruns, H. Tobi & S. Bell (Eds), *Research in Landscape Architecture: Methods and Methodology*. New York: Routledge press.
- Sadeghi, R. (2019). The Nature of Paradigm and its Holistic Aspects. *Metaphysics*, 11(27), 129-156.
- Scott, F. (2018). *On Altering Architecture*. (Translated from English to Persian by A. Einifar, E. Masoud & N. Golchin). Tehran: Ketab-e Fekr-e No.
- Shariatrad, F. & Nadimi, H. (2017). Problem framing: the designer way of tracking design problem. *Soffeh*, 26(3), 5-24.
- Sio, U. S., Kotovsky, K. (2015). Fixation or Inspiration? A Meta-Analytic Review of the Role of Examples on Design Processes. *Design Studies*, 39, 70-99.
- Soltani, M., Mansouri, S.A. & Farzin, A.A. (2012). A Comparative Study on the Role of Pattern and Experience-Based Concepts in Architectural Space. *Bagh-e Nazar*, 9(21), 3-13.
- Svengren, L. (1993). Case Study Methods in Design Management Research. *Design Studies*, 14(4), 444-456.
- Swaffield, S. (2002). *Theory in Landscape Architecture: a Reader*. Philadelphia: University of Pennsylvania press.
- Swaffield, S. (2017). Case study. In A. Brink, D. Bruns, H. Tobi & S. Bell (Eds), *Research in Landscape Architecture: Methods and Methodology*. New York: Routledge press.
- Thompson, I. H. (2017). The Role of Theory. In A. Brink, D. Bruns, H. Tobi & S. Bell (Eds), *Research in Landscape Architecture: Methods and Methodology*. New York: Routledge press.

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