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Proposal for an approach to teaching the issues of "balance" and "order" in basic design education classes of graphic design departments with reference to the "big bang" and the formation of the universe processes

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Abstract

Graphic design students can be educated through different methods and approaches to create forms and turn them into artworks within a particular order. However, being able to present powerful designs consisting of visual messages contextualized with an effective perception of balance and order is possible by utilizing scientific data. In this paper, information is given regarding the addressing of the issues of "balance" and "order" which are taught in basic design classes of graphic design departments. Accordingly, "The Big Bang" and the process of formation of the universe are mentioned briefly by referring to the information given; and the importance of the subject is emphasized with a proposed method of teaching lesson and by explaining the applications practiced in classes where this method is used.

Keywords: Design, education, balance, order, layout, graphic design, composition.

1. Introduction

Basic design courses are environments of a very vital wakening that help to develop an inquisitive personality, activate and form awareness during the process of raising artist candidate students who are able to notice the most extraordinary qualities in the most ordinary things and who continuously endeavor to introduce the "new". Graphic designer is an extraordinary human being who takes very vital responsibilities as a part of his/her duty and personality as an artist, as the individual who designs the messages to be transmitted to the target audience within a proper layout for their perception (Becer, 2006; Uçar, 2004; Tepecik, 2002). Because his/her primary duty is to make notifying presentations to society containing different cultures in order to create the intended change in behavior and increase the levels of aesthetic appreciation. Being able to present powerful designs consisting of visual messages contextualized with an effective perception of balance and order is possible by utilizing scientific data. Graphic design students can be educated through different methods and approaches to create forms and turn them into artworks within a particular order. However, with respect to the consideration of visual messages in a certain balance and order (Özsoy, 2007; Seylan, 2005) and their designing process within an effective integrity, it is extremely important to take advantages of scientific data which can be explained with bases such as "Gestalt approach defending that parts within a whole make sense" (Arnheim, 1961) and "theory of the golden ratio" in creating an *effective layout*. Based on these statements, *the big bang phenomenon* (Karen, 2002) and *the fact of*

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human as a changer - who has been interfering in "the great order called the universe" that has formed by itself in a very short time, and who has brought the civilization and the universe that we live in to these days - could be taken as references in basic design classes while teaching "balance" and "order" issues in design, because it is possible to encounter very significant examples of "balance" and "order" formations which have emerged either spontaneously in nature or have been created as a result of interferences by humans in the universe and especially on earth (Alpher and Herman, 2001).

2. Applications on the Issues of "Balance" and "Order" in Basic Design Education Classes

In most education institutes, basic design education begins with preliminary study and analysis of natural objects. The students work through applications similar to their other previous works; afterwards they go on with "balance" and "order" issues. These two concepts are addressed rather without expanding on the issue, generally by asking the students to create different designs with various geometrical objects given to them. Students who have been preparing for the exams of faculties of fine arts by drawing many different objects all their lives face the risk of becoming completely indifferent because of practicing the same exercises when they are taken into education with similar approaches and applications in basic design education at universities. During the performance of any art work including natural or artificial object examinations, it is quite important to begin firstly with teaching balance and order concepts in basic design education since making an effective and easily perceivable design is possible by considering it in a certain balance and order. As it should be the primary purpose in basic design education classes to make the student acquire an original and creative personality (Balcı, 2004; Gence, 2006), initially some old "known" and "common" customs that he/she has previously gained should be taken away or maybe removed. For this reason, art students, who are expected to improve new images, original expressions by destroying mediocrity and convention due to the nature of art, should be directed to perform unexpected amazing applications befitting the spirit of the work area, therefore to make a difference and astonish. Because the artist is somebody who astonishes people with the art works he /she creates. Thus, conversations should be made on subjects that the artist candidate students are not familiar with, unexpected exercises should be practiced and shocks should be delivered in a planned way so that they become aware of the different environment they are in. For this purpose, exercises should be given to the students for some time after they are taken away from the world of the known with the performed applications to interpret objects and events with the new perspective they have acquired in order to make them gain high aesthetic appreciation, creativity and different personalities. One of the education processes that could be applied in this context is as the following: The proposed concept in this study is to start the education process by saying "welcome" to the students with amazing methods which they are not used to. For example the lesson can be started by puncturing an inflated balloon filled with tiny white and gray pieces of papers suddenly on a base made with black cardboards spread on the classroom floor, then making explanations based on "the big bang" process and arrangements with the pieces of papers gathered spontaneously on the black cardboards.

3. Application Proposal for the Issues of "Balance" and "Order" to be taught in Basic Design Education Classes

The students who graduate from primary and secondary schools with a vast majority having a perception based on "memorization" and certain patterns far from review and creativity, aesthetic appreciation and mentality of originality subsequently go to universities to take art education. It is very important to make sure that these students firstly leave this perception behind and become inquisitive individuals having a perspective without prejudice in a state of high awareness. For this reason surprises should be delivered frequently.

For instance, the first lesson could be taught as the following: The instructor enters the classroom with an unexpected behavior, makes some amazing discourse; with the help of a couple of persons brought from outside having images of workmen, a network is knitted in the classroom with strings at height of reach of the hand through consternation of the students. Afterwards black cardboards are spread on the classroom floor accompanied by surprising words and behaviors. The instructor tells the students that they would go for a long journey and they should be tough, everyone's resistance should be very strong in order to complete this journey period successfully and gives each student a balloon with surprising behaviors and asks them to inflate the balloons and tie them to the

strings on the ceiling (The instructor observes each student's reactions, gestures and mimics carefully during the action of inflation because it is important to know each student in a multifaceted way to make versatile contributions to them since art education requires developing a personality of which individual aspect is predominant). The inflated balloons are tied to the network knitted with strings. Four or five balloons including tiny pieces of paper inside are also hung among the other tied balloons.

The instructor gets the attention of the students by talking about different things – which he/she later would explain the reason – and refers to the energy compression before the big bang (Karen, 2002) with a conversation beginning as "it was approximately fourteen billion years ago; there was no time, no space, no matter and energy. There was nothing. A very tiny, extraordinarily tiny movement emerged from this nothingness; it condensed, got compressed, warmed and trembled…" and suddenly pricks one of the balloons which contains tiny pieces of paper with the pin hidden in his/her hand causing the main explosion. While this explosion takes place he/she tells that the universe was formed within less than one second (one of the purposes herein, which would be explained to the students later, is that extraordinary things could be executed in a very short time). By the meantime, while a couple of more balloons are punctured, drawing attention to the fact that other explosions have also taken place during the formation of the universe (Coles, 2006), the instructor stresses that the order and balance called the universe is formed by bouncing pieces in different forms and sizes being spontaneously spread and located. While the instructor makes these statements, he/she says that what was told about this issue could be made up, not everything they hear or read should be true, they must necessarily make researches and examine many resources related to any subject to make sure and that they should be individuals who will be able to defend what they know by giving bases or references when speaking or discussing about a subject and tells them to attend the next lesson having made researches about the said big bang and the formation of the universe. The instructor picks up with great care one of the black cardboards on which tiny pieces of paper are gathered having completed their moves in a certain order by being poured spontaneously; puts it on the table and asks all the students to go by the table. He/she tells that the cardboard and the pieces of paper on them are a part of the universe each, the cardboard on the table is "earth", the pieces of paper on the cardboard are the "things" that have been made on earth to date, all of these have been taking place by natural events and by the interference of living things, people in particular, and tells one of the students now to interfere in this order that has formed by adding his/herself and to establish his/her own layout. The students are directed to make various interferences in the present order. Meanwhile it is emphasized once more how fast this order has formed which is based on a very strong balance that has reached to date with huge particles forming the universe, some of which hover steadily at a certain point while some others either turn around themselves or go on turning around another particle; thus it is particularly stressed that each of us should work very hard and produce things quickly today as everything changes too fast. Apart from this, the instructor makes statements stressing that interference should be made to change some things; changer personality is very important and he/she introduces balance – order issues (each subject is studied within the class periods in one week program and continues during times out of school). The aforesaid applications in basic design education classes oriented at observing the students' awareness and inquisitive personality are practiced to take the students – coming from the pre-university education system of the Republic of Turkey that is based on memorization and determined patterns, and attending a university's faculty of fine arts – to a journey that requires freedom and originality of arts and to make them shake off the points of view and customs of prejudice. The phases of examining the issues of "balance" and "order" that are included in the lesson in which it is declared to the students that all the related matters to be organized with pieces of paper or pencils will be studied by making references to the big bang and the formation processes of the universe could be summarized as follows. (In all projects at least ten sketches are improved by each student; after it is discussed clearly on these sketches with the instructor with respect to the knowledge related to graphic design principles and elements, at least two proper ones among new choices to be improved are enlarged on 35x50 cm sized white drawing cardboards as the original work)

3.1. Subject: Layout – design improvement, Issue: Random Layout

In order to create a random layout each student hurls over 200 squares of black cardboards (around 3 x 3 cm) at once and obtains an order having an impression of spontaneous formation on 35x50 cm sized white cardboard on the floor and pastes the squares right where they are. While the students throw the black squares in

their hands on the white cardboard at once to form a random order, in case of a distribution associated with a known, accustomed layout, they repeat the action with the supervision of the instructor until they come up with the most random effect. Two separate applications are performed on this subject; one with many elements, the other with a few. The reason of performing with many elements and a few elements is to make the students gain the experience of forming layouts with both large and very little data.

Gain: With this study it is expected from the student to have knowledge and experience of "random" and "non-random" concepts as a result of the environment in which he/she is present at, the actions and observations he/she experiences, because random events are very important for scientists and artists. For example while the falling of a fruit from a tree would be an ordinary natural event for many people, it could be a starting point to prove the fact of gravity from the perspective of an inquisitive – exploratory person.

3.2. Subject: Layout – design improvement, Issue: Layout – state transmission

The students draw all the squares with black pencil one by one on a white cardboard with the same size as the random layout work that they have previously obtained (35x50 cm) in a way that they preserve their spots by looking at the layout, and fill them with different tones between black and white. While doing so, the students are told not to leave any prints of pencil around or inside the squares, to fill all the surfaces with a clear, regular and a dominant tone and to get a clear action and movement (these principles are essential for all applications). Two separate applications are performed on this subject, one including many elements, the other a few.

Gain: With this application it is expected from the student to realize how much he/she should be patient, attentive and aware, to improve ability to use black pencil in forming surfaces, and to have knowledge and experience in creating an effect from any starting point, etc.

3.3. Subject: Layout – design improvement, Issue: Finding/discovering the influencing

The students search new influence areas and compositions with transmission method by taking details from the layout that has formed through random motion, having a certain perspective and a wriggly – energetic effect with clear squares of different tones transferred to the white cardboard with black pencil.

Gain: With this study it is expected from the student to have experience in creating new things by interfering in a random or altered (formed by others) structure or order.

3.4. Subject: Layout – design improvement, Issue: Design with two elements

The student prepares design sketches with two elements (square + triangle and square + circle) by taking the advantage of his/her previous experiences from different designing works done with a single element (square). The geometrical elements used in this application can be drawn in unlimited numbers, sizes and tones.

Gain: With this application it is expected from the student to have experience in making designs by using two different elements.

3.5. Subject: Layout – design improvement, Issue: Design with three elements:

The student prepares sketches with three elements (square + triangle + circle) by taking the advantage of his/her experiences from previously performed various designing works. In this application, unlimited numbers of cubes as well as rectangular and triangular prisms, spheres, cylinders etc. with edges in different lengths can be used by improving them in different dimensions (two and three dimensions).

Gain: With this study it is expected from the student to have experience in improving designs by using tens of shapes that he/she has created with reference to three different elements (basic geometrical elements). After the

students are provided with a certain basic background of balance and order in designing with the help of the applications summarized above, the process continues by making typographic and other graphic style designs considering the gained experiences. Evaluations are made open to the whole class in every project; discussions are directed within the frame of the student's explanation about his/her work, criticisms of his/her classmates and contributions of the instructor. All applications and discussions are done transparent to others.

4. Conclusion

The basic geometrical elements (square, triangle and circle) which are the basic units of all images considered as principles assuring "balance and order" which strengthen perception by providing the relation and integrality between forms in designing are indispensable elements of the graphic designer. Therefore, with this proposed method, balance and order exercises are done in the basic design applications which are performed by making references to the improvements that have taken place during the big bang and creation of the universe. For this purpose layouts are made consisting of firstly only *square,* then *square and triangle obtained by removing one edge of the square* and afterwards *circle (which has only one edge, obtained by removing two edges of the triangle), triangle and square*.

Within the design improvement education, graphic design students are provided with knowledge, experience, high-level perception and understanding about the qualities making up the artist personality such as enlightened, civilized, active and influential personality, patience, exploratory nature, fast productivity, perfect forming, optional working, awareness, looking-seeing, stimulant character, originality, perfectionism, creativity, principles and elements in graphic arts, etc. during the process of applications summarized and stated above. In this education period, it is expected from the students to review/give up their customs, to have knowledge and experience about issues such as original and influential design/layout improvement methods, developing objective and subjective points of view, the importance of coincidences in arts and science. This approach has been applied in the Republic of Turkey, Hacettepe University, Faculty of Fine Arts, Department of Graphic Design and successful results have been obtained.

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