

COMPARATIVE STUDY IN THE PARADIGM OF ART RESEARCH AND ART CREATION

Bambang SUNARTO D*

Post Graduate School, Indonesian Institute of the Arts, Surakarta, Jl. Ki Hajar Dewantara 19, 57126 Surakarta, Central Java, Indonesia

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Abstract. This article reveals the epistemology of the pillars of existence between art research and artistic creation. The main focus is to tell about the nature of the paradigm, especially the paradigm of research and artistic creation. This discussion is necessary because both have been present as art disciplines that have received wide attention in the academic world. This paper elaborates ideographically on the thoughts of researchers and artists comprehensively when researching and creating art. The aim is to improve epistemological literacy in learning the implementation of research and creating works of art with strong pillars of existence. Anyone concerned with research and art creation has significant potential to carry out academic tasks. Whoever they are, they need a pillar of existence as the basis for intellectual performance. This article describes the nature of the pillars of existence in art creation activities. The elements of the two paradigms, the relationship between the pillars of existence, and the elements of the paradigm will receive great attention. This explanation has an important meaning, namely to foster regular reasoning in the development of the paradigm of researchers and art creators, as well as to stimulate the spirit to be accountable for their work academically for art researchers and creators.

Keywords: art research, art research pillars, artistic pillar, creation, paradigm.

Introduction

The basis for writing this article is comparative research with the object of art research activities and art creation. The philosophical study that leads to the epistemology of these two activities is the approach and perspective of this article. The article's purpose is to explain the differences and similarities of paradigms in art research and paradigms of art creation. The paradigm in question is an intellectual discipline from the perspective of researchers and the perspective of art creators toward objects that target research and artistic innovation. According to our understanding, elements in the paradigm consist of concepts that influence researchers and art creators. The paradigm elements also determine how art researchers and creators think and behave in intellectual disciplines.

*Corresponding author. E-mail: bambangsunarto@isi-ska.ac.id

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This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons. org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. Art researchers certainly align with the basic goals of art research activities. The creators of art think, of course, also in line with the goals of art creation activities (Mullennix, 2023; Sunarto, 2015). Art research aims to find the truth in the scope of human values and human thought that is present as an actualization in the phenomenon of art. In contrast, art creation aims to reveal values using certain media with main expectations in pleasant forms. Of course, additional requirements exist beyond more complex and enjoyable forms, such as conveying concepts, knowledge, or emotions (Shears, 2022).

Values are a very broad expanse of substance. The scope of values includes truth, goodness, and beauty. Truth is the concept of conformity between statements or propositions (logic, ideas, and experience) with reality (objects and events), which common sense can accept (Schreuder, 2014, p. 82). Goodness is quality as a moral measure (a mirror of good condition that coincides with virtue) expressed in activities and performance. Beauty is a characteristic of objects that gives perceptual satisfaction. It contains pleasurable features and is often present as the essence of art, whether intentional or unintentional, by the art creator. Art research is an activity of seeking to find one element of value. At the same time, the creation of art is an activity of uncovering the possibilities of all aspects of value.

In essence, there are various types and theories of truth. Therefore, researchers must concentrate on certain types and concepts of "truth". An in-depth investigation revealed that artists are also like this. Some are just concerned with one of the values, especially beauty. Many artists give close attention to factors other than beauty, namely truth, and goodness (Sunarto, 2015). Those who concentrate on beauty alone adhere to the philosophy that the value of art is intrinsic, and they view art as "true" and genuine (Strickland, 1992). This genre of art views the existence of art as separate from its didactic, moral, useful, or practical functions. The term utilitarian has two meanings, namely (a) relating to or aiming at utility (benefits or usefulness) and (b) indicating or preferring utility.

Art expresses an artist's ideas, values, feelings, aspirations, and reactions regarding a particular object. The general purpose of art is to stimulate a certain sense (usually oriented to beauty and fun) in the person who sees or hears it (Rueger, 2011). Artists have a way of expressing thoughts, feelings, emotions, and the deepest impressions of a particular object (Rejimon, 2017, p. 217). The focus of this concept is to show symbolic problems and aesthetic thinking in art so that it becomes the most classic concept in the study of art. Implicitly this concept also explores art research and artistic creation. Art research deals with how delusion can grow and develop in truth orientation. The creation of art is concerned with the artist's exposure to expressing symbolic taste through empirical forms that stimulate the growth of certain feelings in the imagination.

Unfortunately, few experts pay attention to the research and artistic creation paradigm. In some scientific research from 2004 to 2021, only eight experts paid attention to the scientific research paradigm. They are Patti Lather (2004), Pascal and Bertram (2009, 2012), Ma and Suna (2012), Livingstone (2013), Franco (2018), Hsieh et al. (2018), Caíno-Lores et al. (2020), and Lepskiy (2021). Each has a different focus, orientation, and understanding of the research paradigm.

Lather criticizes the Federal government of the United States regarding the scientific method of legislation in the realm of education research. The thought of Foucault (1995) in

Discipline and Punish: The Birth of the Prison (in French: Surveiller et punir: Naissance de la prison, originally published in 1975) and Stuart Hall in Stuart Hall: Critical Dialogues in Cultural Studies (Morley & Chen, 1996) are the basis of the approach to placing scientism as a reaction to the proliferation of research approaches that characterize social Research (Lather, 2004, p. 15). Pascal and Bertram put research as a strong ethical commitment to including children's voices as an integral part of their research. For Pascal and Bertram, research manifests the ethos of empowering participatory research for active involvement in promoting children's rights as citizens. This research is a methodological and epistemological lesson for researchers and practitioners to identify and explore democratic thinking and practice (Pascal & Bertram, 2009, p. 249). Ma and Suna (2012) negates traditional research methods and offers an e-science paradigm that provides a space for sharing and exchanging scientific ideas. This paradigm requires a structure for designing and implementing an e-science collaboration platform. This platform solves the key techniques of scientific research cooperation, integration of scientific research resources, control of scientific research processes, and the possibility of expanding scientific innovation cooperation (Ma & Suna, 2012, p. 254).

Livingstone (2013) offers a participatory paradigm for audience research. He questioned how to research audiences in the era of digital networks. He saw that many researchers concentrated on the notion of participation. They question the types of modes of participation for certain media with communication infrastructures that socially mediate cultural or political life. It also questions how people engage as they explore and find new ways to relate to one another through the media (Livingstone, 2013, p. 21). Franco (2018, p. 202) discusses the paradigm of ecological and economic thought to contribute to a better understanding of modern ecological economics and the current position of the discipline to its values, aims, methods, and content, which differs from the scientific paradigm of Kuhn (2012). The dependence of science on reliable foundations is Hsieh, Vaickus, and Remick's focus in developing the paradigm. This paradigm explores the handling of scientific premises, experimental design, biological variables, and authentication as conditions for forming a scientific paradigm (Hsieh et al., 2018, p. 6). Research about paradigms focuses on the increasing data associated with implementing scientific workflows that raise awareness of parallel data-intensive problems that convey the experience of combining traditional high-performance computing and grid-based approaches with big data analytics (Caíno-Lores et al., 2020, p. 447). Lepskiy conducts paradigm research that focuses on cybernetic affairs. Methodological foundations and classical ideas of the philosophy of science become the basis for developing scientific knowledge that systematizes the cybernetic process (Lepskiy, 2021, p. 625). The literature data above shows that none of the experts pay attention to the art research paradigm. For that, this article has significant reasons for presenting here.

Of course, research on paradigms does not consist of just these eight articles. Scientific studies on paradigms are still abundant, focusing on very broad fields of study. The eight articles presented above are models in the broad context dominating the paradigm discourse. Because, in general, the paradigm is like being imprisoned in the dimension of scientific research.

It is as if there has never been a paradigm in the discourse of art creation. It is as if the paradigm only applies to scientific research activities, while art creation activities do not require a paradigm. Through this article, the author refutes this and convinces the public that art creation also has a paradigm base.

We can understand that the practical activity of creating art is not a scientific discourse, so many people think there is no paradigm to base. So far, knowledge about art creation only exists as tacit and implicit knowledge. Tacit knowledge is a type of knowledge that is difficult to express verbally, obtained through experience, self-learning, and practice. Implicit knowledge can be expressed verbally into explicit knowledge because it exists in the form of experience that contains various identifiable factors such as beliefs, perspectives, concepts, rules, and principles. Tacit knowledge and implicit knowledge of art creation are generally stored only in the minds of art creators. The problem is that nobody tries to put the paradigm of art creation as explicit knowledge becomes scientific knowledge.

Nowadays, finding writings about the paradigm of art creation is not easy. Rational thinking elaborating tacit and implicit knowledge in art creation into explicit knowledge is an intellectual luxury. We can see Bambang Sunarto's attention to the problem of the paradigm of art creation in three published articles. He is of the view that there is a rational basis for art creation activities. The reasoning that develops in the minds of art creators forms a paradigmatic building of art creation knowledge (Sunarto, 2015, p. 285). He also elaborates on paradigmatic elements in the art creation process carried out by a well-known artist from Bali in creating environmental art, entitled *Cèlèng Ngêlumbar* (Sunarto, 2020b, p. 9). Next, he reveals the paradigm of music creation by paying special attention to the elements of models and concepts as part of the elements of paradigm of music creation (Sunarto, 2020a, p. 103).

This article discusses epistemology, focusing on comparing the pillars of the existence of research and the pillars of art creation. The attention of art creation on certain issues and values orientation is a perspective that determines how art creators work. The choice of work to concentrate on certain topics is a pillar of existence for researchers in art research and art creators in art creation. The choice of work is not a simple matter because it is related to the will of form, content, technical, and concepts of beauty, goodness, and truth. The pillars of existence determine the color, style, and nature of art research and art creators to form study and creative frameworks. The framework of choice of researchers and art creators is a principle that researchers or art creators believe in. This principle is called a paradigm, both the art creation and research paradigms.

Every researcher and art creator applies a chosen and determined paradigm in their research and art creation activities. There has never been a researcher or art creator who works without a paradigm base, except for epigon art creators who imitate the physical things of other art creators' works. The difference between one research work and one artwork is due to the difference in paradigm. To become researchers and art creators who produce typical works with significant, important, and relevant novelty, they must develop a paradigm. The problem is creating a paradigm in art research and artistic creation. The creation of a paradigm is necessary because both researchers and art creators need to develop perspectives. Perspective is a demarcation of thinking which, for researchers, determines how to find, formulate and explain knowledge and for art creators, determines how to find, formulate, and utilize artistic forms of expression.

1. Research method

In this research, the writer observes art researchers' thoughts who have to think academically. On the other hand, the writer also watches the activities of art creators thinking about producing works of art, who tend to think artistically. Thinking about academics and the arts are two different things. Even though they are different, the writer assumes that both thoughts have a pillar of existence that is the basis for the truth of thinking according to their respective ontological demands.

We analyze, verify, and categorize more than ten titles of art research and art creation activities in this study. Research activities and art creation are also subject to identification and interpretation. These steps give birth to a new understanding of research and art creation sources, means, and procedures. Verification is carried out by "reading" and identifying the research and creation of art. The writer first read the facts of thought attached to research reports in the form of theses, dissertations, and works of art created. Second, the writer read the structure and building of knowledge associated with writing research results and the construction of expertise in works of art. Third, read research references for theses and dissertations and observe references for art creation activities. This point is important because it forms a frame of mind for researchers and art creators.

Reading art research and reading art creation activities can discover the essence, sources of art, and the means and techniques. The focus of the study on works of art is the substance, source, means, and procedures. The broad scope makes it unable to apply a single method of analysis when reading research activities and art creation. Reading in this research employs an interdisciplinary approach, including the verstehen technique, interpretation, artistic treatment analysis, and induction.

The verstehen method is understanding the character of research and works of art through insight. This method is seeing clearly and intuitively the complexity, situation, and nature of the symbolic character of the results. The application of this method is to help us understand the reasoning behind actions, putting ourselves in another's shoes.

The interpretation method is the analysis process after the verstehen stage. The way used is to explain, express, and interpret the character expanded interpretatively by introducing external factors that shape context and meaning. Interpretation takes place in many ways and for many reasons. However, the purpose, in essence, is to find messages or meanings contained in the art research and artistic creation phenomena.

The treatment analysis method is the only way to expose artistic techniques and discourse, namely identifying sources, means, and procedures for creating artistic works in art creation. The main focus is on how art creators manage creative elements, vocabulary, and the relationship between artistic language and other artistic elements in creating artistic works. Artistic treatment analysis method, only to see pieces of art. This method reveals creative techniques and discourses related to the medium and style of artistic construction. This method applies because no artist can avoid artistic treatment to express something interesting.

While explaining and concluding by applying the principles of logic, the writer calls the inductive method. The logical basis of this method is the various special phenomena in art research and art creation activities by art creators. With the inductive approach, the writer

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can (1) condense large amounts of data into a manageable amount of text, (2) establish a direct link between my evaluation or research goals and my summary findings derived from the raw data, and (3) create a structural framework to support the experiences or processes revealed in your raw data.

2. Pillars of arts research and arts creation

In the scientific world, the discussion of paradigms in the knowledge revolution is inherent in the thinking of Kuhn. He said that the basis of change in science is a change in paradigm or perspective in overcoming problems (Kuhn, 2012). The weakness of Kuhn's concept of paradigm because he uses the word paradigm to represent many different meanings. Kuhn (2012) does not provide a single and clear definition of a paradigm. This condition means Kuhn is inconsistent (Masterman, 1999, pp. 60–73). The concept of Kuhn's paradigm includes five things. The first is the theoretical assumptions that become common beliefs. The second is an analogy or parable about the study's target phenomenon, called a model. The three are values as a reference for researchers or scientists in scientific activities. Fourth is the principle of metaphysics that does not require testing to determine the research direction. The fifth is the problem that is the target of the study (Ahimsa-Putra, 2008, pp. 4–5).

Of course, in exploring the paradigm of art research and creation, the concept of Kuhn's paradigm cannot be applied slovenly. That is, there must be a modification of thinking regarding the elements that prescriptively form the system in art research and artistic creation. In principle, we must formulate a paradigm consistently to see the paradigm in art research and creation. A paradigm is a set of concepts consisting of several elements. Therefore, formulating a paradigm must begin by identifying the elements needed to develop a paradigm. The formulation of the paradigm is more didactic thought in the development of science. Identification is more observational to find a match between elements in the paradigm. The formulation lies in the elements needed to implement the art research and the implementation of art creation activities.

Art researchers never use the term paradigm in their research activities and theoretical discourse, except for those who use the perspective of the social sciences. Art researchers who tend to see art from the perspective of the depths of the essence of art have a completely different tendency. However, that does not mean they have never used a paradigm. They do more ideographic theory development than paradigm development.

The creators of art also never use the term paradigm in their art creation activities. Art creators tend to think about revealing artistic content, forms, and techniques rather than developing a paradigm in creation. Inherent with the thought processes of art researchers and creators, paradigms are attached to both activities. Although they never mention and say the word paradigm, in essence, it has merged with the performance of art researchers and creative artists in their work. We understand the paradigm as a systemic building of the construction of a form, both a form of knowledge and artistic expression. Of course, a researcher or art creator in his activities requires knowledge as a basis for his work.

In answering how to create a paradigm in art research and creation, it is necessary to understand the nature of art research and artistic creation as a knowledge system. Both have a different existence or ontological reality. However, the ontological elements of the two cannot be said to be different. Based on this understanding, we can see that the paradigm of art creation is similar to the paradigm in art research because both have comparable characteristics.

No researcher in art conducts their research without a paradigm. No art creator works without a paradigm also. The similarity occurs because the ontological position between art research and creation is "equivalent".

Equality refers to things or situations with the same meaning, level, or position. Knowledge, activity, and method are the three things that make up the equivalence between research and art creation (Sumadikara, 2013). These three elements are the pillars of the art research and artistic creation. Art research has never existed without the basis of these three elements, nor will a piece of art ever be created without the cause of these three elements. The following describes the pillars of art research and creation to understand both comprehensively.

2.1. First pillar

According to objective observation and interpretation techniques, some experts see art research as a systematic collection of knowledge about human values and human thought in the frame of the art phenomenon. Therefore, art research is similar to humanities research (Weichselbraun et al., 2021) because art research, such as humanities research, focuses on efforts to study and deepen human values and human thought. Meanwhile, art, as a result of artistic creation activities, manifests knowledge about selected values, embodied in creative forms in a systemic arrangement through deep interpretation and appreciation of the art creator to the object that unfolds before the consciousness of the creators of art, and which they feel is important to reveal.

Some scholars viewed art research as facts relating to human values and thought. In art, the facts in question are facts of artistic form as a container for the essence of thinking about human values. Some researchers see art research as a discipline or a branch of knowledge that interprets the facts of art phenomena to discover general propositions (Hodges et al., 2017, p. 66). The nature of art creation is also one of the disciplines or branches of knowledge in artistic submissions. Art creators embody offers using creative activities and methods to make them happen.

The essence of art research is the knowledge that is proven and organized rationally and methodically, based on perceptual data into generalizations, which contain rules, principles, concepts, theories, and systems (Royston & Foulds, 2021). The essence of art creation is an application of knowledge about values present in artistic and symbolic forms, manifestations of the ratio, and intuition of art creators based on creative rules, principles, and concepts as an art system. However, experts assert that art research is an effort to explore a knowledge system that concentrates on human values, human thought, and phenomena based on unbiased and systematic observations and interpretations. Meanwhile, the creation of art is an effort to expose the knowledge of human values that can develop and stimulate awareness in human thought by expressing it through forms that they consider relevant and interesting, with a typical system for each artist. In addition to science in general and art research, there is art. Art is a form of expressing feelings or thoughts, not for practical purposes (Parker, 1920). The foundation of artistic expression is freedom and independence created and judged in itself. The meaning of the expression of feelings or thoughts is an expression of experience. No feelings or thoughts are separated from experience, which is, in the *a posteriori* perspective, the source of knowledge formation (Türkleş et al., 2018, p. 443). However, from an a priori perspective, the attainment of knowledge is independent of experience. One of the properties of knowledge is inherent in consciousness. So, the content of artistic expression is the knowledge the creator of art possesses. Therefore, one of the dimensions of art is knowledge. This aspect is similar to one of the dimensions of science in art research.

2.2. Second pillar

One of the pillars of scientific research on art is the method. The writer proved it when the writer did this research. Above, the writer has described the approach or practice in this research. However, when the writer discusses the method points here, the writer does not mean to repeat them. However, the writer will explain the basic principles of existence of the pillars of existence in scientific research with art objects.

On the other hand, art creation activities also require the support of method pillars. Of course, the method of art creation is not the same as the method of art research because the two have different orientations. Art research intends to find knowledge in principles, rules, concepts, or theories. In contrast, art creation wants to express knowledge about values, resulting in thoughts and feelings as meaningful experiences.

Art research aims to uncover principles and rules for understanding new values and thinking in art. Thus, there is a general pattern in functioning as a postulate (Cordero, 2012, p. 1420). Art research uses knowledge as a basis, proof, or reason for truth. Knowledge is "postulated" to refer to the attempt to present and defend an idea as truth or a search for the target entity of concern. As a result, the writer can now see that the study of art is a science that uses the scientific method to uncover broad patterns of human cognition expressed as principles and propositions. Therefore, the study of art is a science. On the other hand, the creation of art uses knowledge as a basis, proof, and reason for goodness and beauty. Art creation uses subjective norms and principles, which artists find useful in presenting and communicating the values that concern them.

The writer also needs to consider Goode and Hatt's thoughts on science. The scientific method approaches the entire universe of experience, which Goode and Hatt (1952) assert is a world that may become a human experience. When Goode and Hatt refer to the "world full of experience", and the denotation involved includes aesthetic or artistic experience, then based on Goode and Hatt's thinking, an understanding of artistic creation can be born. This understanding shows that art creation is a method or approach in all artists' thinking about human values. It is difficult to separate the artistic process from the essence of art because art and all its creation processes are related to human values. Therefore, like art research, art creation also requires a method as a fundamental tool for artists to express ideas that are considered important and suitable.

When considering Thomas Ford Hoult's thoughts on science, there is also something interesting. In looking at science Ford Hoult says that science is a procedure for developing reliable knowledge about probabilities. Under certain conditions, relationships exist between phenomena and producing knowledge buildings organized into coherent systems of general propositions (Ford Hoult, 1977, p. 284). Thus, art research is a procedure for developing reliable knowledge about the probabilities of human thought. Under certain conditions and related to human values, human knowledge is built into a coherent system of general propositions. However, art is completely different. Attention to probability is not a concern of the art creator creating art. Art is concerned with the art creator's beliefs. These beliefs are about necessary, meaningful, and significant things for the art creator to express.

Lindsay, an epistemologist, argues that science is a method for describing, creating, and understanding human experience (1973, p. 7). Therefore, art research also tells human thought and focuses on human values. As for the nature of art, if one considers its equivalence with Lindsay's idea, it is an expression that describes the art creator's understanding and values in the representation or depiction.

This view also aligns with the opinion that science uses adequate means to achieve the desired goal (Wilson, 1969, p. 4). Suppose the writer refers to the equality of art research and art. In that case, art research is the means to discover human phenomena, values, and principles to raise awareness of art research. Meanwhile, art is also the use of means to convey artistic values. Those values have broad possibilities related to ideology, politics, society, economy, culture, defense, security, and spirituality.

On par with Bunge's (1972) view of science as a method, art is a symbolic expression that manifests the art creator's ideas (Weingartner & Dorn, 1990). It works by using certain ways according to the art creator's beliefs. In line with Ford Hoult's view of science, art is a procedure for developing and offering knowledge in the context of symbolic forms. Art exists under certain conditions and relates to empirical phenomena as the object of its creation. Extended reality is a collection of knowledge from art creators' works, formulations, considerations, and inventions to improve the quality of the soul's awareness of values.

Lindsay's (1973) view of science parallels the discipline of art creation as a science because art symbolically expresses discourse without any practical purpose. Discourse is an expression that presents a depiction of various ideas. Art is also expressed in characterization, creation, and understanding experience. There is never a work of art that does not present the art creator's depiction, method of artistic invention, and knowledge of their conscious experience. Art is also no different from science in Norman Lockyer's view because art is a means to an end (Haines, 1969, p. 53). However, the purpose of art is not for practical purposes. The purpose of art is to evoke a sense of consciousness through appreciation, joy, and affection for values. The main thing is values with a spiritual dimension to make people aware of the nature of life, with all its existential realities.

So, art is a means to convey and stimulate axiological appreciation of phenomena understood and lived by art creators. Art fosters an appreciation and axiological deepening of awareness of values. The writer can understand this as a discipline whose expression uses a certain method. The problem is that creating art is not a scientific method but an artistic method. The method is not art, and art is not a method either. However, art requires method in absolute terms. Without the method, art would never exist.

2.3. Third pillar

The view of science as an activity is useful for pointing out the parallels between art research and artistic creation. The basis of the similarity is that art research is an academic discipline. Art creation is the result of the activities of the creators. Let us look at epistemologists who believe in science as an activity.

The essence of the art research is a series of continuous observations, accumulating and producing concepts or theories that can explain and predict phenomena. Scientific research is often associated with the scientific method as a systematic procedure to find true knowledge. Research is a set of activities to solve problems and improve their understanding and application (Andersen & Koutnik, 1972, p. 5). Research also attempts to find regularities, rules, or propositions that describe natural phenomena. Thus, art research is a set of activities to explore problems, improve understanding, and apply knowledge about human values and human thinking. Art research is also an attempt to find regularities, rules, or propositions that describe the phenomena of human thought.

On the other hand, art creation is fundamentally a series of observations by the artist of objects. Art is present through observation, creative formulation, and a place of worth. Artists compile the outcomes of creative, innovative, and inventive formulations into an aesthetic form that serves as a vehicle for artistic expression. The expression is significant because it comprises an interpretable concept or theory. Thus, art fundamentally describes a phenomenon that becomes an artist's object. However, the concepts and theories are still implicit, not explicit. So, art creation is often related to the artistic method as a systemic procedure to reveal interesting, true, and important knowledge. Creation is a series of activities to arbitrarily present an aesthetic image of an artist's concern in an artistic proposition. Thus, creating art is a series of exercises to explore interesting forms. These forms have a symbolic meaning, then apply these forms and intentions to become artistic propositions that describe the phenomena of the artist's thinking.

When the writer thinks of art research as a science, the writer also needs to pay attention to the fact that science attempts to understand the nature of things by formulating theories and conducting tests through observation and experimentation to see whether the hypotheses and theories are valid or not. Based on this thought, the writer believes art research attempts to understand the nature of human values and the human mind by formulating theories through observation and interpretation. On the other hand, art attempts to reveal the heart of a thing by creating symbolic forms without testing hypotheses, preceded by observation, appreciation, exploration, and perhaps experimentation.

Singer (1959), an epistemologist, stated that science makes knowledge (Black, 2018). So art research was formulating knowledge relating to human values and thought, and art is the process of expressing knowledge symbolically using any forms as symbols. In terms of science, John N. Warfield supported Singer by stating that science is a relevant process with a focus of attention on research (Warfield, 1976). Based on Singer's mind, art is an appropriate process emphasizing expressing interpretations of values. Benjamin (1950) justifies Singer (1959) and Warfield (1976) by saying that science is the controlled and orderly application of methods for systematic knowledge (Ferm, 1950). Therefore, in seeing the equivalence of art with science, art also applies systemic methods by art creators to reveal values.

The nature of art is an art creator's activity to explore and create a new reality as a manifestation of meaning. In creating art, artists use suprarational ways to express sense symbolically or metaphorically (Kahler, 1970, p. 164). The essence of art is also the substance of using thoughts, feelings, and intuition to produce something pleasurable (Brade-Birks & Higenbottam, 1963, p. 49). This idea aligns with Parker's (1920) view that art is an expression not solely for practical purposes and Humardani's view, which states that the main work area for art is spiritual life (1991, p. 143).

3. Comparison in research and art creation paradigm

3.1. Element of paradigm

To understand the paradigm in art creation, the writer needs to recognize the paradigm in art research. The writer can juxtapose the two because the scientific process in the art research study is similar to the artistic process in art creation activities. The systemic scientific series involves procedures, requirements, and principles used by scientists to generate new knowledge. The creative process is the stage of art creation activities with the mode of action, necessity, and basis of conduct art creators use to produce artwork. The approach in art research uses systematic reasoning to acquire new knowledge. The artistic process uses a systemic thought process to manage and process artistic and symbolic forms with semiotic meaning.

Art research	Art creation
(1) basic assumptions,	(1) values,
(2) values,	(2) basic beliefs,
(3) models,	(3) the will to work,
(4) problems to be solved or answered,	(4) artistic forms,
(5) concepts,	(5) concepts,
(6) research methods and procedures,	(6) ways and procedures to realize artistic
(7) analytical methods and procedures,	forms and concepts,
(8) analysis results, and	(7) application of artistic form and concept,
(9) representation (Ahimsa-Putra, 2007, 2008, p. 7).	(8) artwork (Sunarto, 2013, p. 108).

Table 1. Comparison of the art research and art creation paradigm (source: created by author)

Both have similarities and differences. The similarity lies in the goal: to find, discourse, and uncover discourse-selected objects. The difference lies in the procedure for finding and unveiling discourses and formulating the "container" of the resulting treatise. The scientific process of discovering and disseminating the truth. The artistic approach of finding a creative format for the discourse of values. There are nine elements in art research. Meanwhile, the aspects of the art creation paradigm consist of eight components. The comparison of the elements contained in the two paradigms can see in Table 1.

The first element of the art research paradigm is basic assumptions, while the first element of the art creation paradigm is the values. Basic assumptions are views about something that is not in question. Values in art creation have a strong relationship with the object, which is the center of the art creator's attention, so we cannot let them go. The second element of the art research paradigm is the values, while the second element of the art creation paradigm is basic beliefs. The second element of the art creation paradigm is similar to the first element of the art research paradigm, namely the basic assumptions. The basic conviction or assumption in the paradigm of art creation is intellectual and intuitive agreement that certain objects have the qualities of beauty, goodness, or truth without any proof first. Intellectual approvals are ideas with pragmatic power that serve to develop works of art.

Values in art creation are an integral part of the object, the center of the art creator's attention. Art creators, when encountering objects, they believe that objects have (1) "quality" that allows people to like, want, utilize, and can become objects of particular interest and (2) "privilege", which is the value of goodness. The value that the creator art creator believes in is artistic value. The belief is attached to the object, both in the form of instrumental value and intrinsic value. Instrumental value is (1) the value possessed by a certain object which the art creator believes is capable of producing something desired and (2) the value that a person has as a tool to produce something desired. Intrinsic value is related to the artistic goals to be achieved and aspired by the creator art creator. The value of art that raises the belief of the art creator is its potential as an instrumental value. Art creators feel this potential as an entity capable of producing new art constructions. This potential is related to working (material, means, and interpretation) that allows the art creator to apply it to the object.



Figure 1. Concept construction in scientific research (source: created by author according to Ihalauw, 2004, p. 29).

The model is the third element of the art research paradigm. The third element of the art creation paradigm is the desire to work, namely the will to present artistic conceptions of value with certain objects. The fourth element of the art research paradigm is the problems to be solved or answered. The fourth element of the art creation paradigm is an art form. The model is a parable, analogy, or allegory of a targeted phenomenon in the study (Ahimsa-Putra, 2007, p. 10). The artistic form for the creation of art is identical to the imagination of the design of the work, namely the imaginative picture of the creator art creator regarding the art form or construction that they will work on and happen.

The fifth element in art research and creation paradigms has a common concept. Concepts in research are terms or words that have meaning to understand, interpret, analyze, and explain events or phenomena that are the object of study (Ahimsa-Putra, 2007, p. 13). Ihalauw states that, in essence, the concept is a unity between symbols (visual and auditive

words or forms), phenomena, and their meanings (2004, p. 24). The terms or words referred to by Heddy Shri Ahimsa-Putra are meaningful symbols used to understand, interpret, analyze, and explain events or symptoms of values and human thought. We can see an overview of concepts in art research in Figure 1.

Understanding the concept of creating art is similar to concepts in art research. Concepts in art creation are explanations of artistic conceptions and the art creator's perception of objects that appear in the art creator's consciousness, which are present through the artistic symbols that the art creator wants to create. The artistic symbol that the art creator seeks to complete appears in a creative form still in the art creator's imagination. Therefore, the concept of art creation is a manifestation, explanation, and description of the phenomenon and meaning of the art form. At this stage, symbols, sensations, and implications still exist in the art creator's imagination, feelings, understanding, and intentions to initiate an art form into work.

The concept identifies artistic phenomena as an art creator's abstraction present in a creative form. The concept is an entity that unites with artistic form, which exists in the imagination of the art creator. The position of the imaginative art form, which is in the view of the art creator, serves as a symbol. This symbol still requires an explanation of the phenomenon and its meaning. The presentation of the artistic form imagined by the creator art creator also uses terms or words representing what the creator imagines. We can see the relationship between concept and creative form in Figure 2.



Figure 2. Concept construction in art creation (source: created by author according to Ihalauw, 2004, p. 29)

In Figure 2, we can see that art form is one of the elements of the concept, which includes (1) artistic form, (2) artistic phenomena contained in artistic forms, and (3) meanings contained in phenomena. Creative art creators construct concepts by perceiving artistic forms according to their beliefs, experiences, and competencies. That perception manifests in the art creator's consciousness, eventually becoming an artistic phenomenon. Artistic form as a symbol that contains artistic phenomena requires explanation. The interpretation of the explanation of the artistic phenomenon then produces meaning.

The essence of the concept in creating art is the understanding, interpretation, and explanation of the meaning of artistic phenomena present in art creators' ideas. The purpose or intention is the content and scope of understanding artistic phenomena as objects of creation. Substance exists in the imaginative art form. The content and scope of understanding the object of design is knowledge of the conditions, categories, shapes, and structures inherent in creative formats that exist as entities in the imagination of the creator art creator.

Concepts in art creation are artistic phenomena and their meanings. Art creators know and imagine these two entities because they are vital elements of material and immaterial existence for the object of art creation. The art creator cultivates, creates, and offers material and immaterial facts to the public in response to objects' conditions, categories, shapes, and structures.

Phenomena are basic conditions, categories, forms, and structures of objects in artistic form. The art creator perceives the phenomenon so that the phenomenon appears in the art creator's creative consciousness. Without a perception of phenomena, phenomena cannot be present in a work of art.

The essence of the meaning of artistic form is the intention of the creator process and offers values that depart from an object. Therefore, the concept in art creation is the intention and plan about the values to be achieved in managing things into artistic forms. It may be that some symbols are not meant to be in work. However, the essence of the paradigm is the construction of the artist's thinking in creating works of art, not the determination of technical aspects in choosing vocabulary that will function as a means of expression. Therefore, the mismatch of symbols present in work is a natural problem in artistic creation. Concepts relate to basic beliefs, values, desire to work, and creative conditions in the artist's imagination. The art creator then develops and realizes the imaginative reality into an empirical fact in a piece of art.

The concept processing method is a means to realize the will to work. The formation of the art must be subject to the concept because the concept contains the intention, plan, and purpose of creating the work of art. Of course, art-making differs from art research, including techniques and procedures for data collection and analysis (Ahimsa-Putra, 2007, pp. 16–32). Methods for creating art include a procedure, process, technique, or way to make art used by or is appropriate for any point of view in the art to achieve an artistic form, concepts, and expression to become a real creative reality.

The next element of the art research paradigm is the result of an analysis that requires researchers to "state the relationships between variables, between elements, between symptoms" (Ahimsa-Putra, 2007, p. 32) as a theoretical finding in research. In the art creation paradigm, the element equivalent to the analysis result is the result of processing and applying the concept. As a result, there is a greater understanding of the aesthetic system inherent in art. The system is the reality of the interaction between the media, which includes vocabulary, treatment work, message or meaning, and context. There is a working system for artistic design for media, vocabulary, and flavor.

The last element of the art research paradigm is representation, a complete description of research results, starting from the material object and formal object, its objectives, methods, theoretical findings, and significance. In comparison, the last element of the paradigm of art creation is the work of art as a symbolic manifestation of the artist's statement. The work contains an artistic system that becomes the medium, means, and expression procedures. Art creators embody the expression with an empirical medium in symbolic meaning.

3.2. Paradigm and pillars of existence

As described above, scientific research in art research and artistic creation requires pillars of knowledge, methods, and activities. The presence of the three pillar is necessary because their existence is concrete and certain. On the other hand, researchers and creative artists always use a certain paradigm to implement art research and artistic creation. The paradigm is formed based on the elements that contribute to constructing the thinking of researchers and creative art creators. The aspects of the paradigm have a relationship with the pillars of scientific research and artistic creation. The following is the relationship between the pillar of existence and the paradigm elements.

3.3. The paradigm in art research

Ontologically, we cannot separate the scientific research paradigm in art research from the essence of knowledge, methods, and activities as the pillars of research. This pillar is necessary because there has never been a research paradigm without a post of existence. All elements in the art research paradigm are always related to these three pillars. We can see the relationship between the features of the paradigm and the pillars of research in Table 2.

Pillar of research		Paradigm elements
Activity	Knowledge	(1) basic assumptions,
		(2) values,
		(3) models,
		(4) problems to be solved or answered,
		(5) concepts,
	Method	(6) research methods and procedures,
		(7) analytical methods and procedures,
	Knowledge	(8) analysis results, and
		(9) representation.

Table 2. Pillar relations and elements of paradigm in art research (source: created by author)

The elements of the paradigm consisting of basic assumptions, values, problems to be solved or answered by researchers, construction models of thinking in research, and formulation and development of concepts by researchers are knowledge that must be aware of every researcher. This knowledge is an important resource in the conduct of art research. Before conducting research, this knowledge is the generative force that drives the growth of research methods and activities. Knowledge is also the driving force for research activities. These bits of knowledge must be present in the researcher's awareness before carrying out research activities because these pieces of knowledge act as a foothold in determining the direction of carrying out research activities.

In practice, the paradigm elements in research methods and procedures are data collection activities. Elements of analytical methods and procedures are essentially analytical activities on the data. Both are methods that must exist so that researchers rationally develop and implement them in research. The essence is the means and procedures to achieve certain goals. The purpose of the study is to find the truth. Therefore, the nature of the two elements is a research method. It is the way to obtain the object's truth in question. This method is also knowledge, but specific expert knowledge in techniques or practices to find clues and evidence through logical reasoning in solving or answering problems that need to be solved.

The last two elements of the scientific research paradigm are the results of analysis and representation. Both are knowledge as a result of the performance of research activities. This performance is the final estuary of research methods and procedures that start from process knowledge to produce new knowledge. The researcher's attempt to describe the research results is the essence of representation. This representation contains a complete description of the material object, formal object, objectives, methods, theoretical findings, and significance.

Once again, all elements in the research paradigm are the pillars of research activity. There are two kinds of activity, namely non-physical and physical activities. The non-physical activity involves reasoning. In contrast, physical activity is a concrete activity using members of the research body. Paradigm elements' non-physical activities include deepening, understanding, forming, and developing basic assumptions, values, models, problems to be solved or answered, concepts, and analytical methods and procedures. The physical activity of all research activities is only collecting data bound by research methods and techniques and writing representations of research results.

3.4. The art creation paradigm

Ontologically, we cannot separate the paradigm of art creation and research from the pillars of its existence. The essence of the three pillars of the art creation paradigm is the same as that of the art research paradigm: knowledge, methods, and activities. These three pillars in art creation activities are also necessary because no art creation paradigm is not related to knowledge, methods, and activities. We can see the description of the relationship between the art creation paradigm and the existing pillars of that paradigm in Table 3.

Like in art research, there is a relationship between the elements of the creation paradigm and its pillars in creating art. Art creators build awareness of creation based on generative powers such as values, basic beliefs, desire to work, artistic forms, concepts, ways, and

Pillar of art creation		Elements paradigm
Activities Knowledge		(1) values,
		(2) basic beliefs,
		(3) the will to work,
		(4) artistic forms,
		(5) concepts,
	Method	(6) ways and procedures to realize artistic forms and concepts,
	Knowledge	(7) result of the application of artistic form and concept, and
		(8) artwork.

Table 3. Pillar relations and elements of paradigm in art creation (source: created by author)

procedures to realize artistic forms, concepts, and artwork. On another occasion, The writer mentioned the art form as a model (Sunarto, 2015, 2020a, pp. 108–112). All elements of the generative power are elements of the paradigm of art creation. The art creator perceives all these elements in his consciousness. Elements of values, basic beliefs, desire to work, artistic forms, and concepts are pillars of knowledge before art creators carry out art creation activities. This knowledge must exist from the beginning. That knowledge must have been present before the consciousness of the creator of art from the start. The art creator must prepare himself with this knowledge since it is an important reference source in determining the direction of art creation.

The element of the paradigm in the form of ways and procedures for applying concepts in practice is the activity of realizing images that are ideas into concrete shapes and structures that are empirical. Empirical concrete realities are symbols of meaning, which are semiotics that needs to be considered by art creators. Art creation is the stage of implementing the methods and procedures for applying this concept.

The last two elements of the art creation paradigm result from applying artistic form and concepts, and works of art are knowledge and products of art creation activities. This elements paradigm is knowledge, the final estuary of all ways and procedures for applying concepts based on elements of other paradigms. The paradigm element in using artistic forms and concepts is implicit knowledge stored in the minds of art creators, whose existence is still a hidden philosophy. In contrast, the work of art is concrete knowledge. The writer can feel and read the meaning of this knowledge. However, the writer can only theoretically understand the importance of the substantial knowledge inherent in artworks.

Similar to scientific research, it turns out that all elements in the art creation paradigm are pillars of art creation activities. Art creation also involves two kinds of activities, namely non-physical activities and physical activities. The non-physical movement in creating art is broader than just reasoning because intuition and feelings are often required. Physical activity in concrete steps for art creators starts from exploration or experimentation, compiling subject matter findings, design, and design applications as a stage to carry out and realize artistic forms and concepts into concrete and empirical reality. The elements of the paradigm, which are activities of deepening, understanding, formation of values, basic beliefs, desire to work, the imagination of artistic forms, and development of concepts, are non-physical activities that art creators must carry out.

Conclusions

Comparing art research and creation based on their respective paradigms has the same principles. A paradigm is a thinking construct that requires the support of various elements in the form of concepts to form a distinctive and specific mindset. Paradigms in art research ultimately produce four possibilities: principles, rules, concepts, or theories. The paradigm of art creation is also the same. However, the statement about the possibility of four things in art is not explicit knowledge but implicit knowledge inherent in works of art in symbolic form. The creator of art can turn the implicit knowledge of his performance into explicit knowledge. Usually, academic artists should do this because they have to be literary aware of the works of art created. The creator artist can change the implicit knowledge produced into explicit knowledge when he is aware of the use of thinking constructs when creating works of art.

Researchers and art creators must master the three pillars: knowledge, methods, and activities. Every researcher and art creator must possess and be aware of the knowledge, methods, and activities to produce scientific truths or meaningful artistic forms. The details of the two's knowledge content, methods, and activities are different. Researchers need mastery of basic assumptions, values, models, problems to be solved or answered, concepts, research methods, procedures, and analytical methods and procedures to obtain solid analytical results to represent research well. Art creators must master all elements of the paradigm of art creationsince all aspects are an artistic means for the birth of artworks. One thing is unique to the design of art, and this does not happen to scientific research, namely the delivery of implicit knowledge in the form of hidden philosophy. This knowledge is a theoretical construction in creating art from art creators' performances in creating works of art. Academic art creators, the artist who works for academic purposes, needs, reasons, and considerations, have a moral responsibility to change their implicit knowledge into explicit knowledge so that other parties can learn the rules, principles, and concepts of an artistic system in art creation. Non-academic artists, who create art solely for the existence of art, to build and create a deep appreciation, not because of needs, reasons, and academic considerations, have no obligation to produce explicit knowledge. They already have a great service in producing art that contains implicit knowledge in the form of hidden philosophy.

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