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Visualization of the Israeli-Palestinian War in Digital Media: An Analysis of Anadolu Agency Infographics

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Abstract

As a visual method of communicating news, infographics are employed to convey news about politics, economy, sports, culture and arts, as well as news about extraordinary periods such as war, natural disasters, and epidemics. The succinct and concise presentation of information, supported by visual elements, facilitates more effective communication of news related to periods of war that result in humanitarian crises and social consequences for the public. The problem of this study is to examine the manner in which the Israeli-Palestinian war, which commenced on October 7, 2023, is represented through the medium of infographics. The central objective of this study is to elucidate the characteristics of data-driven visual news content by conducting a comprehensive analysis of infographics related to the Israeli-Palestinian war. To this end, a content analysis of infographics published by Anadolu Agency was conducted. The data set of the study consists of 336 Turkish and 134 English infographics published by Anadolu Agency between October 7, 2023 and October 7, 2024. Within the scope of the research, the infographics were subjected to comparative analysis in three categories: quantity, content, and visualization features. The present study is distinctive in that it addresses a critical gap in the existing literature by focusing on the coverage of the Israeli-Palestinian war through the medium of infographics. The infographics analyzed in the present study consistently employed narrative storytelling to convey the events in the Palestine war, utilizing diverse visual frames to address numerous issues. In this regard, they effectively served as a conduit for disseminating information to the public about the war on both national and international levels. It is recommended that subsequent studies in this field employ a more diverse array of data sets to further expand the scope and depth of research in this area.

Keywords: Palestinian, Digital Media, Data Journalism, Data Visualization, Infographics, Anadolu Agency.

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Dijital Medyada İsrail-Filistin Savaşının Görselleştirilmesi: Anadolu Ajansı İnfografikleri Üzerine Bir Analiz

Özet

Haber iletmenin görsel bir yöntemi olarak infografikler; politika, ekonomi, spor, kültür-sanat gibi gündemlerin yanı sıra savaş, doğal afet, salgın gibi olağanüstü dönemlerdeki haberlerin aktarılmasında da kullanılmaktadır. Bilginin kısa ve öz şekilde görsel unsurlarla desteklenerek gerçekleştirilen sunumu, insani krizlere ve sosyal sonuçlara yol açan savaş dönemlerine ilişkin haberlerin topluma daha kolay ve etkili bir şekilde aktarılmasını sağlamaktadır. 7 Ekim 2023 tarihinde başlayan İsrail-Filistin savaşının infografiklerle ne şekilde aktarıldığının ortaya konulması bu çalışmanın problemini oluşturmaktadır. Çalışmanın temel amacı İsrail-Filistin savaşı ile ilgili infografiklerin analizi ile veri odaklı görsel haber içeriklerinin özelliklerinin ortaya çıkarılmasıdır. Bu amaçla çalışmada Anadolu Ajansı tarafından yayımlanan infografiklerin içerik analizi yapılmıştır. Araştırmanın veri seti 7 Ekim 2023 - 7 Ekim 2024 tarihleri arasında Anadolu Ajansı tarafından yayımlanan 336 Türkçe ve 134 İngilizce infografikten oluşmaktadır. Araştırma kapsamında incelenen infografikler nicelik, içerik ve görselleştirme özellikleri açısından üç kategoride karşılaştırmalı olarak analiz edilmiştir. Bu çalışma İsrail-Filistin savaşındaki haberlerin infografiklerle aktarımına odaklanarak bu konuda alandaki boşluğu doldurması bakımından özgün niteliktedir. Araştırma kapsamında incelenen infografiklerin Filistin'deki savaşta yaşananları birçok konuda farklı görsel çerçeveler kullanarak bir hikâye anlatısı şeklinde düzenli olarak aktardığı, bu bağlamda savaşla ilgili ulusal ve uluslararası ölçekte kamuoyunu bilgilendirmede etkin rol üstlendiği sonucuna ulaşılmıştır. Gelecek çalışmalar için Filistin konusunda alana genişlik kazandıracak farklı veri setlerini içeren infografiklerin analizinin yapılması önerilmektedir.

Anahtar Kelimeler: Filistin, Dijital Medya, Veri Gazeteciliği, Veri Görselleştirme, İnfografik, Anadolu Ajansı.

Introduction

The ongoing digital transformation of the world, coupled with the accelerating pace of life, has precipitated profound shifts in both lifestyle patterns and the modalities of information reception and dissemination. The evolution of content and the accelerated transmission of information, precipitated by advancements in information technology and the Internet, has given rise to novel approaches to influencing target audiences through a deluge of messages. In this context, the creation of content that captures people's attention has become a critical aspect of modern communication, particularly in the context of the extensive information exposure that individuals encounter daily, especially in digital spaces. The news media has not remained indifferent to these developments in communication technologies, and it has increasingly incorporated data visualization methods in its reporting. Consequently, the capacity to process data effectively has become a pivotal skill for journalists in the creation of news content.

The advent of digital technologies and the dissemination of open data have given rise to a new form of journalism known as data journalism. Data journalists' responsibilities extend beyond the collection of information and the composition of textual narratives; they also engage in the production of complex text forms that amalgamate words and numbers with graphic components.[1] The integration of words and visuals fosters a narrative effect in the minds of readers. In this regard, infographics facilitate the comprehension of intricate information by the audience. The utilization of graphics as a data visualization method dates back to the 1980s, having been employed in journalistic endeavors to support and enhance understanding of complex subjects. However, it was in the 2000s that the use of data visualization and infographics in news content underwent a marked increase. This surge has led to the popularization of the term "infographic" in the context of data visualization in journalism.[2]

In the current era, characterized by technological advancements, there has been a significant surge in the consumption of information. This is attributable to two major factors: the prevalence of information overload and the diminishing capacity to concentrate over extended periods. When this phenomenon is viewed in conjunction with the structure of social media, which is designed to encourage the sharing of content, it becomes evident that infographics, as a data visualization method, have emerged as one of the most effective forms of content for the purpose of information communication. Generally speaking, an infographic constitutes a type of visual representation that integrates data with design, thereby facilitating the effective communication of messages to target audiences by individuals and organizations. In other words, an infographic is defined as a visual representation of data or ideas that aims to convey complex information to an audience in a manner that is both accessible and easily comprehensible.[3] This integration of data and design is achieved by infographics through the application of visual elements.

An infographic is a product that is designed to inform, educate, or visually represent data in a way that facilitates understanding of a given phenomenon. With the advent of Web 2.0 technology, infographics have evolved to persist as a medium for disseminating information. Beyond mere aesthetics, visual appeal, and practicality, infographics adapt to the evolving demands of the information age by incorporating elements such as immediacy, movement, multimedia richness, interactivity, and hypertextuality.[4] The necessity of infographics can be attributed to several factors, including the ability to convey messages, present extensive information in a succinct and comprehensible manner, reveal data, classify relationships between data by identifying cause-and-effect relationships, and

1 Dmytro Solodovnyk et al., "Data journalism visualization in Ukraine and in Europe: a comparative analysis," *Amazonia Investiga* 12, no. 64 (2023): 103.

2 Yael de Haan et al., "When Does an Infographic Say More Than a Thousand Words?," *Journalism Studies* 19, no. 9 (2018): 1293; Rachel Jacob, "Visualising Global Pandemic: A Content Analysis of Infographics on Covid – 19," *Journal of Content, Community and Communication* (2020): 116-17.

3 Mark Smiciklas, *The Power of Infographics: Using Pictures to Communicate and Connect With Your Audiences* (Indiana: Que Publishing, 2012), 6.

4 Paola Eunice Rivera Salas, "Evaluation of the Infographics Posted on Facebook by Printed Newspapers in Latin American Countries during 2017 " (paper presented at the Procedings CUICIID, 2018), 198.

observe changes or trends in data.[5] Infographics have been demonstrated to be more effective than written content in conveying and understanding information due to their high visual power. A study revealed that users on social networks engage with publications containing visuals at a rate 30 times higher than those without, while publications incorporating infographics receive 12% more shares than those without.[6]

In an era marked by an escalating prevalence of data, there is an imperative for effective and accessible methods to facilitate the dissemination of information within the digital landscape. Infographics have emerged as a potential solution to bridge the gap between data and understanding. These visual representations integrate visual components with succinct text, thereby facilitating the comprehension of intricate subject matter and accentuating salient insights. The integration of visual elements and concise text has been shown to minimize cognitive overload, thereby enhancing the accessibility of information to a broader audience.[7] Consequently, infographics emerge as a valuable instrument for data communication. In this regard, infographics serve as a conduit for translating complex data into a comprehensible visual format.

Data visualization has been noted by many scholars as playing an increasingly important role in journalism. This is due to the fact that data visualizations affect both journalistic content and the interactional patterns of news discourse. These developments parallel the general trend in society toward "datafication," which is defined as the quantification of aspects of life previously experienced in qualitative, non-numerical forms, then tabulation, analysis, and visualization. This cultural trend encompasses enhanced public data accessibility and simplified data mediation through an expanding array of visualization tools. Consequently, these factors contribute to the proliferation of data in newsrooms and a heightened emphasis on data visualization as an integral component of journalistic genres.[8]

Infographics serve as an ancillary instrument employed in the news media to convey information with greater precision and to offer a visual depiction of significant events. This utilization of infographics serves to provide a more comprehensive and visually appealing exposition of significant events and phenomena.[9] Beyond the realms of politics, economy, sports, culture, and the arts, these visual representations have emerged as a pivotal medium for news outlets to address events of national and international significance, such as wars, crises, natural disasters, and epidemics, which profoundly impact the global public.[10] In such extraordinary periods, the manner in which information is disseminated

5 Joanna C. Dunlap and Patrick R. Lowenthal, "Getting graphic about infographics: design lessons learned from popular infographics," *Journal of Visual Literacy* 35, no. 1 (2016): 45.

6 "Qué es el Marketing Visual y cómo puedes aprovecharlo para tu empresa?," Love visual marketing, 2014, accessed 12.02.2025, https://lovevisualmarketing.com/que-esel-marketing-visual-y-como-puedes-aprovecharlo-para-tu-empresa/.

7 Sarah Barnes, J N Campbell, and Lauren M Ndebele, "The Effectiveness of Infographics and Graphical Media in Communication," *International Journal of Communication and Marketing* 1, no. 1 (2024): 2.

8 Martin Engebretsen, "Data Visualization in Scandinavian Newsrooms," *Nordicom review.* 39, no. 2 (2018): 3.

9 Jacob, "Visualising Global Pandemic: A Content Analysis of Infographics on Covid – 19," 116.

10 Simge Deniz Demirel and Petek Durgeç, "Dijital Medyada Deprem Haberlerini İnfografikler Üzerinden Okumak: Anadolu Ajansı ve TRT Haber Örneği," *Journ al of Communication, Sociology and History Studies* 2, no. 2 (2022): 30.

to the public assumes significance. In this context, infographics emerge as a potent medium for conveying information to the public, offering a unique capacity to present data in a clear, comprehensible, and compelling manner, often unveiling otherwise imperceptible insights.[11] The rapid dissemination of infographics through digital media, particularly social networks, amplifies their impact during extraordinary periods.[12] For instance, during the recent pandemic, governments, research organizations, and news media extensively employed infographics to disseminate information regarding the pandemic.[13]

Furthermore, periods of war represent extraordinary circumstances of critical importance in the dissemination of information to the public. The dissemination of news during wartime, bolstered by visual components, has been demonstrated to facilitate a more comprehensive and effective understanding of the prevailing circumstances. In addition to the role of infographics in the rapid dissemination of information, their visual nature facilitates more effective comprehension of events and news during wartime. A case in point is the Israeli-Palestinian war that began on October 7, 2023, which was covered extensively both nationally and internationally. The war, which subsequently spread to the region with the participation of other countries, gained an international dimension with the involvement of many countries in the process. Consequently, numerous tools were employed to disseminate news about the war. Given the strategic nature of war, the need to inform public opinion becomes a paramount concern during these periods. In this regard, there has been an extensive exchange of information regarding the Israeli-Palestinian war across various news media outlets, particularly digital platforms. The advent of social media, with its inherent capacity to expedite the dissemination of information, has emerged as a pivotal instrument in the documentation and dissemination of war narratives.[14]

The employment of infographics in news coverage pertaining to the Israeli-Palestinian conflict facilitates not only the comprehension of pertinent information, but also the conveyance of events in a more impactful manner. Indeed, in the context of public communication, the employment of transparent and visually compelling infographics to convey the situation related to the war has been demonstrated to enhance knowledge and trust in news content, while potentially exerting a substantial influence on public opinion.[15] The use of infographics, which are characterized by their ability to create a narrative by integrating verbal and visual elements, is particularly advantageous during emergency situations for several reasons. Firstly, infographics facilitate the reader's acquisition, understanding, and recall of the represented information. Secondly, they facilitate more

11 Jacob, "Visualising Global Pandemic: A Content Analysis of Infographics on Covid – 19," 118.

12 Mrudula Joshi and Latika Gupta, "Preparing Infographics for Post-publication Promotion of Research on Social Media," *Journal of Korean Medical Science* 36 (2021): 1.

13 H. Kleijsen, "Infographics as a public communication tool in the covid-19 pandemic" (Bachelor University of Twente, 2021), 3, http://essay.utwente.nl/87636/; Elizabeth E. Riggs, Hillary C. Shulman, and Rachel Lopez, "Using infographics to reduce the negative effects of jargon on intentions to vaccinate against COVID-19," *Public Understanding of Science* 31, no. 6 (2022): 751.

14 Nam Maharani, "Social media as a primary source of information: exploring its role in disseminating the current situation in Palestine," *Gema Wiralodra* 15, no. 1 (2024): 275.

15 M. Kiernan et al., "Effects of a methodological infographic on research participants' knowledge, transparency, and trust," *Health Psychol* 37, no. 8 (2018): 782.

effective communication, especially in situations characterized by a deluge of information, such as during wartime, when a substantial amount of information is disseminated. A third benefit is their effectiveness among individuals with limited knowledge of the subject matter.[16]

On October 7, 2023, in the midst of the ongoing conflict in Israel and Gaza, a significant number of casualties were reported, including children, women, and elderly individuals. The severe restrictions on the provision of basic humanitarian needs have resulted in a profound human tragedy for civilians caught in the midst of the war. The active involvement of European countries, particularly the United States, and regional states has amplified the global impact of the conflict. Media outlets have reported extensively on the war, shaping public opinion both domestically and internationally. The focal point of this study is to elucidate the manner in which infographics are employed in the dissemination of war-related news to the public.

It has been observed that the domain of news, encompassing the modern press, digital communication media, online media, and the internet, is progressively acquiring a visual character.[17] Despite the increasing popularity of data visualization in the creation of news content, the number of academic publications on infographics is limited, and these studies have been conducted on various topics related to data journalism and infographics.[18] A paucity of studies exists in the extant literature on infographic content related to extraordinary periods such as war, natural disasters, and epidemics. A cursory review of the extant literature reveals that the preponderance of these studies pertains to the period of the pandemic. A recent study examined the data visualizations employed in *The Hindu* and *The Times of India* during the pandemic. The study revealed a notable disparity in the frequency of infographics depicting response and self-efficacy, which were comparatively less prevalent than those focusing on violence and vulnerability.[19] Another study examined the compliance of the Dutch government's infographics during the pandemic with the Gestalt laws of visual perception. The results indicated that the infographics exhibited a very high rate of Gestalt principles of visual perception, with an average of approximately 63%. A comprehensive analysis of the available data has led to the conclusion that the infographics published by the Dutch government concerning the COVD-19 pandemic appear to have employed Gestalt principles with a high degree of frequency.[20] Another study was conducted in accordance with feelings-as-information theory. The objective of the study was to determine whether the utilization of jargon and infographics in messages designed to elucidate the mRNA vaccines developed to combat the SARS-CoV-2 virus influences individuals' behavioral intentions to receive the vaccine. The findings indicated

16 Dylan Degeling and Ruud Koolen, "Communicating Climate Change to a Local but Diverse Audience: On the Positive Impact of Locality Framing," *Environmental Communication* 16, no. 2 (2022/02/17 2022): 44.

17 Vladimir Tulupov, "Infographic Visualization of Modern Journalistic Text" (paper presented at the European Proceedings of Social and Behavioural Sciences, Russia, 28-29 March 2019), 605.

18 Barnes, J N Campbell, and Ndebele, "The Effectiveness of Infographics and Graphical Media in Communication."; Adegboyega Ojo and Bahareh Heravi, "Patterns in Award Winning Data Storytelling," *Digital Journalism* 6, no. 6 (2018/07/03 2018); Edson C. Tandoc and Soo-Kwang Oh, "Small Departures, Big Continuities?," *Journalism Studies* 18, no. 8 (2017).

19 Jacob, "Visualising Global Pandemic: A Content Analysis of Infographics on Covid – 19."

20 Kleijsen, "Infographics as a Public Communication Tool in the Covid-19 Pandemic."

that the presence of jargon was associated with a challenging information processing experience, message resistance, diminished perceptions of message credibility, and reduced intentions to receive the vaccine for the prevention of severe acute respiratory syndrome (SARS-CoV-2) infection. However, when an infographic was integrated into the jargon message, these negative associations disappeared. Consequently, the study posits that the incorporation of infographics can mitigate some of the adverse effects associated with the use of jargon in specific contexts.[21]

In a study analyzing the infographics employed in earthquake news, earthquake-themed infographic news in Anadolu Agency and TRT News was evaluated by content analysis method. In light of the research conducted, it was ascertained that the aforementioned news articles predominantly offer a broad overview of seismic events transpiring in Turkey and globally. A paucity of information regarding earthquake-related risks, awareness-raising, and mobilizing information on what to do during and after an earthquake was determined.[22] In a study conducted within the context of war, Marta et al. examined data visualizations concerning the Russian-Ukrainian war and climate change. The study has been conducted with the objective of comprehending the manner in which the war in Ukraine is associated with climate change and the manner in which this issue is represented visually. To this end, data visualisation was analysed in terms of topic distribution, infographic types used, design strategies and narrative use. With regard to the distribution of topics, it was determined that those related to energy and finance/trade were the most prevalent, while bar and line graphs were predominantly employed as infographic types. With regard to the utilisation of narrative, it was determined that data visualisations exhibited a limited representation of the broader content of the articles, with numerous visualisations employed as a supplement to the text. The analysis identified a paucity of detailed and engaging data narratives explaining the critical dimensions of war and climate change.[23] Another study was conducted by Ekram on the use of political infographics in the Israeli-Palestinian war. The study sought to ascertain the manner in which political infographics were utilized in the coverage of the Gaza War. To this end, a content analysis was conducted on the Israeli *Haaretz* website, the Palestinian *Al-Quds* website, the Egyptian *Youm7* website, the *New York* website, and *The American Times*. The analysis revealed that infographic content was predominantly utilized for the dissemination of news and information. A substantial proportion of the subjects pertained to destruction and killing, and they were predominantly produced as fixed infographics, exhibiting a consistent design. [24]

A comprehensive academic study on the coverage of news about the Israeli-Palestinian war through infographics is lacking in the literature. In addressing this lacuna, the present

21 Riggs, Shulman, and Lopez, "Using Infographics to Reduce The Negative Effects of Jargon on Intentions to Vaccinate Against COVID-19."

22 Demirel and Durgeç, "Dijital Medyada Deprem Haberlerini İnfografikler Üzerinden Okumak: Anadolu Ajansı ve TRT Haber Örneği," 30.

23 Ferreira Marta et al., "The Russia-Ukraine war and climate change: Analysis of one year of data-visualisations" (paper presented at the IASDR 2023: Life-Changing Design, Milan, Italy, 9-13 October 2023).

24 Flora Ekram, "Employing political infographics in covering the war at Gaza in a sample of Arab and foreign press websites (an analytical study)," *Journal of Mass Communication Research "JMCR"* 70, no. 3 (2024).

study focuses on the reporting of news about the Israeli-Palestinian war through infographic content. This study delves into the dissemination of news during the one-year span of the Israeli-Palestinian war, specifically from October 7, 2023, to October 7, 2024, through the medium of infographics as a data visualization technique. The investigation delves into the potential of infographic news to reflect the Israeli-Palestinian war through the lens of data visualization. The primary objective of this study is to conduct a systematic analysis of infographic news concerning the Israeli-Palestinian war in the context of data visualization. To this end, the infographics prepared by Anadolu Agency during the Israeli-Palestinian war were examined in terms of quantity, content, and visualization features. The Anadolu Agency was selected as the primary source due to its possession of the most extensive data set, which was deemed essential for achieving the objectives of the research. The study's theoretical framework is anchored in a discussion of digital media, data journalism, and infographics as a data visualization method. The subsequent section details the methodology of the study and the findings obtained. The final section of the study comprises an evaluation of the findings, a discussion of the results, and concluding remarks.

Digital Media and Data Journalism

Significant changes in many fields in today's digital age have been triggered by technological innovations and features associated with these media. The digital media age is characterized by innovation and radical transformation across all facets of journalism.[25] In the contemporary world, the process of news production continues to evolve in close alignment with digital technology, and news media organizations are proactively leveraging these mediums. This development is evident in the ongoing transformation of daily life practices and social communication processes, which are increasingly shaped by internet networks and digital technologies. Indeed, all actions in everyday life take place on digital media, resulting in the generation of vast amounts of digital data. This profound transformation in the realm of digital media has had a significant impact on journalism, leading to a series of changes in the way news are disseminated and consumed.

In the contemporary landscape of journalism, the notion of data journalism has emerged as a pivotal genre, gaining prominence in journalistic practices. This genre places data, often considered the most fundamental element of the digitalization process, at the forefront. Howard[26] offers a definition of data journalism that encompasses the collection, cleansing, organization, analysis, visualization, and publication of data to support the creation of journalistic content. Berret and Phillips[27] offer a similar definition, characterizing data journalism as "the practice of collecting, analyzing, visualizing, and publishing data for journalistic purposes as a field." In essence, data journalism can be understood as the application of data science, defined as the study of extracting information from data, to the practice of journalism.

25 Bob Franklin, "The Future of Journalism," *Journalism Studies* 15, no. 5 (2014): 481.
26 Alexander Benjamin Howard, "The Art and Science of Data-Driven Journalism" (2014), 4.
27 Charles Berret and Cheryl Phillips, *Teaching Data and Computational Journalism* (New York: Columbia Journalism School, 2016), 15.

Data journalism concerns itself with data that is accessible and analyzable with open-source tools. In this regard, it pertains to the utilization of numerical data from databases by journalists as primary news materials.[28] Rinsdorf and Boers[29] conceptualize data journalism as both a process and a product. In this context, data journalism is defined as the process of analyzing open datasets with semi-automated methods and transforming them into meaningful content. Data journalism is a branch of contemporary journalism that uses techniques such as data analytics, programming, and narrative visualization in combination with traditional journalistic methods to create data-driven narratives.[30] Consequently, data journalism signifies the presentation of a news story that has undergone processing and transformation into a narrative, accompanied by visual components, as opposed to relying solely on text-based reporting.

In light of the substantial volumes of data that are being generated by digitalization, it is imperative to examine the manner in which this phenomenon is influencing the field of journalism. The advent of large-scale data sets has fostered the emergence of data-driven journalism. In this regard, the emphasis of data journalism is not solely on the data itself, but also on its transformation, processing, and presentation. Data journalism increasingly makes the story about the dataset, provides more context for data collection and highlights meaningful findings from the analysis. In this regard, multimedia elements have become a pivotal component. The incorporation of multimedia and visual components has been demonstrated to facilitate comprehension of intricate information and enhance the presentation of patterns inherent in data-driven narratives.[31]

Data journalism is the process of examining large sets of data that can be obtained from many sources. A distinguishing element of data journalism, which is defined and understood as a form of storytelling,[32] is the use of visualizations. The inherent value of numerical data is limited in isolation. The responsibility of journalists is to uncover the stories behind the numerical data and present them in an attractive way to the reader. This encompasses a wide array of visual aids, including tables, diagrams, photographs, and videos, each serving a distinct but informative purpose.[33] Data journalism employs a blend of storytelling and graphic design techniques to transform complex information into visually engaging formats.[34] In this context, scholars regard data visualization as a critical component of information design, facilitating readers' comprehension of news content. Data visualization can be defined as a visual representation of numerical data, in

28 Astrid Gynnild, "Journalism innovation leads to innovation journalism: The impact of computational exploration on changing mindsets," *Journalism* 15, no. 6 (2014): 719.

29 Lars Rinsdorf and Raoul Boers, "The need to reflect: data journalism as an aspect of disrupted practice in digital journalism and in journalism education," *Promoting Understanding of Statistics about Society IASE Roundtable Conference* (2016): n. pag.

30 Ojo and Heravi, "Patterns in Award Winning Data Storytelling," 693.

31 Tandoc and Oh, "Small Departures, Big Continuities?," 998.

32 Franklin, "The Future of Journalism," 486.

33 Alba Córdoba-Cabús, "Estándares de calidad en el periodismo de datos: fuentes, narrativas y visualizaciones en los Data Journalism Awards 2019," *El profesional de la información* (2020): 7.

34 Katelyn Godoy, "Data Journalism Meets Information Design: Creating A Complex Infographic About The Yarnell Hill Wildfire" (Master's State University of New York, 2015), 2, http://hdl.handle.net/20.500.12648/973.

conjunction with other data, designed to enhance readers' cognitive processing of information.[35]

Data storytelling is an interdisciplinary endeavor that merges the fields of computer science and journalism. The product of data-driven journalism, which is the result of the relationship between these two disciplines, is data-based visualization.[36] Data visualization has witnessed a surge in news media and newspaper publications. This development is part of a broader transformation of journalism in the digital age, which has given rise to new forms of visual narrative tailored to the needs of the informed news consumer. The advent of big data has led to a significant expansion of the potential for visualization in journalism. In this context, infographics have emerged as a prominent data visualization method, facilitating the comprehension and accessibility of voluminous datasets.[37]

Data Visualization Method in Digital Media: Infographics

In the contemporary digital society, the importance of data visualization lies in its role in enhancing the comprehensibility of content and shaping its meaning. Data visualization can be defined as the visual representation of data, which is schematically abstracted information that contains attributes or variables for units of information. In essence, it can be defined as the visual depiction and exposition of data, with the objective of facilitating comprehension.[38] The functions of visualization generally include explaining, illustrating, and conveying complex data. In this capacity, data visualization serves to depict, support, and embellish the news story. At times, a news story may appear unyielding, and the incorporation of visual elements serves to imbue it with emotional depth. The utilization of infographics in the context of extensive news narratives facilitates comprehension.[39]

The process of developing and publishing infographics is referred to as data visualization, and conversely, data visualization is often referred to as infographics.[40] An infographic, defined as a graphic representation of concepts or patterns in data or information, employs computer-aided, interactive visual elements to enhance cognition.[41] In a broader sense, the term "infographic" refers to a technology that utilizes visual content designed to be easily comprehensible and memorable. This technology combines various graphic elements, such as pictograms, maps, graphs, graphics, photographs, and illustrations, with textual

35 Solodovnyk et al., "Data journalism visualization in Ukraine and in Europe: a comparative analysis," 104.

36 Wibke Weber and Hannes Rall, "Data Visualization in Online Journalism and Its Implications for the Production Process," *2012 16th International Conference on Information Visualisation* (2012): 329.

37 de Haan et al., "When Does an Infographic Say More Than a Thousand Words?," 1294.

38 Andy Kirk, *Data Visualisation: A Handbook for Data Driven Design*, 2 ed. (London: Sage Publications, 2019), 29; Weber and Rall, "Data Visualization in Online Journalism and Its Implications for the Production Process," 349.

39 Sri Syamsiyah Lestari Sjafiie et al., "Graphic Visualization in Printed Media: How Does the Use of Technology Influence Journalism Culture," *Jurnal Komunikasi: Malaysian Journal of Communication* 34, no. 4 (2018): 373.

40 de Haan et al., "When Does an Infographic Say More Than a Thousand Words?."; Smiciklas, *The Power of Infographics: Using Pictures to Communicate and Connect With Your Audiences*, 3.

41 Daniel Chandler and Rod Munday, *A Dictionary of Media and Communication* (Oxford: Oxford University Press, 2019), 208; Waralak V. Siricharoen, "Infographics: The New Communication Tools in Digital Age" (2013), 169.

content, thereby creating clear and engaging representations of complex data.[42] The value of an infographic lies in its ability to present complex content that is difficult to explain verbally or in writing in a visual format.[43] These visual representations are designed to convey complex information and data through narrative, transforming the abstract into the concrete. Infographics are frequently employed in the media as a visual method of communicating news in data journalism.[44]

Historically, infographics were produced for newspapers and magazines, which are considered traditional media. However, in the contemporary era, their utilization has expanded significantly, particularly within the domains of digital journalism and social media. This shift can be attributed to the proliferation of digital media.[45] In the contemporary landscape, infographics, which enhance news content with visual elements, have become essential for numerous prominent news organizations worldwide. While data visualization has been employed in the field of journalism previously, infographics have seen a marked increase in recent years as a popular approach to presenting content visually.[46]

The proliferation of digital technology and the increasing accessibility of data have contributed to the rise of infographics. As the internet has emerged as the predominant source of information for a significant proportion of the population, there has been an increased demand for visually engaging, easily comprehensible content. Infographics have emerged as a popular medium to address this demand, offering a visually appealing alternative to conventional formats such as tables and written reports. Readers have been observed to engage with graphics before delving into text. The strategic use of graphics has been demonstrated to draw readers into the narrative, thereby highlighting less significant details. Research has demonstrated that individuals inherently allocate more attention to visual content and that visual information is processed at a faster rate than textual content. Concurrently, studies have indicated that graphics and visual content enhance attention and accentuate specific details, thereby facilitating comprehension of explanatory content.[47] This growing interest in visual information underscores the efficacy of infographics in communicating complex data.

42 Mohammed Kamal Afify, "The Effect of the Difference Between Infographic Designing Types (Static vs Animated) on Developing Visual Learning Designing Skills and Recognition of its Elements and Principles," *International Journal of Emerging Technologies in Learning (iJET)* 13, no. 9 (2018): 204-05.

43 Weber and Rall, "Data Visualization in Online Journalism and Its Implications for the Production Process," 349.

44 Godoy, "Data Journalism Meets Information Design: Creating A Complex Infographic About The Yarnell Hill Wildfire," 3; Jonathan Gray, Lucy Chambers, and Liliana Bounegru, *The Data Journalism Handbook* (California: O'Reilly Media, 2012), 2.

45 Kirk, *Data Visualisation: A Handbook for Data Driven Design*, 27; Dunlap and Lowenthal, "Getting graphic about infographics: design lessons learned from popular infographics," 43.

46 de Haan et al., "When Does an Infographic Say More Than a Thousand Words?."; Dunlap and Lowenthal, "Getting graphic about infographics: design lessons learned from popular infographics," 44.

47 Barnes, J N Campbell, and Ndebele, "The Effectiveness of Infographics and Graphical Media in Communication," 2; Murray Dick, *Book review: The infographic: a history of data graphics in news and communications* (Cambridge: The MIT Press, 2020), 2; Jacob, "Visualising Global Pandemic: A Content Analysis of Infographics on Covid – 19," 117.

The appeal of infographics stems from their visual nature. These visual representations are designed to capture and maintain the viewer's attention by employing a variety of visual elements.[48] A notable benefit of infographics is their capacity to present a substantial volume of data in a comprehensible manner, by condensing it into a single image, thereby obviating the need for extensive reading.[49] The utilization of infographics is particularly advantageous in the effective presentation of complex subjects that are challenging to articulate through verbal or written means. An infographic comprises two components: content (data, information, text, etc.) and visual elements (graphics, pictograms, photographs). Infographic designs can vary, ranging from basic design arrangements to intricate and interactive frameworks.[50]

Due to their nature and manner of presentation, infographics can be utilized in a variety of settings.[51] The effective presentation of information is contingent upon the format in which infographics are prepared and the media in which they are published. While the extant literature has been organized into disparate groupings, a predominant classification system divides infographics into three categories: These categories include static infographics, motion infographics, and interactive infographics.[52] Static infographics are a type of infographics that utilizes text, photographs, drawings, and other static visual components to convey information. Static infographics present information in a single, unchanging plan and are devoid of any interactive engagement with the reader. They are the most prevalent type of infographics due to their application in print media and ease of dissemination in online environments. Their dissemination via social media platforms such as Facebook, X, and Instagram is a testament to their widespread appeal and ease of sharing. In contrast, motion infographics are dynamic data designs that incorporate music and sound effects. These are screen-based infographics that present subjects that cannot be explained in a single plan or at once by spreading it over the process. Motion infographics refer to graphics prepared for use in various digital media, especially YouTube. Interactive infographics are graphics that give readers a certain degree of control over the published data or visuals.[53] The distinguishing characteristic that sets interactive infographics apart

[48] Riggs, Shulman, and Lopez, "Using infographics to reduce the negative effects of jargon on intentions to vaccinate against COVID-19," 753.

[49] Godoy, "Data Journalism Meets Information Design: Creating A Complex Infographic About The Yarnell Hill Wildfire," 2.

[50] Evelina Jaleniauskiene and Judita Kasperiuniene, "Infographics in higher education: A scoping review," *E-Learning and Digital Media* 20, no. 2 (2023): 192.

[51] Joshi and Gupta, "Preparing Infographics for Post-publication Promotion of Research on Social Media," 2.

[52] Mevlüt Eren, "The Reflection of Graphic Desing to News Reporting (Anadolu Agency Example)" (Master's Ankara Haci Bayram Veli University, 2020), 83; Jason Lankow, Josh Ritchie, and Ross Crooks, *Infographics: the power of visual storytelling* (Hoboken; New Jersey: John Wiley & Sons, 2012), 59; Burak Özkan, "The Effects of The Infographics on Readers Which Are Used Agency Journalism" (Master's Ankara Haci Bayram Veli University, 2019), 54.

[53] Afify, "The Effect of the Difference Between Infographic Designing Types (Static vs Animated) on Developing Visual Learning Designing Skills and Recognition of its Elements and Principles," 205; Randy Krum, *Cool infographics: effective communication with data visualization and design* (Indiana: John Wiley & Sons, 2014), 48; Nader Said Shemy, "Digital Infographics Design (Static vs Dynamic): Its Effects on Developing Thinking and Cognitive Load Reduction," *International Journal of Learning, Teaching and Educational Research* 21, no. 5 (2022): 107; Wibke Weber and Alexandra Wenzel, "Interaktive Infografiken: Standortbestimmung und Definition," in *Interaktive Infografiken*, ed. Wibke Weber, Michael Burmester, and Ralph Tille (Stuttgart: Springer Vieweg, 2013), 21.

from static and motion infographics is the level of control they offer to users. This attribute fosters the establishment of an interactive information environment.

Infographics are prepared in various application types as a visual content production method used in many different fields in information transfer. A review of the extant literature reveals the following common application types:

Statistics-Based (Data) Infographics: The integration of numerical data with visual elements is a method of conveying large amounts of data and displaying and comparing complex data sets. Such infographics consist of a variety of visual elements, including tables, boxes, histograms, diagrams, and pie and bar charts. This type of visual representation is particularly prevalent in news content related to economics and numerical data.[54]

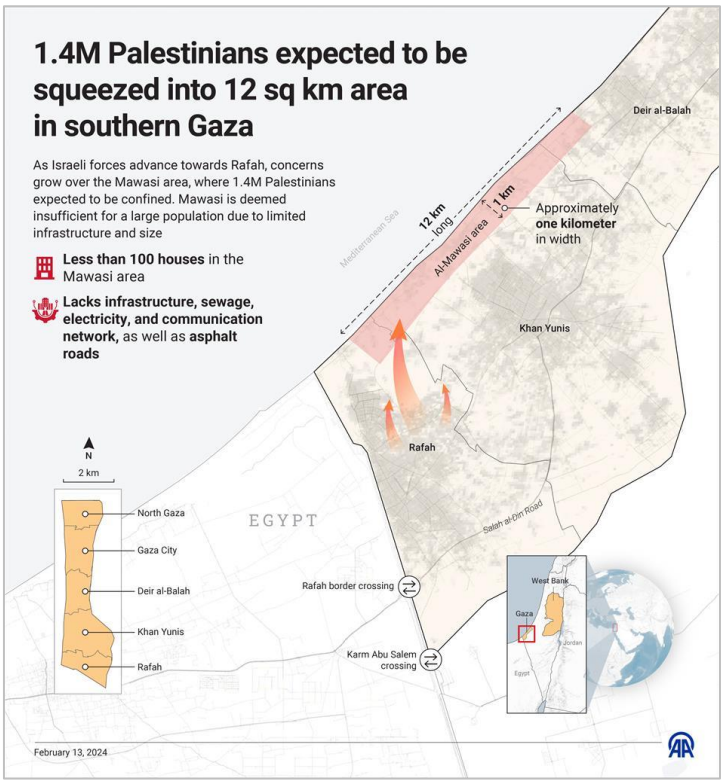
Image 1. Statistics-based infographic sample

(Source: https://www.anadoluimages.com/p/most-us-women-young-adults-oppose-israeli-attacks-on-gaza/27414950)

54 S. Zwinger, J. Langer, and M. Zeiller, "Acceptance and Usability of Interactive Infographics in Online Newspapers" (paper presented at the 2017 21st International Conference Information Visualisation (IV), London, United Kingdom, 11-14 July 2017 2017), 177; Gao Ru and Zhang Ya Ming, "Infographics applied in design education" (paper presented at the 2014 IEEE Workshop on Advanced Research and Technology in Industry Applications (WARTIA), Ottawa, Canada, 29-30 Sept. 2014 2014), 984.

Cartography (Geographic) Infographics: In this type of infographic, maps are employed as the primary visual element. The information presented encompasses geographical regions, transportation hubs, and maps, in addition to content that delineates the geographical location of the event. Beyond textual information, these maps offer concise, lucid, and readily comprehensible data concerning spatial, temporal, and event-related aspects, thereby facilitating efficient understanding for the reader.[55]

Image 2. Cartography infographic sample



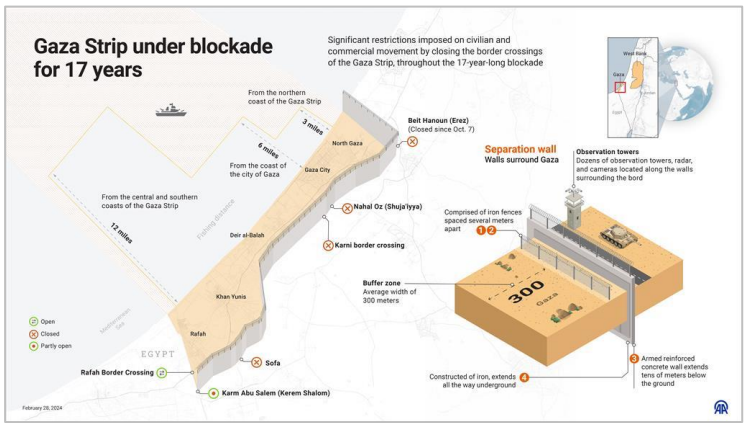
(Source: https://www.anadoluimages.com/p/1-4m-palestinians-expected-to-be-squeezed-into-12-sq-km-area-in-southern-gaza/27705363)

The Visual Article: This technique is employed to diminish the volume of text by rendering it more visually appealing, thereby enhancing the appeal and enjoyment of an essay. Furthermore, the utilisation of infographics of this nature affords them a high potential for sharing, given their capacity to visualise a substantial amount of information in an appealing manner. [56]

[55] Angela Jansen and Wolfgang Scharfe, *Handbuch der Infografik* (Berlin: Springer Berlin Heidelberg, 1999), 142; Helen C. Purchase et al., "A Classification of Infographics" (paper presented at the 10th International Conference on the Theory and Application of Diagrams, Edinburg, 18-22 June 2018 2018), 214; Siricharoen, "Infographics: The New Communication Tools in Digital Age," 171; Zwinger, Langer, and Zeiller, "Acceptance and Usability of Interactive Infographics in Online Newspapers," 176.

[56] "Infographics: Graphic Visual Representations of Information," 2020, accessed 31.01.2025, https://www.melinakmiller.com/the-seven-common-types-of-infographics/; Waralak Siricharoen and

Image 3. The visual article infographic sample



(Source: https://www.anadoluimages.com/p/gaza-strip-under-blockade-for-17-years/27780140)

Timeline Infographics: This type of infographic is employed to convey the progression of an event or series of events in a sequential manner. These infographics, which convey the occurrence of events in a certain order, divide the time into sections and provide an easily comprehensible overview of the stages of the event.[57]

Image 4. Timeline infographic sample

(Source: https://www.anadoluimages.com/p/1st-year-anniversary-of-escalation-in-gaza-amid-israeli-palestinian-conflict/28830039)

Opinion Infographics: These are graphical representations that convey the opinions of experts on a given event or subject. These graphics facilitate the articulation of the

Nattanun Siricharoen, "How Infographic should be evaluated?" (paper presented at the The 7th International Conference on Information Technology, Amman, Jordan, 2015).

57 Özkan, "The Effects of The Infographics on Readers Which Are Used Agency Journalism," 63; Siricharoen, "Infographics: The New Communication Tools in Digital Age," 171; Mayank Yuvaraj, "Infographics: tools for designing, visualizing data and storytelling in libraries," *Library Hi Tech News* 34, no. 5 (2017): 7.

perspectives of individuals or entities, as well as the range of viewpoints held by multiple parties on a particular subject.[58]

Image 5. Opinion infographic sample

(Source: https://www.anadoluimages.com/p/79th-un-general-assembly-highlights-israels-aggression-calls-for-reform/28796081)

Comparison Infographics: These visual representations are typically employed to facilitate comparisons between a variety of entities, including individuals, concepts, products, events, locations or groups. These visual representations communicate the disparities or congruences between the entities in question. Such infographics present two factors in a

[58] Eren, "The Reflection of Graphic Desing to News Reporting (Anadolu Agency Example)," 88; Özkan, "The Effects of The Infographics on Readers Which Are Used Agency Journalism," 64.

side-by-side format, thereby demonstrating the relative superiority or inferiority of one option over the other.[59]

Image 6. Comparison infographic sample

(Source: https://www.anadoluimages.com/p/while-world-focuses-on-humanitarian-crisis-in-gaza-western-powers-oppose-cease-f/27244806)

Biography Infographics: This is a type of infographic that employs visual design elements to convey information about the life, achievements, works and other salient information regarding prominent individuals in various fields, including politics, business, history, art, literature and sports. The efficacy of these visual representations lies in their ability to convey comprehensive information about prominent individuals who are the subject of current news coverage to the reader, addressing all pertinent aspects of their lives and accomplishments (Eren, 2020: 91; Özkan, 2019: 67).[60]

59 Miller, "Infographics: Graphic Visual Representations of Information," 558-59; Siricharoen and Siricharoen, "How Infographic should be evaluated?."; Yuvaraj, "Infographics: tools for designing, visualizing data and storytelling in libraries," 7.

60 Eren, "The Reflection of Graphic Desing to News Reporting (Anadolu Agency Example)," 91; Özkan, "The Effects of The Infographics on Readers Which Are Used Agency Journalism," 67.

Image 7. Biography infographic sample

(Source: https://www.anadoluimages.com/p/hak-ve-adalet-adina-sivil-direnisin-adi-rachel-corrie/27869719)

War Journalism and Visual Framing of War

War journalism, which fulfills the public's need to remain informed about the events of past wars that have shaped human history, occupies a significant position within the realm of journalistic practices. The advent of war journalism can be traced back to the Crimean War (1854-1856) in the mid-19th century.[61] The Crimean War is widely regarded as a pivotal moment in the evolution of war corresponding and photography, as it marked the inaugural use of photography in warfare, thereby introducing a significant technological advancement within the domain of war journalism. Although some photographs were taken during the Mexican War (1846-1848) and the Burma War (1852) prior to this war, the Crimean War marked the first instance of systematic war photography. The Vietnam War represented a significant turning point in the evolution of war journalism, marking the inaugural use of cameras to convey war-related information through moving images. The American military intervention in Vietnam, the first war to be widely covered by television news networks, introduced novel forms of violence that profoundly impacted civilian lives, thereby rendering the distant more proximate. The First Gulf War is regarded as a pivotal moment in the evolution of war journalism, as it marked the inaugural instance of a war being broadcast live to a global audience through satellite transmission.[62]

The advent of the 21st century has coincided with a period of significant transformation in the realm of war journalism, precipitated by the emergence of new media technologies such as the internet and social media. The inaugural instance of the internet's integration into war journalism occurred during the Gulf War II in 2003. Digital war journalism is defined as a type of news reporting that utilizes new media technologies to disseminate

61 Kevin Williams, *A New History of War Reporting* (Abingdon: Routledge, 2020), 1.

62 Kurbani Geyik, "Savaş Haberciliğinde Değişen Roller: 2. Karabağ Savaşı Örneği," *Atatürk İletişim Dergisi* 21 (2021): 56-57; Susan Sontag, *Başkalarının Acısına Bakmak*, trans. Osman Akınhay (İstanbul: Agora Kitaplığı, 2014), 20.

information, thereby altering conventional news reporting practices.[63] The evolution of war journalism in the historical context pertains to the manner in which journalists who are present at the war scene report on it. Indeed, war correspondents endeavor to serve as public witnesses, striving to capture and convey the reality of the war. In this regard, the coverage of war is realized as a framing.[64]

Entman defines framing as the process of "selecting some aspects of perceived reality and making them more salient in the communication text in such a way as to promote a particular problem definition, causal interpretation, moral evaluation and/or treatment recommendation for the item being described". Accordingly, framing diagnoses, evaluates and prescribes, a process that essentially involves selection and salience.[65] Frames are instrumental in the organization of experience and the guidance of action, as they serve to accentuate the significance of certain events over others. The manner in which warfare is depicted has the capacity to evoke a range of emotional responses from viewers, including sympathy or apathy. The manner in which media outlets select, present, emphasize, or ignore specific images has the capacity to influence public perceptions. Media frames have been shown to reflect dominant social norms, values, and traditions, and therefore have the capacity to influence how stories about politically, culturally, or ideologically different countries are framed. [66]

Visual framing, as defined by Brantner et al., involves the selection of specific aspects of perceived reality and the subsequent emphasis of these aspects through the use of visual stimuli. The purpose of this emphasis is to facilitate the identification of a particular problem, the interpretation of causes, the evaluation of moral principles, and/or the formulation of treatment recommendations. [67] Visual framing can be achieved through the form and content of images in various ways. Examples include the frequency or number of photographs covering a particular subject or event; the inclusion or exclusion of individuals or objects in the photographs; and accompanying textual information such as camera angle, headline, caption, and related story. The visual frame has been established as a functionalist framework for the analysis of the types of meaning that news can convey.[68]

The presence of graphic images in contemporary news coverage is also a salient aspect that merits consideration. The use of emotionally charged visuals has been demonstrated to be a potent instrument for the articulation of political messages, as evidenced by the conflicts

63 Williams, *A New History of War Reporting*, 1-2.

64 Stuart Allan, "Visual War Journalism," *Digital Journalism* 13, no. 1 (2025): 4.

65 Robert M. Entman, "Framing: Toward Clarification of a Fractured Paradigm," *Journal of Communication* 43, no. 4 (1993): 52.

66 Carol B. Schwalbe, "Visually Framing the Invasion and Occupation of Iraq in TIME, Newsweek, and U.S. News & World Report," *International Journal of Communication* 7 (2013): 243-44.

67 Cornelia Brantner, Katharina Lobinger, and Irmgard Wetzstein, "Effects of Visual Framing on Emotional Responses and Evaluations of News Stories about the Gaza Conflict 2009," *Journalism & Mass Communication Quarterly* 88 (2011): 525.

68 Ganga S. Dhanesh and Nadia Rahman, "Visual Communication and Public Relations: Visual Frame Building Strategies in War and Conflict Stories," *Public Relations Review* 47, no. 1 (2021): 1.

in Iraq, Palestine, Syria, and Ukraine.[69] In this sense, graphic visuals, in addition to photographs and video footage, have the capacity to influence the viewer's perspective and emotional response to events by determining which aspects of reality will be emphasized in war and conflict news within the scope of war journalism. Media outlets have the capacity to determine which of the numerous facets of warfare, including conflict, humanitarian crises, destruction, protest, diplomacy, and peace initiatives, to accentuate through the medium of visuals.[70] Consequently, the employment of infographics as a visual framing device in war journalism assumes significance in determining which issues related to war are prioritized. The mounting significance of visuals in war journalism has given rise to a novel academic research domain, namely visual framing.[71]

Methodology

In this study, Turkish and English infographics prepared by Anadolu Agency on the Israeli-Palestinian war were analysed comparatively with content analysis technique, one of the qualitative analysis methods. Content analysis, a research technique for deriving valid inferences from texts or other meaningful content regarding their context of use, is employed as a methodological tool in the context of data journalism. In content analysis, the analysed data are synthesised and interpreted within the framework of concepts and themes appropriate to the purpose and subject. The utilisation of comparative analysis as a methodological tool is predicated on its ability to unveil the latent similarities and divergences inherent within the analysed contents.[72] The data set related to the infographics subject to the research was created from the Anadolu Images portal, where Anadolu Agency provides visual news content to its subscribers. The findings obtained through content analysis were interpreted using descriptive statistical methods.

Purpose and Importance

The utilisation of infographics as a data visualisation method in the dissemination of news content has witnessed a surge in popularity, largely attributable to the pervasive influence of social media. Presenting news of events like wars that cause humanitarian crises and have social consequences in a short and concise manner, supported by visual elements, enables the public to understand them more quickly. In extraordinary periods, such as wars, epidemics and natural disasters, there has been a notable increase in the use of infographics in conjunction with long news reports.[73] In light of the increasing ubiquity of

69 Thomas E. Powell et al., "A Clearer Picture: The Contribution of Visuals and Text to Framing Effects," *Journal of Communication* 65, no. 6 (2015): 97.

70 Marc Jungblut, "Visual Deductive Conflict Frame (War Coverage)," *DOCA - Database of Variables for Content Analysis* 1, no. 2 (2021); Schwalbe, "Visually Framing the Invasion and Occupation of Iraq in TIME, Newsweek, and U.S. News & World Report."

71 Dhanesh and Rahman, "Visual Communication and Public Relations: Visual Frame Building Strategies in War and Conflict Stories."

72 Klaus Krippendorff, *Content Analysis: An Introduction to Its Methodology*, 4 ed. (California: Sage Publications, 2018), 24; Ali Yıldırım and Hasan Şimşek, *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*, 10 ed. (Ankara: Seçkin Yayıncılık, 2016), 241; A. J. Kleinheksel et al., "Demystifying Content Analysis," *American Journal of Pharmaceutical Education* 84, no. 1 (2020): 128.

73 Rahul Chauhan et al., "Understanding Covid-19 using data visualization" (paper presented at the 2021 International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), 4-

digital media technologies, particularly the transformative impact of social media on newsgathering practices, the utilisation of infographics as a data visualisation method in digital news content remains a pivotal research area of interest within academic circles. A number of studies have been conducted in this area, examining the use of infographics in digital media in relation to extraordinary periods such as war, natural disasters and epidemics. These studies encompass a range of subjects, including the Russian-Ukrainian War, the pandemic of the Coronavirus, climate change, and earthquakes.

A survey of the extant literature reveals a paucity of studies that comprehensively analyse the use of infographics in news reporting on the Israeli-Palestinian war. In addition to the military and diplomatic aspects, wars can lead to a number of consequences that result in humanitarian crises and disasters. The utilisation of infographics is of paramount importance in the effective and compelling presentation of the multifaceted nature of warfare, a feat that written news content is often unable to achieve. It is therefore hypothesised that the disclosure of the scope and manner in which infographics are presented in war news constitutes a significant contribution to the field, in terms of the depth it will bring to the subject. The present study seeks to identify the characteristics of data-driven visual news by analysing infographics related to the Israeli-Palestinian war. Another objective of the study is to reveal how infographics about the war are reflected in terms of visual framing. In this context, the study is significant in terms of addressing a gap in the field by focusing on the transmission of news about the Israeli-Palestinian war through infographics. The study contributes to the expansion of the field by offering an alternative perspective on the news about the Israeli-Palestinian war, that is, the perspective of data visualisation. Furthermore, it is anticipated that the study will serve as a foundational reference point for future research, particularly in the determination of characteristics of content conveyed in news related to the war.

The research questions that have guided the study are as follows:

- RQ1. How often are infographics about the Israeli-Palestinian war published?
- RQ2. What visual frames are used in infographics about the Israeli-Palestinian War?
- RQ3. How is the distribution of infographics about the Israeli-Palestinian war according to their types?
- RQ4. Which visual elements are used in infographics about the Israeli-Palestinian war?
- RQ5. What is the visualization rate of infographics on the Israeli-Palestinian war?

5 March 2021 2021), 555; M. Egan et al., "Evaluating the effect of infographics on public recall, sentiment and willingness to use face masks during the COVID-19 pandemic: a randomised internet-based questionnaire study," *BMC Public Health* 21, no. 1 (Feb 17 2021): 2; Jacob, "Visualising Global Pandemic: A Content Analysis of Infographics on Covid – 19," 119; Kleijsen, "Infographics as a public communication tool in the covid-19 pandemic," 3; Riggs, Shulman, and Lopez, "Using infographics to reduce the negative effects of jargon on intentions to vaccinate against COVID-19," 751.; Dylan Degeling and Ruud Koolen, "Communicating Climate Change to a Local but Diverse Audience: On the Positive Impact of Locality Framing," *Environmental Communication* 16, no. 2 (2022/02/17 2022): 44

- RQ6. What are the similarities and differences between Turkish and English infographics on the Israeli-Palestinian war?

Sampling and Limitations

The present study is based on a sample of Turkish and English infographics published by Anadolu Agency in the context of the Israeli-Palestinian war. In this context, the study was constrained to the Turkish and English infographics provided by Anadolu Agency to its subscribers between 07.10.2023 - 07.10.2024, covering a period of one year from the commencement of the war. The data utilised for the analysis was obtained from the Anadolu Images portal (https://www.anadoluimages.com/), the online repository for Anadolu Agency's infographics. A search was conducted on the portal using the keywords "Filistin" for Turkish infographics and "Palestine" for English infographics, yielding 336 Turkish and 134 English infographics. These are the national and international infographics prepared in Turkish and English and made available to subscribers on the Anadolu Agency website (www.aa.com.tr) as well as on the Anadolu Images (www.anadoluimages.com) portal. The Anadolu Agency was selected due to its possession of the most extensive data set, which was deemed to be the most suitable for achieving the objectives of the research.

Data Analysis and Coding Procedures

The infographics examined within the scope of the research were analyzed in three categories in terms of quantity, content, and visualization features. The quantitative characteristics of the infographics were analyzed in terms of the total number of news items and their distribution by months, while the content of the infographics was analyzed in terms of the visual framing features of the news subjects. The data visualization features were analyzed into three categories: infographic types, visual elements, and visualization ratio.

To facilitate a comprehensive content analysis of the visual framing and visualization features of the infographics examined in the study, a coding chart was developed. The coding chart contains instructions and rules on how to categorize and systematically record the content. The instructions and rules in question refer to the general rules that have been established to facilitate the interpretation of the content and the identification of any thematic elements.[74] The coding process, which is one of the processes in content analysis, is carried out meticulously according to predetermined variables and categories. The categories employed in coding can be selected by the researcher or derived from those previously developed in the extant literature. In the coding phase, the researcher endeavors to identify a concept that most accurately reflects the essence of a significant portion of the data during the conceptualization or coding process. Consequently, the research data are categorized in a manner that generates a coherent whole within each category.[75]

[74] Lawrence W. Neuman, *Basics of Social Research : Qualitative & Quantitative Approaches* (Harlow: Pearson Education Limited, 2014), 261.

[75] Yıldırım and Şimşek, *Sosyal Bilimlerde Nitel Araştırma Yöntemleri*, 243-44.

Themes and categories frequently employed in the infographic, data journalism, and visual framing literature were taken into consideration in the use of variables to be coded in content analysis and in the creation of the coding chart. In this context, related studies in the literature were examined to inform the coding and evaluation of the data in the study. A coding chart was developed in accordance with the study's objectives. The finalized coding chart was determined through a consensus of expert opinion. The coding chart created according to the determined categories is as follows:

Table 1. Coding chart

Content	Visual Framing	• Conflict • Human Interest • Violence/Destruction of War • Peace/Protest • Politics/Diplomacy/Law • Economy/Trade • History
Visualisation Features	Infographic Type	• Statistics / Data • Cartography • The Visual Article • Timeline • Opinion • Comparison • Biography
	Visual Elements	• Illustration • Timeline • Logo / Emblem • Graphic • Photograph • Pictogram • Map
	Visualization Rate	• Only visualisations • Only text • The text predominates • Visualisations predominate • Balanced

The subcategories in which the themes were addressed were structured on the basis of the studies in the literature as follows:

Visual Framing: The analysis of the subject distribution of infographics entailed the examination and categorization of all infographics within the scope of the research. These infographics were examined and categorized according to operational definitions that

were considered to be reproducible from the visual framing studies in the literature. The visual framing for the distribution of the subject content was created as follows:[76]

- Conflict (soldiers, weapons, moments of conflict, prisoners of war)
- Human interest (civilians, victims, humanitarian aid workers)
- Violence/destruction of war (images of damage/destruction, injury and death information)
- Peace/protest (peace demonstrations, anti-war protests, actions in support of victims)
- Politics/diplomacy/law (politicians' statements, diplomatic efforts, legal activities)
- Economy/trade (economic and commercial activities)
- History (historical background of the war and its parties)

Types of Infographics: Types of Infographics: In order to ascertain the type of infographic prepared, a classification was made and seven different types of infographics commonly used in the literature were identified. These comprise statistics-based (data), cartography (geographic), the visual article, timeline, opinion, comparison, and biography.[77]

Visual Elements: The analysis of visual elements employed in infographics encompassed the utilisation of maps, pictograms, photographs, graphics, logos/emblems, timelines, and illustrations.[78]

Visualization Rates: The analysis of infographics was conducted by examining the usage weights of text and visual objects in terms of their visualization function according to their structural elements. The analysis involved the division of text and visual usage rates into five categories. Only visualisations, only text, balanced, visualisations predominate, the text predominates. [79]

In the course of the research, the data from 336 Turkish and 134 English infographic studies obtained from Anadolu Agency were coded and recorded separately by two researchers in Microsoft Excel. This process was conducted in accordance with a coding chart specified in the aforementioned table (Table 1). This approach was adopted to ensure the security of the coding process. The Cohen's Kappa coefficient was calculated to numerically compare the coding similarities and differences between the coders. That is to say, the coefficient test was used to evaluate the validity and reliability between the coders. The Cohen's Kappa test is a statistical test that is used to determine the validity and reliability of the

[76] Daniela V. Dimitrova and Colleen Connolly-Ahern, "A Tale of Two Wars: Framing Analysis of Online News Sites in Coalition Countries and the Arab World during the Iraq War," *Howard Journal of Communications* 18, no. 2 (2007): 161; Jungblut, "Visual Deductive Conflict Frame (War Coverage)," 1-2; Schwalbe, "Visually Framing the Invasion and Occupation of Iraq in TIME, Newsweek, and U.S. News & World Report," 244.

[77] Eren, "The Reflection of Graphic Desing to News Reporting (Anadolu Agency Example)," 86-91; Özkan, "The Effects of The Infographics on Readers Which Are Used Agency Journalism," 60-67; Siricharoen and Siricharoen, "How Infographic should be evaluated?," 558-59.

[78] Özkan, "The Effects of The Infographics on Readers Which Are Used Agency Journalism," 68-85; Siricharoen and Siricharoen, "How Infographic should be evaluated?," 558; Weber and Rall, "Data Visualization in Online Journalism and Its Implications for the Production Process."

[79] Solodovnyk et al., "Data journalism visualization in Ukraine and in Europe: a comparative analysis," 110; Tandoc and Oh, "Small Departures, Big Continuities?," 1006.

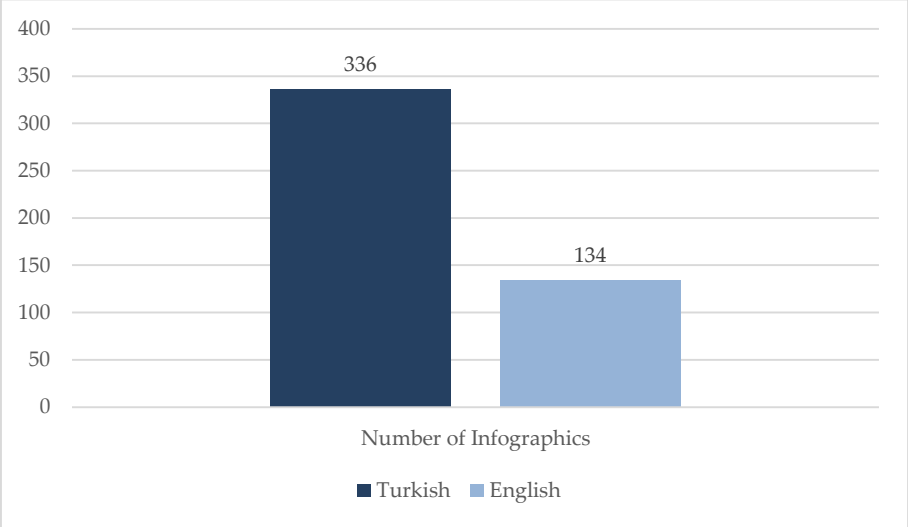
consistency between codings.[80] The reliability measure is evaluated on a scale from 0 to 1, with 1.0 denoting perfect agreement. In qualitative studies, a reliability coefficient of 0.80 and above is required for coding the same data set, but 0.70 is acceptable for exploratory research.[81] In this study, the inter-coder reliability (k) was calculated to be 0.904. This value indicates a very high level of consistency between coders. For qualitative research, this value exceeds the required level of reliability.

Descriptive statistics, such as percentage and frequency analyses, were used to analyze the data collected in the study. A comparative analysis was conducted on the data obtained from Turkish and English infographics on the Israeli-Palestinian war, which was then presented in tabular form.

Findings

In this section of the study, the findings of 336 Turkish and 134 English infographic studies examined within the scope of the research are presented in terms of the number of infographics, distribution by months, visual framing distribution of news subjects, infographic types, use of visual elements and visualization rates according to structural elements.

Figure 1. Number of infographics by language of publication



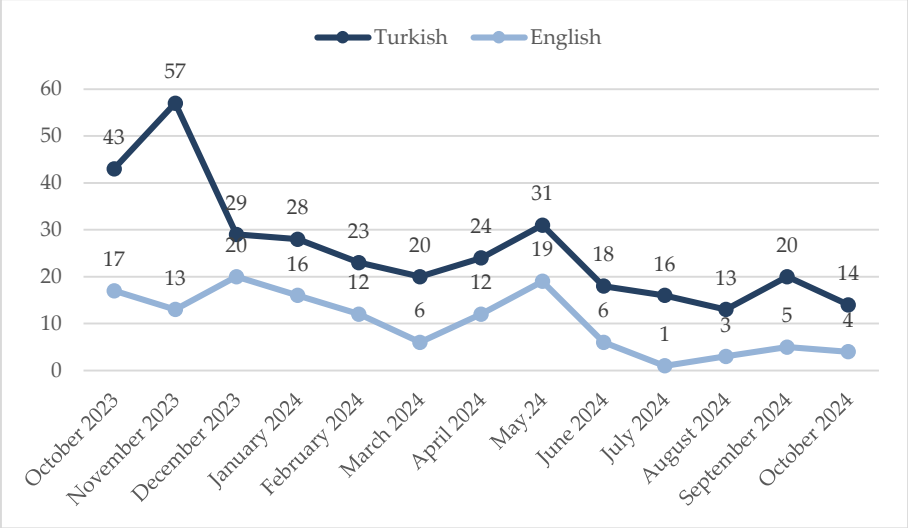
As illustrated in Figure 1, the number of infographics published on Palestine varies according to the language of publication. Accordingly, 336 of the infographics published by Anadolu Agency on Palestine are in Turkish and 134 are in English. A comprehensive analysis reveals that a greater proportion of infographics were disseminated through national channels, while a notable number were also disseminated through international media outlets. This finding underscores the notion that the issue is being supported by a substantial amount of infographic content in both national and international media outlets.

[80] Jacob Cohen, "A Coefficient of Agreement for Nominal Scales," *Educational and Psychological Measurement* 20 (1960): 37.

[81] Neuman, *Basics of Social Research : Qualitative & Quantitative Approaches*, 264.

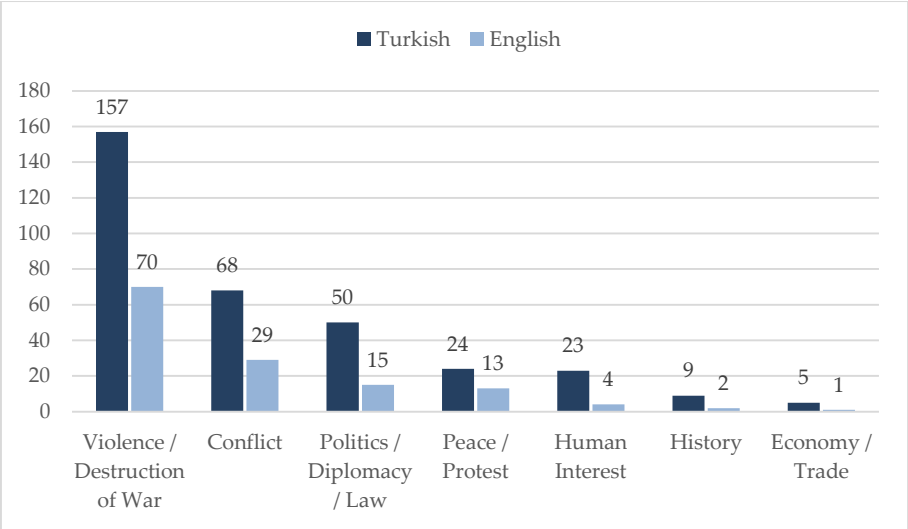
The English-language infographics appear to play a pivotal role in disseminating this information to the global media.

Figure 2. Number of infographics by month



As illustrated in Figure 2, a visual representation of the infographic distribution by month, the frequency of infographic publication exhibits a fluctuating trend. It is evident that the number of infographics exhibits a fluctuating trend, with a gradual increase followed by a subsequent decrease from one month to the next. The highest number of infographics in Turkish was observed in November 2023 (n=57), while the highest number in English was recorded in December 2023 (n=20). The initial phase of the Israeli-Palestinian war exhibited the most prolific output of infographic publications. Notably, Turkish infographics demonstrated a significant surge in the initial months of the conflict. The number of infographics, which had been in a state of decline since the previous period, exhibited an uptick in April, only to witness a subsequent decline in June. A similar pattern is observed in the number of infographics in English, which mirrors the fluctuations in Turkish infographics. The only significant difference between the number of English and Turkish infographics was observed in November 2023. In this period, Turkish infographics demonstrated a substantial increase, reaching a maximum number, while English infographics exhibited a decline. This difference can be attributed, at least in part, to the heightened national interest and sensitivity observed during the early stages of the war. The decline in infographic production observed in the initial months of 2024 is attributed to Turkey's prioritization of its domestic electoral agenda. However, a subsequent increase in the number of infographics was observed, with a notable resurgence in production after March. It is generally understood that the war remains a prominent topic on the agenda, with a consistent production of infographics on a monthly basis.

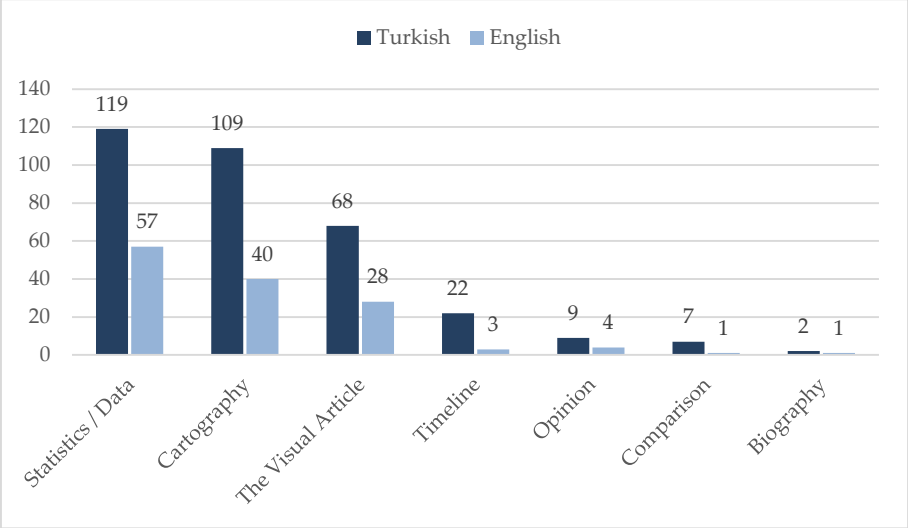
Figure 3. Visual framing distribution of news subjects



As illustrated in Figure 3, the subject distributions of infographics concerning the Israeli-Palestinian war were categorized according to their visual framing characteristics. Accordingly, the predominant visual frame in Turkish is the violence/destruction of war frame (n=157). The subsequent categories are conflict (n=68) and politics/diplomacy/law (n=50). The categories of peace/protest (n=24) and human interest (n=23) are nearly equivalent in number. The categories of history (n=9) and economy/trade (n=5) are significantly less represented than the other categories. An analysis of the number of infographics in English reveals that the most prevalent visual frame is the violence/destruction of war frame (n=70). This is followed by conflict (n=29). The categories of politics/diplomacy/law (n=15) and peace/protest (n=13) are nearly equivalent in number. The categories that yielded the lowest number of infographics were human interest (n=4), history (n=2), and economy/trade (n=1). A comparative analysis of the visual framing distribution of infographics published in both languages reveals a high degree of similarity. This finding indicates that the framing of the war is analogous in both languages. This phenomenon is evident in the consistent application of a similar attitude in both national and international contexts when discussing war. A thorough analysis of the categories reveals a predominant theme: the overwhelming majority of infographics published in both languages depict the devastation and violence of war. It is evident that the number of civilians who lost their lives in the war and the extent of the destruction are heavily emphasized. The prominence of information regarding fatalities, injuries, and destruction serves to underscore the stark and disheartening toll of the war. The presentation of policy, diplomacy, and legal activities related to the Israeli-Palestinian war in Turkish infographics is significant in terms of reflecting the efforts at the state level. Despite the paucity of English infographics in this category, the evidence suggests the presence of a comparable framing endeavor on the international stage. While less prominent, the protest/peace category is significant in terms of reflecting social

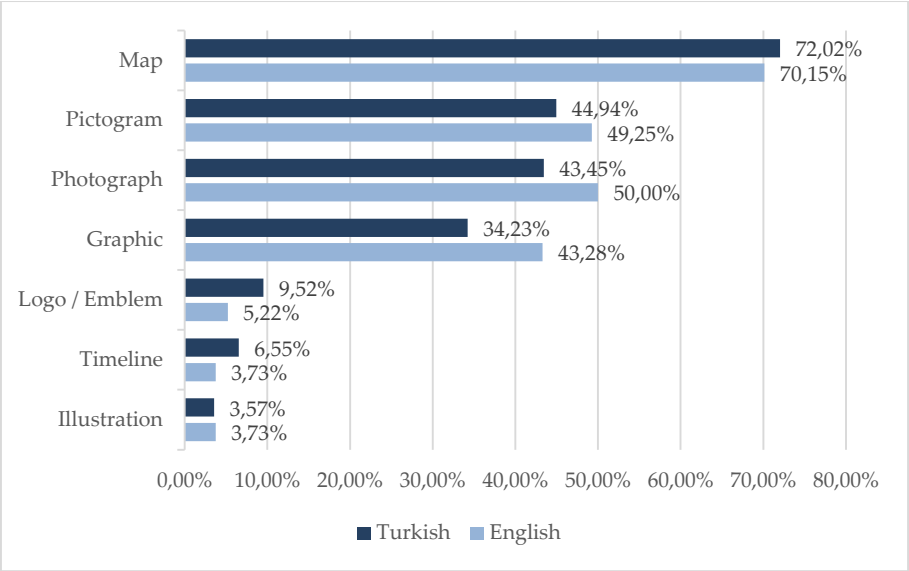
mobilization in relation to war, and the human interest category is important in terms of reflecting the dimension related to human values in a war environment.

Figure 4. Distribution of infographics by types



As illustrated in Figure 4, the distribution of infographics on Palestine is categorized on the basis of their respective types. Of the 336 Turkish infographic content that was analyzed in this study, 119 were statistics/data, 109 were cartography, 68 were visual articles, 22 were timelines, 9 were opinions, 7 were comparisons, and 2 were biographies. Among the 134 infographic content prepared in English, 57 were statistics/data, 40 were cartography, 28 were visual articles, 4 were opinions, 3 were timelines, 1 was a comparison, and 1 was a biography. Consequently, it was determined that the majority of infographics were produced in the statistics/data category, across both languages. This predominance can be attributed to the persistent dissemination of information pertaining to war-related casualties. The next most prevalent type of infographic was cartography. Cartography infographics, defined as graphics containing maps and location information, were found to be extensively utilized in conveying the regional situation and information about the war in Palestine. Visual article-type infographics, which convey news content through storytelling, were also utilized at a considerable frequency. This finding indicates a strategic effort to present the war's events as a compelling narrative, emphasizing storytelling as a key element in conveying the war's narrative.

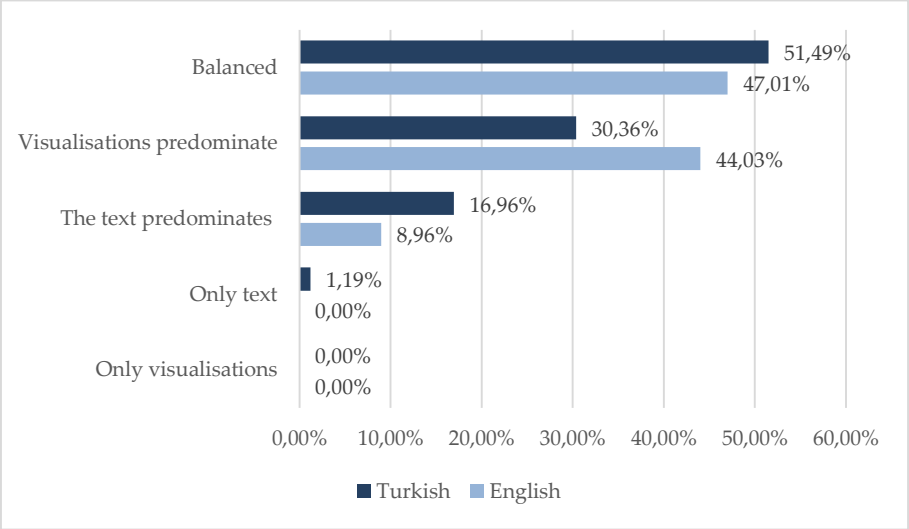
Figure 5. Usage rates of visual elements



As illustrated in Figure 5, the scope of the research revealed the following utilization of visual elements: In the 336 Turkish infographics that were examined as part of the study, the prevalence of visual element usage was as follows: 72.02% for maps, 44.94% for pictograms, 43.45% for photographs, 34.23% for graphics, 9.52% for logos/emblems, 6.55% for timelines, and 3.57% for illustrations. The map emerged as the most prevalent visual element in Turkish infographics. A survey of infographic data reveals that maps were utilized in three out of every four infographics examined. This observation indicates a prioritization of regional information within the context of infographics, particularly concerning geopolitical events such as the war. Following the map, the most frequently employed visual elements were pictograms and photographs. The utilization of pictograms and photographs was closely aligned, with pictograms being employed in approximately one out of every two infographics. The employment of pictograms in infographics is thus a prevalent practice. Especially noteworthy is the use of photographs in infographics. The incorporation of photographs in infographics can be attributed to the objective of sharing authentic visual representations related to the war. The utilization of graphics as a visual element was observed in one out of every three infographics. While illustration was the least frequently used visual element, logo/emblem and timeline were also used with low frequency. In the 134 English infographics examined in the study, the rates of visual element usage were 70.15% map, 50% photograph, 49.25% pictogram, 43.28% graphic, 5.22% logo/emblem, 3.73% timeline, and illustration. A similar trend was observed in Turkish infographics, with maps being the most prevalent visual element. The utilization of pictograms and photographs in English infographics was nearly equivalent, though it was higher in English infographics compared to Turkish infographics. The analysis revealed that pictograms and photographs were employed in approximately 50% of English infographics. Furthermore, the utilization of graphics as a visual element was more prevalent in English infographics. In contrast, logo/emblem, timeline, and illustration were the least frequently employed visual elements in English infographics. While maps

and illustrations demonstrated comparable usage across both languages, English infographics exhibited a more frequent utilization of pictograms, photographs, and graphics compared to Turkish infographics. A comparison of the contents in the two languages revealed that the most significant disparity lay in the utilization of graphic elements.

Figure 6. Visualization rates according to structural elements of infographics



As illustrated in Figure 6, the utilization rates of the infographics examined in this study are categorized on the basis of their structural elements, with particular attention to their visual representation and textual composition. Accordingly, 51.49% of the Turkish infographics had a balanced design, while visualization was more dominant in 30.36% and textual use was dominant in 16.96%. The rate of infographics created using solely text was 1.19%, while no infographics were created using solely visualization. This analysis suggests a preference for balanced designs in Turkish infographics. In contrast, English infographics demonstrated a different design preference, with a 47.01% prevalence of balanced designs and a 44.03% prevalence of infographics dominated by visualization. In the context of English infographics, it was observed that 8.96% of infographics were predominantly textual in nature, while no infographics consisted exclusively of visual elements or textual information. This revealed that balanced and visualization-dominated infographics were generally predominant in both languages, while the use of textual elements was especially infrequent in English infographics. Thus the comparative analysis of Turkish and English infographics showed that the former were relatively more inclined towards textual elements than the latter.

Conclusion

The advent of internet technologies, the proliferation of communication tools, and the digital transformation have engendered a paradigm shift in the manner in which information is disseminated, resulting in the rapid propagation of information of considerable magnitude. This shift has necessitated the presentation of information to its

intended audience in a distinctive and engaging manner. This paradigm shift has also influenced the realm of news production, compelling news outlets to adopt visualization methods to navigate effectively the demands of the contemporary media landscape. As a data visualization method, infographics facilitate faster and more effective understanding of news content by readers. This study has examined the utilization of infographics, a data visualization technique, in the news coverage of the Israeli-Palestinian war by Anadolu Agency between October 7, 2023, and October 7, 2024.

The infographics examined in this study were found to convey news and information related to the Israeli-Palestinian war. To this end, it was ascertained that an average of 28 infographics were published monthly in Turkish and approximately 11 infographics were published monthly in English. This finding indicates that the publication of infographics in the national media occurs with high frequency, on a near-daily basis. This finding suggests a notable increase in the availability of visual news content related to the war. While the number of infographics published in English appears to be lower, it can be argued that these infographics were sufficiently disseminated through international media. The fact that not all national news content related to the war is suitable for an international audience is likely to have been effective in this lower number of English infographics. Notably, fluctuations in the number of infographics during the one-year period were attributed to Turkey's domestic political agenda. However, a consistent monthly publication of infographics on the war in Palestine was observed, underscoring a reliable and consistent source of visual news coverage.

The study's findings indicated that the most prevalent category of visual framing in infographics disseminated in both languages pertained to the violence and destruction of war. This outcome can be interpreted as an attempt to portray the harrowing nature of the war to the public. A similar result was found by Dimitrova and Connoley in their study examining the Arab and Western media's coverage of the Iraq War (2003), where they found that the Arab media used "military conflict" and "war violence" frames at a higher rate. In the aforementioned study, it was determined that Western media outlets placed a greater emphasis on the reconstruction of Iraq than on the violence that characterized the war.[82] Fahmy and Neumann's analysis of the representation of the Gaza War (2008-2009) as both war and peace journalism in three leading Western news agencies (Associated Press, Reuters, and AFP/Getty Images) employed a novel approach by using news photographs. Their findings revealed that the agencies employed varied frames depending on their respective perspectives. Consequently, while AP placed greater emphasis on external events, such as anti-war demonstrations and international summits, AFP/Getty Images placed greater emphasis on the conflict itself and the warring parties.[83] In another study, Schwalbe examined the frames employed by three prominent US news magazines during the invasion of Iraq. This investigation revealed that these news magazines framed the conflict from an American-centered perspective, emphasizing politicians and human

[82] Dimitrova and Connolly-Ahern, "A Tale of Two Wars: Framing Analysis of Online News Sites in Coalition Countries and the Arab World during the Iraq War," 161-62.

[83] Shahira Fahmy and Rico Neumann, "Shooting War or Peace Photographs? An Examination of Newswires' Coverage of the Conflict in Gaza (2008-2009)," *American Behavioral Scientist* 56, no. 2 (2012): 1.

interest stories while disregarding alternative viewpoints, such as anti-war protests, destruction, Iraqi military leaders and troops, and human loss.[84] In a subsequent study, Ekram's analysis of political infographics employed during the Gaza War (2023) revealed a predominant emphasis on the violence and destruction aspect of the conflict. The study noted an extensive dissemination of information pertaining to the death toll and the extent of destruction.[85] In light of the findings from a variety of studies, the impact of news media perspective on the visual depiction of war becomes increasingly evident.

Beyond its depiction of the violence and destruction wrought by the war, the utilization of frames such as politics/diplomacy/law, peace/protest, and others in almost equal measure is significant in its multifaceted reflection of the war's impact. In this regard, it was determined that framing was employed on various issues related to the war, and infographics were utilized effectively in conveying the news to the public. In this sense, it can be posited that while the violence and destruction dimension of the war was accentuated in the infographics examined in the study, other dimensions of the war were not overlooked.

An analysis of infographics according to their type revealed that statistics-based and cartography-based infographics were the most prevalent in both languages. The sustained presentation of quantitative data pertaining to fatalities and injuries, coupled with geographical specifics about the region, is hypothesized to have contributed to this outcome. Conveying diverse statistical information, including damage and destruction, was also found to be effective. Indah and Hasanah's[86] study on the use of infographics, which was conducted in the context of the Coronavirus Disease 2019 (Covid-19) vaccine, yielded similar findings. The study by Stalph[87] on the quality of European news websites utilized statistics-based bar charts as the primary visual data presentation, thereby highlighting the variability in the preferred visual representation of quantitative data across different studies.

The analysis revealed maps as the most prevalent visual element. This finding is consistent with the predominance of cartography infographics among the various infographic types. The predominance of cartography infographics among the most frequently used infographic types, coupled with the prominence of maps as the most widely used visual element, suggests that a significant number of infographics with geographical content related to the war have been published. Furthermore, pictograms and photographs have been identified as prevalent visual elements in infographics. The heightened use of photographs is indicative of their role in reflecting the reality of the war. Notably, Anadolu Agency's use of authentic photographs in depicting the situation in Palestine contributes to enhancing the accuracy and impact of the information presented to the public.

84 Schwalbe, "Visually Framing the Invasion and Occupation of Iraq in TIME, Newsweek, and U.S. News & World Report," 239.

85 Ekram, "Employing political infographics in covering the war at Gaza in a sample of Arab and foreign press websites (an analytical study)," 1335.

86 Sika Indah and Khuswatun Hasanah, "Infographic data visualization as an alternative form of news: content analysis of Covid-19 vaccine issues of data journalism-based media," *The Indonesian Journal of Communication Studies* 15 (2022).

87 Florian Stalph, "Classifying Data Journalism," *Journalism Practice* 12, no. 10 (2018).

An analysis of the visualization ratios of infographics revealed that balanced designs were predominant in both languages. This finding suggests that the integration of visual elements with narrative information enhances the comprehensibility and engagement of the infographic. A notable distinction emerged between Turkish and English infographics, particularly in those employing dominant visualization. The analysis revealed a higher prevalence of visualization in English infographics. A comparative analysis of the visualization ratios revealed that the results were closely aligned in both languages, suggesting a general predominance of visual representations in the data presentation. This observation was further corroborated by the finding that text-intensive visuals were utilized less frequently. A similar finding was reported by Tandoc and Oh[88] in their analysis of The Guardian's big data journalism stories. Solodovnyk et al.[89] investigated the characteristics of data visualization in Ukrainian and European data media. Their findings, contrary to expectations, revealed a text-dominant trend in the publications of the European Data Journalism Network. Similarly, Jacob's[90] research on the visualization of the Covid-19 coronavirus pandemic in *The Hindu* and *The Times of India* revealed a preponderance of text-centered infographics. This finding suggests that the creation of text- or visual-oriented infographics is influenced by the subject of the news and the publishing institution.

A comprehensive evaluation of the research findings revealed that the Palestinian war remained a persistent subject, though the number of infographics fluctuated due to the intermittent impact of Turkey's domestic agenda. It was observed that Anadolu Agency consistently disseminated information regarding the Israeli-Palestinian conflict to both domestic and international media outlets through the medium of visual storytelling, addressing a variety of subjects. It was determined that the infographics were prepared in a manner that reflected a wide range of subjects, utilizing diverse frames related to the war. The situation related to the war was conveyed in a multidimensional way. The findings of the research indicate that the quantity and caliber of infographics adequately address the needs of digital and particularly social media for visual news concerning the war in Palestine. Consequently, it is posited that Anadolu Agency has assumed an effective role in conveying the events of the war to both national and international public opinion through the infographics it has published.

The study is confined to the analysis of infographics related to the Israeli-Palestinian war. In light of the limited number of studies that have examined infographics on wars in terms of visual news content, this research is poised to address a significant gap in the existing body of knowledge. The present study is distinctive in that it is the first to examine infographics in the context of the Israeli-Palestinian War. In this respect, the study contributes to the expansion of the academic field on the war in terms of reading and researching the events in the Israeli-Palestinian war from a different perspective. Moreover, it is anticipated that this research will lay the foundation for subsequent studies

88 Tandoc and Oh, "Small Departures, Big Continuities?," 1009.
89 Solodovnyk et al., "Data journalism visualization in Ukraine and in Europe: a comparative analysis," 109.
90 Jacob, "Visualising Global Pandemic: A Content Analysis of Infographics on Covid – 19," 120.

examining the characteristics of infographics pertaining to war news. Future studies are advised to analyze infographic content on various subjects related to Palestine. Conducting new research in this direction will contribute to the expansion of the academic field on different topics related to Palestine, as well as revealing the extent to which the Palestinian issue is covered as visual content in the media.

Declarations:

1. **Ethics committee approval:** Not needed for this study.

2. Author contribution: The author declares that no one else has contributed to the article.

3. Competing interests: The author declares no competing interests.

BIBLIOGRAPHY

Afify, Mohammed Kamal. "The Effect of the Difference between Infographic Designing Types (Static Vs Animated) on Developing Visual Learning Designing Skills and Recognition of Its Elements and Principles." *International Journal of Emerging Technologies in Learning (iJET)* 13, no. 9 (2018): 204-23.

Allan, Stuart. "Visual War Journalism." *Digital Journalism* 13, no. 1 (2025): 1-17.

Barnes, Sarah, J N Campbell, and Lauren M Ndebele. "The Effectiveness of Infographics and Graphical Media in Communication." *International Journal of Communication and Marketing* 1, no. 1 (2024): 1-10.

Berret, Charles, and Cheryl Phillips. *Teaching Data and Computational Journalism.* New York: Columbia Journalism School, 2016.

Brantner, Cornelia, Katharina Lobinger, and Irmgard Wetzstein. "Effects of Visual Framing on Emotional Responses and Evaluations of News Stories About the Gaza Conflict 2009." *Journalism & Mass Communication Quarterly* 88 (2011): 523-40.

Chandler, Daniel, and Rod Munday. *A Dictionary of Media and Communication.* Oxford: Oxford University Press, 2019.

Chauhan, Rahul, Pallavi Goel, Vikas Kumar, Neam Soni, and Nidhi Singh. "Understanding Covid-19 Using Data Visualization." Paper presented at the 2021 International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE), 4-5 March 2021 2021.

Cohen, Jacob. "A Coefficient of Agreement for Nominal Scales." *Educational and Psychological Measurement* 20 (1960): 37-46.

Córdoba-Cabús, Alba. "Estándares De Calidad En El Periodismo De Datos: Fuentes, Narrativas Y Visualizaciones En Los Data Journalism Awards 2019." *El profesional de la información* (2020): 1-11.

de Haan, Yael, Kruikemeier Sanne, Lecheler Sophie, Smit Gerard, and Renee and van der Nat. "When Does an Infographic Say More Than a Thousand Words?". *Journalism Studies* 19, no. 9 (2018): 1293-312.

Degeling, Dylan, and Ruud Koolen. "Communicating Climate Change to a Local but Diverse Audience: On the Positive Impact of Locality Framing." *Environmental Communication* 16, no. 2 (2022/02/17 2022): 243-61.

Demirel, Simge Deniz, and Petek Durgeç. "Dijital Medyada Deprem Haberlerini İnfografikler Üzerinden Okumak: Anadolu Ajansı Ve Trt Haber Örneği." *Journ al of Communication, Sociology and History Studies* 2, no. 2 (2022): 27-44.

Dhanesh, Ganga S., and Nadia Rahman. "Visual Communication and Public Relations: Visual Frame Building Strategies in War and Conflict Stories." *Public Relations Review* 47, no. 1 (2021): 1-11.

Dick, Murray. *Book Review: The Infographic: A History of Data Graphics in News and Communications.* Cambridge: The MIT Press, 2020.

Dimitrova, Daniela V., and Colleen Connolly-Ahern. "A Tale of Two Wars: Framing Analysis of Online News Sites in Coalition Countries and the Arab World During the Iraq War." *Howard Journal of Communications* 18, no. 2 (2007): 153-68.

Dunlap, Joanna C., and Patrick R. Lowenthal. "Getting Graphic About Infographics: Design Lessons Learned from Popular Infographics." *Journal of Visual Literacy* 35, no. 1 (2016): 42-59.

Egan, M., A. Acharya, V. Sounderajah, Y. Xu, A. Mottershaw, R. Phillips, H. Ashrafian, and A. Darzi. "Evaluating the Effect of Infographics on Public Recall, Sentiment and Willingness to Use Face Masks During the Covid-19 Pandemic: A Randomised Internet-Based Questionnaire Study." [In eng]. *BMC Public Health* 21, no. 1 (Feb 17 2021): 1-10.

Ekram, Flora. "Employing Political Infographics in Covering the War at Gaza in a Sample of Arab and Foreign Press Websites (an Analytical Study)." *Journal of Mass Communication Research "JMCR"* 70, no. 3 (2024): 1335-96.

Engebretsen, Martin. "Data Visualization in Scandinavian Newsrooms." *Nordicom review.* 39, no. 2 (2018): 3-18.

Entman, Robert M. "Framing: Toward Clarification of a Fractured Paradigm." *Journal of Communication* 43, no. 4 (1993): 51-58.

Eren, Mevlüt. "The Reflection of Graphic Desing to News Reporting (Anadolu Agency Example)." Master's, Ankara Haci Bayram Veli University, 2020.

Fahmy, Shahira, and Rico Neumann. "Shooting War or Peace Photographs? An Examination of Newswires' Coverage of the Conflict in Gaza (2008-2009)." *American Behavioral Scientist* 56, no. 2 (2012): 1-26.

Franklin, Bob. "The Future of Journalism." *Journalism Studies* 15, no. 5 (2014): 481-99.

Geyik, Kurbani. "Savaş Haberciliğinde Değişen Roller: 2. Karabağ Savaşı Örneği." *Atatürk İletişim Dergisi* 21 (2021): 53-71.

Godoy, Katelyn. "Data Journalism Meets Information Design: Creating a Complex Infographic About the Yarnell Hill Wildfire." Master's, State University of New York, 2015. http://hdl.handle.net/20.500.12648/973.

Gray, Jonathan, Lucy Chambers, and Liliana Bounegru. *The Data Journalism Handbook.* California: O'Reilly Media, 2012.

Gynnild, Astrid. "Journalism Innovation Leads to Innovation Journalism: The Impact of Computational Exploration on Changing Mindsets." *Journalism* 15, no. 6 (2014): 713-30.

Howard, Alexander Benjamin. "The Art and Science of Data-Driven Journalism." 2014.

Indah, Sika, and Khuswatun Hasanah. "Infographic Data Visualization as an Alternative Form of News: Content Analysis of Covid-19 Vaccine Issues of Data Journalism-Based Media." *The Indonesian Journal of Communication Studies* 15 (2022): 30-45.

Jacob, Rachel. "Visualising Global Pandemic: A Content Analysis of Infographics on Covid – 19." *Journal of Content, Community and Communication* (2020).

Jaleniauskiene, Evelina, and Judita Kasperiuniene. "Infographics in Higher Education: A Scoping Review." *E-Learning and Digital Media* 20, no. 2 (2023): 191-206.

Jansen, Angela, and Wolfgang Scharfe. *Handbuch Der Infografik.* Berlin: Springer Berlin Heidelberg, 1999.

Joshi, Mrudula, and Latika Gupta. "Preparing Infographics for Post-Publication Promotion of Research on Social Media." *Journal of Korean Medical Science* 36 (2021): 1-8.

Jungblut, Marc. "Visual Deductive Conflict Frame (War Coverage)." *DOCA - Database of Variables for Content Analysis* 1, no. 2 (2021): 1-2.

Kiernan, M., M. A. Oppezzo, K. Resnicow, and G. L. Alexander. "Effects of a Methodological Infographic on Research Participants' Knowledge, Transparency, and Trust." [In eng]. *Health Psychol* 37, no. 8 (2018): 782-86.

Kirk, Andy. *Data Visualisation: A Handbook for Data Driven Design.* 2 ed. London: Sage Publications, 2019.

Kleijsen, H. "Infographics as a Public Communication Tool in the Covid-19 Pandemic." Bachelor, University of Twente, 2021. http://essay.utwente.nl/87636/.

Kleinheksel, A. J., Nicole Rockich-Winston, Huda Tawfik, and Tasha R. Wyatt. "Demystifying Content Analysis." *American Journal of Pharmaceutical Education* 84, no. 1 (2020): 128-37.

Krippendorff, Klaus. *Content Analysis: An Introduction to Its Methodology.* 4 ed. California: Sage Publications, 2018.

Krum, Randy. *Cool Infographics: Effective Communication with Data Visualization and Design.* Indiana: John Wiley & Sons, 2014.

Lankow, Jason, Josh Ritchie, and Ross Crooks. *Infographics: The Power of Visual Storytelling.* Hoboken; New Jersey: John Wiley & Sons, 2012.

Maharani, Nam. "Social Media as a Primary Source of Information: Exploring Its Role in Disseminating the Current Situation in Palestine." *Gema Wiralodra* 15, no. 1 (2024): 275-81.

Marta, Ferreira, Nuno Nunes, Chiara Ceccarini, Catia Prandi, and Valentina Nisi. "The Russia-Ukraine War and Climate Change: Analysis of One Year of Data-Visualisations." Paper presented at the IASDR 2023: Life-Changing Design, Milan, Italy, 9-13 October 2023.

"Infographics: Graphic Visual Representations of Information." 2020, accessed 31.01.2025, https://www.melinakmiller.com/the-seven-common-types-of-infographics/.

"Qué Es El Marketing Visual Y Cómo Puedes Aprovecharlo Para Tu Empresa?" Love visual marketing, 2014, accessed 12.02.2025, https://lovevisualmarketing.com/que-esel-marketing-visual-y-como-puedes-aprovecharlo-para-tu-empresa/.

Neuman, Lawrence W. *Basics of Social Research : Qualitative & Quantitative Approaches.* Harlow: Pearson Education Limited, 2014.

Ojo, Adegboyega, and Bahareh Heravi. "Patterns in Award Winning Data Storytelling." *Digital Journalism* 6, no. 6 (2018/07/03 2018): 693-718.

Özkan, Burak. "The Effects of the Infographics on Readers Which Are Used Agency Journalism." Master's, Ankara Haci Bayram Veli University, 2019.

Powell, Thomas E., Hajo G. Boomgaarden, Knut De Swert, and Claes H. de Vreese. "A Clearer Picture: The Contribution of Visuals and Text to Framing Effects." *Journal of Communication* 65, no. 6 (2015): 997-1017.

Purchase, Helen C., Katherine Isaacs, Thomas Bueti, Ben Hastings, Aadam Kassam, Allen Kim, and Steffan van Hoesen. "A Classification of Infographics." Paper presented at the 10th International Conference on the Theory and Application of Diagrams, Edinburg, 18-22 June 2018 2018.

Riggs, Elizabeth E., Hillary C. Shulman, and Rachel Lopez. "Using Infographics to Reduce the Negative Effects of Jargon on Intentions to Vaccinate against Covid-19." *Public Understanding of Science* 31, no. 6 (2022): 751-65.

Rinsdorf, Lars, and Raoul Boers. "The Need to Reflect: Data Journalism as an Aspect of Disrupted Practice in Digital Journalism and in Journalism Education." *Promoting Understanding of Statistics about Society IASE Roundtable Conference* (2016).

Ru, Gao, and Zhang Ya Ming. "Infographics Applied in Design Education." Paper presented at the 2014 IEEE Workshop on Advanced Research and Technology in Industry Applications (WARTIA), Ottawa, Canada, 29-30 Sept. 2014 2014.

Salas, Paola Eunice Rivera. "Evaluation of the Infographics Posted on Facebook by Printed Newspapers in Latin American Countries During 2017 " Paper presented at the Procedings CUICIID, 2018.

Schwalbe, Carol B. "Visually Framing the Invasion and Occupation of Iraq in Time, Newsweek, and U.S. News & World Report." *International Journal of Communication* 7 (2013): 239–62.

Shemy, Nader Said. "Digital Infographics Design (Static Vs Dynamic): Its Effects on Developing Thinking and Cognitive Load Reduction." *International Journal of Learning, Teaching and Educational Research* 21, no. 5 (2022): 104-25.

Siricharoen, Waralak, and Nattanun Siricharoen. "How Infographic Should Be Evaluated?" Paper presented at the The 7th International Conference on Information Technology, Amman, Jordan, 2015.

Siricharoen, Waralak V. "Infographics: The New Communication Tools in Digital Age." 2013.

Sjafiie, Sri Syamsiyah Lestari, Sri Hastjarjo, Widodo Muktiyo, and Pawito. "Graphic Visualization in Printed Media: How Does the Use of Technology Influence Journalism Culture." *Jurnal Komunikasi: Malaysian Journal of Communication* 34, no. 4 (2018): 373-85.

Smiciklas, Mark. *The Power of Infographics: Using Pictures to Communicate and Connect with Your Audiences.* Indiana: Que Publishing, 2012.

Solodovnyk, Dmytro, Inna Havryliuk, Inna Sypchenko, Olena Ishchenko, and Oksana Kyrylenko. "Data Journalism Visualization in Ukraine and in Europe: A Comparative Analysis." *Amazonia Investiga* 12, no. 64 (2023): 102-16.

Sontag, Susan. *Başkalarının Acısına Bakmak.* Translated by Osman Akınhay. İstanbul: Agora Kitaplığı, 2014.

Stalph, Florian. "Classifying Data Journalism." *Journalism Practice* 12, no. 10 (2018): 1332-50.

Tandoc, Edson C., and Soo-Kwang Oh. "Small Departures, Big Continuities?". *Journalism Studies* 18, no. 8 (2017): 997-1015.

Tulupov, Vladimir. "Infographic Visualization of Modern Journalistic Text." Paper presented at the European Proceedings of Social and Behavioural Sciences, Russia, 28-29 March 2019.

Weber, Wibke, and Hannes Rall. "Data Visualization in Online Journalism and Its Implications for the Production Process." *2012 16th International Conference on Information Visualisation* (2012): 349-56.

Weber, Wibke, and Alexandra Wenzel. "Interaktive Infografiken: Standortbestimmung Und Definition." In *Interaktive Infografiken*, edited by Wibke Weber, Michael Burmester and Ralph Tille, 3-24. Stuttgart: Springer Vieweg, 2013.

Williams, Kevin. *A New History of War Reporting.* Abingdon: Routledge, 2020.

Yıldırım, Ali, and Hasan Şimşek. *Sosyal Bilimlerde Nitel Araştırma Yöntemleri.* 10 ed. Ankara: Seçkin Yayıncılık, 2016.

Yuvaraj, Mayank. "Infographics: Tools for Designing, Visualizing Data and Storytelling in Libraries." *Library Hi Tech News* 34, no. 5 (2017): 6-9.

Zwinger, S., J. Langer, and M. Zeiller. "Acceptance and Usability of Interactive Infographics in Online Newspapers." Paper presented at the 2017 21st International Conference Information Visualisation (IV), London, United Kingdom, 11-14 July 2017 2017.