Three dimensional perception and production process

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Abstract

The purpose of study is to take views of students educated and trained in visual arts and in connection with two or three dimensions and production process. It has been thought that students predominantly take applied courses such as picture, graphic, lithograph statue as optional atelier courses etc can give general information on this matter during 4 year education and training process. The scope of research has been stinted at the beginning and it has been thought that it has been gained a movement point to study on this matter in more details. In content it has been mentioned as a summary for vision form, perception, visual perception and perception with three dimensions. It has been interviewed with 11 persons that have been total number of senior class students for study. As a result of interviewing with students it has been reached to the opinion that perception with two and three dimensions is different, also it is contained differences in production process and perception and expression with three dimensions are more complicated process.

Keywords: Three dimension, perception, sculpture, painting.

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1. Introduction

In the world encircled with visuals where we are living we can predict that visual perceptions of students educated in the field of visual arts could have advanced.   But researches made indicate that visual perception has different dimensions and those dimensions have various features. As a result of individual observation that have been made it was determined that some students whose sufficiency levels are high in perception with two dimensions could not show the same sufficiency in three dimensional perception. The main subject constituting the basis of this study is to collect information in connection with this difference. For that reason it was made an interview consisting of three questions with 11 students taking visual arts.

2. Vision

Because vision of an individual gives us information about his individual features and perception, it is important in terms of our subject. Here, it was mentioned in terms of giving opinion about ways of seeing very shortly.

According to Merleau-Ponty (2003) to think is not sufficient in order to see. View is a thought with conditions, it rises "with mediation" of that happening in body.

There is a vision in every image even in photographs. Because photographs are not mechanical recording as it is thought mostly and when we look at a photograph we can distinguish that photographer selects views in consideration of unlimited appearance. Vision of photographer reflects in his selection of subject. Vision of a painter is animated with images that he makes on cloth or on paper. Although there is a vision in every image our perception or evaluation depends upon our vision at the same time (Berger, 2010).

If we take into consideration that basic means of vision and observation are mind (Translated by Leppert, 2002), we can predict that there are different deterministic factors in connection with visual perception. This is a condition expanding framework of subject also.

Thomas Sebeok, a specialist of anthropology and semiotic showed that even animals preferred some forms and asserted that liking was a form of selection answering natural requirements as a basis. This kind of observation shows that stylistic abilities have effect on perception and consequently on conduct, for that reason selection or liking have role on it. That is to say, abilities observed of an article are not attributed when we look them but there are abilities to exist (Erzen, 2011).

3. Perception-Visual Perception

Perception arising as an important concept in the process of perceiving and analyzing of environment is defined as transferring objective world to subjective awareness by means of senses (Ozcan, Bayraktar, Goker & Tekel, 2003).

Perception is to comment sense impressions, and as to visual perception it is ability to understand things that individual sees. What and how individual will sees and percepts, whether he percepts which views he was seen or doesn't percept them, what he means to views, which he will percept sensitively and evaluates them are in connection with his knowledge and life experience to a great degree. In order to realize visual perception, it is necessary for and individual to look and see psychologically. Here, what individual would like to see, which view he require to see within a chaos of views encircling him have importance in realizing perception (İnceoglu, 2004). Visual perception is not related to identification also. Visual identification is to recognize and identify similarity such as size, color, shape among articles; as to visual perception is to recognize, identify visual warning and combine temp previous experiences and finally to comment them (Translated by: Memis and Harmankaya, 2012).

Individuals experience an acquisition process in connection with perceived concept in visual perception process. This process has two dimensions. In this phase, they perceive views as width and height. After this process, individual begins to constitute a view in the field of visual perception. During this process, third dimension begins to be seen together with depth perception. Later, it means sense of the concept with cultural infrastructure and also makes and identification gained   that is recognizes the concept (Booth, 2003; Findlay and Gilchrist, 2003) (Translated by Eristi, Uluuysal, Dindar, 2013).

Up to now as a summary, there are many theories and features that we can not mention in connection with perception. We can summarize deterministic features of perception having importance in terms of our subject as follows:

- Features of perceived article,
- Age, sex, cognitive, affective readiness level of perceiver,
- Features of articles present hint in constituting perception in connection with perceiver,
- Features of training environment and its having exhorters suitable to expectations of perceiver,
- Cognitive, affective and psychomotor advancement levels of perceiver,
- Individual features of perceiver such as interest and curiosity etc,
- Perceiver's requiring/interesting to related condition.

4. Three Dimensional Perception

It is specified that problems of visual perception result from lack of identification, differentiation, reminding, and commenting visual sense in related literature. But, there are other reasons that create differences about three dimensional perception constituting basic problem of perception.

Although visual-spatial perception and visual perception are related with each other very closely, both of two perception types define different matters. Visual perception is "allocentric" perception. That is visual perception gives us information about size, shape and color of an article. As to visual-spatial perception, it is "egocentric" perception. That is, visual-spatial perception changes according to position of an individual. Visual-spatial perception expresses relation among articles in the place, distance estimate between sub-compounds of articles and articles that is depth perception and inherent presentation that is images related to event (Kurt, 2002).

It is necessary to focus on type of duty and use attention permanently in order to exhibit successful performance in duties of visual-spatial perception. In other words, it is necessary to differentiate target stimulant from amazing stimulants and maintain this as long as duty continues (Kurt, 2002).

It has importance in terms of accepting as visual literate that individual whose environment is full of visual messages and especially trained in visual arts and making application on this field develop their vision.

Visualization includes ability to turn and change article with two and three dimensions in mind. Bishop separated visualization ability to two parts, low and high spatial abilities. Spatial ability with low level includes visualizing articles with two dimensions not including cognitive changing of visual images. As to high spatial abilities, it includes visualizing articles with three dimensions not including cognitive changing of visual images (Kurt, 2002).

5. Findings

1st question: Do you see a difference between expression with two dimensions and expression with three dimensions? If you see differences what are them? (For example such as to paint and to sculpture etc)

	There are differences (three dimensions)	There is not any difference
Student 1	Powerful as reality	
Student 2		Ability to perceive is the same
Student 3	Harder expressing	
Student 4	Technical differences	
Student 5	There are difference	
Student 6	More attractive	
Student 7	Harder expressing	
Student 8	Difference of dimension	
Student 9	Difference of dimension	
Student 10	Tactile difference and difference of dimension	
Student 11	Ability to comprehend widely	

When it is studies the above table, it is seen that 10 students among 11 students state that there are differences between expression with two dimensions and expression with three dimensions. When it is studies the answers it can be said that those students have obtained those differences in the way of their experiences.

Student 1 has expressed his experience as follows:

"I am thinking that three dimensions are more powerful than two dimensions as a reality. Effect of three dimensions in human beings is higher. I am also thinking effect of reality is more attractive always..."

Except one student, other students have laid emphasis on feature of reality of three dimensions. They are in idea unity that having this features, in other words, tactual and third dimensions makes harder to express it after comprehending. Some have expressed that the same feature constitutes a differentiation and requires a longer and tiresome process.

Expression of Student 11 drawing attention to "comprehending ability" as a difference is as follows:

"He who comprehends expression with three dimensions can also comprehend two dimensions more easily. But he who comprehends expression with two dimensions cannot think and reflect three dimensions always. I am thinking that three dimensional perceptions require wider comprehending ability…"

Student 7:

"To study with two dimensions is more easily and funny, I am interiorizing the painting that I painted. To sculpture is harder, it forces me to shape. Especially I cannot comprehend three dimensional perceptions completely. "

Expression of Student 2 that has answered the first question is as follows:

"Human beings can use material with two dimensions and three dimensions as a means in order to express their senses. For that reason I am not thinking that there is any difference. A capable individual can be successful in both perceptions."

2nd question: Are there any differences between to perceive a form with three dimensions and to perceive with two dimensions for you? If yes, what are they?

	There are differences (three dimensions)	There is not any difference
Student 1	Difficulties to perceive dimensions	
Student 2		Eye that see well can perceive both of them.
Student 3	Two dimensions are sub-step of three dimensions	
Student 4	Material and dimension	
Student 5	-	
Student 6	More attractive	
Student 7	Difficulty of perceiving	
Student 8	Difficulty of perceiving	
Student 9	Difficulty of perceiving	
Student 10		Harder to transform two dimensions.
Student 11	Difficulty of perceiving	

In second question, students used expression complying with answers that they answered in first question. Students that think that there are differences have answered that this difference has been resulted from third dimension, in other words, depth. As to some students, although they perceived this difference but they could not bring to apply. Only Student 10 expressed that condition was more different:

"It is necessary to see by observing perspective perception, between volume and rate-proportion. This situation is more difficult that works with three dimensions always…"

Here it is emphasized that it is required to more sufficiency and abilities in order to see to transform reality in two dimensional studies for example painting in other words width, height and depth without losing reality of two dimensions.

Meaning of answer of fifth student is not apparent.

3rd question: Are you successful in two dimensional studies or three dimensional studies, why?

	More successful in studies in two dimensions	More successful in studies in three dimensions	Successful level is the same in both of them
Student 1	x		
Student 2		x	
Student 3	x		
Student 4			x
Student 5	x		
Student 6	x		
Student 7	x		
Student 8		x	
Student 9			x
Student 10	x		
Student 11			x

Student 2:

"I am successful in three dimensional studies after overcoming technical troubles."

Student 7:

"I am more successful in two dimensional studies. Three dimensions force me more. I am slogging on applying that I see."

Student 10:

"I am thinking that both of them are good. But to reduce more volumetric article such as three dimensions is more difficult to reduce to two dimensions. "

The majority of students specifying there dimensional perception require a more different cognitive process have expressed that they have been more successful in two dimensional studies than three dimensional studies. Those that have said that they have had equal success are the students expressing that three dimensional perceptions is more coercive.

6. Conclusion

In definition of Genc and Sipahioglu (1990), perception is expressed as process of acquiring environmental knowledge in order to meet requirements of an organism with a method. Here, "requirement" can be marked as one of the reasons of differences in two and three dimensional perception.

Also Erzen (2006) is supporting the above views. Human being directs his attention and interest to the articles that he selects and is not aware of others more. Articles that attract his attention are article he has run into before and it is not necessary to identify them again. Everything has a definition and a place in this environment. Human being easily maintains his life by perceiving any article in this settled world comfortably. Today in general human being does not perceive explore and see and understand the world deeply. In this case we can say that the single place where human being uses his sense densely is the environment of art.

In study that was made it has been reached the conclusion that it has been understand that two and three dimensional perceptions are different from each other, includes differences in production process at the same time and there dimensional perception and expression are more complex process. In a general expression, it can be said that three dimensional studies are more different and require comprehending ability beyond two dimensional perceptions and in application process materials and technical features are important. In three dimensional studies such as sculpturing can be collected almost many materials with most various probabilities and also it is necessary to evaluate as a form in the gap in other words in space. Besides it is important to make conditions presenting to applier or creating difficulty by materials and techniques comply with to this process. Other than those, interest, personal features, expectations, curiosity, cognitive, affective and psychomotor features of individual are effective on comprehending in the entire process. Other than those it should be emphasized the importance of possibilities presented by education and training and sufficiency, interest and directing ability in the field of trainer.

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