Theseus' paradox: history, authenticity and identity

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ABSTRACT: In the Life of Theseus, Plutarch observes: "The ship on which Theseus sailed with the youths and returned in safety, the thirty-oared galley, was preserved by the Athenians down to the time of Demetrius Phalereus. They took away the old timbers from time to time, and put new and sound ones in their places, so that the vessel became a standing illustration for the philosophers in the mooted question of growth, some declaring that it remained the same, others that it was not the same vessel." (Plutarch, Perrin, 1914, V1, 49). Thereafter, the paradox sparked discussion regarding an object's authenticity and identity. For Barthes (1974), the paradox presents form-permanence as a Structural argument. Walter Benjamin (1969) disagreed noting that "[t]he presence of the original is the prerequisite to the concept of authenticity." When original producers are not available we can evaluate the relationship of contemporary design with historic modes of production through Material Culture. By privileging knowledge of what the spatial product is and how it was produced, the essay examines the role of History in addressing spatial authenticity. The essay uses Theseus' Paradox as a theoretical framework to evaluate authenticity and identity. Architectural objects either continue or discontinue the aesthetic language of their context: as designers cite History to generate designs claiming contextual site sensitivity, it is important to evaluate the validity of this approach. Specifically, Theseus' Ship is deconstructed using the philosophical arguments of atomism and essentialism. Atomism, a Positivist tool, determines elementary physical characteristics of a society's spatial practice. Essentialism (Aristotle) focuses on the nature of the spatial product: what it has been, it is, and could be. Designers can use Theseus´ Paradox as a comparative framework to evaluate to what degree their proposal continues authentic modes of production rooted in historic spatial traditions and identity-based placemaking.

KEYWORDS: Theseus, History, Authenticity, Identity, Design

INTRODUCTION

Placemaking based on sociocultural traditions has greatly diminished because of two major challenges: The first is Modernism's and Post-Modernism's embrace of differentiation; the second is the phenomena of globalization. On one hand, the advent of Modernism's willful rejection of the past and its spatial production traditions represented a major break with history and context. Practitioners, individually or as part of the organizations such as CIAM, embraced the idea of international fraternity that believed in Modernism's *meta-narrative* promise of progress. While Post-Modernism provides a more democratic approach to design, including quoting the built past, most designers view this approach as kitsch or façadism. On the other hand, globalization, already a historic *de facto* process when one group conquered or traded with another, accelerated with each Revolution: Scientific, Industrial, and now, the Digital/Information. Globalization, driven by the logic of capital and its market-oriented forces, promotes an increasingly homogenized environmental aesthetic.

The above challenges to spatial identity have led some specialized spatial producers (i.e. architects, landscape architects, urban designers, and planners) to push back on the pervasive homogenized spatial production by employing a strategy of producing what they call an "authentic" spatial "identity." This focus evokes the question: What makes a space, a place? As designers cite location and site-specific History to generate designs claiming sensitivity to palimpsest contextual spatial production, it is important to evaluate the validity of this approach. Can contemporary designers claim that historically rooted and contextually sensitive design is

authentic, and hence preserves or augments place identity? If so, how do we determine if a design is authentic? To answer these questions, the essay utilizes the Paradox of Theseus' Ship.

The Paradox of Theseus' Ship demonstrates that identity based on authenticity is one that exhibits that *essential nature* of the object: not just *how* something looks –surface appearance-, but also *how* is it made, and what is the purpose or "final cause."(Aristotle*, Barnes*, 1995) of an object. The essay will use the Paradox to explain how these questions inform and guide design. First, the paper will recount the Paradox to illustrate the philosophical implications regarding identity and authenticity. Second, the paper will explain and demonstrate how the philosophical ideas of atomism and essentialism are appropriate tools to determine what is authentic. Finally, using the previous discussions, the paper proposes an evaluation methodology that identifies types of spatial production, by which designers can evaluate their own design proposals within the context of spatial identity and authenticity.

1.0 THE PARADOX

1.1 Understanding the paradox
In the *Life of Theseus,* Plutarch makes a seemingly simple observation:

> The ship on which Theseus sailed with the youths and returned in safety, the thirty-oared galley, was preserved by the Athenians down to the time of Demetrius Phalereus. They took away the old timbers from time to time, and put new and sound ones in their places, so that the vessel became a standing illustration for the philosophers in the mooted question of growth, some declaring that it remained the same, others that it was not the same vessel. (Plutarch, *Perrin*, 1914, V1, 49).

Thereafter, the Paradox has sparked discussion regarding an object's *authenticity* and *identity.* The anecdote presents the reader with the description of an object: a sea-going ship purportedly used by Theseus. Because of its historic importance, the "Athenians" decide to preserve the ship at port, so that the then current and future generations of Athenians and visitors, can experience the ship. Plutarch notes that the ship required maintenance, whereby "old timbers" are replaced by "new and sound" timbers. Herein lies the paradox: if the object has any part of it replaced, can it still *be* the *same* object. Can new components claim to have the same *authenticity* as the original components? If we substitute the Ship with "site" (regardless of scale), and ship components with spatial products, can a present day spatial product claim to be authentic even employing the forms of its context? As Plutarch further notes, the paradox serves as a "standing illustration" for what was then an already lengthy debate about identity and authenticity. At the heart of the question is what makes an object what it is, or in philosophical terms, its *quiddity*.[i]

The paradox exhibits the intrinsic relationship between authenticity and identity. Plutarch's establishes that
1) there is an initial condition of production for the object –the Ship, hereafter S_0;
2) the Ship is composed of smaller parts, which configured together in a particular way are understood as the object;
3) the object's components were exchanged for similar (perhaps replicated) components as maintenance required;
4) Plutarch asserts that the Ship "returned safely," transforming the Ship from a sea-going vessel to a *monument*.[ii] Therefore, the *function* of the Ship has changed.
5) the question of identity of the object arises after the replacement of ship parts.
6) when a part, or parts, of the Ship S_0 are replaced, each change *may*[iii] represent a new Ship, hereafter S_1, or Ships S_2, S_3, and so on, but will never again be S_0.

If we exchange "Ship" for "project" located in a physical space, which we take as the initial contextual condition (equivalent to S_0), we understand the application of the paradox to spatial production. Spatial production, regardless of scale or object type (teapot, building, landscape, or city plaza), incorporates the same assertions about process, components, authenticity, and identity. Contemporary modes of spatial production based on historic factors, such as

aesthetics, materiality and traditions, claim to perpetuate genuine place identity. This is because designers quote existing historic and contextual spatial objects to justify their design as preserving or augmenting place identity. If the replacement of any part of the object renders the Ship inauthentic, then by extension, any object produced today, whether a building or a landscape, no matter how exact of a copy of its historic context would be similarly inauthentic. Yet, intuitively, design strategies such as "Critical Regionalism" (Frampton 1981, 1) *feel* as if they genuinely perpetuate a sense of place. In order to unravel the paradox to determine the validity of this approach we must define authenticity, identity, and essence.

1.2 Defining identity

All spaces, whether *created* by nature, or *produced* by humans, possess a potential *identity* based on their essentiality. In the case of human production, Henri Lefebvre observed that societies "secrete" space (Lefebvre 2011, 38), imbuing produced space and its objects with *properties* attributed to its producer. These properties include social, cultural, and political values, made manifest by the object's appearance and function. Objects, mental or physical, generate an experience of space by their composition, configuration and qualities. Identity is a mental construct that describes an object (a thing) by the sum of its properties -its quiddity. All objects have an identity, even when the identity is a lack of singularity -as lack of uniqueness is in itself a property of the object. Moreover, identity allows cognizant living things to distinguish between one object and another, while simultaneously group objects together because of established criteria of commonality or sorting.

Furthermore, an object's identity is generated not only by the properties confined by its physical boundaries, but also by its relationship with other objects. Theseus' Ship, once a physically manifested object, occupied space, and in so doing, generated spatial relationships based on its existence. For example, the Eiffel Tower in Paris, France, would still be a tower if located anywhere else. Its location, however, at the northwest end of the *Park Champ de Mars*, with the Seine less than 100 meters away, is as much part of its identity as its iron materiality or its triangular prism form. The *identity* of the ship changed when its settings changed: from sea-going vessel to monument. Finally, identity requires a viewer, whose senses engage with the object, and whose interaction provides specific meaning. Hence, identity is heavily dependent on the value systems of producer and the individual's or groups' experience of that object.

1.3 Defining authenticity

Authenticity's etymology derives from the Greek word *authentikos*, which in turn originated from the word *authentes*, composed of "*autos* (author, self) + '*hentes*', (doer, being), from the Proto Indo-European '-*sene*' to accomplish, achieve."[iv] Authenticity is an *essential* quality that is possessed by an object because of the triadic relationship between maker (author), the process of making or spatial production (doing, achievement), and the produced object.

In *The Human Condition* (Arendt 1998, 139-148)*,* Hannah Arendt outlines in "Work" the process by which humans who fabricate, or *homo faber*, imbue *authority* in the objects they produce. Drawing from Plato and Marx, she first notes that during fabrication it is necessary to transform Nature's materials into objects. This transformation has two immediate object based results: a sense of permanence of the object (when not in use) and a sense of separation from the natural condition of its un-transformed raw component materials –a human process has rendered the object *different* from the materials whence they originate. Next, she argues *homo faber* destroys nature to produce objects, and such destruction confirms humans' divinity, as producers –we become as gods through making. Arendt is then able to argue that this divine process of destruction of the natural state to produce the human-made object confers authorship over their products. We say an object is authentic when we perceive the engagement of human processes of extraction, destruction and production that together yield an object. Authenticity is a property of an object because it requires ideation (mental construction), a process that may or not be seen but is subsumed in the product, and an object that is the product of the previous two. For Arendt, without evidence of the metaphoric or literal maker's hand in the production process of an object, or a lack of conceptualization (the idea of) making the object, there cannot be authenticity -as there is no authorship –simply

reproduction by imitation. Years earlier, Walter Benjamin had also noted the inherent problems with reproduction of any original object.

In his seminal essay, "The Work of Art in the Age of Mechanical Reproduction" (Benjamin, *Zohn,* 1968) Benjamin takes up the task of defining authenticity. He begins by noting that "the most perfect reproduction of a work of art is lacking one element: its presence in time and space, its unique existence at the place where it happens to be." (Benjamin, 220). This assertion is ever more relevant when we consider its implications regarding the built environment. After all, the greater question is can contemporary spatial production be considered authentic even when quoting its historic location and context. He further states "[t]he presence of the original is the prerequisite to the concept of authenticity." He continues by defining

> "[t]he *authenticity*[v] of a thing is the essence of all that is transmissible from the beginning, ranging from its substantive duration to its testimony to the history which it has experienced. Since the historical testimony rests on the authenticity, the former, too, is jeopardized by reproduction when substantive duration ceases to matter. And what is really jeopardized when the historical testimony is affected is the authority of the object. (Benjamin, 221).

Finally, he introduces the concept of "aura" or the quality of uniqueness possessed by the original authored object. Detached from time and place, the tradition of making, and the uniqueness of the original, each reproduced object that replicates the original diminishes in its aura.

Common to the ideas of authenticity of Arendt and Benjamin, is the assertion that authenticity requires a a) process, that is b) located in a specific time and place and, c) produced by a particularly maker. Any reproduction that does not match these conditions is considered inauthentic. On its face, this would mean that citing site historic context would be thus inauthentic design. Yet both, in noting the importance of the process, allow a way forward to produce space that does not diminish authenticity and hence the aura of place. Using their analyses it becomes clear that an attempt to *reproduce* the *original* object would be inauthentic, but producing another object, *could* be authentic. In other words, replication, that is attempting to copy the original form, results in a lack of authenticity as this new object is *not* produced by the original makers, nor at the original time and in the original place. Making a new object that shares *atomic* (formal and material) and *essential* qualities, however, could yield an authentic *new* object. It requires that the spatial producer understand and deploy knowledge of a place's atomism and essentialism.

2.0 ATOMISM AND ESSENTIALISM

2.1. Understanding atomism

This paper argues that authenticity is an *atomic* and *essential* quality possessed by the object. First, it is important to define atomism. Centuries before Plutarch's presentation of the paradox another philosopher, Heraclitus, had stated, "No man ever steps in the same river twice, for it is not the same river, and he is not the same man." (Heraclitus, *Barnes*, 1982, 50). Heraclitus assertion implies two specific conditions for an object to be considered *that* object. First, an object is the perceived sum of its components: the river is the sum of all water molecules. Second, time is a descriptive and bounding property of an object. He notes that time has elapsed between the initial stepping event and any subsequent event. Considered together, he recognizes that the river is itself ever changing (as well as the person) because the component parts, such as the water molecules, are continuously re-arranging themselves, or replaced altogether. Yet, our common sense informs us that the river is still the *same* river, regardless if the component parts (and us) have changed. This is because we *perceive* the *nature* of the object at each individual moment of the existence and over time. The philosophical idea that describes the *nature* of things based on its components is called atomism.

In the 6th Century B.C.E., Leucippus and Democritus proposed *atomism* as an ontological approach to describe the components of the physical world. As the etymology suggests, they argued for an inductive construction of the physical world taking as the starting point, (ἄτομος) "a-tomos" or atoms, particles that cannot be further "cut" in any aspect. For Democritus and Leucippus, atoms exhibit a binary relationship with spatial occupation: one of *being* or *not being* –normally a void (Taylor 2010, 72-74). Space, in turn, was defined by the quantity (*mass and volume*), configuration (*form*), and their relative position of objects to each other.

Bertrand Russell[vi] (Russell 1988, 54) employed the construction of language to demonstrate Atomism's capacity to transform generalized ideas into discrete, recognizable, and unitary concepts. Similarly, through atomic analysis, societies are distinguishable from each other not only by their rituals and value systems, but also by the *fundamental* material properties of the objects they produce. *Material atomism*[vii], as an analytical approach, describes a society's *elementary* (basic) spatial products. Material atomism analysis reveals the forms that are being identified, contested, reinterpreted, or abandoned altogether in spatial production. Material atomism is applicable at all scales of the physical world precisely because it determines the threshold at which point the product/object is recognized as *elementary*: an object whose further division results in at least two different objects with no individual-object specific *identity*. For example, if we speak of a Greek column, we may *identify* it as such because of its volutes or column fluting -all atomic identities. Should these components be removed, the object would still be a column, but it could not be *identified* as an *elementary* Greek column. Conversely, sub-atomic particles, fluting, marble, bases, can and do combine to form *elementary* objects, which in turn combine in varying quantities, to form increasingly complex objects with varying characteristics that exhibit the proprietary identity of its makers. It is these object qualities that permits them to be deconstructed as socio-culturally produced products.

Following Russell, [viii] (32-33) spatial producers can employ a positivist approach when analyzing a spatial identity product. This approach, articulated by Auguste Comte, states "[t]he basic affirmations of positivism are (1) that all knowledge regarding matters of fact is based on the "positive" data of experience and (2) that beyond the realm of fact is that of pure logic and pure mathematics." (Feigl, "Positivism") In other words, designers may formulate empirically observed rules inherent to classify each spatial particle as a component of an object's form, and then, proceed to develop criteria-based (sorting) component relationships whose configuration produce single identifiable spatial product or object.

2.2. The atomism of Theseus' ship

In presenting the paradox, Plutarch notes that the debate centers on the identity of the Ship after its "timbers" are replaced during maintenance of the Ship. Hewn and shaped timbers are an atomic component of Theseus' Ship. It is not accidental that Plutarch focuses on the timbers. Ponder the following: could the Ship S_0 be considered the same ship had it lost an oar, or all of its oars? Its sails? We could argue that we would still perceive the sail-less Ship as *the Ship* but lacking non *elementary* components. Conversely, can we call a Ship with no overall form of a Ship, the same Ship if its *structural* components have been removed? Probably not, as it could *be something else,* or at least an object in the process of *becoming* the Ship. Atomism permits the designer to investigate what are the necessary minimum components for an object to be *that* object. Roland Barthes notes this by writing

> A frequent image: that of the ship Argo (luminous and white), each piece of which the Argonauts gradually replaced, so that they ended with an entirely new ship, without having to alter either its name or its form. This ship *Argo* is highly useful: it affords the allegory of an eminently structural object, created not by genius, inspiration, determination, evolution, but by two modest actions (which cannot be caught up in any mystique of creation): substitution (one part replaces another, as in a paradigm) and nomination (the name is in no way linked to the stability of the parts): by dint of combinations made within one and the same name, nothing is left of the origin: Argo is an object with no other cause than its name, with no other identity than its form. (Barthes, *Howard*, 1974, 46)

From one point of view, so long as the replacing components were identical to those replaced in materiality and form, the Ship continued to be S_0. If this were the case, in strict analogy, any design that adheres strictly to contextual component materiality and forms, regardless of the

historic period in which these are produced would have to be considered authentic. Similarly, if we were to produce the previously mentioned Greek column *today*, complete with all its *atomic* (elementary) components, why would we still hesitate to call it a Greek column, and instead label it a Greek *style* column? Several problems exist with this point of view: First, it is doubtful that as time passed, the same maker would produce the original object and the ensuing replacement parts. Second, contemporary spatial production does not have the lived experience of the historic context. Intuitively, we tend to consider this "pastiche" (the imitation of formal qualities) or "façadism" (in this case, a concern only for how something looks), because spatial production that relies exclusively on materiality and form is lacking the qualities possessed by the original context. Yet, not all contextually sensitive design is void of authority and identity placemaking qualities.

From the opposite point of view, the first time the Ship sailed was condition S_0, and any replacement, regardless of its scale or location, meant that with each change the Ship was a different, such that with each replacement a new Ship emerged (S_1, S_2, S_3…). We can reasonably expect that the Ship's parts would have been replaced routinely during the command of Theseus himself, because of battle, sailing wear-and-tear, or even aesthetic preferences (e.g., rostrum colors). Seen exclusively from an atomistic components focus, this observation illustrates that the same Ship which left the port could *not be* the same Ship as the one that returned after its final voyage back to Athens. Hereafter, it is important to remember Arendt's and Benjamin's arguments. In the case of the former, Theseus and his crew are the maker and hence have authority to make, and in the latter, every event of the Ship –its history-, and therefore its component parts, strengthens the aura of the Ship as a whole, even when parts are replaced. This is could be why Plutarch points to the debate *after* the end of the Ship's use at sea: so that Ship S_0 must be understood as the *final* iteration that arrived back in port, no longer to be commanded by Theseus or his crew, to sail or engage in battle, but fully an object that embodies its historic experiences. This quandary suggests that atomism alone cannot solve the paradox; we must turn to another philosophical idea to arrive at quiddity of an object: essentialism.

2.3. Understanding essentialism

Object authenticity draws as much from its *process* of production and *purpose* as much as it does from its materiality and form. The primary purpose of Theseus' Ship was to sail. Its makers were aware that the Ship would require periodic maintenance to continue to perform as a sailing ship. Because of this, it is easy to suppose that its makers purposely designed a Ship that could be maintained by replacement of parts. The process and purpose of an object are *essential* qualities. Where material atomism is useful in identifying and understanding the physical substance of spatial production, *essentialism* is applied in explaining the *nature* of the object.

Essentialism is a philosophical approach that seeks to go beyond the "appearances in order to discover the hidden causes of things," (Ellis 2002, 24) and thus objects are defined by characteristics/properties that are bound in the very *essence* of the object. Essentialism requires first an affirmation of the object's characteristics/properties and thus distinguishes those properties that are intrinsic and necessary for *being* the object and those which are *accidental,* the latter defined as a *"property of an object* …. it happens to have but that it could lack."[ix]

Aristotle's proposed four "cause" categories (Aristotle, *Barnes*, 1995, 315-446) that explain physical reality and the *nature* of things: material, formal, efficient and final.[x] Of these, the first two parallel atomism's definition of the *elementary.* Material cause, as the name suggests, explains the material content of the object; formal cause explains the shape of the object. With efficient cause, Aristotle attempted to describe qualities that are not necessarily exhibited at the surface of the object itself, but are imbued into the object during its production. These qualities include individual's or groups' socially constructed value systems operating during object production such as rituals, skillsets, aesthetics (value judgements of beauty), logistics

(including location, tools and facilities) and temporality (duration and time frame). The purpose of the object, or final cause, is the designed purpose or function of the object. In this essay, the focus is on *efficient* and *final* causes.

2.4. Aristotle's causes

2.4.1. Efficient cause

For Aristotle, one of the explanations of the object's *nature* is the *efficient cause* or its production process. Efficient cause explores *who* produces the object, and *how* it is produced. *Who* may be a general category, for example, an ethnic, national, or other group, i.e. "the Greeks," and can be further specified to an individual producer -i.e., Theseus. *Who* produces the object is then an *essential* property of the object itself -even anonymity of production is an *identifiable* property of the object (i.e., when we do not know or cannot know who made the object, when anonymity is a requirement of production, or when anyone can produce an object). Identifying *who* produces the object is limited only by the criteria that is established to generate a set based on common qualities or properties: such as profession, religious or hierarchical status, socio-cultural and political membership, etc. When analyzing a spatial product, such as ship, we might investigate who designed, built, blessed, and funded the object, noting that each of these *producers* had a specific *role* in the production process. We might further investigate requirements to participate in these roles, for example, to build a ship for the Athenian Navy, it might have been required to be an Athenian sailor.

Another aspect of efficient cause is *how* or the *process* of production. In essentialism, the object's *essential* identity may embody the processes of production if deemed relevant by the individual maker or society as a whole. These processes include but are not limited rituals, traditions and their associated codes (rules) of execution. For example, it may be *essential* that the object be produced following specific manufacturing steps or associated rituals that may or may not be visible in the object itself; at specific periods of time, such as after offering ritual sacrifice to Athena (patron goddess of Athens); or with specific tools –particularly relevant when discussing human vs machine made. Codes and rituals of production may significantly overlap with the *final cause* (see below) designed purpose, as often *how* something is produced is part of *why* an object is produced.

It is important to recall that Arendt argues that the *how* of making is a fundamental part of authenticity because it necessarily incorporates socio-political value systems, including capital production contexts, codes, and working condition of the maker. Like production rituals, these characteristics may or may not be visible in the product itself, and overlap at times with other essentialist causes such as material. For example, a ship may be made of wood, such that its material cause is wood, but its efficient cause is that the wood must be from a particular forest associated with a sacred mountain.

2.4.2. Final cause

Aristotle describes final cause as the object's telos (τέλος, end) or purpose. Purpose is further divided into two parts: what it *should* do, for example "a ship *should* float on water"; and what it *can* do (beyond its primary purpose) because of its inherent properties, such as materiality, shape, dimension, volume, color etc., for example, "a ship *can* be a monument." The *should* is a desired *intent*, while *can* recognizes an object's possibilities, but is lacking designer *intent*. Furthermore, as Benjamin noted, fundamental to the idea of what an object does, is an incorporated history of all previous actions, which taken as a sum, enable present and future actions of the object (hereafter, called *functions*). Observers must distinguish between passive (actions that happen to the object) and active functional properties of the object. In that sense, actions that happen to an object can be fundamental for describing the nature of an object, especially when these actions become emblematic of what an object *must* do when functioning to define it as a *thing*. These historic, present and future *functions* become the "signs" by which semiotic analyses ascribe various degrees of *meaning* and ultimately the collective memory inherent in the *social contexts* of spatially produced objects.

2.5. The essence of Theseus' ship

Ship components are not then just elementary particles, but actually express a process and purpose for *being.* Theseus' Ship could only be S_0 so long as it continued to carry out its purpose of sailing and during the time of his command. The moment the Ship docked for a final time, its purpose was no longer to sail, but rather to be a monument –its *final* cause had changed. Theseus' sailing ship was different than Theseus' monument ship. Once transformed, however, into a monument whose purpose was to be representative of Theseus and his adventures, it became *necessary* to maintain the ship to accomplish this purpose of *being* a monument. As long as the parts were replicated atomically, the Ship would continue to be considered *authentic* as a monument. In applying this theoretical framework to a site, a design that looks to its historic context to derive identity, will find its authenticity originates not only from the form and materiality of the site (recall the above example of the Eiffel Tower), but also from the essential *how* and *why* the spatial context was built. It is through the incorporation of the context into the new object's *being*, that the spatial product emanates identity.

2.6. The role of context

Contextual site sensitivity begins with a positivist approach: while analyzing a place -and hence describing it- space-time contexts must be identified and sorted (listing of qualities). Next, the History of the site gives spatial objects meaning: what *have* the objects been, what *are* they now, and what *could* they be are properties themselves of site. Equally important, context must be understood as an intrinsic property. This context is necessary to establish the limits of *being* of the object itself*: it is like this*, but *not like that.* In his essay, "Building Dwelling Thinking," Heidegger reifies an object's identity through its context, stating "*Accordingly, spaces receive their being from locations and not from 'space'."* (Heidegger, *Hofstadter,* 2013, 152). The Ship is not merely a ship, but *that Ship*, and it embodies all its properties of space, time, materiality, form and essence of its context.

3.0 EVALUATING CONTEMPORARY SPATIAL PRODUCTION

3.1. Evaluation framework

As an empiric, positivist exercise, contemporary spatial producers should first deconstruct site context, that is take the whole of the site, and identify its spatial components. Just as one would describe each component of Theseus' Ship, its "timbers", oars, keel, mast, sails, and so on, a spatial producer must describe and understand the components of a place. Next, it is necessary to derive a set of *normative* rules that address the atomic and essential qualities of the contextual objects.

Key to the evaluation exercise is the ability to distil the essential nature of the contextual objects. *Who, how*, and for *what purpose* were contextual environments produced? Can a project continue the spatial quiddity of the environment, and how does it do this? If a designer chooses to only focus on the aesthetic or material properties of an object, they risk addressing only the most superficial of qualities. Instead, designers must focus on the causes of things, and determine what can actually be learned from the way and purpose of making of the historic context. We can argue that like Theseus' Ship as a *monument*, the site's contextual vocabulary must be maintained by replacement and/or aggregation of objects which follow what Aldo Rossi called the *spirit –"Genius Loci"*- of the place (Rossi 1999, 103). The built environment must be preserved or augmented by the very act of its use and continued development. If identity is the main design driver, then the parts, however, must obey the *cause* logic of the place, so that the product acquires the aura of the place.

3.2. Contemporary example

In fig.1 (*below*), Teodoro Gonzalez de Leon and Abraham Zabludovsky designed in the early 1990s the Banamex Central Headquarters[xi] in the heart of historic viceroyal Mexico City. The designers are aware of the historic context, but rather than simply imitate the site's existing surroundings, they deconstructed spatial components. Like the adjacent 17th Century adjacent

building, cornice lines are continued from building to building, and employed to separate the ground floor from the higher floors. These lines, however, also address the nature of the contemporary use of materials such as concrete and its aggregate texture. Arches above the windows tie together both buildings' façades with a common language. However, where the older building's arches frame the window panes, Gonzalez and Zabludovsky use the arches to mark the façade plane of deep windows that produce natural shade.

Figure 1: Banamex Central Headquarters, Mexico City by Teodoro Gonzalez de Leon and Abraham Zabludovsky

CONCLUSION

The Paradox of Theseus' Ship serves as a theoretical framework to evaluate the validity of spatial production that derives its materiality, form and function from the site's historic context. In using the paradox to evaluate the validity of a contemporary spatial production approach of emulating historic context, we must start with understanding the spatial component parts, as well as the efficient and final causes of *place*. Were the contextual objects designed and built for a specific purpose, in a specific way, during a specific time? Were these contextual objects, designed to be unique in their context –such as a Cathedral, or to belong to the *identity* of a larger community –e.g. a village house? Were contextual objects meant to be ephemeral, or last as long as possible, and hence it is in the *nature* of the object to be maintained after its initial production? What were the constructed systems of values that led to the production of an object, or a series of objects to produce a place?

The choice to push back against the challenges of Modernist and Post-Modernist goals of spatial differentiation, and globalization's increasing influence, can and should lead to the strengthening of place identity, and hence placemaking. Yet, spatial producers, particularly designers, who fail to account for the value systems of those who produced objects rooted in the specificity of time, the intrinsic process of making, and the purpose of the original built environment, risk simulating identity due to a lack of authenticity. It is therefore recommended

that designers utilize atomic spatial components and a place's essential qualities as design generators that preserve and augment the identity in an authentic manner.

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ENDNOTES

[i] "Quiddity": Merriam-Webster "whatever makes something the type that it is: essence."
https://www.merriam-webster.com/dictionary/quiddity
[ii] Monument: a lasting evidence, reminder, or example of someone or something notable or great.
https://www.merriam-webster.com/dictionary/monument
[iii] Plutarch himself never declares where he stands.
[iv] "Authentic", Online Etymology Dictionary, accessed on November 22, 2018,
https://www.etymonline.com/word/authentic
[v] Italics mine.
[vi] Bertrand Russell, *The Philosophy of Logical Atomism.*(La Salle, Illinois: Open Court, 1988), 54
[vii] That is *atoms* that have spatial location and physical existence.
[viii] Op. Cit. Bertrand Rusell, 32-33.
[ix] https://plato.stanford.edu/entries/essential-*accidental*/
[x] "The Four Causes", Stanford Encyclopedia of Philosophy, accessed on July 2, 2018.
https://plato.stanford.edu/entries/aristotle-causality/#FouCau
[xi]Image originally appeared in Pinterest, modified by paper author.
https://i.pinimg.com/originals/50/8c/8f/508c8f8c0d03642e7ebe73e197a2bfe6.jpg