BIBLIOMETRIC ANALYSIS OF STUDIES ON MOVIE POSTERS USING VOSVIEWER

FİLM AFİŞLERİ ÜZERİNE YAPILAN ÇALIŞMALARIN VOSVIEWER İLE BİBLİYOMETRİK ANALİZİ

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Abstract

Film posters, as one of the most influential narrative tools of visual culture, have generated a broad field of academic interest ranging from cinema studies to graphic design research. This research endeavors to investigate the academic literature concerning film posters as a medium of visual communication through the application of bibliometric analysis. In this context, a comprehensive search was conducted in the Web of Science database on May 30, 2025, utilizing the keyword "movie-poster." The search identified a corpus of 89 academic publications produced between 1978 and 2025. The dataset was subsequently subjected to analysis via the VOSviewer software. The findings reveal a steady increase in scholarly output on film posters over the examined period, with 2024 emerging as the peak year in terms of publication volume. The majority of contributions take the form of journal articles, with English being the predominant language of dissemination. Moreover, the publications are primarily situated within the disciplinary domains of "Computer Science, Engineering, and Film Radio Television," while the "University of Johannesburg" and the "University of Oulu" distinguish themselves as leading institutions in terms of research productivity. Collectively, the results underscore that scholarship on film posters constitutes a rapidly expanding field in which technical and societal dimensions advance in tandem, characterized globally by a multi-centered structure that demonstrates a discernible tendency toward concentration within particular nodes of scholarly activity.

Keywords: Visual Communication, Poster, Film Poster, Bibliometric Analysis.

Öz

Görsel kültürün en etkili anlatı araçlarından biri olan film afişleri, sinema araştırmalarından grafik tasarım çalışmalarına kadar geniş bir akademik ilgi alanı yaratmıştır. Bu araştırma, görsel iletişim aracı olarak film afişleri ile ilgili akademik literatürü bibliyometrik analiz yöntemi ile incelemeyi amaçlamaktadır. Bu doğrultuda, 30 Mayıs 2025 tarihinde Web of Science veri tabanında "movie-poster" anahtar kelimeleriyle tarama yapılmıştır. Gerçekleştirilen tarama sonucunda 1978-2025 yılları arasında yayımlanmış 89 akademik yayına ulaşılmıştır. Buradan elde edilen veriler VOSviewer yazılımı aracılığıyla analiz edilmiştir. Analiz sonuçlarına göre, film afişleri ile ilgili yayınların yıllar içerisinde artış gösterdiği ve 2024 yılının en fazla yayının yapıldığı dönem olduğu belirlenmiştir. Söz konusu çalışmaların büyük çoğunluğunu makaleler oluşturmakta ve yine büyük çoğunluğunun İngilizce dilinde yayımlandığı tespit edilmiştir. İlgili yayınların çoğunlukla "Computer Science, Engineering ve Film Radio Television" alanlarında yer aldığı; "University of Johannesburg" ve "University of Oulu" üniversitelerinin bu alanda en fazla yayın yapan kurumlar arasında ön plana çıktığı belirlenmiştir. Araştırma sonucunda elde edilen bulgulara göre film afişleri araştırmalarının hızla büyüyen, teknik ve toplumsal boyutları eşzamanlı ilerleyen ve küresel ölçekte çok-merkezli fakat belirli düğümlerde yoğunlaşma eğilimi gösteren bir alan olduğunu ortaya koymaktadır.

Anahtar Kelimeler: Görsel İletişim, Afiş, Film Afişi, Bibliyometrik Analiz.

INTRODUCTION

Film posters, designed to promote motion pictures and inform audiences about the film, are among the key visual communication tools used in the cinema industry. Serving as the first point of contact with the audience, they are crafted to attract viewers to theaters and to encourage film consumption, while offering cues about the film's content, theme, subject, and target audience. Film posters can also be regarded as artistic and cultural objects. According to Becer (2011, p. 201), posters are graphic products in which artistic and design concerns carry equal weight. Consequently, academic studies on film posters provide important insights into visual design trends and cultural reflections.

In this study, scientific publications on film posters were examined using bibliometric analysis. In bibliometric studies, specific characteristics of academic publications are analyzed to generate data on scholarly communication and publishing (Tonta and Al, 2008, p. 43). In other words, bibliometric analysis can help elucidate the development and trends of a field by analyzing the number of publications on a given topic, patterns of collaboration among authors and institutions, and the use of keywords.

A review of the literature shows that researchers have examined film posters through a variety of academic approaches. Accordingly, this study is significant in that it systematically evaluates the position of film posters—an important component of visual communication—in the literature using visual mapping techniques, provides an overview of the current state of research on the topic, and offers insights for future studies. In this context, based on publications indexed in the Web of Science database, the study aims to establish a foundation for understanding the direction of academic interest in film posters, the current state of the field, its developmental trajectory, research trends, and potential future research avenues.

In recent years, the expansion of digital archives and the development of AI-based visual analysis methods have significantly broadened the scope of research on film posters. Digitalization has not only facilitated access to poster collections from different historical periods but has also enabled the examination of film posters as data-rich visual artifacts through computational approaches. These developments have contributed to the emergence of a wider research environment in which aesthetic, cultural, and technological dimensions intersect.

The interdisciplinary nature of film poster studies has led to growing academic interest from fields such as communication, media studies, cinema, cultural studies, marketing, psychology, and computer science. Researchers now examine posters not only as design objects but also as tools that shape audience perception, encode cultural and ideological meanings, and serve as important instruments through which the film industry communicates identity and genre. This diversity makes it difficult to evaluate the film poster literature holistically, thereby increasing the value of bibliometric studies in identifying the developmental directions of the field. Systematic analysis of publication trends, citation patterns, and collaboration networks helps reveal research foci, dominant themes, and existing gaps. In this context, the bibliometric analysis conducted in this study provides a clearer understanding of the current state of film poster research and offers a comprehensive framework that may guide future investigations.

This study both synthesizes the existing literature and offers an original framework through analyses conducted with the VOSviewer software. The findings provide multi-dimensional evidence—from the geographical distribution of scholarly output and patterns of author collaboration to the most cited studies in the field. Furthermore, the study is expected to inform the development of strategic recommendations for future research on film posters as a visual communication tool. In the existing literature, film posters are predominantly examined from aesthetic, design-oriented, or cultural perspectives; however, these studies do not provide a comprehensive understanding of the field's overall trends, thematic concentrations, or patterns of scholarly production. Therefore, there is a need for extensive bibliometric analyses that systematically map the accumulated academic knowledge on film posters. This study aims to address this gap by evaluating the film poster literature within a data-driven and holistic framework. In sum, using VOSviewer, visual maps of scholarship on film posters were generated, through which core research themes, influential authors, and key publications were identified.

In addition to supplying valuable insights into the effectiveness and cultural significance of film posters for cinema industry professionals, academics, and visual communication designers, this research contributes methodologically to the literature and establishes an evidence-based foundation to guide the design and direction of future studies on film posters.

In line with the purpose and scope of this bibliometric study, the following research questions were formulated:

RQ1: What is the temporal development of international academic publications on film posters?

RQ2: In which countries, institutions, and disciplinary areas is the scholarly production on film posters concentrated, and how is this reflected in international collaboration networks?

RQ3: What thematic clusters, keyword co-occurrences, and highly cited publications characterize the conceptual structure of film poster research?

Theoretical Framework
The poster, a key medium in visual communication and graphic design, is defined as "a large-scale announcement hung in places visible to the target audience to promote a brand or product or to provide information about social or cultural events" (Mazlum, 2006, p. 170). Another definition describes posters as "prepared for purposes such as awareness-raising, announcing, and selling, and largely considered a mass communication tool; they are also the graphic products in which artistic concerns are most intensely present" (Ertan and Sansarcı, 2017, p. 162). The Turkish Language Association defines a poster as "a wall announcement, usually illustrated, prepared to publicize or promote something and hung in a place where crowds can see it" (sozluk.gov.tr). In sum, poster design fulfills two principal functions: promotion and information.

Emerging first in France in 1890 to market machine-made products and subsequently spreading across Europe (Mazlum, 2006, p. 170; Turani, 1995, p. 7), posters were initially produced as ornamented notices. Over time, however, they evolved into graphic products incorporating images that convey messages. The development of poster design was significantly shaped by modern art and design movements such as Cubism, Expressionism, Art Nouveau, the Bauhaus, and the International Typographic Style (Becer, 2011; Doğru and Yıldırım, 2022, p. 127). As a work of art, the poster emerged with the Art Nouveau movement; its recognition as a legitimate art object was made possible through the efforts of the Bauhaus in Germany (Sözen and Tanyeli, 2018, p. 16). While poster design bears the imprint of these artistic movements, it also varies according to the technological possibilities of its period, prevailing design trends, and the designer's perspective. Accordingly, a historical review shows that a range of techniques have been applied in poster design (Acar and Acar, 2025, p. 437).

Posters are commonly grouped into three main categories: advertising posters, cultural posters, and social posters. Advertising posters typically promote a product or service and are often used for commercial purposes. Cultural posters announce and provide information about cultural and artistic events such as festivals, seminars, symposia, concerts, films, theater, and exhibitions. Social posters are educational and informative in areas such as health, transportation, civil defense, traffic, and the environment (Becer, 2011, p. 201; Ertan and Sansarcı, 2017, p. 162; 2022, p. 671; Doğru and Yıldırım, 2022, p. 127). Although posters are categorized, a single poster may simultaneously embody features of more than one group. In other words, a poster can be commercial, cultural, and social at the same time (Acar and Acar, 2025, p. 437).

Widely used across many sectors, posters function as an important visual communication tool in cinema as well. Film posters are designed in line with a film's plot, narrative, and content to promote the film. The first use of film posters in cinema is dated to 1890, when the Parisian lithographer Jules Chéret prepared a poster for the film "The Story of the Kelly Gang." The true rise of film posters coincides with the 1920s, the golden age of Hollywood. During this period, cinemas evolved beyond mere screening venues into architectural spaces with large walls showcasing film posters. Posters were generally hand-

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drawn and aimed to attract audiences to theaters. As the film industry expanded, the importance of film posters grew accordingly. By the 1940s and 1950s, the use of photography in posters became widespread, and famous actors began to feature more prominently (Farah, 2024).

As major, high-budget products of the entertainment industry, films—like other commercial goods—require promotion and advertising. One of the most effective means of achieving this is the poster, as film posters are prepared to announce and publicize the film by capturing the attention of broad audiences (Çakır and Demir, 2011). Posters are graphic products that balance artistic and design concerns in equal measure (Becer, 2011). Initially, however, filmmakers and directors resisted the idea of film posters as independent works of art, believing this would distract from their fundamental function of attracting public interest. Thus, early film posters should not be equated with fine art. Over time, as graphic artists and painters became involved, film posters acquired aesthetic value (Rivadulla, 2000, p. 16). These values vary according to the country of exhibition, content, dimensions, visual components, and the number of graphic elements.

Fundamentally, a film poster can be said to consist of image/photography and text (Güney, 2009, p. 89). These design elements are arranged to form a coherent whole (Çakır and Demir, 2011, p. 17). Through the relationships among design components, viewers can swiftly glean information about the film upon seeing the poster (Parsa, 2008, p. 115). While stimulating the viewer's subconscious, film posters also provide clues about the film's content (Çeken and Aypek Arslan, 2016, p. 508). Thus, a viewer can infer aspects such as the film's subject, genre, and characters. The textual component typically includes information such as the title, cast, director, screenwriter, and producer. The visual component may feature photographs of lead actors, a scene from the film, or an image that alludes to the film's content. By combining these visual and textual elements, the poster seeks to capture and direct audience interest.

Film posters, designed to promote motion pictures, present viewers with a set of cultural cues, visual codes, and ideological messages even before they encounter the film itself. Therefore, analyzing film posters requires more than examining their graphic or aesthetic features; it necessitates a deeper interpretative approach grounded in cultural studies, semiotics, and visual communication theories. From the perspective of cultural studies, film posters can be regarded as visual communication tools through which social meanings, identities, and ideological formations are represented. In this context, theorists such as Stuart Hall (1997) emphasize the central role of visual media in circulating cultural narratives and dominant ideologies. Accordingly, film posters may indirectly or directly reflect themes such as gender roles, national identity, class representations, and political atmospheres.

A review of the literature shows that semiotic approaches offer a strong theoretical framework for understanding the meaning-making processes in film posters. In particular, Barthes' approach is significant for analyzing the multilayered structure of visual messages. Barthes distinguishes between "denotation" and "connotation," arguing that denotation refers to the surface-level meaning of elements such as photographs, colors, and characters, while connotation points to cultural myths and symbolic associations (Barthes, 2012).

Integrating cultural studies, semiotics, and bibliometric perspectives in the analysis of film posters provides a more robust and comprehensive understanding of both meaning production and the structure of the academic literature. While cultural and semiotic approaches explain the social and ideological meanings embedded in posters, bibliometric analysis reveals the position, development, and structural relations of these studies within scholarly production.

METHOD
In this study, which was designed according to a survey model, scientific publications on film posters were examined using the method of bibliometric analysis. The concept of bibliometrics was first introduced by Alan Pritchard in 1969 as an approach proposed to replace the term "statistical bibliography." Pritchard defines bibliometrics as "the application of mathematical and statistical methods to books, articles, conference papers, and other means of communication" (Diodato, 2012, p. 8; Glänzel, 2003, p. 6). As Pritchard's definition indicates, bibliometrics is a quantitative method

preferred for the numerical analysis of scientific works published in digital or print form. "Bibliometrics is a tool by which the state of science and technology can be observed through the overall production of scientific literature, at a given level of specialisation." (Okubo, 1997, p. 6). The earliest known study in this area is Campbell's 1896 work titled "Theory of the National and International Bibliography," in which mathematical and statistical tools were used to classify different categories and determine their distributions (Sengupta, 1992).

In practice, bibliometrics is primarily applied to documents related to science and therefore substantially overlaps with scientometrics, the measurement of science (Thelwall, 2008, p. 605). Accordingly, bibliometric analyses can provide comprehensive insights into the developmental trajectory and dynamics of a research field by evaluating publications from multiple angles (Lawani, 1981). It is thus reasonable to state that bibliometric analyses are increasingly employed for the systematic examination of scientific publications and are regarded as an important tool across nearly all disciplines (Ellegaard and Wallin, 2015). Bibliometrics is one of the few genuinely interdisciplinary research domains extending across almost all scientific fields. Its methodology incorporates components from mathematics, the social sciences, the natural sciences, engineering, and even the life sciences. Moreover, the past two decades have seen the publication of numerous comprehensive bibliometric studies addressing major scientific fields, with aims such as assessing national research performance in an international context or delineating the development of a scientific domain using bibliometric tools (Glanzel, 2003, p. 5).

The bibliometric analysis conducted within this scope formed the basis for evaluating the following hypotheses tested in the study:

- H1: The number of academic publications on film posters has shown a significant increase over the years.

- H2: Academic publications related to film posters are predominantly concentrated in the fields of 'Computer Science' and 'Engineering.'

- H3: English is the dominant language in international academic publications on film posters.

- H4: China produces the highest number of academic studies on film posters.

- H5: In the film poster literature, the most frequently cited studies are those employing technical approaches such as deep learning, computer vision, and GAN-based analysis.

These hypotheses were developed by taking into account observed trends in the literature, findings from previous bibliometric studies, and the interdisciplinary nature of film poster research.

In the methods section of this study, the variables examined within the scope of bibliometric analysis, the data collection procedures employed, and the analytical techniques applied are described in detail. VOSviewer analyses were performed using both full counting and fractional counting methods depending on the structure of each network. Prior to visualization, the dataset exported from Web of Science was cleaned to remove duplicates, incomplete records, and documents lacking author, keyword, or affiliation information. Keyword standardization was conducted to merge semantically identical terms (e.g., "film poster" and "movie poster"), and singular/plural forms were harmonized. For the co-occurrence analysis, a minimum threshold of 3 occurrences per keyword was applied. In co-authorship and institutional collaboration networks, a minimum of 2 documents per author/institution was set as the threshold. All networks were normalized using the association strength method, which is the default and recommended option for VOSviewer. Visual layouts were generated using the VOS layout algorithm with default attraction and repulsion parameters, ensuring optimal clustering and distance representation. These methodological steps enable the results to be replicable and ensure that the visualizations accurately reflect the structural and thematic patterns of the film poster research domain. In this way, all stages of the research process are addressed systematically, and a comprehensive methodological framework is presented.

Variables

In this study, international publications addressing film posters within the fields of visual communication and graphic design were comprehensively evaluated. The study considers two core variables: visual communication and posters. However, the primary focus is on research concerning film posters in the context of visual communication and graphic design; therefore, both variables were examined together from a holistic perspective. International documents related to film posters were selected according to predefined criteria, and a bibliometric analysis was conducted on these data. The analyses reveal the current state and prevailing trends in research on film posters to date.

Data Collection Instruments

To identify international research on film posters within the field of visual communication, a comprehensive search was conducted in the Web of Science database—widely recognized globally—on 15 June 2025. The database was chosen because it hosts numerous publications in the social sciences, communication studies, and the arts, particularly those related to visual communication and graphic design. Moreover, its inclusion of prestigious indexes such as the Science Citation Index (SCI), Social Sciences Citation Index (SSCI), and Arts & Humanities Citation Index (A&HCI) facilitates access to internationally published studies (Goodman and Deis, 2005). In addition, it covers other significant indexes including the Conference Proceedings Citation Index–Science (CPCI-S), Conference Proceedings Citation Index–Social Science & Humanities (CPCI-SSH), Book Citation Index–Science (BKCI-S), Book Citation Index–Social Sciences & Humanities (BKCI-SSH), and the Emerging Sources Citation Index (ESCI).

To retrieve international publications on film posters, the "topic" search option of Web of Science was used, encompassing titles, abstracts, and keywords. The search employed the keywords "movie" and "poster." The exclusive use of Web of Science in this study was preferred due to its access to peer-reviewed academic outputs and high-impact content. Its comprehensive filtering and analysis features also make it a reliable source for systematic reviews. Owing to its structure that enables tracking of interdisciplinary research, the platform provides a suitable environment for multifaceted topics such as visual communication, graphic design, posters, and film posters.

With no temporal restrictions and an effort to capture all relevant publications, the search yielded a total of 89 scientific works on film posters. These records were analyzed in detail—according to criteria such as publication year, type, language, country and institutions of origin, research areas, source titles, citation counts, and the annual distribution of publications and citations—and presented in tabular form. The bibliometric analysis included only records in Web of Science that contained complete bibliographic metadata; publications with missing metadata were excluded. However, since Web of Science is continuously updated and new publications are added, results may vary across searches conducted at different times using the same keywords. Consequently, discrepancies in retrieved data may occur despite similar data collection procedures (Liu et al., 2013).
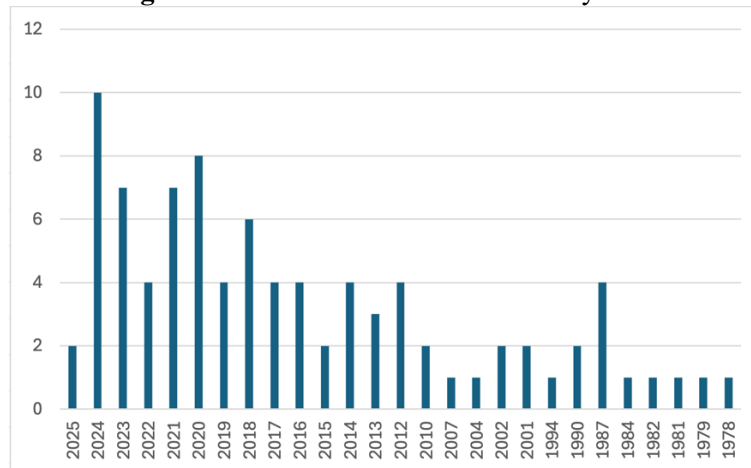
Data Analysis

To perform the bibliometric analysis and to present the results visually, the study employed VOSviewer, an open-access, freely available software package described as "a scientific mapping tool developed for the analysis and visualization of bibliometric networks" (Van Eck & Waltman, 2017, p. 1054). After the data were downloaded from the Web of Science database, they were imported into the software. Prominent authors, countries, and sources appearing in international publications on film posters were identified using the "Co-authorship," "Co-occurrence," and "Citation" analysis modules. Accordingly, the most frequently used keywords, the authors and countries with the highest levels of collaboration, and the authors, sources, and countries receiving the greatest number of citations were determined.

Results

According to the data in Figure 1, research on film posters exhibits an irregular yet clear upward trend over time. While the 1980s saw a very limited number of studies (a total of six in 1981, 1984, and 1987), academic interest began to increase notably from the mid-2000s onward. The post-2020 period is particularly marked by intensified output, with 8 publications in 2020, 7 in 2021, 7 in 2023, and 10 in

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2024—years that represent peaks in productivity. This pattern indicates that film posters have increasingly become a subject of academic inquiry from both cultural and communicative perspectives. The presence of 2 publications already recorded in 2025 further suggests the continuation of this trend. Overall, the trajectory shows that film posters are being examined not merely as promotional tools but also through diverse lenses such as cultural memory, visual rhetoric, social representation, and marketing communication.

Figure 1. Distribution of Publications by Year

Source: Compiled by the author using the Web of Science database.

According to the data in Figure 2, the majority of studies on film posters have been published as peer-reviewed journal articles (48.3%), followed by symposium/conference proceedings (38.2%). This distribution suggests that the topic possesses sufficient theoretical depth for journal publication while also constituting an emerging research area open to debate in conference settings. The small number of book reviews and review articles indicates that the field's theoretical framework may not yet be fully consolidated. Additionally, the presence of specialized formats such as art exhibit reviews and meeting abstracts shows that film posters are addressed not only in academic contexts but also within artistic and cultural frameworks.
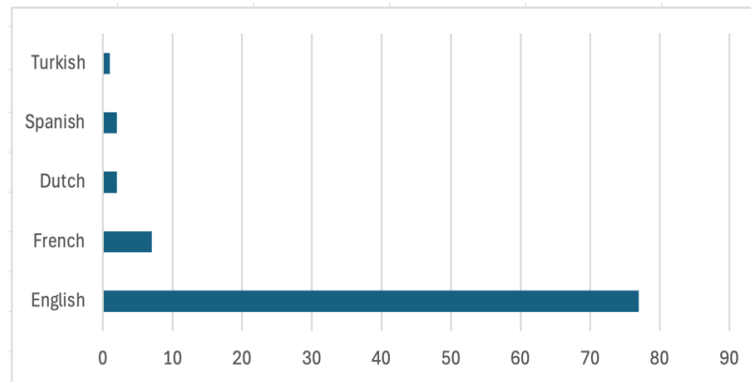
In terms of language, a large proportion of the publications are in English (86.5%), indicating the field's accessibility to global academic audiences and its recognition in the international literature. Beyond English, there are a limited number of studies in French (7), Dutch (2), Spanish (2), and Turkish (1) (Figure 3). This diversity suggests that interest in film posters exists across different cultural contexts, although it has not yet translated into substantial academic output.

Figure 2. Types of Publication

Source: Compiled by the author using the Web of Science database.

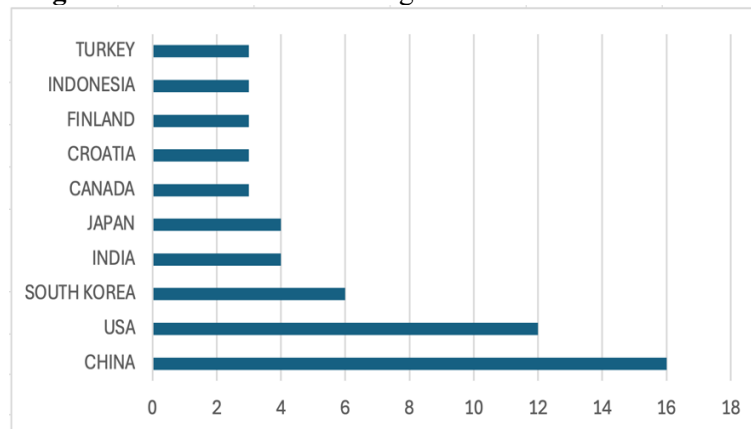**Figure 3.** Languages of Publication

Source: Compiled by the author using the Web of Science database.

Figure 4 presents the distribution of academic studies on film posters by country and institution. The findings indicate that publications in this field are geographically widespread. The country with the highest number of publications is the People's Republic of China with 16, followed by the United States with 12 and South Korea with 6. This distribution suggests that countries with strong film industries also lead in academic output on film posters. China's rapid rise in academia in recent years appears to extend to this area within the context of visual culture and media studies. Turkey's presence with 3 publications indicates growing interest, while also pointing to the need for more work at the international level.

At the institutional level, each institution appears on the list with only two publications (Figure 5). This pattern suggests that academic production on film posters is not concentrated within specific institutions but is instead dispersed across different geographies and universities. Prominent institutions include Asia-based universities such as Aliah University, Beijing University of Technology, the Indian Institute of Technology System, and Islamic Azad University, alongside established Western universities such as KU Leuven and the University of California, Berkeley, which also contribute to academic production in this area. This diversity is significant in demonstrating the interdisciplinary nature of film poster studies and their applicability across different academic traditions.

In sum, the table shows that research on film posters is attracting increasing academic interest internationally; however, this interest has not yet deepened within specific centers. This suggests that, in the coming period, both institutional and geographical diversity will increase in this field, and the topic will be addressed in a more systematic manner.
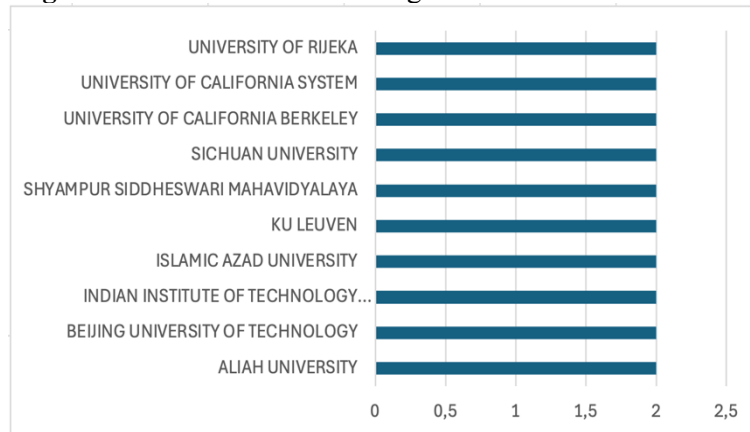
Figure 4. Countries with the Highest Number of Publications

Source: Compiled by the author using the Web of Science database.

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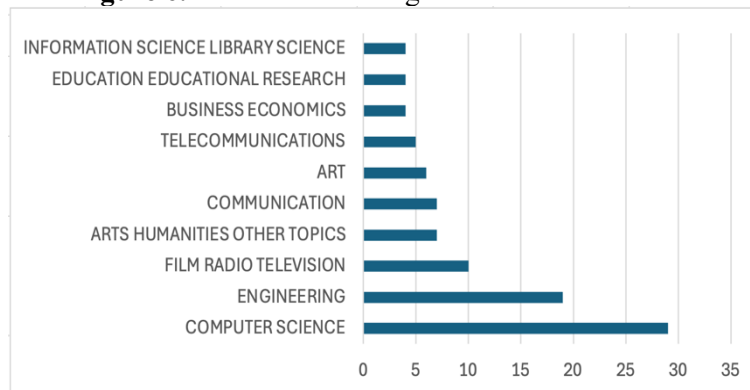**Figure 5.** Institutions with the Highest Number of Publications

Source: Compiled by the author using the Web of Science database.

Figure 6 presents the top ten academic fields in which studies on film posters are most frequently published, as well as the sources in which these studies appear. The data clearly indicate that research in this area is not confined to cinema and art; rather, it exhibits a distinctly interdisciplinary character. The field with the highest number of publications is Computer Science (29), followed by Engineering (19) and Film, Radio, Television (10). This ranking shows that film posters are analyzed not only as cultural or artistic objects but also from technical perspectives such as visual recognition, artificial intelligence, and image processing.
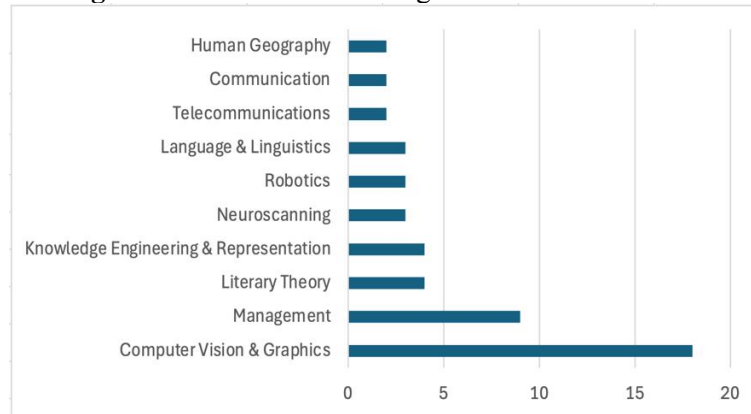
The source with the largest number of publications is the journal Computer Vision & Graphics (18). This suggests that a significant portion of the research on film posters is conducted within the frameworks of computer vision, graphic design, and visual processing technologies. This is followed by Management (9), and Literary Theory and Knowledge Engineering & Representation (4 each), which serve as bridges between the social sciences and technical fields. Additional sources include journals in areas such as Neuroscanning, Robotics, Human Geography, Language & Linguistics, Telecommunications, and Communication (Figure 7). This diversity demonstrates that research on film posters is not limited to aesthetic or narrative analyses, but also draws on multiple disciplines, including audience perception, cognitive processes, communication technologies, and marketing strategies.

Overall, the body of literature on film posters points to a rich research landscape that integrates technical, artistic, and social dimensions. The interdisciplinary nature of the field brings with it a broad perspective encompassing both visual culture studies and AI-supported analyses, indicating that this topic is likely to deepen further in the future.

Figure 6. Fields with the Highest Publication Counts

Source: Compiled by the author using the Web of Science database.

Figure 7. Sources with the Highest Publication Counts

Source: Compiled by the author using the Web of Science database.

Table 1 highlights the ten most cited studies related to film posters, thereby making visible the publications with the highest academic impact in the field. Notably, the list includes both technically oriented visual analysis studies and socially oriented investigations. The most cited work is the conference paper "Multi-Content GAN for Few-Shot Font Style Transfer" by Azadil et al. (2018), which focuses on font style transfer using deep learning and generative adversarial networks (GANs) and has garnered 215 citations—evidence of growing interest in AI-based analysis of the visual components of film posters. Similarly, the study by Zhou et al. (2019), which predicts box-office revenues using deep neural networks, has received 39 citations, illustrating how film industry data can be linked to predictive analytics. Research by Wi et al. (2020) and Mangolin et al. (2022) on multilabel movie genre classification further demonstrates the trend of inferring content and genre from poster imagery.

On the other hand, studies analyzing the social representations conveyed by film posters are also noteworthy. In particular, Aley and Hahn's (2020) content analysis published in Sex Roles, titled "The Powerful Male Hero," examines gender representation in posters for children's animated films and has received 31 citations, underscoring sustained academic interest in the cultural and ideological dimensions of film posters alongside their technological analysis.

Overall, the most influential studies predominantly adopt technical approaches such as deep learning, computer vision, genre classification, text recognition, and recommendation systems. At the same time, social science topics such as gender roles, cultural differences, and audience behavior are well represented. This dual orientation indicates that research on film posters integrates both technical and societal perspectives, reinforcing the interdisciplinary character of the field.
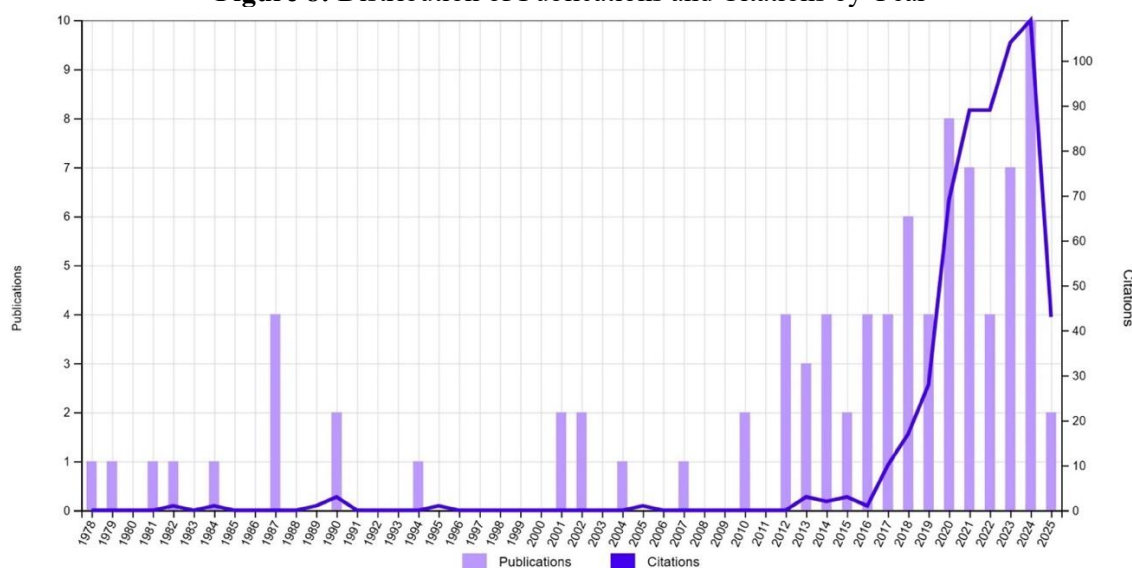
Table 1. Most Cited Publications

	Publication Title	Author	Reference	Publication Year	Citations
1	Multi-Content GAN for Few-Shot Font Style Transfer	Azadil, S; Fisher, M; (...); Darrell, T	31st IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)	2018	215
2	Predicting movie box-office revenues using deep neural networks	Zhou, Y; Zhang, L and Yi, Z	Neural Computing & Applications	2019	39
3	A multimodal approach for multi-label movie genre classification	Mangolin, RB; Pereira, RM; (...); Costa, YMG	Multimedia Tools and Applications	2022	26
4	Poster-Based Multiple Movie Genre Classification Using Inter-Channel Features	Wi, JA; Jang, S and Kim, Y	IEEE ACCESS	2020	19

5	The Powerful Male Hero: A Content Analysis of Gender Representation in Posters for Children's Animated Movies	Aley, M and Hahn, L	Sex Roles	2020	31
6	Same like it hot - visual guidance fur preference prediction	Rothe, R; Tirrtofte, R and Van Gool, L	2016 IEEE Conference on Computer Vision and Pattern Recognition (CVPR)	2016	41
7	Understanding movie poster: transfer-deep learning approach for graphic-rich text recognition	Ghosh, M; Roy, SS; (...); Roy, K	Visual Computer	2022	12
8	A social hybrid recommendation system using LSTM and CNN	Daneshvar, H and Ravanmehr, R	Concurrency And Computation-Practice & Experience	2022	14
9	Multilabel Genre Prediction Using Deep-Learning Frameworks	Unal, FZ; Guzel, MS; (...); Asuroglu, T	Applied Sciences-Basel	2023	10
10	Impact of online information on the diffusion of movies: Focusing on cultural differences	Lee, Y; Kim, SH and Cha, KC	Journal of Business Research	2021	8
	Total number of citations of studies on film posters				**1571**

Source: Compiled by the author using the Web of Science database.

Figure 8 presents the distribution of publications and citations on film posters between 1978 and 2025. According to findings from the Web of Science database, the first publication in this area appeared in 1978, and the first citation was recorded in 1982. The graph shows that both the number of publications and citations peak in 2024. Overall, recent statistics indicate a growing academic interest in the topic, with a clear upward trend in both publication and citation counts.
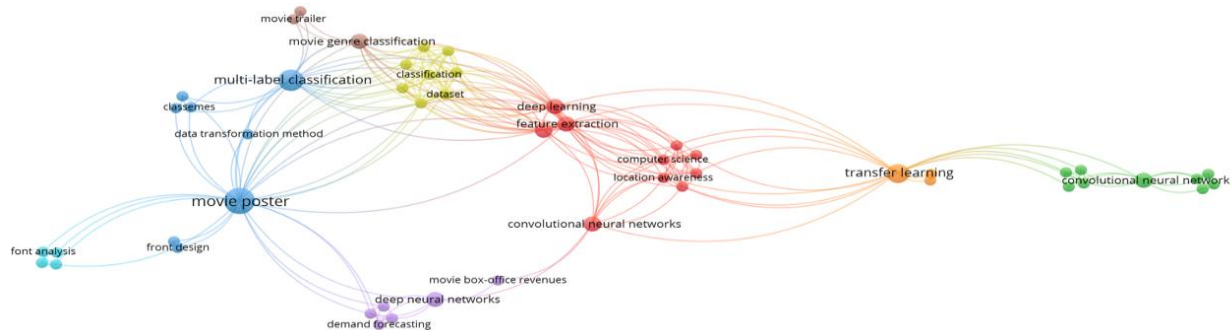
Figure 8: Distribution of Publications and Citations by Year

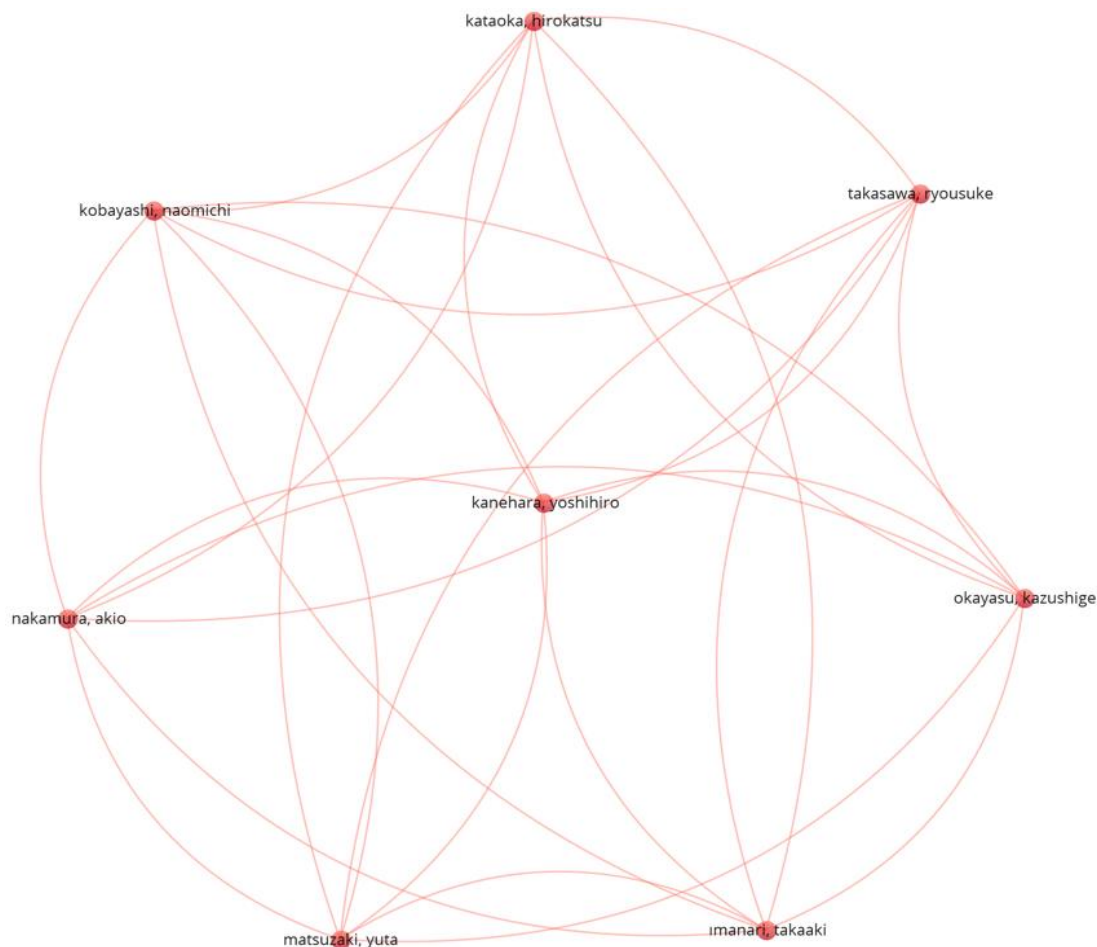**Source:** Compiled by the author using the Web of Science database.

Figure 9 presents the network map of keywords used in studies on film posters. A total of 114 distinct keywords were identified in the surveyed literature, of which 58 that appeared at least twice were

included in the analysis. The findings indicate that "movie poster" is the most frequently used term among the keywords in this area. The keywords were further grouped into six clusters based on thematic similarity, visualized on the map as circles of varying colors and sizes. Overall, "movie poster," "demand forecasting," and "transfer learning" appear frequently and exhibit strong connections with other concepts.

Figure 9. Keyword Network

The co-authorship network was analyzed using VOSviewer. Authors with at least one publication and at least one citation were included as the threshold criteria; accordingly, 88 out of 105 authors were retained for evaluation. The resulting network of the most collaborative authors is presented in Figure 10. The map shows that collaborating authors in film poster research form a single cluster. Within this structure, the researchers "Kanehara, Yoshihiro," "Kobayashi, Noamichi," and "Okayasu, Kazushige" exhibit the strongest links and the highest levels of collaboration. Overall, "Kanehara, Yoshihiro," displayed at the center of the red cluster, stands out as the most collaborative author.
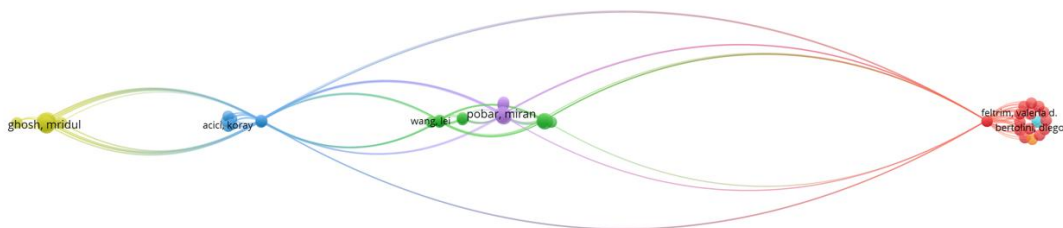

Figure 10. Co-authorship Network of the Most Collaborative Authors

The country-level collaboration network was generated using VOSviewer, with the inclusion threshold set to at least one publication and at least one citation. Under this criterion, all 18 countries in the dataset were included. The resulting map of the most collaborative countries is shown in Figure 11. The network reveals three distinct clusters of collaboration. The first cluster includes Turkey and Finland; the second comprises the United Arab Emirates and India; and the third brings together the USA and China. These countries exhibit the strongest links and the highest levels of collaboration within the field. In the overall structure, India and the USA—represented by larger nodes—stand out as central hubs in international collaborations.
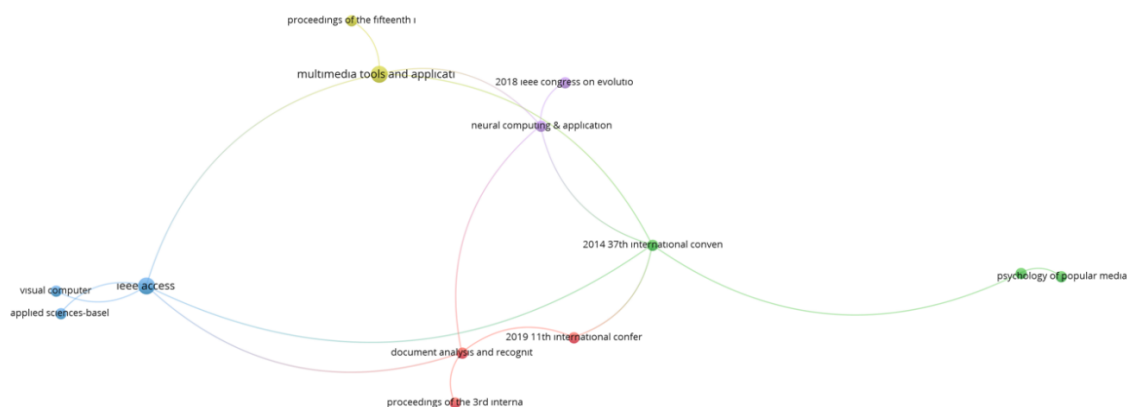

Figure 11. Country Collaboration Network of the Most Collaborative Countries

The citation network of authors was constructed using VOSviewer. Authors with at least one publication and at least one citation were included, resulting in the inclusion of all 105 eligible authors. The resulting map of the most cited authors is presented in Figure 12. The analysis reveals four distinct clusters among highly cited researchers in film poster studies. Within this structure, "Pobar, Miran" stands out as the most cited author in the field, appearing as the largest red node with a total of 254 citations across three publications.

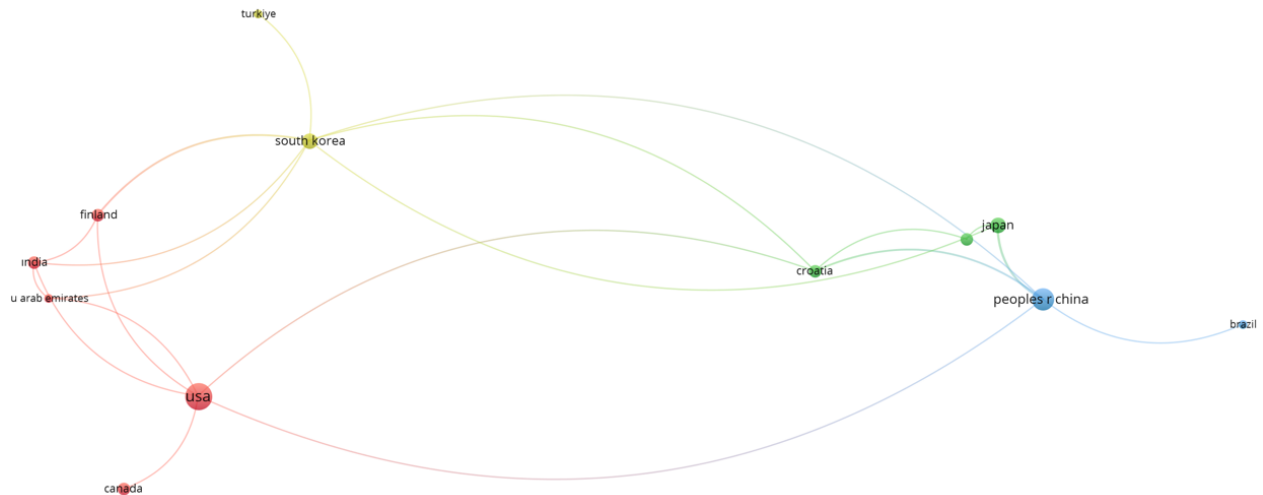**Figure 12.** Citation Network of the Most Cited Authors

The network map of the most cited sources was generated using VOSviewer. Sources with at least one publication and at least one citation were included, resulting in a set of 42 sources. The map, presented in Figure 13, reveals four main clusters among the most cited outlets in film poster research. Within this structure, the journal Psychology of Popular Media, represented within the green cluster, emerges as the most highly cited source in the field.

Figure 13. Citation Network of the Most Cited Sources

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The network map of the most cited countries was created using VOSviewer. The analysis determined the proportion of countries with at least one citation, as measured by the number of citations; all 18 countries meeting this criterion were included in the analysis. The results show the network maps showing the most cited countries visualized in Figure 14. The map is organized, with film screenings independently grouped into three distinct clusters, showing the most cited countries. The analysis determined that the most cited country in this field is the United States.

Figure 14. Citation Network of the Most Cited Countries

CONCLUSIONS

This study maps the international literature on film posters within the context of visual communication and graphic design through a bibliometric analysis conducted with VOSviewer, based on 89 records identified in the Web of Science, and presents a quantitative panorama of the field. The findings indicate that output on the topic accelerated particularly from the mid-2000s and that, after 2020, both publication and citation volumes peaked. In terms of document types, the predominance of journal articles (48.3%) and conference proceedings (38.2%) suggests that the field rests both on maturing theoretical debates and on scholarly venues where methodological and technical innovations are disseminated. With respect to language, English predominates, reflecting global accessibility, while the limited number of studies in French, Dutch, Spanish, and Turkish indicates that interest is diffusing across different cultural contexts. Nevertheless, despite this trend, the linguistic landscape remains relatively fragmented.

An examination of country- and institution-level distributions indicates that academic ecosystems with strong film industries and high R&D capacity are reflected in scholarly output. China (16) and the United States (12) lead, with South Korea (6) and Turkey (3) also visible, while at the institutional level production appears dispersed across different geographies rather than concentrated in a few hubs. Collaboration networks highlight the prominence of countries such as the United States and India, and the aggregation of author collaborations within a single cluster suggests that, although knowledge flows are relatively centralized, they remain open to multi-centered interaction. Within the author citation network, Pobar, Miran stands out, while in the source network Psychology of Popular Media emerges prominently—together indicating that technical approaches and socio-psychological perspectives jointly shape the field's influence.

While Computer Science (29) and Engineering (19) dominate the field and source categories, Film/Radio/Television (10) emphasizes the art and communication-oriented visibility of film catalogs, revealing that they are not only examined as aesthetic/rhetorical objects but also from technical perspectives such as computer vision, machine learning, image/text recognition, and predictive analysis. The rise of topics such as multi-citation domain GAN (Generative Adversarial Network)-based typography transformation, deep neural network image prediction, multiple genre conversion from posters, and image-heavy text recognition demonstrates that movie posters are becoming an increasingly

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powerful representational tool in AI analyses. Concurrently, the presence of content-oriented social sciences, such as gender representations in children's animated films, and the persistence of cultural and ideological dimensions in the field are evident. Key words include procedures such as "movie poster," "demand forecasting," and "transfer learning." This suggests that research on movie posters focuses on both technical analysis (such as artificial intelligence) and cultural or economic implications (such as the development of film).

In general terms, the literature on film posters is demonstrably deepening along three axes: technical-analytical (computer vision, deep learning, visual/text recognition), cultural-social (representation, ideology, audience perception), and applied-communicative (marketing strategies, demand/box-office forecasting, design decision support). This interdisciplinary consolidation facilitates the enrichment of visual culture studies through data-driven methods and strengthens design and marketing practices through evidence-based approaches.

The hypotheses tested in this study were largely confirmed by the bibliometric findings. The distribution of publications by year indicates a marked increase in research on film posters, particularly after 2020, thereby supporting H1. Examination of the research areas reveals that studies are predominantly concentrated in the categories of 'Computer Science' and 'Engineering,' which confirms H2. Moreover, the fact that the vast majority of publications are in English provides strong support for H3.

Country-level analysis shows that China produces the highest number of academic studies on film posters, thus validating H4. Additionally, the most frequently cited studies focus on deep learning, computer vision, and GAN-based methods, clearly demonstrating the influence of technical approaches in the field and supporting H5. Collectively, these findings indicate that research on film posters has developed into an interdisciplinary domain shaped by both technical and cultural dimensions and suggest that AI-supported analytical methods will play an increasingly significant role in the future.

In practice, typography, composition, and visual elements can be linked to audience perception and demand forecasting in a data-driven manner. Moreover, collaborations between academia and industry can be further strengthened through shared poster datasets and explainable AI tools. At the policy and institutional levels, supporting research clusters at the intersection of visual culture and AI, promoting open data standards, and advancing multilingual/cross-cultural comparative studies are expected to enhance both scientific impact and value creation in the creative industries.

In conclusion, this VOSviewer-based bibliometric mapping demonstrates that research on film posters constitutes a rapidly expanding field in which technical and societal dimensions advance in parallel, displaying a global, multi-centered structure with tendencies toward concentration around specific hubs. The next phase of the field is expected to feature greater data diversity, strengthened methodological integration, and the wider adoption of interdisciplinary collaborative practices. For future studies, it is recommended to incorporate additional databases such as Scopus, Dimensions, and Google Scholar; broaden the keyword set with terms such as "film marketing," "visual rhetoric," "key art," "one-sheet," and "poster design"; and triangulate full-text and visual content mining with qualitative content analyses.

REFERENCES

Acar, G., & Acar, H. M. (2025). Görsel iletişimin iki yüzü: Kitap kapakları ile film afişlerinin karşılaştırılması. *Kesit Akademi Dergisi, 11*(43), 432–459.

Barthes, R. (2012). *Göstergebilimsel serüven* (M. Rifat & S. Rifat, Trans.; 6th ed.). Yapı Kredi Yayınları.

Becer, E. (2011). *İletişim ve grafik tasarım.* Dost Kitabevi Yayınları.

Çakır, V., & Demir, S. (2011). İnsanların film seçme davranışında film afişlerinin rolü. *E-Journal of New World Sciences Academy Humanities, 6*(1), 11–28.

Çeken, B., & Arslan, A. A. (2016). İmgelerin göstergebilimsel çözümlenmesi 'Film afişi örneği'. *Bayburt Eğitim Fakültesi Dergisi, 11*(2), 507–517.

Diodato, V. (2012). *Dictionary of bibliometrics*. Routledge.

Doğru, M. S., & Yıldırım, K. K. (2022). Fotoğraf temelli film afişlerinde renk-duygu ilişkisinin incelenmesi: Braveheart, Kingdom of Heaven ve Macbeth afişleri. *Electronic Cumhuriyet Journal of Communication, 4*(2), 126–135.

Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production: How great is the impact?. *Scientometrics, 105*(3), 1809–1831.

Ertan, G., & Sansarcı, E. (2017). *Görsel sanatlarda anlam ve algı.* Alternatif Yayıncılık.

Farah, J. (2024). Film afişi tasarımına derinlemesine bir bakış (A. Dağıstanlı, Çev.). *Güzel Sanatlar Üzerine Yazılar Dergisi,* 256.

Glänzel, W. (2003). *Bibliometrics as a research field: A course on theory and application of bibliometric indicators*. [Course handouts] https://yunus.hacettepe.edu.tr/~tonta/courses/spring2011/bby704/bibliometrics-as-a-research-field-Bib_Module_KUL.pdf

Güney, N. (2009). *Sinema filmlerinin reklam ve tanıtımında afiş ve fragmanların rolü* (Master's thesis, Marmara Üniversitesi).

Hall, S. (1997). The work of representation. In S. Hall (Ed.), *Representation: Cultural representations and signifying practices* (pp. 13-71). Sage & Open University Press.

Lawani, S. M. (1981). Bibliometrics: Its theoretical foundations, methods and applications. *Libri, 31*(1), 294–315.

Liu, X., Zhan, F. B., Hong, S., Niu, B., & Liu, Y. (2013). Replies to comments on a bibliometric study of earthquake research 1900–2010. *Scientometrics, 96*(3), 933–936.

Mazlum, F. S. (2006). *Masaüstü yayıncılık.* Gazi Kitabevi Yayınları.

Okubo, Y. (1997). *Bibliometric indicators and analysis of research systems: Methods and examples.* https://doi.org/10.1787/208277770603

Parsa, S. (2008). *Film çözümlemeleri.* Multilingual.

Rivadulla, E. Jr. (2000). The film poster in Cuba (1940–1959). *Design Issues, 16*(2), 36–44.

Sengupta, I. N. (1992). Bibliometrics, informetrics, scientometrics and librametrics: An overview. *Libri, 42*(2), 75–98.

Sözen, M., & Tanyeli, U. (2018). *Sanat sözlüğü*. Remzi Kitabevi.

Thelwall, M. (2008). Bibliometrics to webometrics. *Journal of Information Science, 34*(4), 605–621.

Tonta, Y., & Al, U. (2008). Türkçe makalelerin dergilere dağılımı ve Bradford yasası. *Bilgi Dünyası, 9*(1), 41–66.

Turani, A. (1995). *Sanat terimleri sözlüğü.* Remzi Kitabevi.

Van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNet Explorer and VOSviewer. *Scientometrics, 111*(2), 1053–1070.