APPLYING THEORIES AND METHODS FROM VARIOUS DISCIPLINES FOR THE SCIENCE OF ARTS CREATION AND ARTS STUDIES

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1. Background

In accordance with the times, it is perceived by most scientists that we are now in the Fourth Industrial Revolution (4.0), which is marked by the massive use of information technology, in the real form of digital machines, whose role greatly shifts the role of humans globally. It is estimated that 1.5 billion of the 7.5 billion workers worldwide are replaced by these machines. A clear example of this 4.0 Industrial Revolution is the elimination of manual labor on toll roads around the world, because of a digital machine that regulates the entry and exit of vehicles automatically. Likewise, various digital-based transportation means, such as grab, gojek, gosend, gocar, to ticket sales and boarding passes on aircraft using this digital technology, have also emerged. There are also various merchandise that can easily be ordered via the internet network, with services available via web pages, making shops without offices, shops with few operators, and others.

Likewise in the world of education, we, whether we want it or not, have to accept this education system that uses digital technology massively as well. For example, now every university, whether in the region, nationally or internationally, is used to using web services, in forms such as e-journals, e-books, e-learning, opencourseware (OCW), e-libraries, face-to-face via video conference or the like, thesis repository, thesis, dissertation, and similar aspects of digitization.

On the other hand, according to the times, education in the arts continues to experience both intensive and extensive development. For example, in the 1970s and 1980s, all arts were grouped into just one study program, namely sendratasik, now it is understood that they have become independent study programs, music, dance, theater, and others. In the Indonesian context, various art programs, for example in terms of naming, are also growing. For example, study programs that offer undergraduate programs in the field of music include: music education, musical education, ethnomusicology, including musical option ballet, musical option performing arts, and others.

In line with the development of science and technology, those of us who are involved in the world of art education (especially at the PT level), also need to keep up with the times. Then able to use and function our world of art, which includes the 5Ps (creation, study, performance, education, and management) in a direction that is in line with the times.

The world of education, in this case art education at universities in Indonesia, certainly cannot separate itself from the social, cultural, and developmental phenomena of science and technology in the midst of world society. It is not only the curriculum that must be constantly updated, but also includes theories and methods for the arts, which need to be continuously developed in the context of the time and space that is passed.

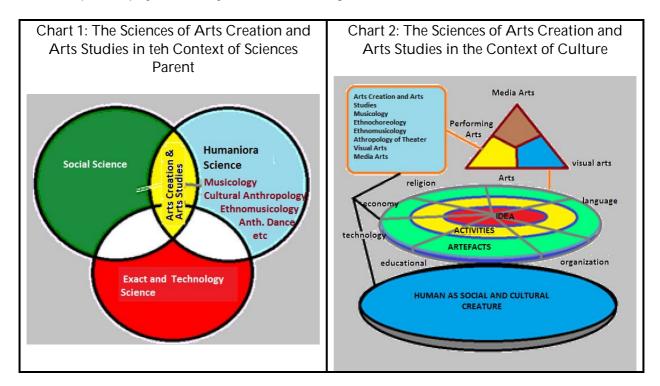
Through this paper, the author wants to provide an overview in which direction the application of theory and method to the art sciences? Furthermore, how to develop it? After that, how does this development become an integral part of the dynamics of the development of science and technology and the socio-cultural phenomena of society, both at regional, national and global rankings. Before that, let us first investigate what the sciences of creation and the study of art are.

2. What Are the Sciences of Arts Creation and Arts Study?

In the context of developing theories and methods, it would be better to describe scientifically what is the creation and study of art. The reason is that this science is relatively new, and in Indonesia it was only started in the 1980s, with the nomenclature of the Masters in Arts Creation and Arts Study Program.

Based on three scientific philosophical points of view, (1) *ontologically*, what one wants to know in the discipline of Art Creation and Study is to scientifically know art in the context of human culture around the world. For (2) *epistemology*, namely how the scientists of the Arts

Creation and Study disciplines know about it, it is carried out with various scientific approaches such as: based on theories, methods, field research, problem formulation and hypotheses, using qualitative and quantitative methods, interviews, recording art data, laboratory analysis, scientific publications, and the like. Furthermore, in (3) *axiological* terms, what value is contained in the knowledge of the creation and study of art is about art which contains human values, by knowing this art we will be able to see the cultural character of the people who support it. This cultural art contains local wisdoms, the norms that its supporters adhere to, and is rich in moral values, customs, philosophy, humanity, and similar things.



Historically, the Creation and Study of Art is a scientific cluster of arts which consists of various types of supporting sciences, such as: musicology, ethnomusicology, dance anthropology (ethnocoreology), fine arts, theater arts, recording media arts, and others.

- (a) Musicology is a scientific discipline that studies and hones the competence of creation, especially music found in Western culture in general, such as antique music, gregorian chant, classical, romantic, baroque, Rococo, ars nova, troubadour, trouvere, church music., and others. The main subject of study is music that is contained in the culture of Western society (Europe and its diaspora such as America, Australia and New Zealand, etc.).
- (b) Ethnomusicology is a scientific discipline that studies music and is able to practice the musical performance in the cultural context of the community that produced the music. Music is not only seen structurally and aesthetically, but music is an integral part of the context of human life, both in terms of culture and social aspects.
- (c) Dance anthropology or commonly referred to as ethnochoreology or dance ethnology, is a scientific discipline that studies dance throughout the world which is seen not only from a structural and aesthetic perspective, but furthermore dance is seen as an inseparable part of culture in where the dance grows and develops. So dance is part of human cultural and social phenomena that support the existence of this dance.
- (d) *Fine (visual) art* is a scientific discipline that studies and also practices works of art, whether those with cultural backgrounds or those with the main objective of exploring visual aesthetics and the like. This discipline emphasizes the final result in the form of visuals, both those that fall into the category of pure and applied arts, including crafts or crafts, and similar scopes.
- (e) Theater arts or sometimes called theater anthropology is a discipline that studies theater arts, whether it grows in society or theater as artistic creativity, based on the existence of theater in the cultural context of the community that supports its existence.

(f) *Media arts* is a discipline that studies recorded media, including television, radio, internet media, communication media, and the like, which are related to technological developments in art, with a multidisciplinary approach.

That the Creation and Study of Arts is a multidisciplinary scientific discipline supported by the following sciences: musicology, ethnomusicology, dance ethnology, fine arts, theater anthropology, recording media art, and the like. In the context of master studies in Indonesia, a master's degree in Creation and Art Studies) is referred to as a master of arts (M.Sn.).

In order to develop theories and methods of study and creation of this art, to align with the development of science in the world, it seems that there is a consensus among scientists, namely the need to use an interdisciplinary, multidisciplinary and transdisciplinary approach. The description is as follows.

3. Interdisciplinary, Multidisciplinary, and Transdisciplinary Approaches

(a) Interdisciplinary is an intensive interaction between one or more disciplines, whether directly related or not, through research programs, with the aim of integrating concepts, methods and analyzes. Multidisciplinary (multidisciplinary) is the combination of several disciplines to jointly solve a particular problem. Transdisciplinarity (transdisciplinarity) is an attempt to develop a new theory or axiom by building links and connections between various disciplines.

An interdisciplinary approach is an approach to solving a problem by using an integrated review of various viewpoints of relevant allied science. What is meant by cognate science is the sciences that are in a certain scientific cluster, namely the Exact Science (E) group, the Social Sciences (S) group, or the Humanities (H) group as an alternative. Relevant science means the appropriate sciences used in solving a problem. What is meant by the term integrated is that the science used in solving a problem through this approach is intertwined with one another implicitly (implicitly) constituting a unanimity or unity of discussion or description included in each of its sub-descriptions if the discussion or description consists of sub-sections. description. The main characteristic or key word of this disciplinary approach is inter, with the meaning of integrated inter-science within the same scientific family.

- (b) A multidisciplinary approach is an approach to solving a problem by using a review of various viewpoints of many relevant sciences. The relevant sciences can be used in the Exact Sciences and Technology (E) clusters, the Social Sciences (S) clusters, or the Humanities (H) clusters alternatively. The use of sciences in solving a problem through this approach is explicitly stated in a discussion or description including in each of its sub-descriptions if the discussion or description consists of sub-descriptions, accompanied by their respective contributions explicitly to finding a way out. of the problem at hand. The main characteristic or keyword of this multidisciplinary approach is multi (ie, many disciplines in the same knowledge family).
- (c) The *transdisciplinary* approach is an approach to solving a problem by using a review of science that is relatively controlled and relevant to the problem to be solved but is outside the expertise as a result of the formal education of the person solving the problem. Knowledge that is outside the expertise to be used by a person can be one or more knowledge. However, usually for the purposes of depth of discussion that person only uses one knowledge outside his expertise. The relevant sciences can be used in the Exact Sciences and Technology (E) clusters, the Social Sciences (S) clusters, or the Humanities (S) clusters as an alternative. The use of knowledge or sciences in solving a problem through this approach can be implied or explicit, but it would be better and usually express. Thus, someone who uses a transdisciplinary approach must also meet the following requirements: (a) using knowledge outside of his/her main expertise, usually in solving a problem using a science outside his expertise; (b) the knowledge used is in the same knowledge family as the main expertise; (c) understand well the knowledge that is used outside the expertise of the main science; (d) show results of sufficient quality and truth. The main characteristic of the transdisciplinary approach is trans (across knowledge within the same knowledge family) or across them.

4. Theory, Method, and Application

Apart from going through an interdisciplinary, multidisciplinary and transdisciplinary approach, in the context of developing theories and methods, similar theories from different sciences can be fused and common ground when studying a human, social, and natural phenomenon. Here is an example.

4.1 Theory of Functionalism from Various Disciplines

According to Lorimer *et al.*, the theory of functionalism is one of the theories used in social science, which emphasizes the dependence of institutions with habits in certain societies. Functional analysis explains how social structure is supported by institutional functions such as: state, religion, family, school, and market. For example, in a complex society such as in the United States, religion and family support values that are functioned to support the political activities of democracy and the market economy. In a simpler society, a tribal society, inclusion in religious ceremonies serves to support social unity in human groups related to kinship. Although this theory formed the basis for 19th century European writers, particularly Emile Durkheim, functionalism has actually developed as a solid theory since its adoption by Talcott Parsons and Robert Merton in the 1950s. This theory greatly influenced Anglo-American sociologists in the 1970s. Bronislaw Malinowski and Radcliffe-Brown, developed this theory in the field of the discipline of anthropology by focusing on non-Western societies. Since the 1970s, functionalism theory has also been used to study the dynamics of social conflict.¹

Malinowski also put forward a functional theory about culture. Malinowski's passion for psychology was also evident when he visited Yale University in the United States for a year, in 1935. There he met psychologists such as J. Dollard, who was then developing a series of studies on the learning process. According to the psychology scholar from Yale, the basis of the learning process is nothing but the repetition of an organism's reactions to external phenomena, which occur in such a way that one of the organism's instinctive needs can be satisfied. This learning theory, or learning theory, attracted Malinowski's attention so much that he used it to provide a definite basis for his thinking on the functioning relationships of the elements of a culture.

As has been described above, when Malinowski early wrote his essays on various aspects of Trobiand society as a whole, he accidentally introduced a new perspective in anthropology. But the reaction from the scientific circles gave him the impetus to develop a theory about the function of elements of human culture. Therefore, using learning theory as a basis, Malinowski developed his theory of functionalism, which was published only after his death. His book was titled A Scientific Theory of Culture and Other Essays (1944). In this book, Malinowski develops a theory about the function of very complex cultural elements. However, the essence of the theory is the stance that all cultural activities are actually intended to satisfy a series of instinctive needs of the human being related to all of his life. Art as an example of a cultural measure occurs because humans want to satisfy their instinctive need for beauty. Science also arises because of the human instinct to want to know. Technology arises because humans want it to be easy to carry out their activities. However, many cultural activities also occur because of the combination of several kinds of needs. With this understanding, said Malinowski, a researcher can study and explain many problems in people's life and human culture.

Radcliffe-Brown argues that function is closely related to the social structure of society. That the social structure lives on, while individuals can change at any time. Thus, Radcliffe-Brown who sees this function from the point of view of its contribution in a society, argues that function is the contribution of one part of the activity to the overall activity in the social system of society. The purpose of the function is to achieve a level of internal harmony or consistency, as described in the following.

By the definition here offered 'function' is the contribution which a partial activity makes of the total activity of which it is a part. The function of a perticular social usage is the

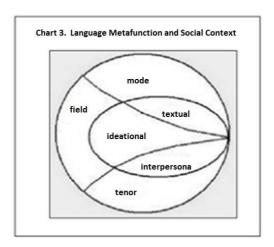
¹Lawrence T. Lorimer *et al.*, 1991. *Grolier Encyclopedia of Knowledge* (volum 1-20). Danburry, Connecticut: Grollier Incorporated, p. 112-113.

contribution of it makes to the total social life as the functioning of the total social system. Such a view implies that a social system ... has a certain kind of unity, which we may speak of as a functional unity. We may define it as a condition in which all parts of the social system work together with a sufficient degree of harmony or internal consistency, i.e., without producing persistent conflicts can neither be resolved not regulated.²

In communication science, the communication function shows the flow of movement that is in line with the development of society or individuals. Communication functions according to the needs of the users or the interacting individuals. Therefore the function of communication can be associated with expressions (emotions), directions, references, poetry, fatigue and metalinguitics related to language. In general, in communication science, when examining communication functions, it consists of four main categories, namely: (1) the function of informing, (2) the function of educating, (3) persuading the audience to change their views, and (4) to entertain others.

In the field of linguistics, it is also common to use functionalism theory which is often referred to as the *theory of language metafunctions*. The three parameters of the situation context influence the language choices appropriately, because they can reflect three language functions. According to the opinion of linguists, language has three main functions, namely: (1) to talk about what happened, what will happen, and what has happened; (2) to interact or do something with language, and to express a point of view; and (3) to transform the results of the two previous functions into one coherent whole.

Halliday calls these three parameters the metafunctions of language. Metafunctions of language are defined as language functions in the use of language by speakers (tenors or involved). In every interaction according to Halliday and Martin³ between language users, speakers, using language to par, exchange, and organize or organize experiences, as in Chart 3.



The three functions of language in human life also have three functions in the context of communication, namely: exposing, exchanging, and arranging experiences. Technically, each is referred to as ideational, interpersonal, and textual.

The relationship with the context of the situation is that the context of this situation has three important variables, namely: (a) *field*, field or content, what is discussed, is represented in the meaning of experience which is realized in a clause consisting of three elements, in the form of: process, participant, and circumstance. Meanwhile, (b) *tenor* or who is talking about a discussion which is represented in the meaning between the people, which shows the actions taken to experience in social interactions. In other words, the meaning between persons is an action carried out by language users in the context of exchanging linguistic experiences which are represented in the meaning of experience. This interpersonal meaning represents the modality with which action

²A.R. Radcliffe-Brown, 1952. *Structure and Function in Primitive Society*. Glencoe: Free Press. p. 181. ³M.A.K. Halliday dan J.R. Martin (ed.), 1993. *Writing Science: Literacy and Discursive Power*. Bristol, London: The Falmer Press. p. 30.

is realized in the (c) *mode*. Furthermore, the mode or method is how the conversation is carried out and then represented in a textual meaning in the form of themes and rema.

On the other hand, ideational meaning means that serves to describe experiences in everyday life. Ideational meaning is a representation of content. One meaning that is constructed by content cannot be separated from the structure of ideational meaning which includes process, participant, and circumstance. When the process describes an experience which then requires a perfect experience unit when it will be realized in language, namely clauses. That is a glimpse of the theory of language function in linguistics.

Furthermore, the theory of use and function is also commonly used in the discipline of ethnomusicology. Definitively, ethnomusicology is a scientific discipline that studies music in a socio-cultural context. This science began to bloom in the 1880s, even though its activities had occurred long before. If in the field of sociology there are Talcott Parson and Robert Merton, then in the discipline of anthropology there are Malinowski and Radcliffe-Brown who are seen as the founders of the theory of functionalism, then in ethnomusicology there is a figure of functionalism who is very important, and becomes the main reference when examining the function of music (art or culture) in the context of the supporting community. He Merriam, an ethnomusicologist-anthropologist from the United States.

By sticking to the theory of functions, which then tried to apply it in ethnomusicology, Merriam further clearly differentiated the meaning of this function in two terms, namely use and function. According to him, distinguishing the meaning of use and function is very important. Ethnomusicologists in the past were not very careful about these differences. If we talk about the use of music, then we are referring to the habit (the way) music is used in society, as a practice that is usually done, or as part of the implementation of customs, both in terms of the activity itself and in relation to other activities. Merriam further explains the difference in understanding between use and function as follows.

Music is used in certain situations and becomes a part of them, but it may or may not also have a deeper function. If the lover uses song to w[h]o his love, the function of such music may be analyzed as the continuity and perpetuation of the biological group. When the supplicant uses music to the approach his god, he is employing a perticular mechanism in conjunction with other mechanism as such as dance, prayer, organized ritual, and ceremonial acts. The function of music, on the other hand, is enseparable here from the function of religion which may perhaps be interpreted as the establishment of a sense of security vis-á-vis the universe. "Use" them, refers to the situation in which music is employed in human action; "function" concerns the reason for its employment and perticularly the broader purpose which it serves.⁴

From the above frame of mind, Merriam further described that until 1964, research conducted by ethnomusicologists on the function of music in people's lives, showed that there were 10 functions. The ten functions of music are: (1) as an emotional expression, (2) as aesthetic appreciation, (3) as entertainment, (4) as communication, (5) as a symbol, (6) as a physical reaction, (7) as a related to social norms, (8) as the validation of social institutions and religious ceremonies, (9) as cultural continuity, and (10) as the integration of society (Merriam 1964). Function reviewers in ethnomusicology should not be trapped by these 10 functions. Each reviewer can expand it and look for other prominent functions in a musical performance practice in society.

In addition, the theory of the function of art is also studied in the field of ethnocoreology (dance anthropology). Soedarsono, an art historian and ethnocoreologist, who sees the function of art, especially from its practical and integrative relationships, reduces the three main functions of performing arts, namely: (1) for social interests or means of ceremony; (2) as an expression of personal feelings that can entertain oneself and (3) as an aesthetic presentation⁵ Soedarsono's opinion is inductive in nature and he generalizes the various socio-cultural functions of dance.

⁴Alan P. Merriam. 1964. *The Anthropology of Music*. Chicago: North Western University Pess. p. 210. ⁵Soedarsono, 1995. "Notasi Laban: Suatu Kemungkinan Sistem Notasi Tari bagi Indonesia." *Pengetahuan Elementer Tari dan Beberapa Masalah Tari*. F.X. Sutopo Cokrohamijoyo (ed.). Jakarta: Direktorat Kesenian Proyek Pengembangan Kesenian Jakarta, Departemen Pendidikan dan Kebudayaan.

Thus, those of us who work in the art sciences can take advantage of the theories of function from the various disciplines mentioned above, in order to develop our discipline. This is also a challenge going forward.

4.2 Semiotic Theory of Various Disciplines for the Arts Sciences

One of the theories most commonly used in the sciences of creation and the study of art is semiotics, which initially developed in the discipline of linguistics, which then spread naturally in the world of science into the disciplines of architecture, dance, music, theater, and others.

Semiotics or semiology is the study of signs and signs used in human behavior. The same definition was put forward by one of the founders of semiotic theory, namely the linguist from Swiss de Sausurre. According to him, semiotics is a study of "the life of signs with the people who use those signs." Although these words were used by the 17th century English philosopher John Locke, the idea of semiotics as an interdisciplinary mode of science, with examples of different phenomena in various fields of study, only emerged in the late 19th and early centuries. 20th, when the works of Sausurre and the works of an American philosopher, Charles Sanders Peirce appeared.

In Peirce's early work on the semiotic field, he focused attention on pragmatism and logic. He defines a sign as "something that supports someone for something else." One of its major contributions to semiotics is its categorization of signs into three types, namely: (a) icons, which are aligned with their references (eg roads are a sign of falling rocks); (b) the index, which corresponds to the reference (smoke is a sign of fire) and (c) the symbol, which corresponds to the referent by means of discovery (such as by words or traffic signals).

Peirce also interprets language as a system of symbols, but it consists of three interrelated parts: (1) representatum, (2) observer (interpretant), and (3) object. In the study of art, it means that we must take into account the role of the performing artist and the audience as observers of symbols and our efforts to understand the process of performance or the process of creation. Peirce distinguishes symbols into three categories: icons, indexes and symbols. If the symbol resembles the one symbolized like a photo, it is called an icon. If the symbol indicates the presence of something such as smoke, it will be followed by fire, it is called an index. If the symbol does not resemble what is symbolized, such as the eagle (burung garuda) representing the Republic of Indonesia, or the tiger (harimau) representing the state of Malaysia, it is called a symbol.

Semiotics is also always used by art and cultural scientists in the study of theater or performing arts. Theater itself is a vehicle for communication that is so complex, because it involves the relationship between the actors and the audience. The process of producing meaning in this theater is fully subject to certain systems which usually involve a combination of various oral symbols and non-verbal symbols. This system will allow everyone to interpret the phenomena that occur.

Theater is a complex means of communication because this art involves the relationship between the actors and the audience. The process of producing meaning in theater, according to a certain system that involves a combination of oral symbols and non-verbal symbols. The system is important to allow the audience to interpret the phenomena being described.

Because performance art is a unidimensional medium, each symbol unit cannot stand alone to describe a message. Performing arts must be seen as a comprehensive combination with other symbols in a particular context. For example, gestures, facial expressions, and language are combined and used simultaneously to reveal something as a whole. One more example is the use of a keris. For the Malay community, the keris is not only a weapon to defend themselves, but also symbolizes strength and power. If it is tucked in the waist, the keris can be interpreted as a symbol of courage, because the image of a Malay officer in traditional Malay society is incomplete if there is no *keris* on the waist. The emission of the meaning of the keris follows the way it is used. A study that uses a semiotic approach explores all the symbolic elements contained in a work of art. In matters relating to the keris, it is not only the way it is used, but its shape is also related to beliefs in Malay society.

Mukarovsky had begun the study of semiotics in theater.⁶ For Mukarovsky a performance text is a macro symbol whose meaning can only be understood in terms of a whole series of other symbols. In theater, symbols or signs give symbolic meaning. Since everything on the stage is a symbol (Jiri Veltrusky, quoted in Elam),⁷ all objects and treatments of the performer on the stage must have a relationship with the object intended. This means, non-literal symbols must be able to function as literals so that the audience is able to interpret the message conveyed. An object may be represented by the use of several symbols if the symbols are able to show the object's presence (Brusak is quoted in Elam). ⁸ For example, symbols produced by movement of the limbs can convert an actor or dancer into other objects such as a flying eagle, a rocking tree, or a fierce elephant. Because the meaning of a symbol is not the same for everyone, it depends on the creativity of the source party to choose the appropriate symbol, in order to highlight the desired message.

De Danaan, who studied the dance of *Menghadap Rebab*, found that the dance movements and lyrics in the song complemented each other. The symbols of dance movements in *Facing the Rebab* represent "several parts" of revelation. The integration of song lyrics and dance movements produces a complete statement, because the lyrics describe the movement and so on the movement shows the meaning in the lyrics. According to Danaan, the relationship between the lyrics and the movements in the Mengadap Rebab dance is very close. It is difficult for someone to understand the message in the dance if they do not examine the dance movements and the lyrics of the song.

Dances in theater are not necessarily accompanied by singing or vice versa. There are times when in certain places, only dance is used to express something. In this case the expressive movements in the dance are fully used as a medium of communication. The movement of the actors not only shows aesthetic value, but also carries a certain message as a substitute for words.

Semiotics are also always used in studying song and dance. By following a semiotic approach, two cultural performance experts, Tadeuz Kowzan and Patrice Pavis from France, applied it in the show. Kowzan offers 13 emblematic systems of a theater performance — 8 directly related to the performer and 5 outside of it. The thirteen symbols are: words, tone of voice, expression, gesture, movement, make-up, hairstyle, costium, property, setting, lighting, music and sound effects.

Semiotics is used in various disciplines, as well as in musicology. One of the semiotic theories in musicology is by Martinez entitled "A Semiotic Theory of Music: According to a Peircean Rationale." He emphasized the communication aspect in music.¹⁰

Recent developments regarding the application of Peirce's general theory of signs to music, such as that of David Lidov (1986), Robert Hatten (1994) and William Dougherty (1994), show that this approach includes both musical and musical contexts. semiotic, which focuses on the power of questions about the importance of events that build the musical aspect. In this paper, Martinez presents the structure of the semiotic theory of music, as he did in his doctoral dissertation on the theme of semiotics in Hindustani music, which he submitted to the University of Helsinski in 1997.

The study of musical references concerns the aspect of the relationship between signs and objects, which clarifies the capacity of musical representations, which can be marked as acoustic or non-acoustic objects. There are several musical meanings. One of the fundamentals is that the sign and object represent a connected identity, that the musical sign is mummy as an icon. After all, music has a signature capacity. Some music aesthetics, such as Hanslick and composers such as Boulez, Cage), and Kostelanetz argued that musical aesthetics are highly dependent on the mode of significance. So that the idea of mummy music or absolute music cannot possibly be realized in discussing music in culture. Every musical tradition in this world has different aesthetic principles and conceptions.

⁶K. Elam,1983. *The Semiotics of Theatre and Drama*. London: Methuen.

⁷*Ibid.*, p. 7.

⁸¹bid., p. 9.

⁹Zaleha Abu Hasan, 1996, *Mak Yong sebagai Wahana Komunikasi Melayu: Satu Analisis Mesej.* Tesis sarjana Fakulti Sains Kemasyarakatan dan Kemanusiaan, Universiti Kebangsaan Malaysia, Kuala Lumpur.

¹⁰José Luiz Martinez, 1996. "Icons in Music: a Peircean Rationale." *Semiotica* 110 (1/2), 57-86. Lihat juga Martinez, José Luiz,1991. Música & Semiótica: Um Estudo Sobre A Questão da Representação na Linguagem Musical. Tese de mestrado não publicada, Pontifícia Universidade Católica de São Paulo.

That is a brief description of some of the relevant theories developed for the field of creation and art studies that we are in. Apart from that, there are many other theories that continue to be fostered in the context of the arts disciplines.

4.3 Application of the Method

In order to apply methods in the arts, including in the field of study and art creation, according to the author, it is necessary to develop field work. The field is the pulse of life for our art, which is integrated into the community or ethnic group that supports the art.

4.3.1 Field Research

Research into the arts "obliges" its researchers to conduct fieldwork. This field research can be carried out in a matter of months, years, or decades, depending on the breadth and depth that an art researcher intends to research. In addition, it must also be adjusted to the financial capacity that supports this art research project.

Furthermore, in this field research, an art researcher is important to determine base informants and key informants. The base informant is a person who knows many things in a community that he belongs to, and sometimes even becomes the leader of a certain field in the community. Even though he knows a lot about the society in question, he usually doesn't go into the fields we study. He is not an expert in the fields of language, literature, culture, art, games, folklore, and the like. These base informants could be a village head, hamlet head, military chairman, heads of religion, priest, preacher, cultural observer, traditional leader or leader, and people who have similar capacities.

Furthermore, in the context of collecting data in accordance with our research project on this art, the most important thing is to find and collect data from key informants. Sometimes it is also referred to as main sources, key sources, expert sources, and others. Key informants are people who have expert capacities in the community that support these arts, which are in line with the subject matter of our research. If in our research the main theme is mantra, then our key informants can be shaman, handler, manang, sibaso, datu, datu bolon, and the like. If our main problem is the meanings in Karo dance, for example, then our key informants could be a dance stylist, dance coach, senior dancer, and the like in Karo society. If our main problem is for example the dialect in Tanjungbalai Asahan Malay, then our key informants are speakers and people who can explain the meanings of the utterances in Tanjungbalai Asahan Malay. Likewise, if our research on the art of Minangkabau pantun is in the context of alek kawin (marriage ceremony), then our key informant could be an expert in the pantun pantun in Minangkabau culture, adjusted to the location in which village or sub-district in Ranah Minang. This is what needs to be considered in the context of finding and determining key informants and key informants in art research.

4.3.2 Observations Involved

One of the methods commonly used in field research in the study and creation of art is involved observation. This means that researchers involve themselves as an inseparable part of the community supporting the art, even though scientifically they must keep a distance, especially the interpretation of the art culture. In this kind of work anthropology discipline refers to the researcher as an engaged observer (participant observer). In the discipline of ethnomusicology, this kind of work is called bimusicality, meaning that the ethnomusicology researcher is also involved as a player of musical instruments, just as a musician who performs this art in his culture.

This involved observation will provide the researcher with benefits in the context of collecting the data needed in his research project. Through involved observation, the research takes place naturally, naturally, and as it is, as if there is no artificial engineering. This is also the main characteristic of ethnographic research using qualitative methods. Walk just as is. If necessary, the public and key informants we studied did not realize that we were conducting research on those who practice this kind of art.

4.3.3 Interview

One of the methods used in research on art is an interview or interview. Interviews are in the form of verbal communication between researchers and base informants, key informants, or the general public who support the arts we are studying. This interview can be done by making preparations such as compiling a list of interview questions, either general or specific, to remember in the memory of the researcher. However, for researchers who have had a lot of experience, the question may arise spontaneously in the research field, and usually the large frame of the question is already in the memory of the researcher. Attempting to do an interview is to dig deeply about the topic of the problem which is the focus of the research.

Even in conducting this interview, it should be done naturally, not rigidly, fluidly, and raises a familiar, natural and just situation. When interviewing an important concern for art researchers is ethical issues. It contains how we value all the information and opinions of the informants. There is no need to interrupt the conversation that is being carried out by the informant too often. Don't think researchers are smarter than they are. Likewise, don't like to budget and highlight academic degrees or the myriad of achievements that researchers have made in their lives. Likewise, the ethical issue of how to record conversations must first be excused to informants. Likewise, first state what our purpose in researching art is, through our informants. What is clear is that an art researcher must be creative in creating an intimate, friendly atmosphere, and research only happens naturally.

Mastery of recording tools in the context of art research is also important for researchers. At least a researcher must be able to shoot art performances, take pictures, and record auditive data, through a camera or cellphone, or others. For this reason, he must practice independently or ask for help from lecturers and colleagues for this purpose. Audiovisual and visual angles are very important to pay attention to, namely when to zoom in, zoom out, and certain angles that must be recorded. Even in art performed in cultural performances, recording is usually done with a static tripot and a dynamic moving camera, then the results are synthesized in the laboratory later.

In line with today's technological developments, these records can be saved in various formats for computers. For example, for audiovisual we can save it in the form of: mov, dat, swf, mpg, and others. For image formats, we can save them in the form of data: jpeg, png, bmp, tif, gif, and others. Likewise, audio files can be saved in mp3, mp4, and other formats. Generally all formats in the three dimensional form can be converted. For this reason, a researcher should also act as a photographer and video shooting expert, data editor, and recording data processing expert, for his research purposes.

4.3.5 Qualitative Research Methods

In field research on the arts, at least we are familiar with the terms field techniques and field methods. Technique means collecting detailed data in the field. In contrast, field methods have a broader scope, covering theoretical bases that serve as references for field research techniques. Techniques show solving problems of day-to-day data collection, whereas methods include the techniques as well as various problem solving as a framework in field research.

In addition, in art research, there are qualitative and quantitative research methods. Qualitative research basically aims to find the meanings contained in certain activities or artifacts. Furthermore, quantitative research usually aims to measure existing phenomena based on certain quantity ranges. As far as the writer observes, art studies are more closely approached by qualitative methods, although that does not mean that quantitative methods are not needed in studying the art. What needs to be understood is that the two methods used are suitable for discussing what problems. For example, to assess how much degradation the number of ronggeng Melayu in North Sumatra, of course, the appropriate method is a quantitative method. On the other hand, to find out to what extent the semiotic meaning that the artist wants to communicate in the guro-guro aron performance, is certainly more appropriate to be approached with a qualitative method. In certain research contexts, both methods are even needed.

Denzin and Lincoln stated explicitly about qualitative research based on the history of scientific development, especially in the Chicago school, in the field of anthropology as follows.

QUALITATIVE [sic.] research has a long and distinguished history in human disiplines. In sociology the work of the "Chicago school" in the 1920s and 1930s established the importance of qualitative research for the study of human group life. In anthropology, during the same period, ... charted the outlines of the field work method, where in the observer went to a foreign setting to study customs and habits of another society and culture. ...Qualitative research is a field of inquiry in its own right. It crosscuts disiplines, fields, and subject matter. A complex, interconnected, family of terms, concepts, and assumtions surround the term qualitative research.¹¹

The research design is a plan on how to collect and analyze data so that it can be carried out economically and in harmony with the research objectives. In design, among other things, it should be considered: (a) the target population, (b) sampling methods, (c) sampling size, (d) data collection procedures, (e) ways to analyze data after collection, (f) whether or not to use statistics, (g) how to draw conclusions and so on.¹²

5. Closing Statement

In accordance with the times, the application of theories and methods in all families and disciplines is an obligation. Development in the art sciences that are included in the humanities and part of the humanities and social sciences must pay attention to cultural and social changes in society both in the ethnic, national and global spheres.

The development of theory and method must be based on the three basic scientific philosophies of the arts, both ontologically, epistemologically, and axiologically. By referring in such a way, it will become increasingly clear that the polarization of theories and methods in the art sciences (be it for the study, creation, and art education).

In the Indonesian context, the development of theories and methods also sees the diverse existence of this nation but is united in its philosophy of life as a single diversity (though different but still one) - not leading to disintegration but mutually strengthening and strengthening unity and integrity. Of course, these efforts do not forget our hopes and prayers to Allah so that the arts and all sciences will become a driving force in order to become perfect and complete human beings, as believers, pious, and have strong social piety, *insha Allah*.

11

¹¹Norman K. Denzin dan Yvonna S. Lincoln (eds.), 1995. *Handbook of Qualitative Research*. Thousand Oaks, London, dan New Delhi: Sage Publications.

¹²S. Nasution, 1982. *Metode Research*. Bandung: Jemmars.