



## INTERNATIONAL PERSPECTIVES

# • Information Use in Art: A Citation Analysis of Sources Used in Art Theses in Turkey

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This study illustrates some of the characteristics of scholarly communication in the arts and includes a citation analysis of theses written between 1983 and 2007 in the Faculty of Art at Hacettepe University, in Turkey. It shows how students studying for a Master's degree or Proficiency in Art (a higher research degree) make use of resources in both Turkish and English, drawing primarily on books and monographs, a common pattern in humanities disciplines.

Humanists, especially artists, are a neglected group in information use studies. There is a deficit in the number of studies on information behavior of artists, and little consensus in their findings. Cobble Dick<sup>1</sup> suggests that although artists make up a significant proportion of the educational professional class in the US, their information needs are somehow neglected. This prevents librarians from identifying the information needs of artists, creating problems in designing information services for them. In order to identify the information use characteristics of artists and the difficulties they face in information retrieval, there is a need for detailed user studies. The majority of what research there is on this subject is based on data collected by polls, inquiries and interviews conducted with artists. However, these data need to be supported even further by bibliometric research conducted especially to reveal how scholarly communication takes place in the field of arts. This study therefore features the results of a citation analysis which sheds light on scholarly communication in the field of arts.

### LITERATURE REVIEW

Research conducted on the information needs of artists began much later and progressed much slower compared to other disciplines. With the foundation of *The Centre for Research on User Studies-CRUS*<sup>1</sup> with the support of British Library in 1976, the information needs and information seeking behavior of artists was conclusively included in the fields of humanities research.<sup>2</sup> However, although research on artists' information needs and uses has increased recently, it is still inadequate. In a recent literature review Hemming<sup>3</sup> cites an article by Toyne's<sup>4</sup> as the first user study conducted in this field. Aiming to fill a gap in knowledge, Toyne conducted a descriptive study on the art library users in the library in which he was working. In Hemming's view, the problems identified in relation to the information needs of artists back in 1967 are still valid today.

Most of the studies dealing with artists focus on their use of sources. Studies show that in the field of art, books are the primary information

source, and the "browsing" habit is strong.<sup>5-9</sup> For example, in her intensive study based on exploratory interviews with four artists (a sculptor, painter, fiber artist, and a metal smith), Cobble Dick<sup>10</sup> found out that they use printed material and libraries extensively, and that much of the material these artists used was not necessarily related to art. When it comes to retrieving information on art events and other technical information, social networks holds an important place.

Studies that compare the information needs and information use of artists to other fields show that book usage rate of this user group is much higher than in the fields of science, engineering, and social sciences.<sup>11-13</sup> Gregory<sup>14</sup> found that studio art faculty members differ from users in other fields of humanities in terms of information needs and their expectations from libraries, and that they made intensive use of books for both technical and inspirational information. Stam's researches also shows that the information needs of the artists cover a wide range of topics and fields, highlighting in particular the significance of visual materials for artists to inspire creativity.<sup>15</sup> Monographs are also regarded as useful for providing comprehensive information on various historical eras and cultures.<sup>16</sup>

The importance of browsing was also a significant finding in Frank's research conducted on art students through "focus group" and interview methods. This study also showed that cover design affects book selection and usage, and that art students describe classification schemes as "useless" in information retrieval; Frank suggests that classification schemes need to be extended, and to contain more references to relevant subjects, in order to meet the needs of these users.<sup>17</sup>

Several articles that address the artist's need for books underline the significance of libraries in meeting the visual information needs of artists.<sup>18-22</sup> While emphasizing the artist's visual information needs, in her study, Cobble Dick<sup>23</sup> also points out that a library which is exclusively designed for artists does not necessarily have to be limited to an art collection. Instead, she suggests that such a library needs to give emphasis to collections on diverse subjects and rich visual materials. Similarly Dane<sup>24</sup> underlines the vital role of public libraries in meeting such needs with the variety of their collections.

In addition Gregory's<sup>25</sup> study shows that artists generally use more than one library, and that university, faculty, and special libraries are the most preferred, while they enjoy the art collections of museums and public libraries. The same study also points out the significance of "image" to art users, a need met by Google Images and other websites.

Cowan and Branigan<sup>26</sup> emphasize that there is no simple answer to the question of what artists' information needs are, and argue that information seeking behavior is actually a creative process beginning and concluding outside the library. Moreover, they argue that librarians do not strive to understand these users completely and

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**Table 1**  
**Distribution of Page Numbers**  
**According to Departments**

Discipline	Master			Proficiency in arts		
	Min	Max	Average	Min	Max	Average
Graphic Design	69	214	108	75	228	158
Sculpture	19	128	58	85	118	103
Interior Architecture	98	248	173	189	189	189
Painting	24	93	50	52	134	89
Ceramics and Glass	42	194	91	48	48	48

that there are difficulties in evaluating the information seeking process by quantitative tools. The authors suggest that in order to develop a user-centered research design, the questions “Who is our user?” and “What is his/her need?” should be answered in the first place.

In recent years there have been a number of studies that focus on the use of information technology by artists. These studies show that the rate of electronic platform use by artists is usually low,<sup>27,28</sup> but that this rate is on the rise in recent years due to technological advances,<sup>29</sup> and that with the ability to obtain visual material via the internet, artists now consider electronic resources as more important.<sup>30</sup> Studying the impact of technology on the information seeking behavior of art historians, Rose<sup>31</sup> shows that art historians identify themselves as low-level technology users who usually prefer Google and Yahoo to retrieve information, and that time constraints, financial deficits, limitations on visual retrieval, and copyrights are seen as obstacles to information retrieval. On the other hand in a study of the Web 2.0 use of art library users and Web 2.0 applications in art libraries, Bowman<sup>32</sup> argues that user perceptions, information sharing, and methods of creation have shifted with Web 2.0, and that the internet is not only used by artists for information retrieval but also for social purposes. The article underlines that Web 2.0 is user-centered and it is not an easy task to adopt it for user services.

### ART EDUCATION IN TURKEY

Art education in Turkey began with the “Westernization” movement in 18th century. During the Ottoman era, art education was developed as a master-pupil relationship with the contributions of foreign artists in 1700s. In the following years, it was transformed into a more comprehensive and formal education. In 1793 art courses were included into curricula in “Mühendishane” (Technical School) and “Harbiye Mektebi” (Military School). The first academic institution to offer a qualification in art education was “Sanayi-i Nefise Mektebi” (today “Mimar Sinan Fine Arts University”), which was established in 1883.<sup>33,34</sup> While it offered only painting, sculpture, architecture, and engraving during its early years, today it is a university of arts offering art education in all branches.

After the foundation of the Republic of Turkey in 1923, art education became a part of national policy that anticipated an increase in budget to support it. Youngsters who were sent abroad for art education later contributed to its development after they returned. Gazi Education Institute Painting Department (est. 1932), Applied Fine Arts High School (est. 1956), Ege University Faculty of Fine Arts (est. 1975) are examples of institutions that began to offer art education in this period. With the foundation of the Higher Education Council in 1982, further academic institutions offering art education were attached to universities, and in recent years the number of universities that offer art education at bachelor and graduate levels has gone up significantly.<sup>35,36</sup>

Today, 49 of the 132 universities in Turkey have an art faculty, and these employ 1245 academic staff; 1 institution offers only art education. A total number of 24421 undergraduate, 2446 graduate, and 788 PhD students attend these faculties.<sup>37</sup> The current study was conducted at Hacettepe University Faculty of Arts. It was founded in 1982 and began offering painting, sculpture, graphics, and ceramics education at bachelor and graduate levels in the 1983–1984 academic year. Interior Architecture and Environmental design was included in 1985 and the Faculty had its first graduates in 1987. Graduate and PhD theses mainly consist of theoretical knowledge, previous studies and research on the subject, and samples from individual artistic work of the author.

### METHOD

In order to explore further the use of information sources by artists undertaking higher level degrees in the university, this study analyzes the characteristics of citations in Masters and Proficiency in Art theses undertaken at the Hacettepe University Faculty of Art between 1983 and 2007. There were a total number of 2908 citations in 83 dissertations written in a 25-year period in the Hacettepe University departments of Graphic Design, Sculpture, Interior Architecture and Environmental Design, Painting, and Ceramics and Glass, which are analyzed according to publication type, date, language; literature obsolescence, and number of authors. Statistical Package for the Social Sciences (SPSS) is used for data analysis.

### FINDINGS

The theses analyzed consist of both creative works, as well as critical commentary on previous studies, and information about the techniques and theories in the subject. Therefore, they draw on sources which not only represent visual sources of inspiration, but art literature. The distribution of the theses analyzed in this study are as follows: Graphic Design 20 (24%), Sculpture 10 (12%), Interior Architecture and Environmental Design 10 (12%), Painting 31 (37%), Ceramics and Glass 12 (14,5%). The majority of theses, 83% (69) are for a Master's degree while 17% (14) of them are Proficiency in Arts level.

Proficiency in Arts theses are longer than Master's theses, the average number of pages being 86 in Master's theses while this number jumps to 116 in Proficiency in Art theses. The shortest thesis

**Table 2**  
**Distribution of Number of Citations According to Departments and Levels**

Discipline	Total	Master	Prof. in art	Average	Min	Max
Graphic Design	883	634	249	44	15	142
Sculpture	370	206	164	37	7	72
Interior Architecture	568	525	43	57	28	118
Painting	594	454	140	19	5	48
Ceramics and Glass	493	469	24	41	7	94

**Table 3**  
**Distribution of Source Types in Citations According to Disciplines**

Source	Graphic Design		Sculpture		Interior Architecture		Painting		Ceramics and Glass	
	N	%	N	%	N	%	N	%	N	%
Book	475	53.8	310	83.8	350	61.6	533	89.7	376	76.3
Journal	127	14.4	25	6.8	99	17.4	47	7.9	54	11
Proceeding	7	0.8	2	0.5	33	5.8	-	-	10	2
Reference source	13	1.5	28	7.6	7	1.2	-	-	10	2
Exhibition catalogue	1	0.1	3	0.8	1	0.2	-	-	1	0.2
Electronic source	193	21.9	-	-	24	4.2	7	1.2	15	3
Others	67	7.6	2	0.5	54	9.5	7	1.2	27	5.5
Total	883	100	370	100	568	100	594	100	493	100

was in the Department of Sculpture, being 19 pages long, and the longest thesis was in the Department of Interior Architecture and Environmental Design, at 248 pages (Table 1).

Among the 83 theses, and 2908 total citations, the total numbers of citations in each subject area are as follows: graphic design 883 (30,3%), sculpture 370 (12,7%), interior architecture and environmental design 568 (19,5%), painting 594 (20,4%), ceramics and glass 493 (16,9%). When analyzing the average number of citations in each field, painting turns out to have the lowest average, at only 19 citations, while the field with the highest average number of citations was submitted in the Department of Interior Architecture and Environmental Design where the average number of citations is 57 and the maximum number of citations is 118 (Table 2).

### Source Usage Characteristics

In various studies which examine the differences in the use of scholarly and scientific communication tools according to disciplines, it has been shown that articles published in scientific journals constitute a huge proportion of publications in the field of science while scholars in the arts and humanities heavily rely more on books.<sup>38-42</sup> This study also shows that citations to books are considerably more than citations to other sources. For example, 70.28% (2044) of the total 2908 citations are to books. Journal articles lag well behind books with 12.1% (352), and electronic sources come third with a rate of 8.2% (235). Encyclopedia and dictionary usage is as low as 2% (58) while conference and symposium proceedings are the least-cited source type with a citation rate of 1.7% (52). When it comes to use of source type according to the field of study, painting stands out as the most book-using field with a rate of 89.7% while graphic design comes last with 53,8%. Almost all sources used in painting are books and journals (97.6%). In the same field it was observed that sources such as encyclopedias, dictionaries, proceedings, and exhibition catalogues are never cited while electronic source use is very low (1.2%). Interior architecture and environmental design is highest in terms of journal citations (17.4%), followed by graphic design (14.4%). Journal usage is the lowest in the field of sculpture (6.8%). In the field of graphic design electronic source use is much higher (21.9%) compared to other fields. Citations to information sources other than books and journals are very low in all disciplines (Table 3).

### Literature Obsolescence

In bibliometric studies, the term "obsolescence" is used to describe the decrease in rates of items within a field or discipline being read, and being cited. There are many studies on literature obsolescence, and many of these show a correlation between the scope and obsolescence rate of a literature, that is, it takes longer for more

extensive literatures to become obsolete.<sup>43</sup> Whether the notion of literature obsolescence changes over time has also been a widely studied topic.<sup>44</sup>

In this study, the literature obsolescence rates of sources used in theses in the field of art have been calculated by subtracting the citation years from the thesis year. In the five disciplines which are the subject of this study, literature obsolescence rates for books are higher than those for journals. When literature obsolescence is evaluated according to the five fields, it has been noted that graphic design and painting have the most recent citations; while interior architecture and environmental design, and ceramics have the oldest ones. The half-life of the cited publications are 6.5 years in painting, 7 years in graphic design, 8.5 years in sculpture, and 10 years in interior architecture and environmental design, and ceramics. The findings of this study thus show that obsolescence rates do not vary considerably in years (Table 4).

### Evaluation of the Sources Cited in Terms of Languages

The language of publications cited is very much related to the characteristics of a discipline as much as it is to visibility, accessibility, and usability in scientific and scholarly literature. Using English as scientific language is common especially in fields where universal and recent information is vital. However, in the social sciences, arts and humanities the tendency is to use native language and local sources more.<sup>45-47</sup>

When cited sources in this study are analyzed by language, it can be seen that the authors of the theses use sources in their native language most, as usage of Turkish sources is 55.9% of all cited works. If sources which are translated into Turkish from other languages (19.7%) are added, the rate of cited sources in the native language

**Table 4**  
**Obsolescence Rates of the Citations According to Disciplines**

Discipline	Minimum	Average	Maximum
Graphic Design	2	7	18
Sculpture	4	8,5	15
Interior Architecture	4	10	18
Painting	2	6,5	14
Ceramics and Glass	5	10	19

**Table 5**  
**Distribution of the Citations According to Language**

Language	Graphic Design		Sculpture		Interior Architecture		Painting		Ceramics and Glass	
	N	%	N	%	N	%	N	%	N	%
Turkish	494	55.9	136	36.8	360	63.4	299	50.3	339	68.8
English	332	37.6	26	7	194	34.2	51	8.6	66	13.4
Other	11	1.2	–	–	5	0.9	3	0.5	19	3.9
Translation	46	5.2	208	56.2	9	1.6	241	40.6	69	14
Total	883	100	370	100	568	100	594	100	493	100

jumps to 77.6%. The field of ceramics has the highest use of Turkish sources, followed by interior architecture and environmental design. Graphic design is the field where use of English sources is the highest. Usage rate for sources other than either Turkish or English is considerably low in almost every field (Table 5).

### Sources Cited in Terms of the Number of Authors

In scientific and scholarly communication, the number of authors on a publication is closely related to whether a given field is open to team work and inter-disciplinary research.<sup>48-50</sup> In this respect, there are many more published papers with co-authors in disciplines like science and engineering, compared to arts and the humanities. As an outcome of the tendency in the scientific community to publish collaborative work, it has been observed that the number of co-authored publications has increased in recent years. Consequently, citations to co-authored works are also rising especially in the natural sciences and in engineering. Research on the arts reveals converse outcomes. According to the findings of this study, citations of single authored sources follow the common pattern of most arts disciplines. Out of 2908 citations analyzed here, 2559 (87.9%) of them are to single authored sources. This rate is more than 90% in painting, ceramics, and sculpture. The highest citation rate of co-authored sources is graphics with 13.7%. Use of corporate works which are tagged as "others" is low in almost every field. The findings show that this situation has not changed over the time period of the theses included in the study (Table 6).

### CONCLUSION

While the majority of the 83 theses written between 1983 and 2007 are at graduate level, overall the findings of this study suggest that graduate level research in the field of arts at Hacettepe University is not extensive. It is not clear whether this finding is unique to this university or applies to others universities in Turkey also. However, the findings as a whole are very consistent with earlier literature and show that artists use resources which are mainly published in book

format, are sole authored, and of reasonable age (that is, have a higher obsolescence rate). The predominant use of information sources in the Turkish language also shows that, like their counterparts elsewhere, most of these artists prefer to use sources written in their native language, and may face barriers in retrieving information in other languages. At the same time, in some of the fields studied, artists are using English language sources up to 30% of the time, and may be looking for additional inspiration outside their own Turkish culture.

Although art education in Turkey goes well back in history and art education is currently provided in 49 universities at bachelor and graduate levels, the information use of artists, and their information needs have not been adequately studied. Further research is needed in order to design effective information systems and collections for artists, and this research must be underpinned by citation analysis research. Only with data obtained from further research, will it be possible to understand the scholarly communication process of artists, and develop new policies to address their needs.

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**Table 6**  
**Distribution of Authorship Patterns by Disciplines**

Author	Graphic Design		Sculpture		Interior Design		Painting		Ceramics and Glass	
	N	%	N	%	N	%	N	%	N	%
Single authored	701	79.4	346	93.5	469	82.6	580	97.6	463	93.9
Multiple authored	121	13.7	21	5.7	60	10.6	4	0.7	15	3
Other	61	6.9	3	0.8	39	6.9	10	1.7	15	3
Total	883	100	370	100	568	100	594	100	493	100

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