DESIGN JURIES AS A MEANS OF ASSESSMENT AND CRITICISM IN INDUSTRIAL DESIGN EDUCATION: A STUDY ON METU DEPARTMENT OF INDUSTRIAL DESIGN

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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ABSTRACT

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Design juries are one of the assessment practices that enable evaluation and criticism of students' projects in studio based courses. This study explores the aims and attributes of design juries from students' and jurors' perspectives. The thesis is constructed upon a field study which consists of an observational study on design juries, a focus group study with students and interviews with the jurors of METU Department of Industrial Design. The findings of the field study indicate that design juries in their current form exhibit several issues to discuss; delivery of comments to students, duration of discussions, organization of the jury and assessment criteria are important factors to consider in design juries.

Keywords: Design Juries, Industrial Design Education, Design Assessment

ÖZ

ENDÜSTRİ ÜRÜNLERİ TASARIMI EĞİTİMİNDE BİR DEĞERLENDİRME VE ELEŞTİRİ ARACI OLARAK TASARIM JÜRİLERİ: ODTÜ ENDÜSTRİ ÜRÜNLERİ TASARIMI BÖLÜMÜ ÜZERİNE BİR ÇALIŞMA

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Tasarım jürileri, stüdyo derslerinde öğrencilerin projelerini değerlendirmeye ve eleştirmeye olanak tanıyan değerlendirme pratiklerinden bir tanesidir. Bu çalışma, tasarım jürilerinin amaçlarını ve boyutlarını öğrencilerin ve jüri üyelerinin bakış açılarından anlamayı amaçlamaktadır. Tez, tasarım jürileri üzerine bir gözlemsel çalışma, öğrencilerle yapılan bir odak grup çalışması ve jüri üyeleriyle yapılan mülakatlardan oluşan bir alan çalışması üzerine kurulmuştur; alan çalışması ODTÜ Endüstri Ürünleri Tasarımı Bölümünde gerçekleştirilmiştir. Alan çalışmasında elde edilen bulgular, bugünkü haliyle tasarım jürilerinin tartışılması gereken alanlarına dikkat çekmektedir; öğrencilere yorumların yapılış biçimi, tartışmaların süresi, jürinin organizasyonu ve değerlendirme ölçütleri, tasarım jürilerinde dikkate alınması gereken önemli etmenler arasındadır.

Anahtar Kelimeler: Tasarım Jürileri, Endüstri Ürünleri Tasarımı Eğitimi, Tasarım Değerlendirmesi

To Emre Özyetiş

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CHAPTER 1

INTRODUCTION

Juries are widely used as a means of assessment and criticism in design education (Peterson, 1979; Anthony, 1987, 1991; Frederickson, 1990; Attoe & Mugerauer, 1991; Ilozor, 2006). This study aims to explore design juries and its dynamics in its complex structure. The structure of design juries may not seem very complex at first sight; however, exploring various issues involved in design juries reveals several dimensions that can be examined in connection with other disciplines such as sociology, philosophy, psychology and androgogy.

Borrowed from the French *École des Beaux-arts* (School of Fine Arts) of the nineteenth century, design juries were started to be utilized in architecture and industrial design education (Anthony, 1991). Throughout the last century, design juries have maintained its significance in the education of studio based disciplines like industrial design, architecture, city and regional planning, and graphic design. This particular form of assessing and criticizing students' performance and knowledge has been used broadly in design education and developed its own traditions.

1.1 Background

The researcher graduated from the Middle East Technical University (METU) Department of Industrial Design. Throughout his undergraduate education he experienced several design juries. Combining his past experiences with his professional interest in design education field, design juries as an assessment system attracted the researcher's attention as an area to explore in detail.

Design studio courses are one of the most important elements of design education, and they aim to provide students with professional skills and knowledge. Design studios are typically project-based courses. These projects are developed in a process and finalized with an end-product or concept in a given time period. The projects are usually evaluated by juries in various forms as part of the assessment procedure of the design studio courses.

Taking the "open jury" system at METU Faculty of Architecture as an example, what happens in a typical design jury is that a student presents his/her work both visually –in the form of two dimensional drawings and three dimensional models– and verbally to the jurors; the jurors generate comments and critiques about the work presented and evaluate the performance of the student in this framework based on the expected project outcomes. The jury usually consists of departmental academic staff. There may also be visiting academics or professionals from outside the department commenting on the projects. The juries are encouraged to be attended by all students and even by passers-by. The comments and critiques made by the jurors are considered to be informative and helpful not only for the specific project assessed, but also for other students' projects in general.

Although they are intended to be useful and effective, sometimes things can go amiss in design juries. Students could sometimes feel stressed and may forget to mention important aspects of their projects, or they may be physically or mentally tired of working on their projects and be unwilling to talk or hear anything about it. Similarly, the jurors may also get bored or tired of commenting on every single project for long hours.

Those negative aspects may have an effect on the evaluation and critiques provided. Additionally, critiques or comments are sometimes delivered in a vague way and may cause students feel disappointed or misjudged. Sometimes the students may be unaware of the weaknesses of their projects, therefore may take negative comments personally and get demoralized. Under such conditions, the jury discussion may be perceived more as an individual dispute than an educational experience. Students may start to defend their ideas strictly and become distant from the learning activity. This tension between students and jurors may bring other negative effects. For instance, "doing it for professors", or forming the projects for the professors' approval may cause regression of the creativity (Anthony, 1991, p.12). Thus, the quality of learning may be replaced by the passion for grades and recognition.

The educational environment is also considered as another dimension of design juries. Anthony (1991) asserts that the sub-culture of studio courses brings many habits to students such as staying together in studios and working on projects without sleeping to finish the projects for the jury's deadline. This sub-culture primarily depends on collaborative study; however students are faced with some problems in this environment (Anthony, 1991 p.12). Obviously the studio is a place for a course –a classroom– rather than a dormitory or a

hostel with accommodation facilities. Thus, the students suffer from tiredness, inefficient working conditions or various health problems during their long hours of stay.

1.2 The goal and scope of the study

Design juries are widely used as a means of assessment and criticism in design studio courses and play an important role in design education. A thorough analysis of design juries would facilitate a better understanding of the dynamics of juries, its advantages and disadvantages, and a fresh look at this traditional practice in design education. The study is intended to provide information to design education professionals on the ways in which the design jury experience can be improved and made more satisfying both for students and jurors.

The goal of this study is the delivery of a report on the nature and dynamics of the jury assessment system in industrial design education together with a detailed account of a field study into the perceived qualities of design juries from the perspectives of students and jurors at the Middle East Technical University Department of Industrial Design.

In order to achieve the goal of the study the following research questions were identified:

- What aims are design juries intended to achieve in industrial design education?
- What are the qualities of design juries from the perspectives of students and jurors?
- What are the advantages and disadvantages of design juries as an assessment method in industrial design education?
- What attributes define an ideal design jury and an ideal design jury member?

1.3 Structure of thesis

The first chapter describes the background of the thesis, clarifies the aim and scope of the study, identifies the research questions, and summarizes the structure of the thesis. The second chapter, the literature review, covers a historical survey of design juries, their principal functions and problematic areas. The chapter consists of five main parts. The first part gives detailed information about the historical background and the aims of design juries. Additionally, non-jury forms of evaluation are presented to portray alternative types of assessment in non-design fields. Furthermore, the jury was explored by the several ideas related to design education and design juries. Next part of the literature review is depended

on the extension of topic with several contributions provided by the studies conducted in different disciplines. The aim of discussing the jury from different perspectives is to represent its effects and causes in a more detailed framework. In this part, perspectives are presented as issues related with design juries such as: philosophical issues, psychoanalytical issues, communicational issues and androgogical issues. Next, to reach a deeper exploration in the topic area, the juries are dissected through the jurors' and students' point of views. Thus, the disaccord between students and jurors about the aims of design juries are presented. Thereto, the "good" and "bad" jury is quoted from students' and jurors' perspectives.

The third chapter presents the design and conduct of the field study and the findings. Three interrelated studies were conducted in order to explore the nature and dynamics of design juries from jurors' and students' perspectives. The first study was an observational study, and involved the video-recording of a jury in the first year basic design studio at METU Department of Industrial Design. The second study was a focus group study which was conducted with a group of students who presented their work to the jury in the observational study. And finally, interviews were conducted with the instructors of the Industrial Design Department to understand the standpoint of jurors on design juries.

The final chapter presents the conclusions of the study, discusses the major qualities to achieve a more satisfying jury experience both for students and jurors, identifies the limitations of the study, and specifies potential areas for future research.

CHAPTER 2

LITERATURE REVIEW

Design juries are one of the most important practices in design education (Peterson, 1979; Anthony, 1987, 1991; Frederickson, 1990; Attoe & Mugerauer, 1991; Ilozor, 2006). However, in the literature the studies about design juries are less than expected (Peterson, 1979; Anthony, 1987, 1991). Although this study focuses on design juries in *industrial design* education, no specific research was found in this area. The researchers of design juries mostly focus on architecture education which borrowed the jury practice from the fine arts education tradition.

The chapter starts with the early uses of design juries and explores them as a means of assessment and criticism with contributions from several disciplines. In the first section of the chapter, origins, aims and alternatives of design juries are discussed. In the second section, the terminology and concepts of design juries are presented within a chronology. In the third section, the juries are taken as a ritual with many components. In this section several dimensions are presented to analyze juries from different perspectives. The fourth section introduces the standpoints of students and faculty members. The final section discusses the advantages and disadvantages of design juries based on the findings of the literature survey.

2.1 The origins of design juries

Although there is not an accurate description in the literature concerning the origins of design juries, their roots go back to the nineteenth-century *École des Beaux-Arts* (School of Fine Arts) in France (Cossentino, 2002; Anthony, 1991). "École des Beaux-Arts" referred to several fine arts schools in France among which the one located in Paris was the most famous and significant (Figure 2.1). The school was founded as "Académie des Beaux-Arts" in 1648 and later its name was changed to "l'École des Beaux-Arts" by Napoléon III in

1897. After the student strikes in May 1968, the architecture department was separated and the school started to be called "École Nationale Supérieure des Beaux-Arts". The approach to education at École des Beaux-Arts differed from other schools of architecture; it was based on *freedom*, *competition* and *variety* in education (Carlhian, 1979). The basic aim was to provide a more creative atmosphere in order to enrich the learning experience.

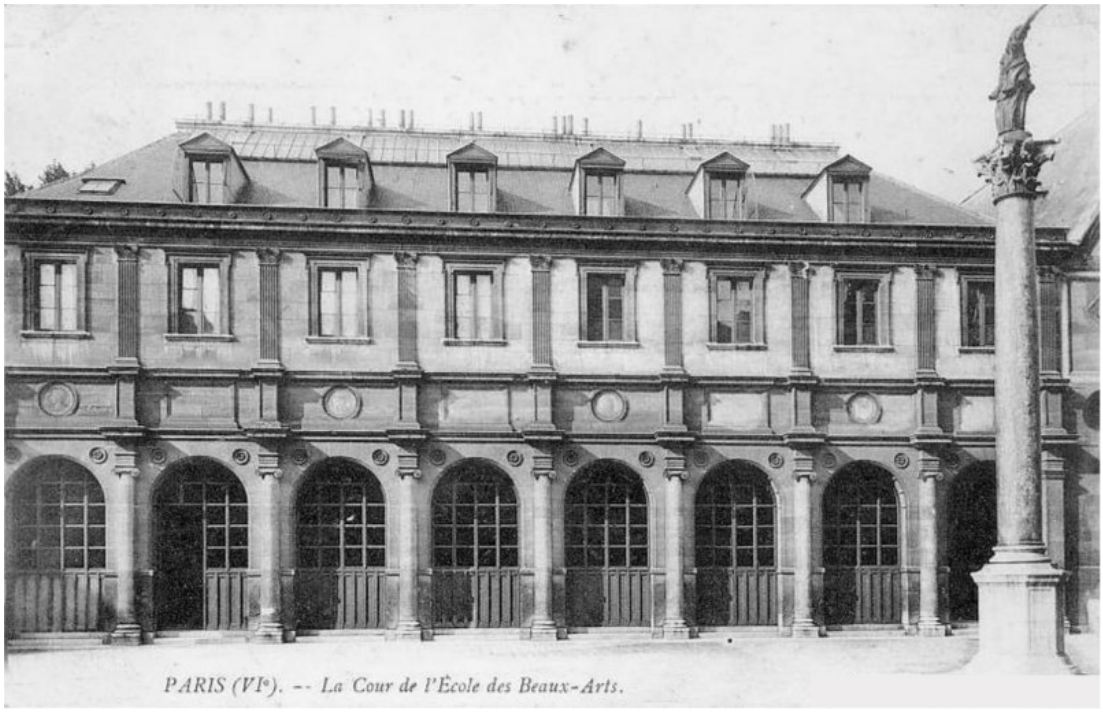

Figure 2.1 École des Beaux-Arts, Paris (L'Ecole des Beaux-Arts en 1900, 2005)

The courses taught at the École des Beaux-Arts followed no strict rules; the educators developed a new approach to teaching which did not exist previously (Carlhian, 1979). As mentioned by Anthony and Dutton, the *atelier* –today it is known as "studio" in many design schools– was another means used by the École des Beaux-Arts which increased students' motivation in design projects or competitions (as cited in Cossentino, 2002, p.43). The students were offered several courses and ateliers on specific subjects, and inevitably this brought a rich variety of assignments in architectural education in École des Beaux-Arts (Cossentino, 2002; Carlhian, 1979). Figure 2.2 shows a scene from an atelier of École des Beaux-Arts.

Figure 2.2 "Group spirit" in the atelier of École des Beaux-Arts (Student Life, 1996)

This new approach to architectural education developed at École des Beaux-Arts emphasized "learning by doing" (Cossentino, 2002; Anthony, 1991). "Learning by doing" came into the scene in several ateliers and allowed students to experience craftsmanship with real materials and production techniques. Furthermore, collecting and analyzing information, sketching, model making, and exhibiting or presenting have been the main phases of solving design problems in ateliers (Anthony, 1991). In this new approach the projects which were mainly developed for several competitions were assessed by the architectural juries (Carlhian, 1979). The grading was based on passing, failing or "HC" (*Hors de Concours, "*out of competition*"*, which was similar to "failing" and meant that the project had to be revised). Only forty students whose projects were honored by the jury could take the course "Grand Prix de Rome" which was a preparation course for one of the most significant annual competitions for a scholarship at the French Academy in Rome. Those students who attained this honor would obtain a great success and a lifetime's career as an architect (Carlhian, 1979). The competition had a high impact on students' professional career, and their fate –whether they passed or failed– depended on the jury members (Anthony, 1991). Figure 2.3 illustrates the finalists of Grand Prix de Rome in 1888.

Figure 2.3 Ten Logists, 1888, anonymous, Paris, École nationale supérieure des Beaux-arts. Ten finalists of Grand Prix de Rome waiting for the announcement. "The artists are posing as prisoners in a dungeon, beneath an imposing set of keys held over their heads by the supervising commissioner." (Les Logistes, 1996)

By the end of the nineteenth century École des Beaux-Arts, the French system of education, had influenced many schools in the North America (Anthony, 1991). In the following decades, studio teaching and thus, the juries as the means of assessment, have gained a significant importance in design education (Anthony, 1991). The jury system in the North America was almost the same as in the École des Beaux-Arts. French style studio teaching was also taken as an example by the North American schools. In design courses, this "learning by doing" approach was replacing the lecture based teaching (Anthony, 1991). However, the integration of the École des Beaux-Arts into the American educational system presented some problems. F. H. Bosworth, Jr. and Roy Childs Jones, the two scholars and the authors of the book *A Study of Architectural Schools,* mentioned the incompatibility of École des Beaux-Arts with the American design curricula. Their argument was that since the French program was brought to America without any questioning, it was disregarding the educational needs and expectations of American schools and students (as cited in Anthony, 1991, p.10).

During the 1920s, there was another major influence on the North American educational institutions, Bauhaus, the effect of which could not be underestimated in design education (Anthony, 1991). Introducing the modern architecture, mass production and modern technology, Bauhaus took the "machine" as the modern medium of design. The German approach in design influenced the world rapidly during the interwar period and almost every field of design including architecture, product design, textile, graphics, typography, painting, advertising, photography and cinema. Bauhaus had 28 *live-in* studios that further increased

the importance of studios –originally introduced by the École des Beaux-arts– as an educational environment.

Figure 2.4 Bauhaus building in Dessau, Germany (Bauhausgebäude Bildgalerie)

There is no clear evidence concerning the influence of Bauhaus on design juries, however according to Anthony (1991) the designers trained in the 1930s and 1940s reported that during this period the juries were held behind closed doors and the projects were returned with grades and sometimes comments written on them. Meanwhile, third Reich in Germany forced the institution to dissolve in Germany. With members of Bauhaus migrating to the States, the institution found its new place in the North America in the 1940s. The 1940s and 1950s witnessed an important period in the history of design juries, and the *closed* juries were replaced by *open* juries (Anthony, 1991). Especially the emphasis in the evaluation process shifted from private to public. The reason of this change is not clear, but Anthony (1991) argues that the reason can be the end of 2nd World War, and the return of the old veterans to the schools. This drastic change in design juries also changed some traditions from the École des Beaux-Arts. Now it was possible for a student to present his/her work orally on the stage to an audience of professors, students and outsiders. The open juries took more time than the closed juries, mostly 3 to 4 hours, sometimes couple of days, or sometimes non-stop 8-9 hours (Anthony, 1991). Design juries have hardly changed since then and they still dominate the project based studio courses in design education.

2.2 The nature and dynamics of design juries

The jury is a complex event with many variables, components and flexible operational features. Therefore, the researchers tend to divide this event into substantive phases to comprehend and narrate it successfully.

The traditional jury defined in the literature involves the assessment of student performance by the jurors based on the design work presented (Peterson, 1979; Frederickson, 1990; Anthony, 1991; Roberts, 2004; Webster, 2007). The jury usually consists of internal members who are the instructors of the design studio, and the external members who are the members of the teaching staff of the department/faculty/university, and/or professionals working outside the university. This type of jury is usually referred as "open jury" as the presentation and criticism is public; there is audience such as the rest of the students of the studio or others who are interested in. The audience is free to ask questions or make comments during the juries. However, the only party who is authorized to grade the students' projects is the jurors. Open juries bring transparency to the assessment for both students and instructors. This transparency is provided by the contributions of the external jury members and audience with regard to discussions and criticism (Figure 2.5).

Figure 2.5 Illustration represents a typical "open jury session". Original ink work drawn by Emre Özyetiş, 2009.

2.2.1 Aims of design juries

The studio based courses are at the center of focus in design education (Peterson, 1979; Anthony, 1991; Webster, 2007). Inside the design studio, students participate in a creative process and also interact with the instructors in their "learning by doing" process (Anthony, 1991; Ochsner, 2000). Within this framework, the assessment process in studio based courses, the design juries, play a significant role in the learning process. The aims of design juries as found in the literature can be grouped under two categories:

i) *Juries as a means of criticism and assessment.* Basically, the design jury aims at criticizing and assessing the students' performance based on their works. Although design juries are widely used in design education –architecture or visual arts- there are relatively limited academic research focusing on design juries (Peterson, 1979; Anthony, 1987, 1991).

ii) *Juries as a rehearsal of professional life.* It is also possible to see design juries as a rehearsal of professional life. Apart from assessment, design juries also serve another aspect of design education: the rehearsal of professional work environment. The critiques and comments by the jurors can be taken as similar to the employers' opinions and comments in the professional context (Anthony, 1991; Webster 2000).

2.2.2 Design juries as a means of assessment

In educational framework, aims of design juries involve evaluating outcomes in terms of educational goals and objectives. The goals and objectives in design education can be referred as teaching how to design, while guiding students to discover their way of designing, and teaching the process of understanding and criticizing of a design product (Ulusoy, 1999). In the evaluation process of these educational goals and objectives, particularly in design education, the common method of evaluation is the design jury, "the setting in which students' design proposals are considered, evaluated and judged by a panel of outsiders" (Attoe & Mugerauer, 1991, p.42).

Moreover, aims of design juries can be related with "evaluation" and "assessment". Evaluation means "to ascertain or fix the value or worth of", and in educational perspective

evaluation is referred as "process of characterizing and appraising some aspect/s of an educational process" (evaluation, n.d.; Greenberg, 2000). The term evaluation involves many subareas such as: "product evaluation, personnel evaluation, program evaluation, policy evaluation, and proposal and performance evaluation –the latter includes, for example, the evaluation of student works on tests, of soloists at concerts, and of athletic performances" (Scriven, 1991, p.vii).

According to the *Evaluation Thesaurus*, assessment is often used as the synonym of evaluation yet, there is a slight difference between the two terms (Scriven, 1991). Assessment in education is defined as "to determine the importance, size, or value of" and it is used to refer to "activities teachers use to help students learn and to gauge student progress" (assess, n.d.; Black & Wiliam, 1998, p.2). Hence, design juries as forms of assessment can be explored in educational assessment context.

2.2.2.1 Formative versus summative assessment

Summative assessments are used to assign students a course grade at the end of a class, course, semester, or academic year. Formative assessment, which is also referred as "educative assessment", is a process carried out throughout a course or project. Formative assessment provides feedback on a student's work, and would not necessarily be used for grading purposes (Lorna, 2003). Robert Stake explains the difference between formative and summative assessment with the following analogy: "When the cook tastes the soup, that's formative. When the guests taste the soup, that's summative" (as cited in Scriven, 1991, p.169). Basically, formative assessments can be considered as a part of educational process. For this reason, formative assessment is often referred as *assessment for learning*, whereas summative assessment is referred as *assessment of learning* (Lorna, 2003). Formative assessment is defined by Bloom (1968) as "a keystone of Learning for Mastery", which is also linked by Bloom, Hastings and Madaus (1971) to instructional units in a variety of content areas (Bloom, 1968; Bloom et al., 1971). Thus, formative assessments provide a reflection of instruction through the assessment; they are not designed to allocate grades; the goal of formative assessment can be referred as to improve. Design juries, as formative type of assessments, provide students with feedback from learning activities and help students to understand and control their own learning.

2.2.2.2 Traditional versus authentic assessment

In traditional assessment, students select the correct answer from several given choices by the assessors (e.g. multiple-choice tests, fill-in-the-blanks, true-false, matching). In authentic assessment, on the other hand, students are asked to perform a more complex task, and their performance on the task is evaluated (Mueller, 2008). Grant Wiggins defines the authentic assessment as follows: "...Engaging and worthy problems or questions of importance, in which students must use knowledge to fashion performances effectively and creatively. The tasks are either replicas of or analogous to the kinds of problems faced by adult citizens and consumers or professionals in the field" (Wiggins, 1993, p.229). Authentic assessment is also known as "performance-based assessment" and "alternative assessment" since it is based on performances using real-world or authentic tasks or contexts, and it is alternative to traditional assessment (Muller, 2008). Design studios and design juries are related to authentic assessment in terms of their form and content. In this framework, the study of Cossentino (2002) sheds light to studio education with several concepts such as artistry, exhibition and reflection-in-action.

Cossentino (2002) links the "artistry" with the design studio in the light of Dr. Donald Schön's (1983) studies of studio education. The study of Cossentino (2002) takes its point from the "exhibition" while it searches the metaphorical attempts of the pedagogical system throughout the phenomenon of "reflection-in-action". The reflection here is the image of exhibition; it calls a pedagogical system instead of an assessment system. Cossentino (2002) marks the term "authentic assessment" and connotes it with the terms "portfolio", "demonstration" and "exhibition" widely used in architectural education.

The conceptual terms of design studio is quite distinct from the terms used in high school classes. The reason is the "language" of the studio and its "translation" between the students and instructors. Throughout the Schön's analysis of design studio curriculum (1983), many terms and concepts mentioned are borrowed from the arts. Like "performance", "mastery" and "criticism" design juries can be rendered with "artistry" or the concepts used in art education. Besides, these terms which are analogous with art education are the implementations of project based curriculum in studio based courses and cause a problem in translation both in conceptual and practical approaches (Cossentino, 2002).

The term authentic assessment is also related with "exhibition" defined in variations for many teachers such as: are culminating performances and/or represent multiple performances within a given course or project. The emphasis on authenticity remarks a challenge in assessment caused by its own rich context and pedagogical aspects that the substantial content that cannot be overlooked. Therefore, the juries are the standardized system of assessment in design education (Cossentino, 2002). Relating to artistry, the works of students are being perceived as an "exhibition" in which the exhibited object is the "performance" of the student. There are remarkable conjunctions between design pedagogy and artistry; both depend on the performance and assessment in an "exhibition" context. In design pedagogy learning is being achieved by the "desk-crits", "pin-ups" and "reviews" (Cossentino, 2002). This whole system brings an assessment of "performance" which is related with the concept of "exhibition" in design studios. Moreover, "exhibition" occurs for students as understanding design and reflecting it on his/her project. Thus, the teachers then talking in a design language with medium of drawings exhibit the possible consequences of the students' ideas and illustrate a form of designing (Cossentino, 2002).

On the other hand, inside the design studio education there is a remarkable fact that the relationship between the students and instructors is compared with "master/apprentice relationship" (Anthony, 1991; Cossentino, 2002). The term "mastery" that Cossentino (2002) refers, is associated with "experience" and this experience becomes the common medium in the assessment. Therefore, the conceptual relation in design juries works as; the student –apprentice- displays an output product –performance- on the stage of instructors –masters- and expect a feedback –comments, critiques and grades- of his/her own "exhibition" (Cossentino, 2002). In this respect, the concepts of design education when linked to "artistry" portray several important denotations such as "experience", "performance" and "exhibition". In the experience spot, the students encounter with a "mastery" of teachers. This brings an issue in design juries that the "mastery" is judicative concept that causes students to report extreme anxieties and desperate feelings when they are exposed to negative criticisms (Cossentino, 2002).

2.2.2.3 Written versus oral assessment

In higher education, written forms of assessment such as written examination, essay and written assignments are used widely to test students' knowledge and understanding in related subject area. In comparison to the written forms of assessment, the use of oral assessment is considerably low. Jaughin (1998) presents a research on oral assessment and

its significance in higher education. "The oral defence of the doctoral thesis, the moot in law, the design jury in architecture, and the oral examination in many postgraduate medical programmes are good examples of oral assessment used by several disciplines which require verbal rather than written responses by the candidates" (Joughin, 2007, p.324). Joughin (1998) presents six dimensions of oral assessment: content, interaction, authenticity, structure, assessors and orality. It is helpful to review these dimensions as they display parallelisms with the design juries, which represent the characteristics of oral assessment. First dimension defined by Joughin (1998) is the "content" that involves knowledge and understanding, applied problem solving ability, interpersonal competence and personal qualities. One of the most significant advantages of oral assessment is the "interaction" during the assessment process. From the findings of Brown and Knight, it is possible to observe that in non-oral forms of assessment, students respond to a specific task defined by the examiner for the exam. The interaction in oral forms of assessment, on the other hand, provides interplay between the examiner and the student, so the examiner directs "unlooked-for new tasks" to the student in order to examine that the student understands (as cited in Jaughin 1998, p.369).

Another point where oral assessment and design juries intersect is defined as "authenticity" which refers to the extent to which the assessment plays a role in students' preparation for the professional practice (Jaughin, 1998, p.370). In design juries, jurors occasionally act as a manager or supervisor of the student while criticizing his/her works concerning professional prospects to contribute to the preparation of the student for some possible future experiences. The other dimensions that Jaughin (1998) presents are the "structure", which refers to the pre-planned frame of comments and questions; the "assessors", who are in the same position as the jurors in design juries; and "orality" which refers to the assessment as being done orally (Jaughin, 1998, p.370).

In another study by the same author, *Student Conceptions of Oral Presentation* (2007), the oral form of assessment is explored from the students' perspectives and three significant implications are highlighted. First, oral forms of assessment are powerful forms of assessment for learning as mentioned by the students. The discussions performed for the development of a work which is being argued, during oral presentations students perform a harder work, which provides deeper understanding of what is being studied and, the ownership of the work which directs students to a personal relevance. Secondly, the student becomes aware of the instructors' intentions by the interaction throughout the assessment process. Thirdly, the oral form of assessment helps students improve their presentation

skills, which allows students narrate their knowledge, understandings and ideas in a common communication frame (Jaughin, 2007).

2.2.2.4 Alternative assessment methods to design juries

In her study *Architectural Education: Evaluation and Assessment,* Aia (2002) states that in architectural education at the University of Hartford; "portfolio" is a hallmark and a significant tool in assessment. A portfolio of a design student is a –designed– collection of works throughout his/her education. Portfolio, in a wider perspective, is a framework of student's approach to a design problem with a result, his/her skills on drawing –design communication–, conceptual studies and analysis and presentation skills; which gives an idea of the student's performance during his/her education process. Besides portfolio, tests, papers, sketchbooks, presentation and analysis, projects and presentations, exams, notebooks, exercises, drawings and presentations, diagrams and presentations, written documentation and a "capstone" senior final thesis or individual study are also assessed throughout the education. Yet, the assessment tool for design studios is design juries (Aia, 2002).

Anthony (1991), in her book *Design Juries on Trial: the Renaissance of the Design Studio*, discusses term papers and final exams as other alternatives to evaluate a student's performance (Anthony, 1991). She compares these three methods in terms of "process", "end product" and "method of evaluation" aspects, which reveals dramatic differences between juries and other evaluation methods used in non-design fields. Firstly, the term papers are prepared and presented individually with little or no contribution from the professors or the class mates. The "end product" is in a written format and presented privately where the feedback and optional comments from the instructor is given again privately in days or weeks later. However in design juries, the presentation is mostly public, often in an oral and visual format and it is open to immediate public criticism. Optional comments and grades are also provided by jurors and/or instructor. Anthony (1991) indicates that the comparison is not made to show which one is better than the other but to mention the differences caused by the different evaluation procedures. On the other hand, there are similarities between the design juries and the comprehensive exams or term papers for doctoral and masters' students. The jury, in this case, is a committee which evaluates the student's work or capacity on a specific subject and the student presents or defends his/her ideas and studies (Anthony, 1991).

Anthony (1991) offers another perspective for comparing design juries with non-design fields. Anthony states that the design jury and the studio system can be observed as athletics where the students are the members of a team and the instructor is the coach. Although there is a clear distinction between these two fields, the point emphasized here is to observe the student progress in a competitive environment and understand the role of instructor as a trainer, leader and supporter. To consider the students of a studio as a team helps us to see the importance of motivation, and how performance affects each individual team member and the trainer –instructor– as well. Anthony also mentions some psychological research on athletes to illustrate that there are syndromes which affect the athletes and design students as well. The research reveals some personality types such as the con-man athlete, the hyper-anxious athlete, the athlete who resists coaching, the success-phobic athlete, the injury-prone athlete and the depression-prone athlete. These personalities could be illustrative of the students' personalities in a design studio such as chronic worriers, students who resist critics, students who are never on time, students always hurting themselves, and students who are always depressed while working (Anthony, 1991: p.15).

Obviously, the design studio is not taken as the Olympic Games but there are similarities which are beneficial to understand. Anthony (1991) cites another research on wrestling coaches as an example to increase the performance of the athletes. The results showed that liberal use of reward statements, encouraging positive talk, emphasizing the improvement of techniques and downplaying outcome were rated as the most effective training strategies.

Considering the criticism and assessment methods, design education and the education in fine arts, are not so different from each other. Anthony (1991) claims that the material in design juries are generally in art form, which makes the juries held in fine arts similar to the ones in design (Anthony, 1991). In both fields, the work presented is a creative piece which basically taken as a "performance" which is criticized and assessed by a group of experts– the jury. The members of the jury are chosen from a list of "masters" or "stars", who are the trendsetters in the field, and to whom masses look for inspiration.

> *"Although jurors in both the arts and environmental design share similar criteria in describing their reactions to submitted work – form, balance and scale, proportion, texture, rhythm, and so on- the specific criteria for judging are rarely made explicit. Instead, expert opinion is what matters most. In many respects, the system resembles the master-apprentice relationship of earlier times." (*Anthony, 1991, p.17)

2.2.3 Design juries as a means of criticism

In his observational study *Design Juries: a Study in Lines of Communication*, Frederickson (1990) presents the significance of communicational issues in design juries. The line of communication from student to jurors can turn into a "one-way dialogue" when the jurors do not involve in active "listening" and interrupt the presentation with comments and questions, causing a blocked or distorted communication (see Figure 2.6). The result from the students' side is defensiveness and hostility to the jury (Frederickson, 1990). On the other hand, the line of communication from juror to student is presented as the most productive communication as "it carries indicators, insinuation, advice, approval, concerns, motivations, attributional feedback as well as a myriad of design ideas and alternative approaches to the challenges" (Frederickson, 1990, p.24).

Figure 2.6 Illustration represents "listening" of the jurors as they play with an i-phone during the student's presentation. Original ink work drawn by Emre Özyetiş, 2009.

The comments during criticism session are important as a feedback on student work unless they aim to destruct it (Anthony, 1991).

Criticism, sometimes referred as "critics" or "crits" in the literature, is defined as "a form of studied discourse about art works. It is a use of language designed to facilitate and enrich the understanding of art" (Weitz, 1964, p.24). From a sociological point of view criticism is related to high culture which refers to art or other symbols preferred by "elite" society that is involved by well- educated, "cultural" and well-styled of thoughts and feelings (Gans, 1974). This is highly related to the historical background of design juries as its origins point the art criticism that used in fine arts education.

Anthony argues that "design critics have a strong tendency to overemphasize the negative. This disproportionately negative slant tips the scale in such a way that often students cannot even recall if the jurors said anything at all good about their work" (1991, p.32). From the students' perspective, on the other hand, the key issue is not whether the criticism is positive or negative but how it is delivered (Anthony, 1991). From the psychoanalytical perspective, in communication it is important to listen to, and try to understand well enough before doing an evaluation. When somebody talks, the listener should see the ideas and attitudes that are expressed by the other person and should sense that person's feelings in order to achieve the person's frame of reference (Rogers, 1961). Thus, the interruptions during the presentation of the student have a catalytic effect, and provoke other jurors to start their comments, therefore not letting the student finish his/her presentation. This may, in turn, mean a less valuable critique session for the student. The effective critique session in juries is provided by the means of delivering the comments (Anthony, 1991).

In the literature there are three major types of delivering comments during the jury: "personal versus project oriented", "vague versus specific", and "destructive versus constructive" criticism (Anthony, 1991, p.109-113). From the jurors' side it is obviously difficult to absorb a high amount of information presented by the student. After getting the grasp of the project jurors should offer a satisfying feedback to the student concerning the strengths and weaknesses of his/her work. At this point, "How to say?" is sometimes more important than "What to say?" The comments should be in a less judgmental and more helpful character (Anthony, 1991, p.109).

- **Personal versus project oriented criticism:** There are comments which focus on the person –student- rather than the project during juries like "You don't seem to have any idea what you're doing here", "You really haven't solved the problem" or "You haven't spent enough time on this yet." Those statements obviously address the person who created it rather than the design project. This type of delivery is observed to have an effect on students' jury experience as they take those comments personally. The delivery of the comment can change according to its construction method such as: "This project does not look finished yet. I can't understand what exactly a section is and what a plan is. Please provide adequate labeling to help explain each individual drawing" or "In order for this project to satisfy building codes, it needs more stairways, fire exits, spaces for mechanical systems, and a service area for the restaurant". If the delivery of criticism addresses the project, the student will also focus onto his/her project instead of being defensive for the "You!" type of judgments (Anthony, 1991, p.110).

- **Vague versus specific criticism:** the superlatives like "marvelous, awful, dramatic or horrible" used frequently during the juries. Delivering vague discourses like fancy or disregard does not point on any evaluation of the project. The students tend to search for the rationale behind the criticism in order to get informed. Comments like "This project has a wonderful feeling about it" or counter wise "This is really ugly" do not point out any specific issue that student benefit from. However, delivering it as "The building is much too massive for the site. It overwhelms its surroundings and dwarfs some of the historic structures nearby. The fenestration pattern needs further study as well. Right now the proportion of windows to building solids looks inappropriate—the windows are too small, like little holes in the walls" will mean much to students (Anthony, 1991, p.111).

- **Destructive versus constructive criticism:** Since the criticism is public in open juries the effects of negative criticism delivered in a destructive way can often do harm than good. The jurors should offer some guidance for the students to improve their works. Therefore, the delivery type of comments is preferred to be in such manner that even it is the final "revise" of the project in the jury, the grammar of comments should be the subjunctive conditional tense –if then types of statements. The shift from "That's about the worst project I've ever seen" to "It

would be better if....” will provide a more educative jury experience to the students (Anthony, 1991, p.112-113).

2.2.4 Design juries as a ritual: The phases of design juries

Roberts (2004) identifies eight phases in design juries in terms of the activities of students and jurors: before “crit”, background information, scheme design, interruption, end of presentation, clarification, comment/discussion and conclusion. In the first phase, just before the jury starts, students hang the project sheets on the walls; in the mean time jurors and audience form an overall opinion about the projects. The second phase is “background information” in which the student presents the background information about the project to inform the audience. In this phase, the jurors tend to relate the oral presentation of the student with the visual presentation displayed. The next phase, the “scheme design” phase, consists of outlining designed product referring to the drawings and models by the student. Meanwhile, the jurors examine the details of the drawings and/or the model while relating the oral presentation of the student to the context. Henceforth, there could be an “interruption” phase and jurors may interrupt the presentation with some questions or comments to get further information if there is a missing part in relation to the presentation. Towards the end of “presentation” phase the activities of the student decreases and meanwhile the jurors tend to make decisions about what comments to make and questions to ask considering the oral and visual presentation as a whole. Anthony (1991) suggests that this transition phase should be taken as a formal part of the design juries, but Roberts (2004) disagrees because according to him, this “pause” only occurs when the jurors are unable to get information successfully and unclear about the comments to make. In both cases, it can be defined as a transition phase during which the student finishes his/her presentation and wait for the comments and critiques by the jurors. Therefore, a “clarification” phase may appear, in which jurors ask questions for a clarification –if necessary– concerning the student’s presentation or expect a detailed explanation about some parts of the project. Then, the jurors are expected to provide feedback consisting of –positive and/or negative– comments, suggestions for further development or the points that the student should further explore. This phase is called “comments/discussion” session, where the student listens to the comments and answers the arguments (Roberts, 2004).

In “comments/discussion” phase, it is also possible that comments and critiques provided by the jurors are not consistent; they may change according to the performance of the

student. Therefore, the comments made are not always agreed; there occur disagreements and debates within the jury itself. This sometimes causes the student to be confused about the opinion of the jury on his/her project. Eventually, the jury ends with a "conclusion" where the student and jurors agree on the comments for further development of the project with a grade provided by the jurors.

2.2.5 Philosophical issues in design juries: Power relations and collaborative judgment

Design juries as Foucauldian power relations. Design juries as a means of assessment and criticism in design education creates its own dynamics. These dynamics can only be discussed within the frame drawn by its nature. However, the "black box" like picture of design education reveals the intuitive and discursive image which is far from being assessed with a "glass box" method (Broadbent & Ward, 1969).

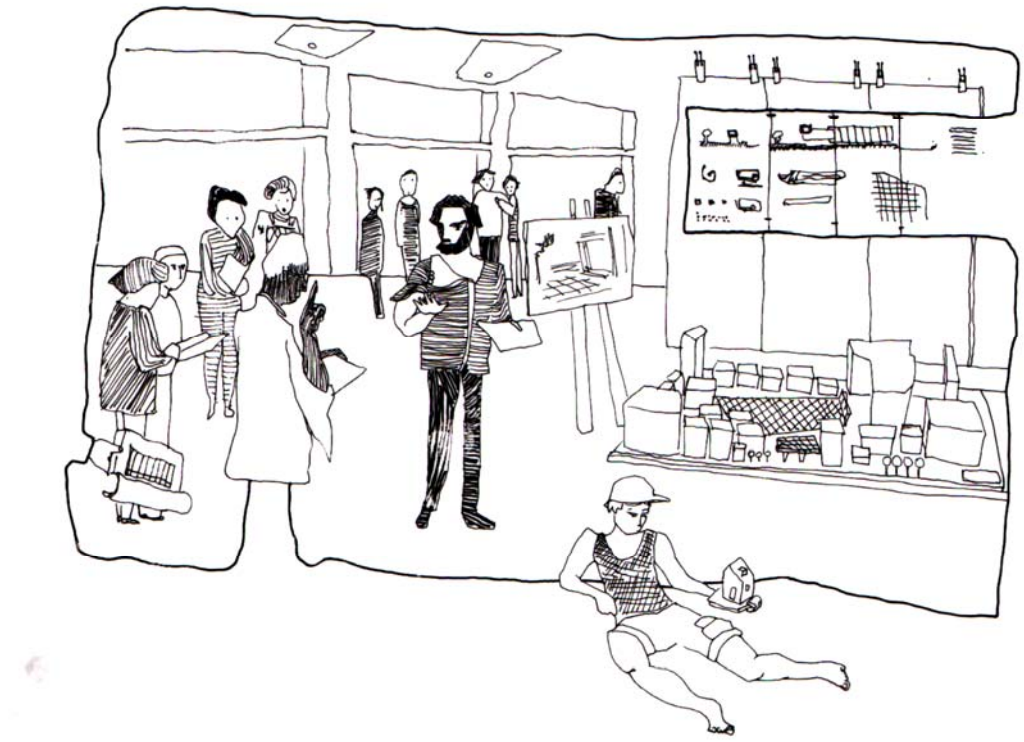

Figure 2.7 Illustration represents the "power/knowledge relationship" between students and jurors. (The famous painting of Raphael, "*The School of Athens*", is an inspiration point as the student is Diogenes who was a nihilist philosopher lived in Athens as a beggar, and in the background Plato and Aristotle is discussing the work of Diogenes as a representation of jurors) Original ink work drawn by Emre Özyetiş, 2009.

Therefore, it is not out of context to argue that the assessment in juries is not supposed to involve an assumption of objectivity and rationality. Rather, it can be visualized as justification of design activity that produces "knowledge" to enrich the learning experience.

In this sense, Foucauldian approach is helpful for analysing the juries in such a philosophical dimension (see Figure 2.7). In his book *Power/Knowledge,* Foucault (1980) explains the interaction between two sides in communication, as he argues that knowledge brings power. The interaction in design juries is considerably relevant to the interaction that Foucault describes (Webster, 2007). There are two sides in design juries: the students –assessed– and the jurors –assessors. They are equally balanced with the "power" as they both create the existence of education together. While these two sides interacting with each other in juries, the jurors assess the students by their own knowledge. This means that the jurors exalt their "knowledge" with the students'. Meanwhile, the students' knowledge is run down by the jurors'; as the students have to defend their ideas by their own knowledge, which is relatively poorer than jurors'; the "power" passess from student to jurors. Thus, an asymmetrical power is observed throughout the juries (Dutton, 1987; Webster, 2007). The imbalanced power between the jurors and students is a concern in studio education and it may have negative effects both pedagogicaly and psychologically (Dutton, 1987).

Webster (2007) has conducted a research with the students and jurors of a British school of architecture. In the school, design juries were used as a formative feedback at the end of the design projects. The summative assessment was provided by a portfolio examination at the end of each academic year. The research aimed to collect data for a comparison between reified, observed and lived accounts of the juries. The results illustrated a stable and highly valued ritual picture of the juries. The ritual of the jury is commonly understood and described as a "formalized event" which also depicts both discursive and nondiscursive practices. The juries –as described by the participants– provide students an individual feedback on their projects by the expert jurors. Although the system of assessment provides a significant learning experience, the findings by the observations, suggested a considerable degree of misrecognition (Webster, 2007).

The data illustrated that, with being a pedagogical event, design juries' ritualistic structure provokes an asymmetry of power between the jurors and the students. The outcomes of the imbalance of "power" was profoundly distorting the learning experience of the students. Webster (2007) describes the asymmetrical contruction of power in five ways:

Periodicity, which refers to the background events of juries and "folkloric" stories and myths like Mies van der Rohe's tearing students' presentation sheets in juries. *Periodicty* in this case creates a symbolic power of the jurors with the help of these stories told by students .

Constituency interprets especially the existence of external jurors in the jury in order to legitimize the power of jurors as they are successful in professional life and have an authorization to assess students.

Spatiality concerns the location of the students against the jurors. The jurors' chairs are located fanning arch in front of the student, displaying the hierarchical positioning designated among the students. A third-year student who participated the study conducted in a British school of architecture on design juries, had stated that: "puts you on public display…it's scary thing because you are so open," which explains the "spatialized" symbolic power of the jurors.

Choreography reveals a pattern of student's presentation followed by the interrogation of the jurors as a power of "judgement". Although it is considered as a public event that audience supposed to make comments and ask questions, they rarely do so. The "summing up" by the jurors reveals the power as they "judge" the overall performance of the studio.

Design juries as collaborative "judgement". The system of assessment as a jury format from a philosophical perspective can be related to a type of "judgement" which is explored by one of the most significant modern Italian philosophists Salvatore Veca. Veca (1991) in his book *Questioni di Giustizia* (Questions of Justice) explained the judgement activity as a justification when the problem is complex. When the problem is complex –or as mentioned as "wicked problem" by the design methodology theorists– rationality is reduced by individuality. So, to make it more rational, the system has to be more collaborative (Veca, 1991). Juries in its current form can be analyzed as the type of judgement that Veca introduced in terms of the design problem is in a complex structure with many variables and components, and evaluating system of the solution needs to be collaborative in order to make it more rational and justified as possible. More than one juror, in this respect, will provide more than one perspective throughout the evaluation process; providing a reduced individuality and inreased rationality among single work of the student.

Hereby, the juries as a self existent structure used as a means of assessment and criticism in design education displays a collaborative image formed in order to provide a rational assessment of a complex educational outcome. In doing that, the communication between the non-individual setup of assessors and individual being that is assessed exhibits an asymmtrical power balance which points out several negative outcomes in terms of pedagogical and psychoanalytical issues.

2.2.6 Psychoanalytical issues in design juries: Narcissistic injury

The design juries are one of the most significant experiences of students throughout their educational process (Anthony, 1991). The experience of juries as a psychoanalytical case involves many important affairs with its current format. Design studios are referred as the central point of design education in the literature (Anthony 1991; Ochsner 2000). Yet, the juries as an assessment process of the studio are also as important as the studio itself (Anthony, 1991; Webster 2007). This section creates a psychoanalytical perspective to the design studio and the design juries while in the literature there is a lack of studies concerning the interaction in the design studio which is routinely referred as the center of the architectural education (Ochsner, 2000). Nevertheless, the juries as a psychoanalytical case are hardly studied.

In comparison to other courses in the curriculum, design studio courses usually cover more hours per week in many schools (Ochsner, 2000). This intensity in time brings the intensity in interaction between the students and faculty members (Ochsner, 2000). Design education in the studios draws a "reflection-in-action" image where students learn to solve design problems with technical "rationality" and creativity (Schön, 1983). The solutions are communicated with the instructors through sketches, drawings, models and computer aided presentations (Ochsner, 2000). Design problems are named in the literature as "wicked problems" which have multi variables and many solutions. Per contra, instructors expect students to develop an individual precise solution for the problems. So the solution of the student is expected to be "original" in context (Ochsner, 2000).

James (1950), in this frame explains the "originality" with "reasoning": the term "reasoning" is related to design activity since in design process the decisions made are either empirical or "reasoned". Reasoning is a psychological term that explains the decisions made in daily life. The reasons of the decisions are related with the intelligence– James (1950) also mentions

about the two types of intelligence: analytical and emotional– yet they are not arbitrary. Eventually, the originality is the result of reasoning which explains the unique individual decision making of the selves.

Ochsner (2000) argues that the interaction in studio education share significant similarities with patient and analyst interaction in psychoanalysis. The goal of the analyst is to help patients to understand about the self; as in the studios instructors help students to discover his/her own unique decisions for the given design problems. There are several terms used in psychoanalysis which can be accorded with the design studio education such as *mirroring*, *transference* and *countertransference.*

Mirroring is defined in psychoanalysis by Jacques Lacan as "the period of development in which a child becomes fascinated by his or her own image in a reflective physical mirror" (Lacan, 1977, p.1-2). *Mirroring,* on the other hand, is explained by Kohut and Winnicott as the reflection of the baby on his/her caregiver's – mother – face (as cited in Ochsner, 2000). It is important in psychoanalysis that the patient sees himself/herself as a reflection with the assistance of analyst. In studios, *mirroring* explains the interaction between the student and the instructor; the student presents his/her ideas through the reflection provided by the instructor. In other words, the instructor helps the student to visualize the consequences of the student's proposal –as a response to given project. In psychotherapy, therapist helps the patient to understand his/her feelings, likewise, in studio education; the instructor responds the student with describing his offer –the offer can be verbal or visual like sketches, drawings or models representing student's ideas– to the given project that helps the student to understand his/her proposal (Ochsner, 2000).

Furthermore, *transference* is defined by Moore and Fine as "the tendency to repeat, in current setting, attitudes, feelings, impulses and desires experienced or generated early in life in relation to important figures in the individual's development" (as cited in Ochsner, 2000). Also, *countertransference* is "the analyst's emotional reactions to the patient, conscious and unconscious, arising from the analyst's own life experiences, that are a response to the patient's behavior toward the analyst" (as cited in Ochsner, 2000). In studio, the interaction between the students and instructors is quite similar to each other in such aspects. The important figure in the students life becomes the instructor(s). Hence, the tranference or the tendency to repeat can be observed in the studio. The students learn and tend to repeat the attitudes of instructors as a design language. On the other hand, instructors response to students by their experience to improve students' skills (Ochsner, 2000).

As *mirroring*, *transference* and *countertransference* in psychoanalysis show paralellism to the design studio, there is another significant concept called "narcissism" which is related to design juries. Narcissim is a "need" of individual throughout the self-development (Freud, 1957). It can be observed through the negative criticism especially when it is vague and destructive that the jurors cause negligence of students which evokes the unfulfillment of narcissistic needs. This situation is called "narcissistic injury" in the psychoanalysis literature (Kohut, 1972). Freud and Kohut agree on that it is important to fulfill the narcissistic of the self, othervise it will cause a "disturbed narcissism" (Kohut, 1972). During design juries there are comments reported as: "You don't seem to have any idea what you're doing here!" or "you haven't spent enough time on this yet!" by the jurors (Anthony, 1991, p.112). These comments that involve almost a *personal attack* are a strong impact on students' narcissistic rage and concerned to evoke a narcissistic injury (see Figure 2.8).

Figure 2.8 Illustration represents "narcissistic injury". Original ink work drawn by Emre Özyetiş, 2009.

2.2.7 Androgogical issues in design juries

In the literature, the jury and the studio in design education are explored pedagogically by several researchers. This part of the thesis takes juries as an issue of androgogy. In

universities the students are adults; the art and science of adults' teaching is called androgogy. Apart from pedagogical principles, androgogical principles target more of adults' needs (McKeachie, 1994). McKeachie lists the principles of androgogy as follows:

- Need to know why to learn
- Need to be self-directing
- More and different experience
- Connection of learning to life
- Task/problem-centered learning
- Extrinsic & intrinsic motivators

According to Aytaç-Dural (1999), after primary education, students face with a number of transitions when they start their education in universities such as from "passive listening" to "active participation", from "ready information" to "exploration", from "multiple-choice" to "multiple authorities", from "safe ground" to "risk-taking", from "success" to "failure", from "self-centered child" to "self-confident individual". These transitions in student's learning environment is a mission of Basic Design Studio as it plays an important role to guide the student's mind into a new direction where a student experiences totally different tasks apart from his/her primary education. In this regard, the transition period in Basic Design Studio is the key factor of training, which is the starting point of a life-long process that the design education is constructed upon (Aytaç-Dural, 1991).

Throughout the new environment in studios, design students are confronted with more difficult tasks. Producing new ideas and to superimpose imaginary decisions on real life conditions can be often challenging tasks and entails creative skills to develop. During the process instructors are both considered as the reference point and a guide to the students. Aytaç-Dural (1999) emphasizes the significance of instructors in the transition period; students quit listening to a single person and start to be in a collaborative experience with their instructors. According to a research done with industrial design instructors from many different universities in Turkey, instructors have different roles in the studio such as *designer, professional/expert* and *master* (in master/apprentice relationship) (Özer, 2004, p.78). Those serious roles bring about many responsibilities in relation to the androgogical issues.

McKeachie (1994) introduces the goal structures of effective instructors in university classroom as follows: cooperative, competitive, and individualized. *Competition* is provided

by exams –assessment procedures- and in design studio, the competition is the jury and it is important as an extrinsic and intrinsic motivator. Instructors of the design studio emphasize that the evaluation is more like a "comparative judgment" and students' performances are compared to one another as it depends on more qualitative approaches. Büyükişleyen, one of the interviewees of Özer (2004, p.75), asserts that criticism plays a significant role in the assessment process; the critiques differ according to the work presented and each student "individually". Another interviewee, Günöven from Middle East Technical University, in his statement points out the importance of the three goal structures presented above as he calls attention when instructors fail in being *competitive* and *individualized* the result is usually the failure of students: "the whole bunch summoned together; copying each other or repeating the same work" (Özer, 2004, p.76). Besides, providing a *cooperative* working environment in studio and also in its assessment procedure, in design juries, is an important point that instructors are responsible for. However, when asked to students and instructors it is observed that there are disagreements about the idea of juries which is not out of context to see it as an obstacle for a cooperative process. To understand these different perspectives the following section will present the jurors' and students' opinions about the juries.

2.3 Design juries from jurors' and students' standpoints

There are studies done with students, faculty members and professionals about the juries in the literature even if they are fewer than expected (Peterson, 1979; Frederickson, 1990; Anthony, 1987, 1991; Webster, 2006, 2007). To understand the reactions and standpoints of students and jurors, researchers conducted surveys, interviews or observations during the education process.

The findings of Anthony (1991) indicate that there is a diversity of ideas about the aims and goals of design juries. For the faculty members, design juries are used for assessing the students' performance with more than one colleague's perspective. On the other hand, students define juries as an opportunity to get feedback or improvements on their design work. Since the students' major prospect is learning, then the major goal of jurors should have been to teach; but there is a slight difference between the two points of view concerning the aim of the juries.

As it is mentioned before there is an imbalance of power in the jury. The students describe this powerful authority as "judgmental" in terms of its *choreography* (Webster, 2007). It is observed during several jury experiences that the students have a strong tendency to build

their individual "tactics" not to get harmed by the jury. Even the most able students report that they build their strategy on "doing well" rather than being honest with their learning through their presentations. Webster presents those strategies of students according to their design ability: *passive compliance* describes the low-level learners who generally receive the harshest criticism, *active compliance* is used by high-level learners and *active resistance* describes the students who just enjoy questioning the authority (Webster, 2007).

According to the students' account a better jury experience is the one that students learn something. Anthony (1991) explains the "good" jury experience as follows:

> *From the students' point of view, the best juries combine a balance between positive and negative criticism; they are not lopsided in either direction. Also the criticism students receive is specific and constructive. Jurors pinpoint where their designs are strong or weak and what would help improve them.* (Anthony, 1991, p.32)

Although criticism seems the key point affecting the students' jury experience, there are other factors that makes students define a jury as a "good" experience. If the students become actively involved in the evaluation process; having the opportunity to discuss their work with jurors and audience they claimed that they easily maintain their interest and motivation during the jury (Anthony, 1991).

On the contrary, students' worse jury experience is linked with the strong effects of negativity. But above all, students reported the worst jury experience as the one which depended entirely on destructive criticism and which does not include any supportive information related to their education (Anthony, 1991).

Anthony (1991) indicates that students argue that the educational contribution of juries is hardly considered. The interim juries –the juries held during the studio process as a mid-term exam–, desk-crits –studio critiques– have much more educational value in students' progress. The reasons are also argued that the criticism in juries is public and the project is finished, so the criticizing the project with a number of jurors and audience concerning the delivery of comments is sometimes of no effect but just a stressful event for students (Anthony, 1991).

2.4 Conclusions

The current form of design juries has a history based on art criticism, the new approach of École des Beaux-Arts in architectural education and the influence of Bauhaus (Chaffee, 1977 in Cossentino, 2002; Anthony, 1991). The tradition kept its dominance until today. Nevertheless, design juries have a more ritualistic tradition than an undisputed utility in the assessment (Anthony, 1991; Webster 2000). However, the design jury is one of the focal point in design education (Peterson, 1979; Anthony, 1987, 1991; Frederickson 1990; Attoe & Mugerauer, 1991; Ilozor, 2006) and there are fewer academic studies on design juries than expected (Peterson, 1979; Frederickson, 1990; Anthony, 1987, 1991; Webster, 2006, 2007).

In studios, the education is based on "learning-by-doing" borrowed from the *atelier* system of École des Beaux-Arts (Cossentino 2002). Thus, in the assessment of the outputs of the education some other concepts like authenticity, experience or master/apprentice relationship can be a discourse which correlates with the nature of arts and design (Cossentino, 2002). To portray the contextual dynamics, design juries could be observed with a non-comperative but self-definitive analysis.

In order to find the elements of the self-existent structure many studies concerning different topics and areas are revisited. Those studies illustrated that several issues can be taken as a concern in design juries. Philosophical issues are related to the jury to expose its conceptual dynamics. The most significant outcome was to notice that there is an imbalance of power in design studio and throught juries (Webster, 2006, 2007; Dutton, 1987). Furthermore as a judgemental process the jury concept defined as a good format of evaluating complex problems in a collaborative way to rationalize (Veca, 1991). From a pschoanalytical perspective juries revealed their therapist-patient relationships. *Mirroring*, *transferenc*e and *countertransference* are related to the design education since they remind the roles and communication between the student and instructors in the studio. Then, it is mentioned that narcissisim could be a negative factor in students' psychology throughout the jury. The importance of listening and delivering comments are recaptured in the communicational issues. Lastly, andragogical issues are taken as educational manners.

Last but not least, defining juries without the standpoints of jurors' and students' would be pointless in order to reach a thorough review. In doing that, the studies of Anthony (1991)

are revisited. The findings are noticed since they indicate the aim of juries are defined dissimilarly by the students and the instructors. While students describing the aims of the jury, they emphasized its educative approaches. Vice versa, the instructors defined the aim of juries as the assessment procedure of the student performences. Thereto, concerning the student accounts, it could be possible to allude to the students' jury experiences as they differ by the delivery of comments.

In epitome, the jury revealed its values with the several sub-dimensions created under its existence frame. Further, having mentioned its origins, its traditional construction and ritualistic form is no more inviolable. The potential of the jury system should be explored deeply in order to reach the most efficient form of assessment in design education.

CHAPTER 3

DESIGN AND CONDUCT OF THE FIELD STUDY

This chapter describes the design and conduct of the field study, the analysis of data collected, and the findings. As discussed previously in section 1.2, this study explores the jury assessment system in industrial design education from the perspectives of students and jurors with particular reference to METU Department of Industrial Design, and poses the following research questions:

- What aims are design juries intended to achieve in industrial design education?
- What are the qualities of design juries from the perspectives of students and jurors?
- What are the advantages and disadvantages of design juries as an assessment system in industrial design education?
- What attributes define an ideal design jury and an ideal design jury member?

One of the common methods of enquiry used in studies on design juries is to ask students and instructors their opinion about design juries through questionnaires and interviews. Yet, there are studies which employed different methods and reached incompatible results; the study by Webster (2007) draws attention to contradictory results from the observational study and surveys. Taking into consideration the previous research conducted, the goal of this study and the research questions posed, the researcher adopted a multi-method approach in the field study. First, the researcher conducted a video-recorded observational study on a design jury held at METU Department of Industrial Design. Secondly, a focus group study was conducted with a subgroup of students who went through the jury experience the researcher observed. Finally, interviews were conducted with the departmental staff who regularly served as jurors in design juries.

The observational study and the focus group study were about the final design jury of the first year design studio course (ID102 Basic Design II), and both studies were conducted at the end of the spring semester of 2007-2008 academic year. The interviews were conducted in the spring semester of 2008-2009 academic year over five weeks. Although the field study was realized in the chronological order described above (that is, observational study, focus group study, and the interviews), the *analysis* of data started with the focus group study; and the emerging categories in the focus group study were used in the analysis of data collected

in the observational study. Therefore, the order of the following sections follows the order of analysis.

3.1 Focus group study: Students' perspective

This section describes the focus group study held with the first year industrial design students concerning the final jury of the Basic Design Studio course. The study aimed at obtaining the opinions of the students who experienced the design jury.

Focus group is a qualitative research method used to collect data through researcher-led group discussions. Focus group enables the researcher to understand the opinions of the participants who share a similar background (Morgan, 2008). Morgan (2008) describes the difference between individual interviews and focus groups as follows: focus groups provide access to a greater number of participants, whereas interviews provide a detailed access to individuals. Focus groups are useful, "particularly when respondents promise to be more forthcoming with the stimulus or the safety of a group of fellow respondents" (McCracken, 1990, p.29). There are also several disadvantages of focus groups such as, one person being able to change the dynamics of the conversation and following statements when the conversation turns to different topics. However, in this study, the focus group was preferred since it allowed the students to engage in idea generation and discussion about a shared experience, the design jury.

3.1.1 The conduct of the focus group study

After the design jury that was observed was over, the studio instructors and students met in the first year basic design studio and discussed the jury and the whole academic year. After the discussion, the researcher, who is one of the teaching assistants of the course, invited the students to volunteer a focus group study concerning the design jury experience they went through. Out of 32, 12 students volunteered; there were 5 male students and 7 female students in the group; the ages of the students ranged between 18 and 20; the grades they received from the jury ranged between BA and DC (Course grades in METU is presented in Appendix C).

The focus group study was conducted the following day in a lecture room in the Faculty of Architecture. The room provided a comfortable and quiet environment; it was furnished with a big long table in the middle and about 20 chairs around it. The students were seated

around the table according to their preference. The researcher brought some snacks and tea for the students and chatted for a few minutes to warm them up. Before starting the session, the researcher informed the students of the aim of the focus group study and told them that they could be comfortable with their comments as the footage would not be shared with anybody else and the identity of the participants would be kept anonymous. Then, in order to facilitate the discussion, the researcher asked two of the questions he had prepared before the session (see Appendix B). After the students started to discuss their design jury experiences, the researcher monitored the topics covered and prompted the discussion when necessary. The entire study was conducted in Turkish. The focus group study took 58 minutes in total and was video-recorded with a Sony handy cam DCR-SR85 camcorder with an internal hard disk. The digital video recorder was located at the most convenient position to capture the entire group.

3.1.2 Analysis of the data collected in focus group study

The first step in the analysis was to get to know the audio-visual data obtained from the video-recording of the focus group study. The researcher went through the footage as many times as necessary, and kept notes of categories and statements of interest. The issues rose repeatedly by the students or the ones strongly agreed upon by the group were also noted down. Then these emerging categories were organized into topics and subtopics together with the related statements by the students as exemplified in Table 3.1. The chronological order of the topics was not taken as an issue in the analysis since some of the topics were raised several times during the study.

During the analysis of video-recording it was observed that some of the students were more willing to talk and share their opinions, whereas some others tended to listen to the discussions. The silent students sometimes participated in the discussions with acts. It was often observed that the students nodded or shook their heads as a sign of agreement or disagreement with the ideas expressed. It was also observed in the video-recording that some students got excited while some topics were being discussed. Some students, on the other hand, didn't get involved in the discussions much and seemed bored while some topics were being discussed.

Table 3.1 The emerging categories organized into topics and subtopics

Topics and subtopics	Examples of related statements by students
Comments delivered by the jurors	"…the comments are of course memorable; I still remember all of the comments I received from the jurors…"
Effects of comments	guiding, directive, memorable
Sources of comments	"I think that jurors refer to design principles and criteria, while delivering their comments."
Aims of comments	"I think receiving only positive or negative comments on our projects is useless; I want to understand the things I did right and wrong… in order not to repeat mistakes in the future."
Ideal comments	"Jurors have to be serious about what they are saying… They may get bored of commenting on each student's project, but for me, what is important is the five minutes that I listen to the jurors…They should consider that even that five minutes is important for each student…"
Oral presentation	"I do not get prepared for verbal presentation before the jury because I know that it is going to change due to the comments I will receive."
Performance of the jury	"Sometimes jurors deliver many comments that makes us understand and learn much about the project, but sometimes they just say 'thank you' without saying anything critical about our projects, I think they get tired in these kinds of situations…"
Ideal jury	"Juries have to be definitely 'open' juries!"
Ideal juror	"I think the woman and the boy [jurors] from the Architecture Department were perfect! You could understand how they were going to grade your work just by their comments."

3.1.3 Findings of the focus group study

The analysis of data collected in the focus group study revealed some issues which gained more importance. The findings of the study were reported below in accordance with the topics and subtopics emerged during the analysis.

1. **Comments delivered by the jurors:** The comments delivered by the jurors were one of the major issues discussed by the students. The comments were explored under several subtopics:
    - The majority of students stated that the effects of comments are directive and memorable. But it was also noted that the comments may also have negative effects. One of the students stated that sometimes they feel obliged to agree on the comments when the jurors overemphasize a topic. Another student explained the situation as follows: "When the instructors

recommend you to do something about your project, it feels like you have to do it, otherwise it means that you don't listen to them and get lower marks".

- The opinions about "How do jurors make critiques?" are responded by the majority of the group that jurors refer to design principles and criteria. Nevertheless, two students stated that some jurors tended to refer to an "ideal project" while criticizing student work. Another student also expressed a similar opinion: "Sometimes while the jurors were trying to improve our project, they describe an imaginary project…But rather than improving our project they create a new one they like most, and deliver their comments based on that 'ideal' project; we cannot understand anything since we cannot understand that 'ideal' project."
- The majority of students agreed on the usefulness of the comments or questions by the instructors prompting the issues the students forgot to mention during their jury presentation. Since the studio instructors have knowledge of the students' project concerns, they sometimes warn the students to mention issues that they forget to refer during their presentations. One of the students explained these types of comments as follows: "When you are presenting your project, you are sometimes so excited that you forget everything about your project. The studio instructors asked questions about the features of our projects whose answers they already knew just to remind us that we forgot to mention about it."
- Most of the students characterized an ideal comment as a specific and useful one which offers guidance to them. Some students also indicated that they would not take vague criticism seriously.
- The majority of students were noticeably in agreement on the importance of the *delivery* of a comment rather than the type of comment (positive or negative).
- The pre-jury phase is also taken as an issue by some students who described the effects of receiving too many comments before the jury as confusing. One of the students stated that it was sometimes difficult to put each and every comment by the instructors into practice: "The instructors sometimes expect so much more than we can do in the given time. When we present our work to instructors they recommend us to change some parts. After

changing it, they recommend us to do other things; when you keep on changing your project you become unable to finish it for the jury."

2. **Oral presentation:** When the students were asked whether they prepare oral presentations for the jury beforehand, the answer by the majority was "no". One of the students explained that it may change during the presentation with the questions and comments directed by the jurors. A student also mentioned that sometimes felt more like marketing the work than presenting it.
3. **Performance of the jury:** Most of the students asserted that the performance of the jury changes during the jury. When the performance of the jurors is high there are more comments and discussions. Sometimes, however, the performance of the jury is perceived as insufficient or unsatisfactory by the students.
4. **Ideal jury:** The majority of students stated that they are satisfied with the open jury system in its current form. However, some students pointed out that the ideal jury should be conducted well and dedicate equal time to each student. Most of the students emphasized the importance of equal presentation and discussion time. Some students also indicated that the jury atmosphere was fun and relaxed; however, sometimes it was not possible to discuss the projects in a serious manner.
5. **Ideal juror:** It was repeated several times by some students that silent jurors –the ones who didn't make any comment but just graded the projects– had a negative effect on students during the discussion. Some students repeated that the jury should allocate equal time to each student and in reference to the jury members dominating a jury session; they argued that discussing a project for half an hour makes the evaluation unfair. Moreover, some students described the ideal juror as the one whose grades are known through the comments they make. Some students emphasized that the jurors should take the student work and what they do seriously.

3.2 Observational study: The design jury observed

The jury is a complex system which cannot be defined and expressed in "If X, then Y" terms. For these situations the researchers use ethnographic studies as "real life problems are difficult to fit into a testable format as dependent and independent variables" (Angrosino, 2007, p.60). If the components of the structure are changeable and too much in number –as in juries– then to document the process can be advantageous in order to define the case and control the variables. Juries can be defined as *narrowed conceptual field* (p.62),

which means that researcher focuses on a part or event on society or its sub-systems –juries in this term can be perceived as the sub-system of an educational event.

Angrosino (2007) defines the observation method as "the act of perceiving the activities and interrelationships of people in the field setting through the five senses of the researcher". This study requires "an objective recording" and "a search for patterns". Researchers, in the recording process, should be aware of taking well-organized field notes. Besides, the field notes have to be structured and narrative in context. Additionally, the researcher can follow through two types of techniques while searching for the patterns: "unobtrusive" and "participant based". Since, this study takes the jury as a case, using a "participant based" technique would be more valuable in terms of searching the possible patterns via students and jurors.

3.2.1 Selection of the design jury observed

The METU's Department of Industrial Design's undergraduate degree is based on a four year program involving eight studio courses (one studio course per semester). The first year design studio courses are called Basic Design I and II. The studio courses require twelve hours student contact a week. The researcher decided to conduct the observational study on the basic design studio's final jury for the following reasons:

- The students of the basic design studio are new to jury experience. The advantage of this lack of previous experience is that the students are not prejudiced about this assessment procedure or the jurors. In the jury, there are members with whom the students have not met before.
- Except the studio instructors themselves, the jurors are less informed about the overall performance of the class or the individual performance of the students. A juror from the third year studio, for example, might be the instructor in another course that the students took, therefore may be more acquainted with the student's performance. Since the external jurors usually meet with the first year students for the first time during the final jury, student-work can be evaluated in a more impartial manner.
- The researcher was one of the teaching assistants of the basic design studio course. Thus, the case was more accessible to observe and, it was relatively easy to involve the course instructors and the students of the studio in the study.

3.2.2 The projects evaluated by the jury

At METU Department of Industrial Design, juries are conducted especially at the completion of a design project or at the end of a semester. The jury observed in this study was conducted at the end of the spring semester of the academic year 2007-08 as part of the assessment procedure of the Basic Design II course. During the jury, the students presented the following two projects they worked on:

i) Project brief 1: The first project brief was "to design a kite kit for a special event, festival or group". The students were expected to develop the project in accordance with the character of the event, festival or group considering the basic design principles taught during the first year studio. The materials and dimensions were defined as "free". The kite kit had to include the following:

- A user manual explaining the construction instructions
- The components of the kite (sticks, strings, plastic or fabric sheets)
- The package with graphical expressions

Students were given two weeks to work on the kite kit project. At the end of the second week it was planned to make a trip to fly the kites in the university campus but due to weather conditions the trip was cancelled and the second project brief was introduced.

ii) Project brief 2: The second project brief was "to design a toy for a traditional game". One of the aims of the toy project was to make a search on almost forgotten traditional games and to design a toy for one of them. Later on, the students were asked to generate a model game that is not out of context to the original one. The last step involved designing and preparing a prototype of the toy for their game with a name label and a user manual on the package. Designing an extra package was optional but it was expected to finalize the toy design as ready to be sold in stores. The prototype was not necessarily to be made by the original material but should have possessed the same properties with the original design. The duration of the project was two weeks and until the submission of the second project the students were given the chance to work on and improve their first project.

3.2.3 The conduct of the observational study

There were 32 students who participated in the jury. The jury was composed of five tutors of the Basic Design course, eight instructors of the Department of Industrial Design and two instructors of the Department of Architecture with a total of 15 jury members. Before the jury session started, the researcher informed the jurors and students about the study and asked for permission to record the jury with a video camera. The jury started with the students' presentation of their projects. As illustrated in the Figure 3.1 and Figure 3.2 the students presented their work with some visuals. Those visuals were presentation sheets about the projects prepared by hand or generated by computer. The students also presented models or prototypes to demonstrate the end-product's size, function and details. Moreover, the students informed the jury orally about the project, the product's advantages, technical details, formal qualities and so on. The jurors gave feedback about the student work. This feedback consisted of critiques, questions, arguments, opinions, and, later on, the grades. It can be observed from Figure 3.1 and Figure 3.2 that the researcher participated in the jury as a juror. It provided the researcher to observe the jury in terms of the activities and behaviors of both students and jurors.

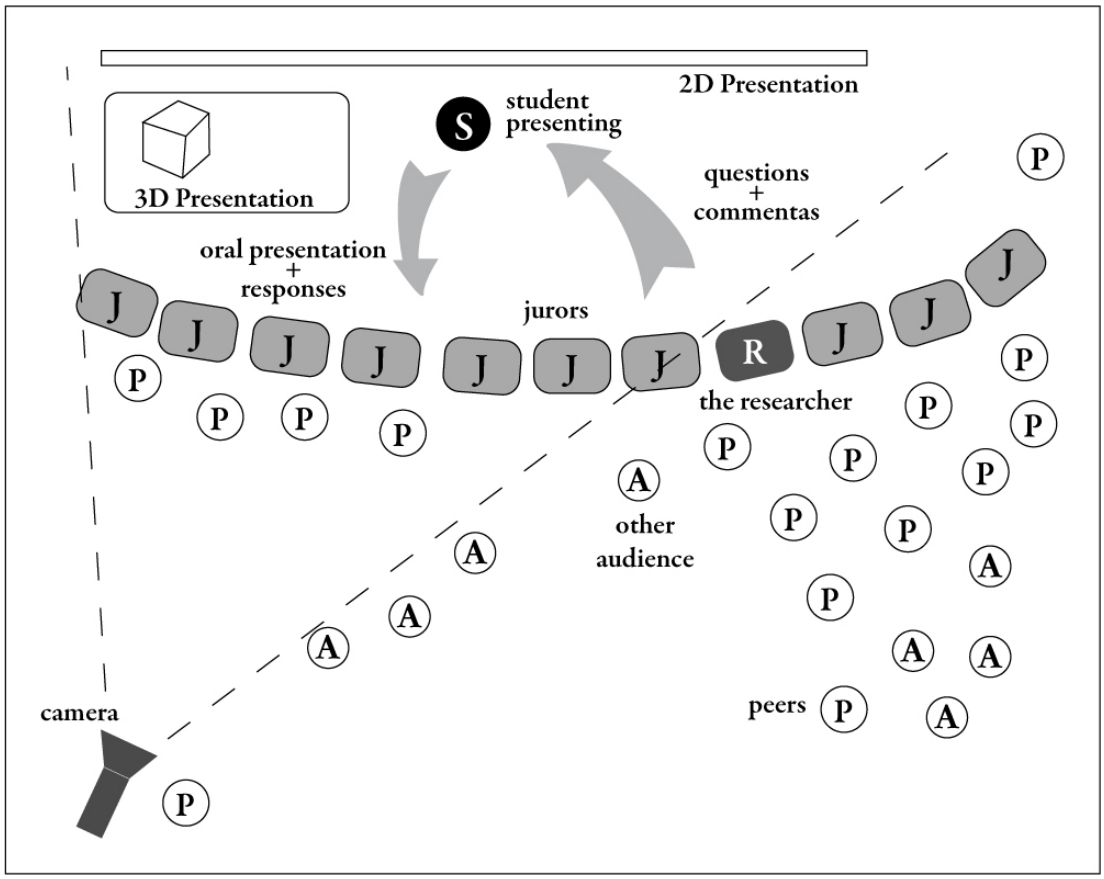

Figure 3.1 Schematic drawing of the design jury setting in the morning session.

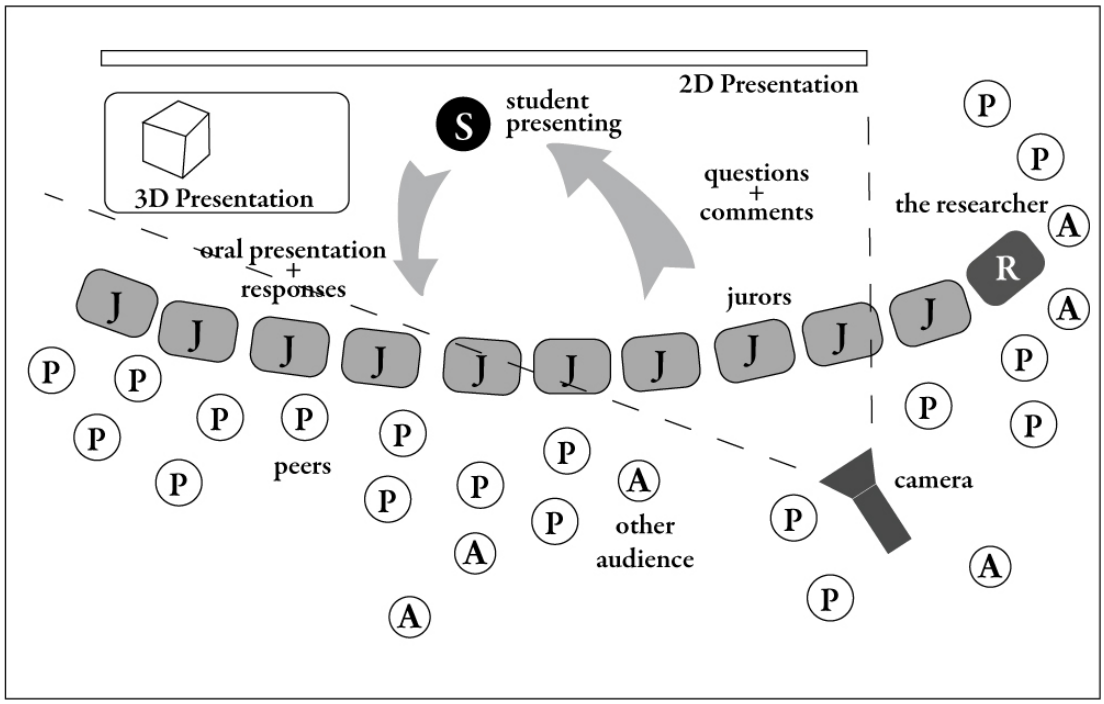

Figure 3.2 Schematic drawing of the design jury setting in the afternoon session.

The aim of recording the jury with a video camera was to record both verbal and visual data. The footage provided the researcher with the opportunity to access all the verbal comments and the visual material that students referred to during their presentation. Video-recording can be questioned about whether it may cause a drastic effect on the two events in which participants deliver their comments and speak of their ideas. However, in the literature video-recording technique was often used under such conditions (McKechnie, 2008). Video-recording can basically reflect the real, naturally occurring context and the actual behaviors of the participants in data collection process of observational study (McKechnie, 2008). On the other hand, there are other techniques of data collection such as note taking and audio-recording. However, in natural settings like design juries, which take almost seven hours of intensive discussions, using note taking or audio-recording as data collection techniques would only provide limited data. Therefore, video-recording was used as a data collection technique in the study.

The study was conducted in the first year industrial design basic design studio and at the entrance hall in the Faculty of Architecture at METU. The glass roof of the studio caused an overheating problem during the first half of the jury so the jury changed its place to the entrance hall after the lunch break. Figure 3.3 and Figure 3.4 are two snapshots from the footage, illustrating the morning and afternoon sessions with changing venue and camera angles. In this second half of the jury echoing sound of the entrance hall caused a noise problem that the studio instructors warned the class several times.

Figure 3.3 A snapshot from the jury in the morning session (by courtesy of the student).

Figure 3.4 A snapshot from the jury, in the afternoon session (by courtesy of the student).

To record the jury, a SONY Handy cam, DCR-SR85 Camcorder with internal hard disk, same equipment used in the focus group was used. The jury took almost seven hours of recording with fifty minutes segments provided by the video camera itself. The segments included 2 to 5 students' jury sessions, which provided the researcher additional help for analysis.

The aim of recording the jury was to refer back to sessions when necessary. The sound quality and the resolution of the digital video were high enough to observe the case in detail. Hand held camera was set-up at the back of jurors' arch (see Figures 3.1 and 3.2) by the researcher on a tripod; two students volunteered to be in charge to control the battery level of the camera.

3.2.4 Analysis of data collected in observational study

A special data sheet was developed for analyzing and coding the audio-visual data collected in the observational study. A separate data sheet was used for each jury session to compare and analyze them systematically. An example of a data sheet can be seen in Table 3.2. The topics emerged during the focus group study with the students shed light on the data analysis process of the observational study. From the focus group study it was observed that there were some significant topics to concentrate on during the analysis of the observational study: (1) Comments delivered by the jurors (e.g., effects of comments, type of comments, how comments are delivered), (2) Performance of the jury, (3) Ideal jury (e.g., time management) and (4) Ideal juror (e.g., help of studio instructors). The video analysis process involved use of data sheets for each student including these topics discussed during the focus group study. Aims of each recorded data listed as follows:

- Duration of presentation and discussion for each jury session were noted down separately on the data sheet in minutes. The aim was to search for potential patterns concerning the time management.
- The grade that each jury member gave to a student was placed on the sheet. In addition, the average grades are noted for each of the two projects. During the analysis these two grades for project 1 (toy) and project 2 (kite kit) were taken together.
- The material presented by each student was noted.
- The role of studio instructor(s) was noted to observe whether the instructor(s) has a prominent role during the jury.

Table 3.2 An example of a data sheet used during the observational study

STU30												
Total time of jury appearance:	9.5 minutes						presentation:	3.5 minutes	discussions:	6 minutes		
Notes:												
GRADING												
KITE KIT	JM01	JM03	JM04	JM05	JM07	JM08	JM09	JM10	JM12	JM15		**average**
	BB	CB	CC	BB	CC	AA	BB		FD			**CB**
TOY	JM01	JM03	JM04	JM05	JM07	JM08	JM09	JM10	JM12	JM15		
	CB	CC	CB	CB	CC	CB	CB		DC			**CC**
PRESENTED MATERIAL:	2 of 3D model / 2 of A3 2D sheets (HAND DRAWN)											
COMMENTS RECEIVED:	**10**											
positive	3	JM08	JM05	JM08								
negative	7	JM08	JM12	JM09	JM09	JM12	JM01	JM09				
how comments are delivered?												
personal	5	JM09	JM09	JM05	JM01	JM09						
project	5	JM08	JM08	JM08	JM12	JM12						
vague	5	JM08	JM08	JM08	JM05	JM12						
specific	5	JM09	JM09	JM12	JM01	JM09						
destructive	6	JM08	JM09	JM09	JM09	JM01	JM12					
constructive	4	JM12	JM08	JM05	JM08							
THE ROLE OF STUDIO INSTRUCTOR:		juror		coach		advocate						
DIVERSITY OF TOPICS:		low		medium		high						

- The number of comments are noted according to their type; positive or negative together with a juror code so that it was possible to follow by whom the comment was made. There were 15 jurors and three persons from the audience who commented on the works during the jury session. The codes for jury members were like JM01, JM02, JM03,…, JM14, JM15 and the codes for the audience were AU01, AU02 and AU03.
- Lastly, the diversity of topics was indicated for each session as low, medium or high in order to explore whether jurors stuck on to one point or widely discussed the points of the projects during the jury.

3.2.4.1 Classification of comments as positive or negative

Whether being positive or negative each comment was classified according to the way they were delivered with the code of the juror. Having mentioned that Anthony (1991) presented the types of delivery of comments as: personal or project oriented, vague or specific, destructive or constructive, Anthony's classification of comments were used since the study involved a detailed information on delivering comments and their effects in educational perspective. Hence, each comment provided by jurors was transcribed onto seperate note sheets filled for every student's jury session throughout the video analysis process. The transcribed form of each comment provided the researcher to clasify these comments according to their type and their way of delivery during the analysis process. This process included two steps: First it was decided that the comment was positive or negative, and second, the how the comments are delivered such as: personal or project oriented, vague or specific and constructive or destructive.

The decision of the type and the way of delivery of comments was based on the findings of the literature study and previously discussed in section 2.3.2. The reseacher defined some critical key points while clasifying the comments. Primarily, the comment was decided to be positive or negative in accordance with its context and wording. If the comment was emphasizing positive aspects or advantages of the student's project then the comment was accepted as a positive comment. The possitve comments were also included statements of compliments, praises and greetings. On the other hand, if the comment tended to emphasize negative aspects or disadvantages of the project, the comment was accepted as a negative comment. Common negative comments involved students' mistakes in design

decisions, possible negative effects of these decisions and lack of student's contribution to the given project. When the decision was hard to make then the researcher revisited the video to understand the comment's type in context of discussions.

3.2.4.2 Classification of comments according to the delivery type

The comments were also clasified according to their type of delivery. In this second step of the process, the comments were clasified under three categories: personal versus project oriented, vague versus specific and destructive versus constructive.

i) personal versus project oriented. Basically, while deciding the comment was personal or project oriented the focus was on the statement. When the statement stressed on the word "you" instead of "the project", the focus of criticism was accepted as personal. On the other hand, project oriented comments were concentrated on the project; the center of focus of the statement was on the project.

ii) vague versus specific. While deciding a comment was vague or specific, the main consideration was to decide whether the comment involved explanation of causes and effects by the juror. If the juror delivered the comment like "I like the color that you used" or "The project seems unfinished" then it was accepted as a vague comment. On the other hand, when the juror explained specific reasons or results, the comment was accepted as specific.

iii) constructive versus destructive. Moreover, the difference between constructive and destructive comment depended on involving a further development or not. When the juror leaded the student to improve his/her project by providing him/her some detailed account, the comment was accepted as a constructive comment. On the other hand, if the juror delivered his/her comment as a subversive criticism, the comment was accepted as destructive. Yet, destructive comments did not need to be involved catastrophic effects. If the comment did not provide any further development or improvement, the comment was accepted as destructive as well.

3.2.4.3 Examples of classification of comments

Nevertheless, some critical examples are given to illustrate the classification process in more detail. In total, the analysis of six comments were given in detail: two of them were positive and four them were negative. Furthermore, three of them were personal and again three of them were project-oriented; four of them were specific and two of them were vague; two of them were destructive and four of them were constructive.

i) Negative/Personal/Specific/Destructive

"Your friends have tried to create a product for a game which did not exist before, however you try to redesign a product which is already being used. It is difficult for you to alter a product at hand. You are trying to further develop what has already been improved. I think this is your biggest mistake. Your final product may still leave people unsatisfied. Because there is a product already available and it is very stereotypical."

"Diğer arkadaşların oyuncağı önceden var olmayan bir oyun için ürün yapmışlar, fakat sen zaten kullanılmakta olan bir ürünü tekrar tasarlamışlışsın. Senin bunu farklılaştırman zor. Sen zaten iyileşmiş bir ürünü tekrar iyileştirmeye çalışıyorsun. Bence senin en büyük hatan bu olmuş. Ne yaparsan yap insanlar memnun kalmayabilir. Çünkü ortada zaten kalıplaşmış bir ürün var."

TYPE OF COMMENT

Positive versus Negative: The comment in relation to its context was accepted as a negative comment. The juror emphasizes the decision of redesigning a stereotypical object, and discusses the negative implications and effects of his/her decision.

DELIVERY OF THE COMMENT

Personal versus Project oriented: The comment was accepted as a personal comment in terms of its wording. The statement focuses on the subject (the student) rather than the object (the project) by expressing a "you" type of judgement.

Vague versus Specific: The comment was accepted as a specific comment since the juror reasons with specific causes and effects of the student's project.

Destructive versus Constructive: The comment was accepted as a destructive comment since the juror did not present any further development or recomendation.

Obviously, the comment does not involve an outrageous destruction of the project at issue but also it does not involve any advise or instructive explanation either. Therefore the researcher has to consider the delivery type of the comment in a wider perspective. The judgement of the juror emphasizes the attempt of the student as a negative concern.

ii) Negative/Personal/Vague/Destructive

"Making up an excuse does not mean anything for us; if there is something missing [in your model] you can show or present it somehow."

"Burada bahane bulman bizim için birşey ifade etmiyor; eğer eksik olan birşey varsa onu bir şekilde gösterebilirdin."

TYPE OF COMMENT:

Positive versus Negative: Basically the comment denoted the balkiness of the student and illustrated a missing point that the student has denied. In this regard the comment was accepted as a negative comment.

DELIVERY OF THE COMMENT:

Personal versus Project oriented: The comment was accepted as a personal comment since the judgement targeted the student.

Vague versus Specific: The comment was accepted as a vague comment since the juror did not clearly explain the refusal of the excuse with specific reasons. Also by saying "somehow you can do it..." the juror refers to an ambigious solution.

Destructive versus Constructive: The comment was accepted as a destructive comment. In the present case, the juror delivered his/her comment with two judgements: First one mentioned an excuse and second one was an advise. Both of them were not destructive comments seperately but when they come together they connote a different meaning, which depicts a fact that the student did not do the thing that he/she supposed to do and instead he/she tries to find a pretext. Thus, the comment aimed at pointing out the deficiency of the project rather than leading the student to a further point.

iii) Negative/Project oriented/Specific/Constructive

"If you make the black part transparent and other parts in black, then you can see a black shape flying into the sky."

"Siyah yerine şeffaf, diğer kısımları da siyah yaparsan gökyüzünde siyah bir şekil uçar."

TYPE OF COMMENT:

Positive versus Negative: The comment was accepted as a negative comment since it refered to the negative effect of the student's design decision on the colors of the kite project. The student intended to create a "rocker fist" figure in the sky with his/her kite. However, the choice of the student for background of the image is a dark color which results in the background became more visible than the main figure in terms of its contrasting color with the color of the sky. Therefore, the juror pointed out this improper color choice of the student by advising him/her to reverse the colors of the background and the figure.

DELIVERY OF THE COMMENT:

Personal versus Project oriented: The comment was accepted as a project oriented comment since the judgement targeted a specific feature of the project.

Vague versus Specific: The comment was accepted as a specific comment since it refers to a specific change in the mentioned part of the project. The comment also pointed out the cause and effect of this color change in an implicit way.

Destructive versus Constructive: The comment was accepted as a constructive comment. The juror pointed out the benefits of color change of the parts in terms of improving the project through the student's intention.

iv) Negative/Personal/Specific/Constructive:

"The part that the string is wound is just a stick. It seems like you didn't pay much attention. If you had considered that part too, then your product would seem more finalized."
"ipin sarıldığı kısım sadece bir sopa. Özen göstermemişsin gibi gözüküyor. Onunla da ilgilenseydin ürünün daha bitmiş gözükürdü."

TYPE OF COMMENT:

Positive versus Negative: The comment was accepted as a negative comment since it refered to the half-baked part of the project.

DELIVERY OF THE COMMENT:

Personal versus Project oriented: The comment was accepted as a personal comment since the judgement was directed at the student by using the word "you".

Vague versus Specific: The comment was accepted as a specific comment. Criticism that the juror made illustrated that the student didn't pay much attention to the holding part of the kite. The juror added also that the final product did not look finished for that reason. Consequently the juror explains the causes and effects of a specific imperfection of the project.

Destructive versus Constructive: The comment was accepted as a constructive comment. The juror pointed out the benefits considering the part that string was wound should be considered as a part of design project in terms of improving the project through the student's intention.

v) Positive/Project oriented/Specific/Constructive:

"There are much to say about details...however, it has been a positive approach that you transform the game into three dimensions."
"Detaylarda söylenecek çok şey var...ama oyunu üçüncü boyuta taşıman olumlu bir yaklaşım olmuş."

TYPE OF COMMENT:

Positive versus Negative: The comment was accepted as a positive comment. The juror indicated the student's approach of rendering the game in three dimensions was a positive approach.

DELIVERY OF THE COMMENT:

Personal versus Project oriented: The comment was accepted as a project oriented comment since the juror did not direct his/her criticism to the student.

Vague versus Specific: The comment was accepted as a specific comment since the specific reference point that juror spoke of was transforming the game into three dimensions.

Destructive versus Constructive: The comment was accepted as a constructive comment. The juror mentioned the student's approach was suitable and could be considered as a start point for further development.

vi) Positive/Project oriented/Vague/Constructive:

"If you change its color to maroon it will be very good." *"Rengini bordo yapsan bence çok güzel olacak."*

TYPE OF COMMENT:

Positive versus Negative: The comment was accepted as a positive comment. The juror made a suggestion about the color of the product aimed at improving its aesthetical values. Since the juror didn't refer to the color choice of the student as a negative aspect, the comment was considered as positive and advisory comment.

DELIVERY OF THE COMMENT:

Personal versus Project oriented: Although the juror use the word "you" in his/her statement the focus shifts from the student to the project according to its context: the juror directs his/her judgement more to the project.

Vague versus Specific: The comment was accepted as a vague comment since the juror did not explain causes and effects of the color change. The comment in this sense, looked more like a personal opinion.

Destructive versus Constructive: The comment was accepted as a constructive comment. Although the juror did not explain any reason or result, the juror's suggestion provided an improvement.

Analysis of audio-visual data: With the preparation of the data sheets for each student, it was possible to observe the change of variables from the sequence. Furthermore, to illustrate findings from the observational study, possible patterns were searched by analyzing data collected with the data sheets for every student (see Table 3.2). Individual data sheets included time management, grading, types of comments and delivery types of comments. In order to observe the patterns from the separate data sheets a table was created in Microsoft Windows Office Excel 2007 (see Table 3.3). Having prepared the tabular data sheet, it was possible to follow all the individual data of students together from a single table. The other step was to find out the ranges in number of comments or amount of time according to several variables like the grades or the jury order followed.

Table 3.3 Video analysis data in tabular form.

	TIME MANAGEMENT			GRADING		TYPE OF COMMENT		HOW COMMENTS ARE DELIVERED?					
STUDENT	total time (min.)	presentation (min.)	discussions (min.)	first project	second project	positive	negative	personal	project oriented	vague	specific	destructive	constructive
STU01	8	5	3	BB	CB	0	4	3	1	1	3	1	3
STU02	11	6.5	4.5	BA	BB	2	4	1	5	3	3	2	4
STU03	30	10	20	DC	DD	0	12	8	4	9	3	9	3
STU04	15	5.5	9.5	BB	CB	2	4	4	2	2	4	1	5
STU05	12	3	9	BA	CB	1	10	5	6	3	8	3	8
STU06	11.5	3	8.5	BB	BA	2	7	2	7	4	5	4	5
STU07	8.5	4	6.5	BB	CB	0	9	5	4	3	6	4	5
STU08	14.5	4.5	10	CB	CC	0	9	5	4	6	3	6	3
STU09	18.5	4	14.5	CC	CC	2	9	4	8	7	5	4	8
STU10	12	5	7	CC	CB	3	4	4	3	3	4	1	6
STU11	10	5	5	CB	DC	0	3	4	3	3	4	1	6
STU12	12.5	7.5	5	AA	AA	1	2	2	1	3	0	1	2
STU13	7.5	6	1.5	BB	BB	2	0	0	2	2	0	0	2
STU14	7	5	2	BB	BB	0	3	2	1	3	0	1	2
STU15	15.5	6.5	9	BA	BB	5	6	4	7	6	5	3	8
STU16	17	7	10	BA	BB	1	5	5	1	4	2	2	1
STU17	11	4	7	CC	DC	1	5	5	1	4	2	2	1
STU18	12	6	6	BB	BA	0	4	1	3	2	2	2	2
STU19	11	4	7	BA	CB	0	4	2	2	3	1	3	1
STU20	10.5	5	5.5	BB	CB	2	5	3	4	6	1	3	4
STU21	15	10	5	BB	CB	0	4	1	3	3	1	2	2
STU22	10.5	5	5.5	BB	CB	1	5	1	5	5	1	4	2
STU23	8	5	3	BB	BA	0	4	0	4	2	2	3	1
STU24	8.5	4.5	4	CC	CC	2	2	1	3	2	2	3	1
STU25	10	7.5	2.5	BB	BB	0	2	0	2	1	1	2	0
STU26	17.5	6	11.5	BB	CC	1	10	4	7	4	7	5	6
STU27	16	11	5	BB	BB	0	5	3	2	4	1	3	2
STU28	10	5	5	BA	BA	1	4	2	3	4	1	2	3
STU29	12.5	5	7.5	BB	CB	0	8	5	3	3	5	4	4
STU30	9.5	3.5	6	CB	CC	3	7	5	5	5	5	6	4
STU31	13.5	6.5	7	BA	BB	4	6	4	6	7	3	7	3
STU32	10	4	6	DC	DD	0	3	1	2	1	2	2	1

3.2.5 Findings of the observational study

This part presents the findings of the data analysis. Figure 3.5 presents the range of total recorded comments in relation to their positivity or negativity.

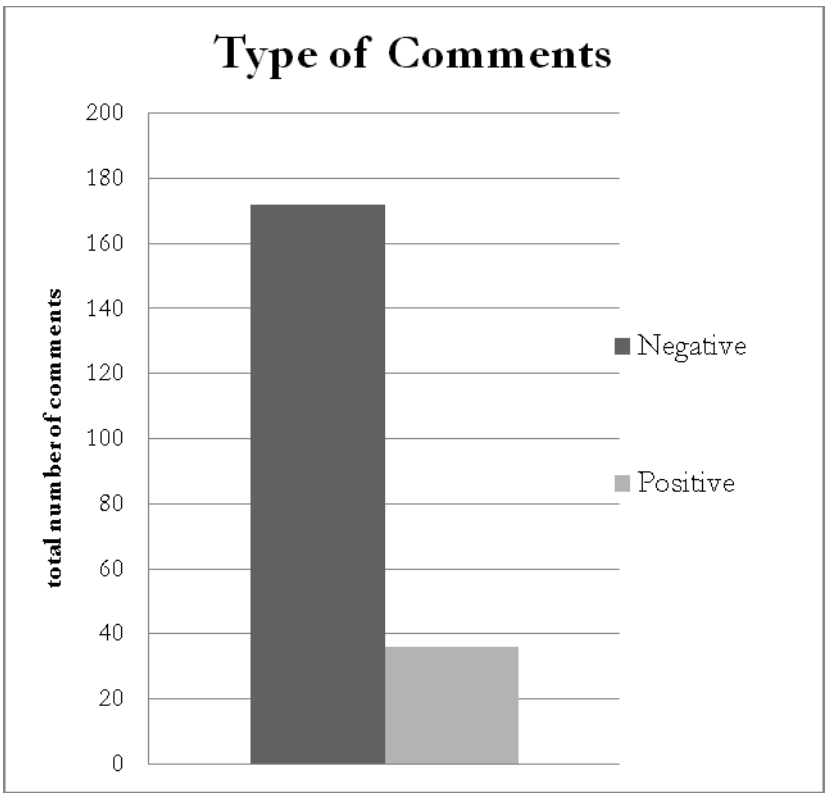

Figure 3.5 Relative proportions of positive and negative comments

Type of comments: The number of negative comments distinctly predominate the overall comments when the criticism followed throughout the observation of the jury. This imbalance of range in type of comments suggests that the jurors have a tendency to overstressing the negativity of the presented work.

How comments are delivered: It can be followed from Figure 3.6 that the instructors delivered more of their comments in a vague type rather than being specific in the frame of reference. The other significant point is that the destructive and constructive critiques are delivered almost at the same percentage. Lastly, project concerned criticism was high in percentage compared to personal criticism. Yet, it is important to note that the percentages of delivery types are close to each other.

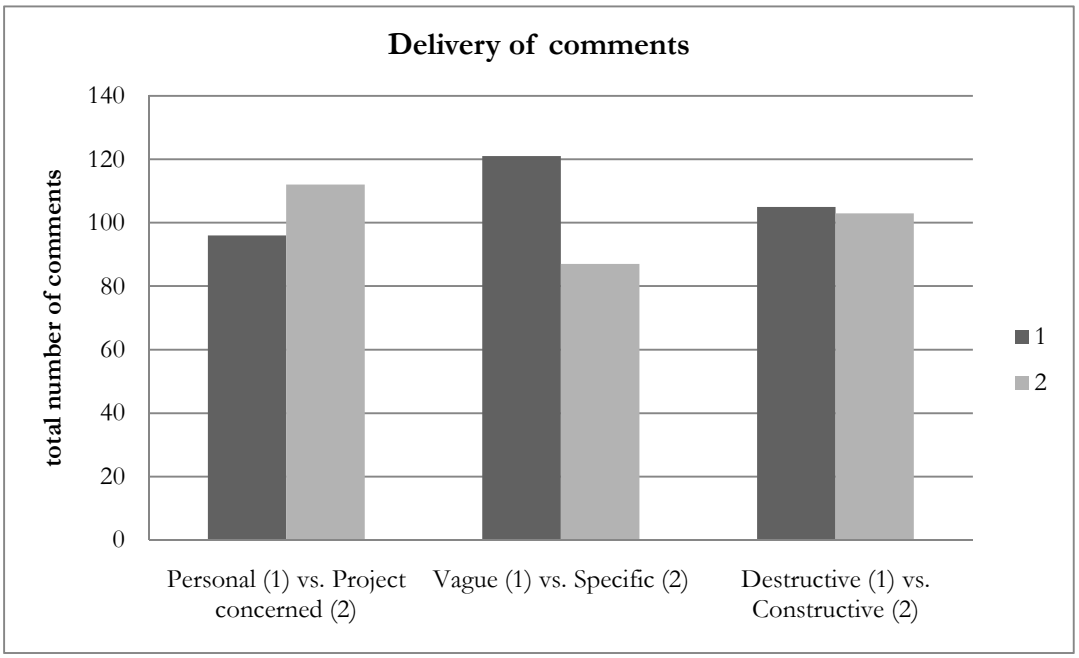

Figure 3.6 Relative proportions of how comments are delivered in observational study

Grading: There were two projects assessed by the jurors for each student: project 1 was designing a toy, and project 2 was designing a kite kit. When the marks of each project was analyzed together for each student it was observed that jurors tended to give the two marks of project 1 and project 2 close to each other. Figure 3.7 presents the grades for project 1 and project 2 for each student.

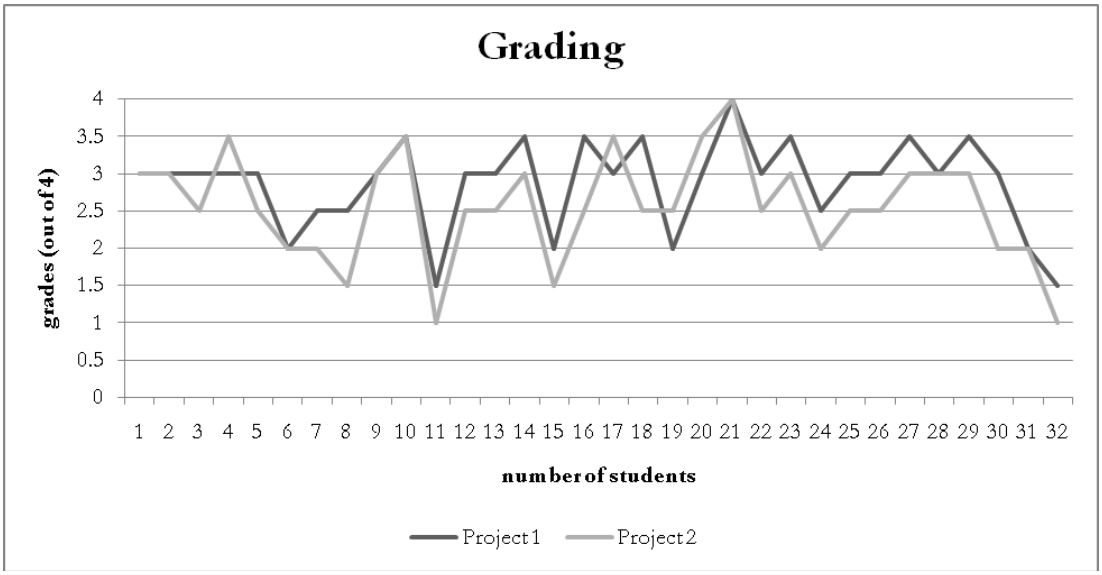

Figure 3.7 Range of grades for project 1 and project 2.

It can be observed from the chart that only four of students' marks for project 1 and project 2 were differed 1 point (out of 4), 20 of students' marks for project 1 and project 2 were differed only 0.5 point (out of 4), and rest of the students' marks for project 1 and project 2 were the same. Therefore, it was observed that jurors tended to grade project 1 and project 2 close to each other for each student.

Grading and type of comments: Furthermore, a pattern observed with the grading was the change of comments received by the students by the sort of their marks. As presented in Figure 3.8 and Figure 3.9, the number of positive/negative comments range due to the marks given by the jury. Figure 3.8 presents the change in the number of positive and negative comments received by the students sorted according to their marks for Project 1 (toy). The linear trend line of positive comments -linear (positive)- indicate the trend, in which students who got higher marks also received more positive comments, on the contrary, students who got lower marks also received less positive comments. On the other hand, from the linear trend line of negative comments -linear (negative)- it can be observed that students who got higher marks received less negative comments than the ones with lower marks. Figure 3.9 illustrates a similar pattern for the project 2 (kite kit). As rather visibly indicated by the trend line of negative comments, the students who received lower marks also received more negative comments. The trend line for the positive comments, on the other hand, slightly indicates that the students with higher marks received more positive comments.

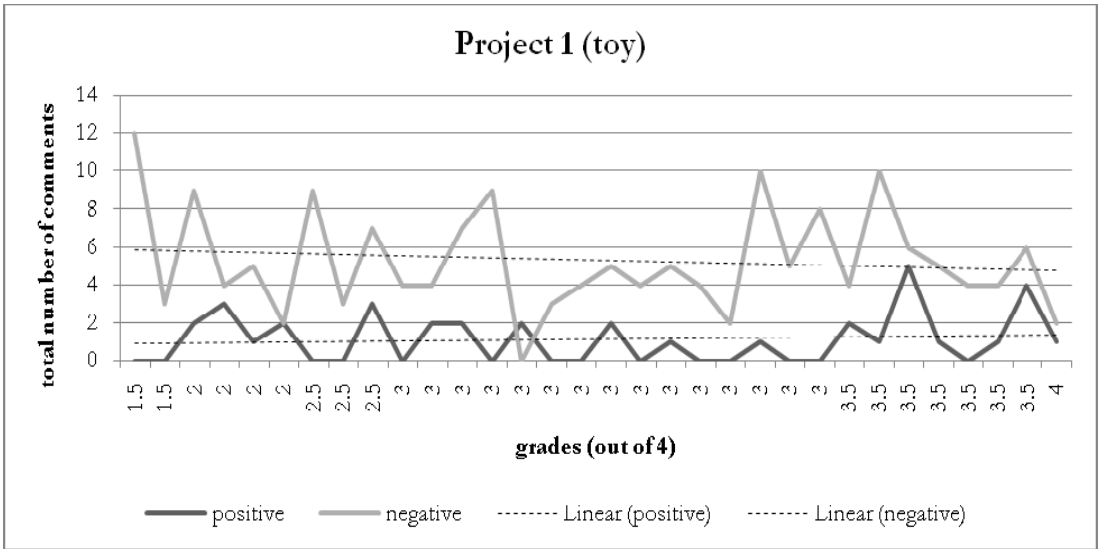

Figure 3.8 Change in the number of positive and negative comments received by the students sorted according to their marks for Project 1 (toy).

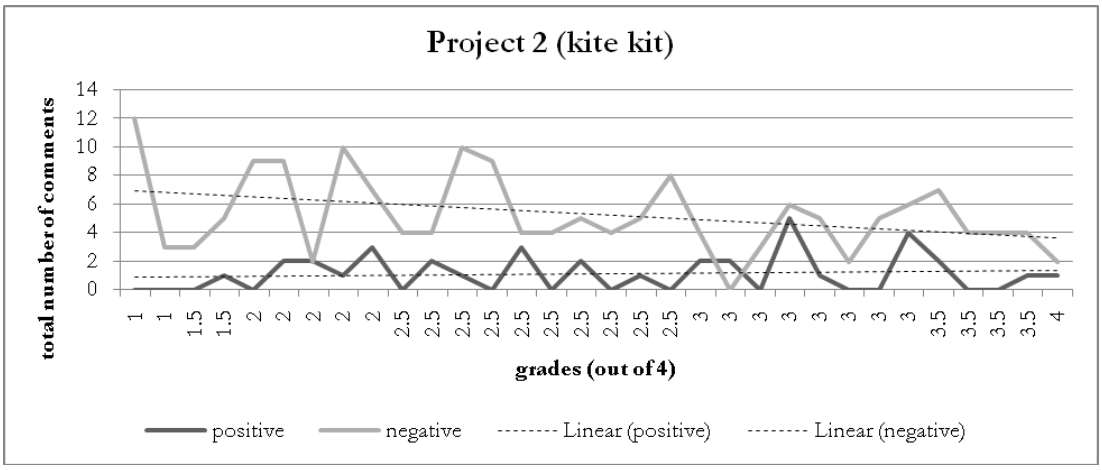

Figure 3.9 Change in the number of positive and negative comments received by the students sorted according to their marks for Project 2 (kite kit).

Grading and time management: Total time of jury appearance for each student was ranged from 7 to 30. First, it was observed if there was a link between grading and time management. Figure 3.10 presents grading for project 1 and project 2, and total time of jury appearance for each student.

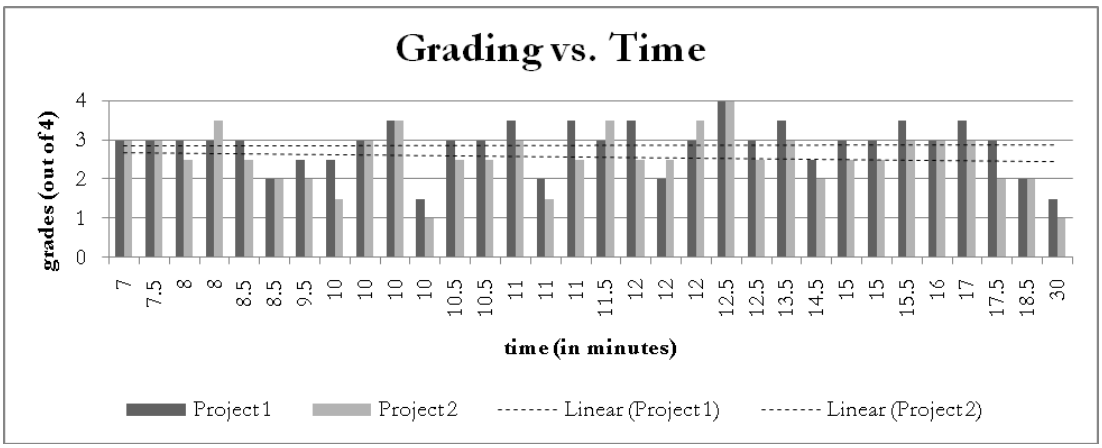

Figure 3.10 Change of grading for project 1 and project 2 and total time of jury appearance for each student.

Results indicated that there was not any visible pattern about the time and grading for both project 1 and project 2. However, there was a slight trend of decrease in the grades for project 2 while the total amount of time for each student was increasing. Having mentioned that the jury was composed of two sessions, morning and afternoon sessions, another chart was also created in two segments. Analyzing each student's total time of jury appearance and grades provided a more visible pattern. In the morning session there were 10 students and in the afternoon session there were 22 students. The total time of jury appearance for each student were ranged from 8 to 30 minutes in the morning session; ranged from 7 to

17.5 minutes in the afternoon session. Average time of jury appearance was 12.5 minutes. It can be observed from the Figure 3.11 that there was a trend of decrease in the grades both for project 1 and project 2 with the increase in the total amount of students' jury appearance. On the other hand, in the afternoon session a different pattern was observed. The trend can be observed from Figure 3.12 that the grades were increased with the time of jury appearance. It was also important to observe a similar trend both for project 1 and project 2.

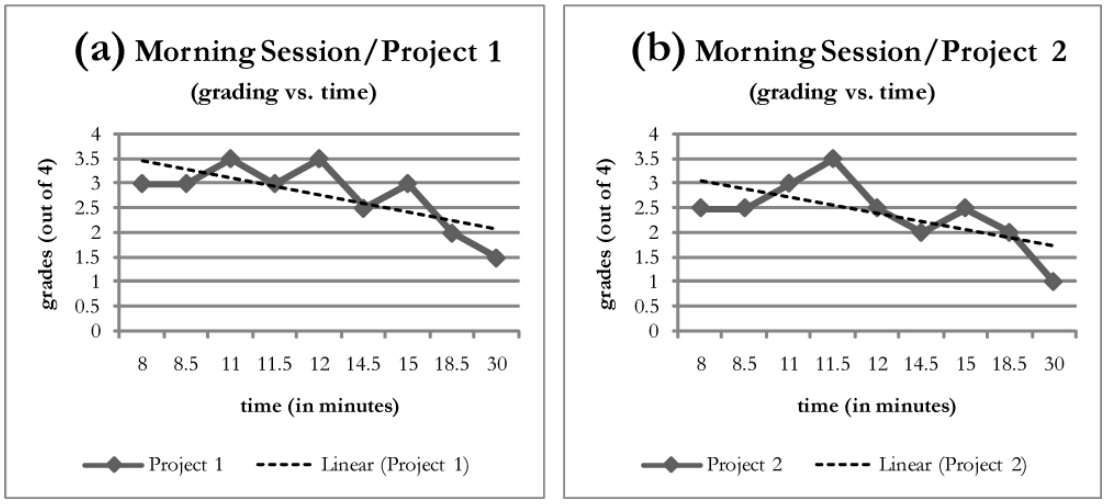

Figure 3.11 Change in the amount of time (minutes) of students' total time of jury appearance according to their marks for Project 1 (a) and Project 2 (b) in the morning session.

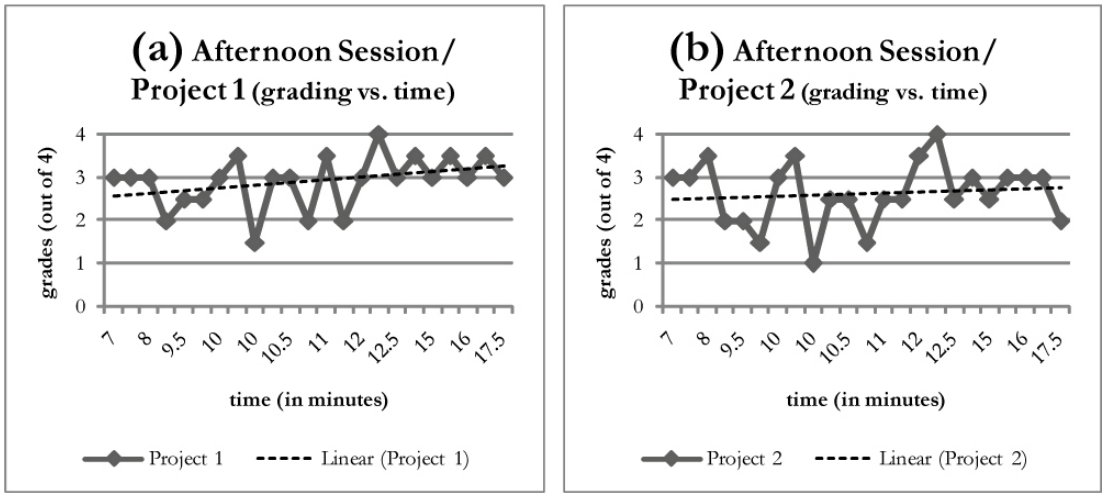

Figure 3.12 Change in the amount of time (minutes) of students' total time of jury appearance according to their marks for Project 1 (a) and Project 2 (b) in the afternoon session.

Roles of instructors of the studio were differed as being a coach, an advocate and a juror. There were five instructors of the studio in the jury. Although, most of the time they criticized the projects as a juror, they also helped students to answer the other jurors' questions and also they gave critical tactics including how students should act during the jury. As an example, an instructor of the studio advised to a student not to turn his/her back to the jurors during his/her presentation. Another coach role was observed when a juror asked the student if he/she offers an additional glue pack inside the kite kit: The instructor advised the student: "Now, you are going to say yes." The instructors of the studio sometimes advised students to take a deep breath and calm down before they start their presentation. Another role of the instructors was observed as being advocate. Mostly, in the first ten of the students' jury sessions the jurors commented on the students projects which were out of project requirements like: "What will be the actual material of this product?" or "It cannot be produced with injection molding." The instructors answered these questions and comments as an advocate: "They [students] cannot decide on the material of the product, since they did not take the Materials Course yet." Or "We [studio instructors] did not ask for a research on production technique, the basic concern was to decide on the form of the product."

3.3 Interviews: Jurors' perspective

This section presents the interviews conducted with 14 instructors of METU Department of Industrial Design about design juries. The primary aim of the interviews was to gather their views about design juries. In the literature review chapter (see Chapter 2), the standpoints of instructors were taken as an issue about the jury. The students' and instructors' points of view about juries are as important as the jury itself since perceiving the jury from different sides provides a better understanding of the jury concept. To perceive a general comment on juries would provide supplementary information to both the observational study and the focus group study with students. After conducting an observation study and focus group with students, it was found necessary to receive the opinions of the jurors about design juries.

The former study was a focus group with students. In the focus group study, it was more convenient to reach the data through a discussion session. However, a discussion session with the instructors would cause several missing points like individual opinions. Another reason that the researcher decided on doing interviews was that the time period of

conducting the study was full of exams, submission of projects and juries so it was not convenient to gather all of the instructors for a focus group in such a short time period.

3.3.1 Selection of the participants

The participants are selected from the instructors of METU Department of Industrial Design. 14 instructors participated in the study. The aim of selecting the instructors just from the Department of Industrial Design was to provide consistency since both observational study and focus group is conducted with students of the same department. The Faculty of Architecture involves three departments in its organization: Department of Architecture, Department of Industrial Design and Department of City and Regional Planning. All these three departments use design juries as means of assessment and criticism in studio based courses. The contributions of the members of the entire faculty would be more advantageous in theory, however, the student profile and the requirements of different disciplines might cause differences in the thoughts of the instructors about design juries.

There is 25 full-time staff at METU Department of Industrial Design: three of them are associate professors, four of them are assistant professors, seven of them are instructors, one of them is specialist in the model making workshop and there are ten research assistants. While the study was carrying out, 16 of them were working actively as full-time staff in the Department. The rest of them were abroad or off duty due to several reasons and the specialist instructor was only responsible with the workshop of the Faculty and did not involved in the assessment process of studios.

Additionally, there are 20 part-time instructors teaching several courses: four of them currently teach studio courses. These four instructors were decided to involve the study as they actively participated in design juries of the studio based courses. Although from the total of 20 participants aimed at conducting interviews, 14 of them were reached. The rest of the participants were on vacation or could not be reached due to various reasons. Two of the instructors were unable to take part in the study due to their busy schedule. The other four staff members were off duty during conduct of the study, between May and June, 2009. Eventually, the interviews are conducted with 14 instructors from the department. The instructors interviewed are as follows:

Full-time staff

- 2 Associate Professors

- 1 Assistant Professor
- 3 Instructors
- 6 Research Assistants

Part-time staff

- 2 Part-time Instructors

The age of the participants ranged from 24 to 57. Inevitably, the teaching experience changed according to their career in design education. The specialization of the staff was different from each other as well. Yet, these differences were not taken as an issue while selecting the participants of the study. The main concern was the contribution of the participants in design studios and the design juries.

3.3.2 Venue and equipment

The study was conducted in participants' offices located in the Faculty. Where it was not available the study was carried out in their houses or communal areas in the Faculty, like the café, tea saloon or the garden. The average duration of an interview session was eleven and a half minutes.

To record the interview sessions, a Creative 512Mb Zen Nano Mp3 player with sound recorder was used. The recorded sounds were in Mp3 format which provided high quality sound and separate voice recording file for each interviewee.

3.3.3 Data collection

The study required face-to-face interview sessions as it was expected to reach answers to prepared topic areas. The researcher was rarely asked to clarify a question. The participants seemed comfortable and unreserved during the sessions. The questions asked during the interviews are presented in Appendix A.

The participants were informed about the aim of the study and also the interviews carried out with the jurors. Before the session started each interviewee was notified that the session would be recorded with a sound recorder for further analysis. The recordings and the personal information of the participants declared to be kept confidential and used only for the research purposes.

3.3.4 Analysis of the data

In "Interview with the jurors" part, after recording the interviews of all 14 teaching staff, each recording was re-listened to and recorded as the statement for each question into a Microsoft Windows Office Word 2007 document. In the Word documents of each juror, the responses were grouped under the title of questions according to the context, and repeated answers were also noted down. Then, it was possible to prepare a form for each of the jurors to fill according to the answers. As shown in Table 3.4 the questions are indicated as titles and the answers are listed under them as "options". If one of the jurors gave another answer except these options then the "other" choice was marked and the given statement was written in detail.

Table 3.4 An example form of data coding for the interviews. (The form is created for grouping the answers by the questions asked)

FORM 02 \ interview with jurors
VOC015
01. Aims of the jury system (X) To provide students with feedback from various areas of expertise (X) To discuss projects in a collective learning environment ( ) To assess student performance (X) Other: *A simulation of professional environment* **02. Evaluation criteria used by the jurors** (X) Evaluation criteria and design brief as given by the studio instructors (X) Consistency and quality of design decisions (X) Quality of design presentation (X) Quality of oral presentation (X) Overall performance of the student ( ) Performance of the student in comparison to his/her peers ( ) Other: **03. Difficulties faced by the jurors during the juries** ( ) Project briefs or evaluation criteria that are not defined well enough (X) Poorly organised jury sessions (interruptions, unclear presentation order, insufficient grading sheet) ( ) Interference by studio instructors ( ) Dominancy of a particular juror ( ) Time management ( ) Incomplete projects ( ) Poor psychological and/or physiological conditions of students ( ) Other: **04. Grading** ( ) In accordance with the criteria defined by the studio instructors

Table 3.4 (continued)

04. Grading
( ) In accordance with the criteria defined by the studio instructors
( ) Criteria defined by the juror himself/herself
(X) In comparison to peers
(X) Other: *Systematic and comparative grading*

05. Advantages/Disadvantages of the jury system
Advantages:
(X) To provide different perspectives
(X) To provide collaborative feedback
( ) Justifies student performances
( ) Educational values
( ) Improvement of presentation skills
( ) Other:

Disadvantages:
(X) Allows overpersonalization of the criticism
( ) Psychological effects on students
( ) May cause an unfair grading
( ) Jurors that are affected by each other
(X) Other: *Emotional behaviour*

06. Definition of the `ideal jury`
( ) Fair/democratic
(X) Educative
( ) Well prepared and well organized
(X) Presents well defined criteria
(X) Other: *Systematic.Giving feedback.*

07. Definition of the `ideal juror`
( ) Fair/democratic
(X) Educative
(X) Constructive
(X) Specific
( ) Makes positive comments
( ) Makes project-related unambiguous comments
(X) Other: *No prejudgements.Objective.*

08. A jury moment that recalled:
"When I was a student, the silent juries were bothering me; not to know how they grade my work... Now, after becoming a juror, I can undertand what it means. Actually, sometimes there is nothing to discuss on the project; the project has no big mistakes but it has no big impacts either; the project has nothing to talk about..."

It was possible to observe the repetitions and groupings on the options by preparing these forms and comparing the answers of the jurors. As shown in Table 3.5, a new Microsoft Windows Office Excel 2007 book was created to organize the distribution of these data for each interviewee. The answers given as a response to the questions were arranged according to their frame of reference and marked for each column created for each interviewee. Consequently, it was possible to analyze the answers of 14 jurors together.

Table 3.5 Distribution of answers given by each interviewee

	juror #													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
01.Aims of the jury system:														
To provide students with feedback from various areas of expertise	■	■	■				■	■	■	■	■	■	■	
To discuss projects in a collective learning environment		■	■		■	■		■	■	■	■		■	■
To assess student performance		■		■		■	■							■
Other					■	■		■	■	■	■	■	■	■
02. Criteria of criticizing process:														
Evaluation criteria and design brief as given by the studio instructors	■	■	■	■		■	■	■	■	■	■	■	■	■
Consistency and quality of design decisions		■		■	■	■	■	■	■			■	■	■
Quality of design presentation	■	■		■	■	■		■	■		■	■	■	■
Quality of oral presentation	■	■	■	■	■			■	■					■
Overall performance of the student		■						■	■					■
Performance of the student in comparison to his/her peers	■	■			■							■		
Other							■						■	■
03. Difficulties of the jury system:														
Project briefs or evaluation criteria that are not defined well enough		■	■			■								
Poorly organised jury sessions		■			■	■		■	■					
Interference by studio instructors	■	■		■	■	■	■							
Dominancy of a particular juror		■			■	■								
Time management		■		■		■			■				■	
Incomplete projects		■		■										■
Poor psychological and/or physiological conditions of students		■		■					■	■	■	■	■	
Other	■	■	■	■								■	■	■
04. Grading														
Criteria defined by the studio instructors	■	■		■		■	■				■	■	■	■
Criteria defined by the juror	■		■	■		■								■
peer comparative	■				■		■	■				■	■	
Other	■	■	■				■		■	■	■		■	■
05. Advantages/Disadvantages of the jury system:														
Advantages:														
To provide different perspectives					■	■		■		■	■	■	■	
To provide collaborative feedback						■		■	■	■	■	■	■	■
Justification of performances	■	■					■		■	■				
Educational values		■				■				■	■			■
Improvement of presentation skills	■					■	■		■	■	■			
Other		■									■	■	■	
Disadvantages:														
Allows overpersonalization of the performances							■	■						
Pschological effects on students		■				■				■	■	■	■	
May cause an unfair gradin		■												
jurors that are affected by each other	■	■		■		■					■	■		
Other	■	■	■	■	■						■		■	■
06. Definition of the `ideal jury`														
Democratic	■	■				■	■							■
Educative					■	■						■	■	■
Well prepared & well organized		■	■	■		■		■		■		■	■	
Presents well defined critria	■	■	■	■		■	■		■	■		■	■	
Other	■	■			■			■			■	■	■	■

Table 3.5 (continued)

06. Definition of the `ideal jury`														
Democratic														
Educative														
Well prepared & well organized														
Presents well defined critria														
Other														
07. Definition of the `ideal juror`														
Has educative concerns														
Provides constructive criticism														
Provides specific criticism														
Gives positive comments														
Other														
Democratic														
Gives project concerned unambiguous comments														

Table 3.6 The number of answers (each cell represents one answer) grouped under the questions asked.

01.Aims of the jury system:												
To provide students with feedback from various areas of expertise												
To discuss projects in a collective learning environment												
Other												
To assess student performance												
02. Evaluation Criteria used by the jurors												
Evaluation criteria and design brief as given by the studio instructors												
Consistency and quality of design decisions												
Quality of design presentation												
Quality of oral presentation												
Overall performance of the student												
Performance of the student in comparison to his/her peers												
Other												
03. Difficulties faced by the jurors during the juries												
Poor psychological and/or physiological conditions of students												
Other												
Interference by studio instructors												
Poorly organised jury sessions												
Time management												
Project briefs or evaluation criteria that are not defined well enough												
Dominancy of a particular juror												
Incomplete projects												
04. Grading												
Criteria defined by the studio instructors												
Other												
peer comparative												
Criteria defined by the juror												

Table 3.6 (continued)

04. Grading
Criteria defined by the studio instructors
Other
peer comparative
Criteria defined by the juror
05. Advantages/Disadvantages of the jury system:
Advantages:
To provide collaborative feedback
To provide different perspectives
Improvement of presentation skills
Justification of performances
Educational values
Other
Disadvantages:
Other
jurors that are affected by each other
Psychological effects on students
Allows personalization of the performances
May cause an unfair grading
06. Definition of the `ideal jury`
Presents well defined criteria
Well prepared & well organized
Other
Democratic
Educative
07. Definition of the `ideal juror`
Has educative concerns
Provides constructive criticism
Provides specific criticism
Gives positive comments
Other
Democratic
Gives project concerned unambiguous comments

Afterwards, as shown in Table 3.6, to observe if there is any correlation in these notes, the quantitative form of answers were transformed into a chart format. It is important that although there are several statements that are repeated by the interviewees, there were also statements that the researcher grouped under "other". The group "other" was created to observe patterns in a more convenient way with separating the answers which were not possible to group under created options. However, it was also taken the group of "other" into consideration as much as other groups. Table 3.7 presents the list of answers classified in "other".

Table 3.7 List of answers classified in "other"

FORM 004 \ interviews with jurors
01. Aims of the jury system:
• Provides a rehearsal of the professional life. • Allows students a chance to present their work. • Provides further development of projects by criticism. • It is a type of examination. • Helps students to improve their presentation skills. • Answers the question: Is the student qualified enough to go on to other stage [next grade]? • Presents different mind sets of jurors. • Provides sharing of ideas, both for students and jurors. • Illustrates different perspectives of a single project.
02. Criteria of criticizing process:
• Behaviors of the student. • Aesthetics. • "Does it work?"
03. Difficulties of the jury system:
• Difficulty in understanding the content of students' projects. • Difficulty in understanding the process of students' projects. • Boredom. • Critiques cannot be understood by students. • Students' underestimating the value of juries as an educational milieu. • Juries may cause misunderstandings between jurors and students. • Open jury causes a fight between the egos of the jurors.
04. Grading
• Grading scale defined by the University [between FF and AA]. • Scenario building skills of students. • Attendance. • Objectivity. • Basic design criteria. • Discussion with other jurors. • Quality of the presented work. • Good and clear presentation. • Research done by the student.
05. Advantages/Disadvantages of the jury system: Advantages:
• Dynamism provided by jurors. • Provides idea generation. • Improvement of projects. • Provides a rehearsal of professional life.
Disadvantages:
• Juries may include silent jurors. • Organizational inaccuracies may cause problems. • Poor presentation skills of students.

Table 3.7 (continued)

• Juries can be just quantitative; sometimes they do not allow qualitative analysis. • Jurors sometimes stuck on same definite criteria. • Emotional behavior of the jurors can affect the jury negatively. • Students can be affected by each other. • Juries can be exhausting. • Standard grading is not enough for assessing the student performance.
06. Definition of the `ideal jury`
• Provides meetings after jury. • Emphasis should be on the process. • Should use more media [should be more informative]. • Should be smaller in group in order to focus better on projects to make deeper analysis. • Should be systematic while giving feedback. • Provides negotiation between jurors. • Jurors should be chosen carefully by president of the jury. • Time management should be an important issue.
07. Definition of the `ideal juror`
• Should be serious. • Does not make prejudgments about students or projects. • Should be aware of the capability of students. • Should be Self-confident. • Should be careful with time management during the jury.

3.3.5 Findings of the interviews

The first question was about the aim of the jury system, and was commented on by all 14 jurors, majority stated the aim as providing different perspectives and providing collaborative feedback. Another aim referred to was assessing the student performance. Some participants submitted other alternatives, for example, different opinions and perspectives. They agreed on the idea that the jury is a type of examination; it is an environment that all different people are sharing their ideas and it provides a simulation of professional life.

In the second question the jurors discussed the evaluation criteria that they use during a jury. Most of them stated that it is the criteria defined by the studio instructors. Second most frequently mentioned criterion was the quality of student presentation. Consistency of the design decisions made by the student was also mentioned several times. Overall performance of the student throughout the course was another criterion mentioned.

The third question was about the difficulties faced by the jurors during the juries. The participants stressed on psychological and physiological conditions of the students. Poorly

organized jury sessions were also repeated several times. Project briefs and evaluation criteria that are not well defined enough, were other difficulties mentioned mostly.

Fourth question asked was the way they grade the student performance in juries. Most of them mentioned about the criteria defined by the instructors of the studio. Comparative performance of peers was another criterion to grade students during the jury. Other alternatives were submitted by the jurors several times again. The examples are systematic grading, presentation skills, objectivity, good and clear presentation, quality of the work, general scale, systematic and comparative grading, requirements, scenario, basic design criteria, discussion with other jurors, attendance.

The advantages and disadvantages of the jury were asked in the fifth question. Findings can be explained in two parts. Firstly *advantages* were: Mostly told as providing different perspectives and collaborative feedback. Improvement of presentation skills is secondly mentioned. Also educational values and justification of performances are mentioned thirdly.

In the first instance they declared psychological effects on students as a *disadvantage* of the jury system. They mentioned that jurors are affected by each other during the jury as another disadvantage.

The sixth question asked them to define the ideal jury. According to them the ideal jury was well prepared and well organized, presents well defined criteria. Secondly the ideal jury must be educational and democratic.

In the seventh question the participants were asked to define the ideal juror. Most claimed ones are educative and constructive. Secondly ideal juror must be specific. Some of them insisted on giving positive comments. Some of them told they must be democratic.

Finally they were asked to tell a significant memory related to juries while they were students or jurors. Some of them claimed about their student times.

For example one of them told that during a jury as a student her model was in an irregular shape. She could not correct that but during the presentation she told that she did it intentionally and the jury did not emphasize on it. She claimed the human side of the jury.

One of them depicted a memory from student times again. One of her colleagues made a model in an architecture jury and a juror argued that structure cannot carry the building. And he stepped on the model to prove his thesis. It was another recalled moment.

Some of them expressed some kind of jurors who made comments in a constructive way. They were affected by these kinds of comments positively in their studentship.

As another example of memories, some of them explained moments of juries while they were member of the jury. For example, one of them told they had given an assignment to the students and that was a type of group work. The first group came out but the jury did not like the project so much. After that the second group presented their work but there was no sparkle again. One of the jurors told she did not like those works and she did not want to grade them. Then she left the jury. Everyone was shocked. They could not do anything. That was another interesting memory from a jury session.

3.4 Comparative analysis of the findings

The findings from the three studies (i.e. focus group, observational study and interviews) provided the researcher a common background for exploring the jury from different aspects. Although the findings from each study have an individual value via their analysis method, the case was shared by the three studies and allowed analyzing findings comparatively. The aim of doing a comparative analysis was to present shared concerns of the students and jurors with an observation of the real life example. It can be said that two main topics emerge from the observational study, focus group with students and interview with jurors: the delivery of criticism, organization and conduct of the jury.

Delivery of criticism:

The common topic of delivery of criticism can be taken as a concern while discussing the jury. Having mentioned the importance of delivering criticism whether the comment is negative or positive, the findings illustrate a different aspect when compared to each other. Table 3.8 compares the delivery of criticisms from the perspectives of students and jurors with the findings from observational study.

Table 3.8 Comparison of findings about delivery of criticism

vague criticism	
Observation:	High level of use
Students' opinion:	Has no educational value, cannot be taken seriously
Jurors' opinion:	Should be avoided
personal criticism	
Observation:	High level of use
Students' opinion:	Causes students to take criticism personally
Jurors' opinion:	Should be avoided
destructive criticism	
Observation:	High level of use
Students' opinion:	Not useful for improving the work, has negative effects
Jurors' opinion:	Should be avoided

Although the students and jurors agreed on that delivering comments in a personal, vague and destructive way is pointless and aimless, throughout the jury it is observed in high amounts of usage. The motives behind this disaccord may be the difficulty of putting the aims in theory into practice. In other words, jurors are aware of that delivering comment in a personal, vague and destructive way is one of the negative issues in design juries; however they consciously or unconsciously often do it that way. A reason can be argued as the difficulty of providing such discourse in a short time while listening, trying to understand and deciding on the strengths and weaknesses of students' projects. Another reason can be the lack of concentration for helping students to understand the weaknesses of individual work and providing the critiques for further development. In this regard, the form of assessment observed through the jury is in a linear time structure that evaluates the end-product; so the focus will be often on the outcome rather than the future improvements.

Organization and conduct of the jury

Students have mentioned about the effects of organization and conduct of the jury as the discussion sessions change irregularly for each student. It is stated repeatedly by the students during the focus group study that when the performance of the jury was high more

critiques were provided, and when it was low, the discussion session was spent inefficiently. Although the change of discussion time via jury order was not considered as an important finding from the observational study, the student accounts revealed the value of the time management during the jury.

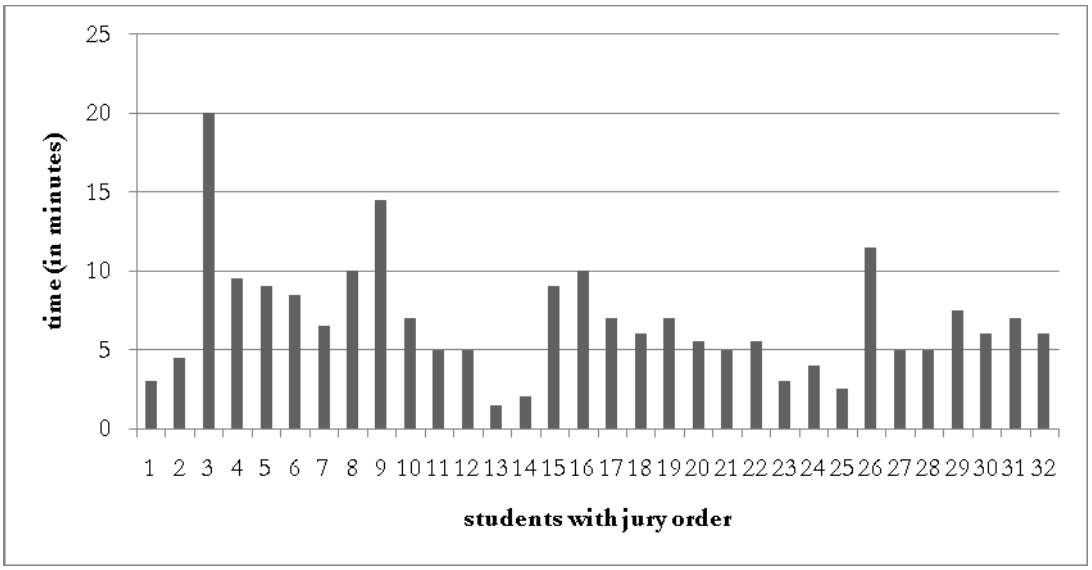

Figure 3.13 Duration of discussions (in minutes) sorted by the student's jury order

Table 3.13 illustrates the continuously changing of duration of discussions throughout the jury. Here, the duration covers the comments and discussion period only, not the total time period of a session, since the time spent for the student presentation did not differ much for students. As can be observed through Figure 3.13, the discussion time for each student differed from 2 to 20 minutes. It can be argued that approximately one third of the students were affected by the imbalance of time interval for discussions.

CHAPTER 4

CONCLUSIONS

The aim of the research was to understand design juries in an extensive context, to explore its dimensions and learn the standpoints of students and instructors about the topic. Since the study did not aim at reaching generalizations based upon statistical data, it was important to conduct qualitative research on design juries. This chapter presents the responses to research questions with combining the findings from the literature review and the field study.

4.1 The principle of balance in design juries

Exploration of design juries can illustrate some problematic areas. The problematic areas can be related with the principle of balance since these problems are mostly caused by several imbalances. The negative effects of the imbalance of power, the imbalance in delivering criticism and the imbalance in discussions were mentioned several times in the former chapters of the thesis.

The imbalance of power between the students and jurors can be interpreted as an obstacle in the assessment process. The system of jury assessment defines the jurors as the assessors and the students as the ones being assessed. While the two parties interact with each other in a common platform, the power passes from students to jurors by means of grading and the spatial position of the jurors. The shift of power can be reduced by jurors by providing a convenient atmosphere that allows the student to contribute to the discussions as much as jurors. It may require well-defined evaluation criteria and informative feedback provided by the jurors. So that students may be involved in the assessment process and take advantage of the comments they receive.

Moreover, delivery of comments can be regarded as another significant factor that causes several problems. Having discussed design juries in a psychoanalytical perspective, it is important to indicate that delivering personal and destructive criticism may cause a "narcissistic injury" on the students which is an important factor in self-development. Also, delivering comments in a vague type is not taken seriously by the students. When the comment is vague rather than specific, it becomes difficult for students to understand the criticism. Furthermore, delivering personal criticism may cause the student take the criticism personally. Delivering comments in a specific and constructive way, on the other hand, will contribute to students' learning.

Jurors should also be aware of the role of time management during discussions as it affects the conduct of design juries whether being too short or too long. Even if there are not much comments to make, jurors may create new dimensions to discuss concerning the project while that ten or fifteen minutes is highly valuable for the student. In some cases there may be many points to discuss about a single project; in those situations the jurors have to be careful with the time management and focus on the more important aspects rather than repeating several comments on a single topic.

4.2 The aims of design juries

There are diverse ideas about the aims and goals of design juries. For the jurors, design juries are used for assessing the students' performance with more than one colleague's perspective with providing a rehearsal of the professional work environment. On the other hand, students define juries as an opportunity to get feedback or improvements on their design work. In this regard, it is possible to argue that even though students and instructors have different opinions about the aims of the jury, they both emphasize its educational value. Thus, the basic aim of the jury can be described as to contribute to students' learning.

4.3 The advantages of design juries

Design juries or more specifically "open juries" have many advantages when they are compared to other types of assessment forms such as exams, term-papers or even "closed juries". First, the jury session provides a collaborative learning environment that presents various comments and discussions on a single given project; students become aware of the diversity of solutions to the problem which represents the nature of design discipline. In this regard, the jury can be described as an intensive overview of the studio course with contributions of visiting instructors from different areas of specialization. Thus, students can make use of numerous comments concerning various aspects of the project through their own or others' jury sessions.

Furthermore, it can be considered that students improve their presentation skills throughout several jury experiences. In this sense, students learn how to visualize their design process with numerous techniques such as sketching, technical drawing, model making combining effective communication tools with their oral presentation skills. The improvement of presentation skills by the jury experience will be also advantageous for the students' professional life.

Although it was mentioned that the jury aimed at providing students with a rehearsal of the professional life, it can be considered as an advantage rather than an aimed action. Since the principal aim of design juries is forming an effective assessment and criticism of the outcomes of design studio, getting students ready for the presentations came across in professional life can be referred as a benefit. Eventually, the presentations practiced during design juries assist students to prepare themselves for the profession.

Another advantage of design juries in comparison to the exams and term-papers is that design juries are interactive and they provide simultaneous feedback with discussions. The feedback of exams, term-papers and closed juries is delivered after the instructor(s) finish reviewing all the students' responses to given tasks. In addition, the feedback is delivered in

a written format with considerably less information. However, in design juries students have a chance to ask questions for clarification –also it is the same for the jurors– or they can defend their ideas according to the criticism delivered by the jurors. So it can be argued that the interaction in design juries has a positive value in the assessment process.

4.4 The disadvantages of design juries

Having mentioned the principle of balance in design juries, it is possible to state that the most significant disadvantage of design juries is that they are constructed upon very sensitive balances. As a result, several disadvantages occur with the impairment of the balances. For example, from the focus group study it is noticed that students tended to refer the negative effects of jurors rather than the jury. One of the students argued that the jurors sometimes forget about the reason they are there for; some assistants delivered some comments just to get appreciated by the senior instructors while criticizing students' work; they focused on finding mistakes of the students to show the senior instructors that they are capable of criticizing the projects successfully. Also, the effect of delivery type of comments can be either positive or negative. Just by changing the structure of the sentences jurors may lead students to learn much about the project or cause serious negative psychological effects on students. Eventually, there are not any specific aspects of design juries that can be referred as disadvantage; instead, there are factors that may turn advantages into disadvantages.

4.5 Description of the "ideal juror"

Based upon the descriptions of an ideal juror from the perspectives of students and jurors, the ideal juror can be described as a professional who answers students' needs throughout the assessment process as well as the educational process. The ideal juror carries on using his/her educational skills throughout the jury. In this regard, ideal juror delivers positive and negative comments together in a well-balanced, specific and constructive way. In order to do that, ideal juror listens to students' presentation without any interruption, and directs

his/her questions for clarification or help. The most significant aspect of being an ideal juror can be referred as being focused on the improvement of the presented work.

4.6 Description of the "ideal jury"

From the students' and jurors' accounts, the ideal jury can be described as an important supportive event of the studio, where students and instructors discuss and review the outcomes of the studio course. For instructors the jury provides an efficient assessment of student performances and for students it provides a feedback that contributes to their learning. In order to achieve this, an ideal jury has to be well-organized and provide well-defined criteria.

From the findings of the study, a well-organized design jury refers to allocating equal and enough time to each student. Each student's jury session should involve jurors' active listening of the student's presentation, and after the presentations jurors should provide a discussion session in which the projects are rendered in terms of both their positive and negative aspects. Also by illustrating the potential values of the projects, jurors should provide an effective learning atmosphere for the students. Thus, a well-organized jury needs the efforts of both students and jurors. Time management, for instance, is dependent on both duration of student's presentation and duration of discussions during which jurors deliver their comments.

The second important aspect of an ideal jury is to provide well-defined criteria for the assessment. It is observed from the field study that jurors spend relatively long time for understanding the dimensions of the project at hand and defining their own criteria for assessment in the first few presentations. Therefore it affects the time management of the whole jury session as first presentations take longer than the rest. Moreover, after seeing numerous projects of the students, jurors have become more knowledgeable about the performance of the class and modify some criteria during the jury. Therefore, studio

instructor(s) should define the assessment criteria considering the expectations and outcomes of the project and share it with the jurors before the jury.

4.7 Limitations of the study

In this study, the observational and the focus group study involved the first year Basic Design jury at METU Department of Industrial Design. The Basic Design course aims to introduce the basic concepts and principles of design in general. Starting from the second year, the studio courses are named as "industrial design" studios, and aim to develop professional knowledge and skills. In terms of the evaluation criteria, the Basic Design jury more focuses on fundamental principles of design, and aesthetic and functional qualities in general, whereas upper year industrial design studio juries involve professional and technical issues. The upper year design juries may involve aspects or issues not raised in basic design juries, and therefore, additional studies should be conducted to fully understand design juries at various educational levels.

4.8 Further research

Further studies conducted with different student groups and educational institutions in Turkey or abroad may provide valuable knowledge on design juries as a means of assessment. Exploring design juries from the perspectives of other disciplines would also be insightful; research on psychoanalytical issues in design juries, for example, may reveal the role psychological factors play in design juries.

The methodology adopted in this study does not allow the researcher to generalize the findings. Nevertheless, this study can provide, at least partially, researchers with a ground to conduct *quantitative* studies on issues such as grading and its relation to the delivery of comments and time management.

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APPENDIX A

THE SCHEDULE FOR INTERVIEWS WITH JURORS

Introduction: Hello. My name is Anıl Ilgaz. I am currently working on a masters thesis about design juries as a means of assessment and criticism in industrial design education at METU Department of Industrial Design. The data from this interview will be used only for research purposes and your personal information will be kept confidential. I am going to record the interview in order to work on it. The interview will last approximately fifteen minutes. I would like to thank you for your patience and contribution.

Interview Questions:

- Is there anything you would like to ask before we start?
- What are the aims of jury assessment in design education?
- As a jury member what are the principles, criteria and subjects that you take into consideration while delivering comments on students' projects?
- What are the difficulties that you have during the juries?
- How do you grade student projects as a jury member? What are your considerations?
- What are the weaknesses and strenghts of the jury as a system of assessment?
- How should be an ideal jury assessment?
- How should be an ideal juror?
- What is your most impressive jury memory that you remember from your student days or as a juror?
- Is there anything that you would like to add?

Thank you for your time and your contribution.

Anıl Ilgaz
METU Department of Industrial Design

APPENDIX B

THE SCHEDULE FOR FOCUS GROUP STUDY WITH STUDENTS

Introduction: Hello. My name is Anıl Ilgaz. I am currently working on a masters thesis about design juries as a means of assessment and criticism in industrial design education at METU Department of Industrial Design. The data from this focus group will be used only for research purposes and your personal information will be kept confidential. I am going to make a video recording during the focus group session in order to work on it. The focus group will last approximately thirty minutes. I would like to thank you for your patience and contribution.

Focus Group Questions:

- How much time did you spend for preparing everything for the jury?
- Did you make changes in your design project considering the possible thoughts of your instructors?
- Did you prepare an oral presentation before the jury?
- How was your pschological condition before the jury? Did it affect your jury session? If yes, then how?
- Do you think that the assessment in the jury was fair?
- Do you think that the comments you received before the jury was coherent with the ones you received during the jury?
- Do you think that the jury is effective in your learning process?
- Do you prefer that the jury delivers your grades during or just after the jury or do you prefer them to be announced later?

Thank you for your time and your contribution.

Anıl Ilgaz

METU Department of Industrial Design

APPENDIX C

COURSE GRADES IN METU

COURSE GRADES

For each course students take, they will be given one of the letter grades listed below by the instructor of the course as the end of term course grade.

Table 3.9 Course grades in METU

PERCENTAGE	COURSE GRADE	COEFFICIENT
90-100	AA	4
85-89	BA	3.5
80-84	BB	3
75-79	CB	2.5
70-74	CC	2
65-69	DC	1.5
60-64	DD	1
50-59	FD	0.5
49 and below	FF	0

Retrieved January 4, 2010. ACADEMIC RULES AND REGULATIONS CONCERNING GRADUATE PERIOD OF STUDY, EXAMINATIONS AND ASSESSMENT: *from web site: http://www.oidb.metu.edu.tr/english/regulations/oidb42a.htm*