

Greater Aura? The 19th and 20th Century Circulation of Art Reproductions in the Press through a Digital and Historical Perspective



**Veća aura?
Cirkulacija reprodukcija
umjetničkih djela u tisku
19. i 20. stoljeća kroz digitalnu
i povijesnu perspektivu**

PRETHODNO PRIOPĆENJE

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SAŽETAK

Kao dio šireg projekta *Visual Contagions* na Sveučilištu u Ženevi u Švicarskoj, ovaj članak predstavlja preliminarne rezultate opsežnog istraživanja o cirkulaciji reprodukcija umjetničkih djela, prvenstveno u ilustriranim tiskovinama diljem svijeta od 80-ih godina 19. stoljeća do 60-ih godina 20. stoljeća. Pridonosi još uvijek ograničenom području istraživanja fotografskih i tiskanih reprodukcija umjetničkih djela, ističući se u kontrastu s već utemeljenim istraživanjima o cirkulaciji umjetnina u okviru povijesti izložbi, bakropisnih tehnika ili kolekcionarskih praksi. Tiskane reprodukcije vjerojatno su cirkulirale znatno šire od fizičkih umjetničkih djela ili bakropisa. U društvu obilježenom brzom modernizacijom, gdje su periodične publikacije, katalogi i tiskane knjige činili slike sve dostupnijima, te su reprodukcije igrale često zanemarenu ulogu u oblikovanju recepcije umjetnika. Jedno od pitanja koje se istražuje jest jesu li reprodukcije umjetničkih djela u tisku pridonijele dalekosežnijem širenju i demokratizaciji umjetničke kulture, bilo putem referencija na kulturne ikone iz prošlosti (stari majstori, povijesni umjetnički stilovi) bilo suvremenog stvaralaštva, posebice moderne umjetnosti. Suprotno zabrinutosti Waltera Benjamina o „gubitku aure“ u mehanički reproduciranoj umjetnosti, postavlja se pitanje je li cirkulacija tiskanih reprodukcija zapravo očuvala, ako ne i povećala auru određenih umjetničkih djela i umjetnika, s obzirom na to da su njihove slike dosegule širu publiku. Je li se time posebno podignula svijest o djelima koja su rijetko ili nikad reproducirana, uključujući suvremena djela?

→

ABSTRACT

This article presents preliminary findings from an extensive study on the circulation of artwork reproductions in illustrated press publications worldwide from the 1880s to the 1960s. In a rapidly modernizing society, where periodicals, catalogs, and printed books made images increasingly accessible, printed reproductions played an often-overlooked role in shaping the reception of artists. One question we examine is whether artwork reproductions in the press contributed to the broader dissemination of artistic culture—through references to past cultural icons (Old Masters, historical artistic styles) or contemporary creation. Contrary to Walter Benjamin's concerns about the “loss of aura” in mechanically reproduced art, did the circulation of printed reproductions actually enhance the aura of certain artworks and artists as their images reached wider audiences? The study identifies over 5,000 art images that circulated internationally between the 1880s and 1960s in a larger corpus of 14.2 million images. These art images rarely crossed social boundaries and were likely consumed by elite audiences. However, we do not conclude that the aura was necessarily maintained by this circulation within elite circles. Some images were likely disseminated more due to commercial and technical factors rather than considerations of taste or admiration for the artists.

KEYWORDS

periodicals, art, globalization, images, circulation, digital humanities, computer vision, distant viewing

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U prvom dijelu autori daju pregled dostupne bibliografije o cirkulaciji reprodukcija umjetničkih djela u tisku. Unutar discipline često su odjekivala razmišljanja Waltera Benjamina o smanjenoj auri umjetničkih djela kada postanu dostupna kroz mehaničku reprodukciju, često uključujući negativan stav prema proučavanju ovog fenomena. Od 90-ih godina 20. stoljeća razvoj vizualnih studija nije u potpunosti uspio osporiti hijerarhiju između jedinstvenog i višestrukog, posebno u kontekstu umjetničkih djela. Autori ističu obećavajuće projekte povezane s produkcijom reprodukcija umjetničkih djela.

U drugom se dijelu predstavljaju višeslojna metodologija projekta *Visual Contagions* i njegov korpus. U ožujku 2024. taj je korpus obuhvaćao 18 670 ilustriranih periodičnih publikacija, koje uglavnom pokrivaju razdoblje od 1880. do 1960., iz 1243 grada i 53 zemlje, s 14,2 milijuna slika izdvojenih i organiziranih u skupove vizualno sličnih slika. Iz tih je slika tim identificirao reprodukcije umjetničkih djela, koje su u fokusu istraživanja, a sastojale su se od 5255 slika 344 originalna umjetnička djela reproducirana više puta od 1840. do 1959. Jedno od početnih opažanja o distribuciji tih slika jest da je njihov doseg, iako globalan, prvenstveno usmjeren na Europu.

Kako bi procijenio cirkulaciju tih 5255 reprodukcija umjetničkih djela, tim je rangirao svaku skupinu slika koristeći se trima indeksima: broj zemalja u kojima je reproducirano izvorno umjetničko djelo, broj gradova u kojima je tiskano te broj reprodukcija u svakoj skupini umjetničkih djela. Među najšire distribuiranim djelima nalaze se reprodukcije starih majstora, ali pojavljuju se i moderna umjetnička djela. Detaljnija kronološka analiza pokazuje dugoročnu koegzistenciju starih i modernih djela, ali otkriva varijacije koje osporavaju često segregirane narative povijesti stare i moderne umjetnosti. U razdoblju od 1890. do 1910. istaknuti moderni umjetnici često su se pojavljivali zajedno s rastućim brojem ilustracija djela starih majstora, poput onih Dürera i Van Eycka. U članku se pokušava ukratko objasniti veća prisutnost starih majstora od 1910., kao i razdoblje od 1915. do 1918. koje se također kosi s očekivanjima, s naglaskom na modernim djelima, a ne onima starih majstora, unatoč povijesnom narativu o „povratku redu” i starim majstorima u avangardnom slikarstvu u Parizu i Njemačkoj od 1915. nadalje.

U jednom se dijelu istražuju elitni društveni konteksti u kojima su cirkulirale proučavane reprodukcije umjetničkih djela, na temelju tipa periodičnih publikacija kako bi se bolje procijenio društveni doseg umjetničkih djela. Časopisi koji su objavljivali reprodukcije umjetničkih djela iz korpusa projekta *Visual Contagions* bili su uglavnom umjetnički časopisi (opći umjetnički časopisi, časopisi o modernoj umjetnosti, časopisi o dekorativnoj umjetnosti, avangardni časopisi) namijenjeni elitnoj publici. Društveni doseg umjetničkih slika putem ilustriranih tiskovina nije se znatno proširio tijekom vremena, osim u slučaju kada su neka umjetnička djela bila ukradena ili kada je umjetnik preminuo.

Zaključno, u članku se pojašnjava da su ovi početni rezultati, dobiveni udaljenim (digitalnim), kvantitativnim i komparativnim pristupom cirkulaciji reprodukcija u ilustriranom tisku, tek početak opsežnijeg istraživanja. Potrebna su daljnja istraživanja, osobito ona koja se odnose na recepciju slika, koja se ne može u potpunosti razumjeti samo kroz kvantitativnu analizu.

KLJUČNE RIJEČI

periodičke publikacije, umjetnost, globalizacija, slike, cirkulacija, digitalna humanistika, računalni vid, udaljeno promatranje

INTRODUCTION

As part of the broader *Visual Contagions* project at the University of Geneva, Switzerland, this article presents preliminary findings from an extensive study on the circulation of artwork reproductions, primarily in illustrated press publications worldwide from the 1880s to the 1960s. It contributes to an emerging field of research, still relatively limited, on photographic and printed reproductions of artworks — marking a contrast to the more established scholarship on the circulation of artworks within exhibition histories, etching techniques, or collecting practices. Printed reproductions likely circulated far more widely than physical artworks or etchings. In a rapidly modernizing society, where periodicals, catalogs, and printed books made images increasingly accessible, these reproductions played an often-overlooked role in shaping the reception of artists. Yet, one question we examine is whether artwork reproductions in the press contributed to the broader dissemination and democratization of artistic culture — through references to past cultural icons (Old Masters, historical artistic styles) or contemporary creation, especially modern art. Contrary to Walter Benjamin’s concerns about the “loss of aura” in mechanically reproduced art, did the circulation of printed reproductions actually preserve, if not enhance, the aura of certain artworks and artists as their images reached wider audiences? Did this especially raise awareness of works that had rarely or never been reproduced before, including contemporary works?

Our study identifies over 5,000 art images that circulated internationally between the 1880s and 1960s, drawn from a larger corpus of 14.2 million images reproduced in periodicals worldwide. The findings suggest that these art images rarely crossed social boundaries, indicating that they were likely consumed by audiences characterized by what Pierre Bourdieu termed “the love of art.” However, we do not conclude that the aura, in Walter Benjamin’s sense, was necessarily maintained by this circulation within elite circles. The study indicates that some images were likely disseminated more due to commercial and technical factors rather than considerations of taste or admiration for the artists.¹

ART AND THE EARLY 20TH-CENTURY ARTISTIC VISUAL LANDSCAPE: INITIAL POINTS OF VIEW

The printed circulation of artworks saw a dramatic increase after the 1880s with the industrialization of photomechanical processes, particularly with the introduction of half-tone printing.² Artworks featured in illustrated magazines, newspapers, and books enriched and expanded a broader “artistic visual landscape,” consisting of a wide variety of art images available at the time: tangible artifacts (visible in studios, private collections, galleries, exhibitions, and museums) as well as their reproductions (engravings, drawings, painted or sculpted copies, photographs, slides, postcards,

¹ This article builds on a more focused study on the circulation of images in Europe. See: Joyeux-Prunel, Barras, Carboni, “Une Europe par les arts?.”
² See the “4e generation” of illustrated press studied by Baot, *La Presse illustrée au XIXe siècle*.

illustrated catalogues, decorated plates, printed fabrics, and more). However, the reach of periodicals — and their potential audience — soon exceeded that of exhibitions, the art market, and even other reproduction formats such as postcards, posters, or everyday items (as in the case of Millet's *The Angelus*), both in terms of scale and diversity, not least due to the shared nature of reading practices.³

Paradoxically, art historical scholarship has not traditionally encouraged viewing media reproductions of images in the illustrated press as worthy subjects of study in their own right. The discipline has often echoed Walter Benjamin's reflections on the diminished aura of artworks as they become more accessible through mechanical reproduction in a negative way, often resulting in an unfavourable stance toward the study of the phenomenon of printed circulations of artworks.⁴ By continuing to prioritize the reception of artworks mainly within traditional art spaces (museums and galleries) and through textual references (books and articles), this focus has reinforced the traditional hierarchy between the original and its copies. Even today, museums remain reluctant to use reproductions in presenting art and its history, and professionals often dismiss immersive museums that lack originals.⁵

Since the 1990s, the development of Visual Studies has not succeeded in fully challenging this hierarchy between the singular and the multiple, especially in the case of artworks. While some scholars have highlighted the value of studying small-scale reproductions of art (such as engravings,⁶ painted reproductions,⁷ posters,⁸ and more recently postcards⁹), they have not fully addressed the taboo surrounding mass-circulated reproductions of artworks, particularly those distributed through media like the press. Moreover, studies on art reproduction have primarily addressed questions typically posed for smaller-scale reproductions, focusing on fidelity to the original, the translation of the experience of viewing artworks, or the creation and modification of artworks.¹⁰ They have rarely addressed issues related to large-scale distribution.

The large-scale reproduction of artworks deserves to be studied as such: on a large scale. It is surprisingly absent from studies on the history of artistic canons,¹¹ even though, from the late 19th century onward, images became the primary medium through which an artist's work was presented to contemporary audiences. The various uses of artistic reproductions in the press were diverse, ranging from advertising to sell the works in auction catalogues and journals,¹² and illustrating articles,¹³ to using artworks for educational purposes, as simple illustrations, or for event-related purposes. Scholars are also beginning to better understand how artistic reproductions in the press were used to contribute to the construction of national identities¹⁴ or to document heritage.¹⁵ However, the logic of production remains poorly understood, and much is expected from the *PhotoMatrix Project* in this regard,¹⁶ as it is becoming clear that this logic cannot simply be modelled on those of engraved reproductions.

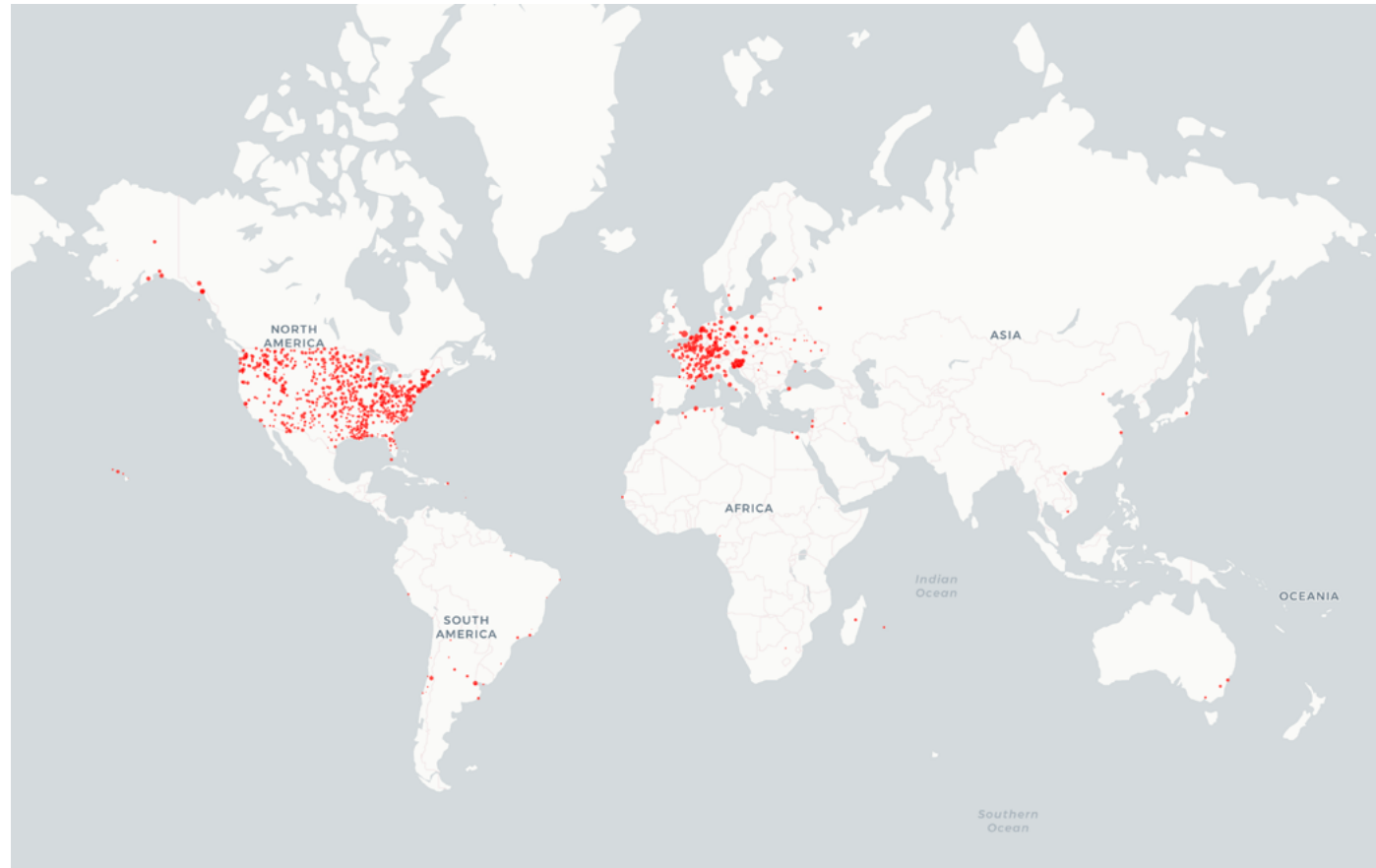


Fig. / Sl. 1 Map of images analysed in the *Visual Contagions* project as of September 2023. Images from 4433 periodicals published in 50 countries and 1179 cities. © Visual Contagions / Mapa slika analiziranih u sklopu projekta *Visual Contagions* od rujna 2023. Reprodukcijske iz 4433 periodične publikacije objavljene u 50 zemalja i 1179 gradova. © Visual Contagions

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See, for example, the ongoing research of Nina Lager on art reproductions and Swedish national identity and the work of Viviana Costagliola on the photographic documentation of the art-historical heritage of Naples and southern Italy (1861–1914), particularly their presentations at the conference "Art within Reach: Photomechanical Reproductions of Works of Art from Print to Digital," held in Prague on December 5–6, 2023, organized by the *PhotoMatrix Project*.

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In the same conference: Camilla Balbi on the "Photomechanical Foundations of Jewish Art History" in Central Europe, and Marta Ziętkiewicz on Jewish heritage in Poland.

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The *Photomatrix Project* (2023–2027), Czech Academy of Science, under the direction of Fedora Parkmann.

17

Joyeux-Prunel, Carboni, Barras, "Plotting the Geopolitics of Twentieth-Century Modern and Avant-Garde Illustrated Periodicals."

18

See, for example: Vitali, "How to Build a World Art." On a European level, see: Joyeux-Prunel, Barras, Carboni, "Une Europe par les arts?."

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The European countries not currently in our database are as follows: Albania, Andorra, Armenia, Azerbaijan, Belarus, Bosnia-Herzegovina, Bulgaria, Cyprus, Estonia, Georgia, Iceland, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Montenegro, Northern Macedonia, Norway, Portugal, San Marino, Turkey, Vatican City.

Additionally, the techniques of storage, reproduction, and circulation of media reproductions are still not well known. Lastly, the reception of photographic images in the press is also poorly understood: we have limited knowledge of which artistic images circulated, where they circulated, what audiences they reached, and across which media domains, themes, nations, languages, economic contexts, and social settings. Our research aims to address these last gaps, exploring the circulation of art images at the turn of the 19th and 20th centuries.

A MULTI-SCALAR METHOD AND ITS CORPUS

Situated at the intersection of digital humanities and traditional source analysis, the *Visual Contagions* project investigates the global dissemination of images in illustrated journals. Using innovative digital methods, it integrates diverse data and approaches to 1) track the most widely circulated images worldwide, 2) pinpoint their distribution locations, and 3) analyze factors affecting their spread.¹⁷ The project explores how images circulate within collective visual cultures, memories, and archives, and their role in either illustrating or revealing, standardizing or disrupting cultural phenomena. Through this lens, it addresses the challenge of handling vast quantities of images in research, assessing the pros and cons of employing big data in historical cultural studies. The vast image sources now accessible online are revolutionizing the work of historians, allowing for the exploration of hypotheses that were previously impossible to consider. Nevertheless, digital quantitative methods also pose theoretical, technical, and conceptual challenges. Large-scale quantitative analyses limit the ability to thoroughly examine various factors, such as material, technological, social, and economic aspects that influence image dissemination. Hence, there is a risk of reverting to rather questionable explanations, such as the autonomous life of forms, the superiority of certain styles, or the genius of particular artists. Maintaining a materialist perspective (in an almost Marxist sense) on artistic visual landscapes helps us avoid interpreting a collection of circulating images as representing a unified collective worldview. It prevents us from resorting to the fragile notion of a homogeneous Western culture or a common "imaginary museum," which we know was a constructed concept.¹⁸

To achieve the aforementioned objectives, the *Visual Contagions* project has analyzed a corpus of digitized periodicals gathered from institutions worldwide. As of March 2024, this corpus consists of 18,670 titles published across 1,243 cities and 53 countries. Primarily focused on the period from 1880 to 1960, these digitized periodicals are accessible online. Constructing a worldwide corpus is inherently challenging, and even on a European scale, some collections have not yet been incorporated (Fig. 1).¹⁹ Some countries are absent because their sources have not been digitized, while others have undergone digitization efforts but have not made their

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Lyons, "La pratique de la lecture."

4

Benjamin, *Das Kunstwerk im Zeitalter seiner technischen Reproduzierbarkeit*, 471–508.

5

See, for instance: Michaud, *L'art, c'est bien fini*; Bonnet Saint-Georges, "A l'Atelier des Lumières."

6

See, for example: Bailly-Herzberg, *L'eau-forte de peintre au dix-neuvième siècle*; Bann, "Ingres in Reproduction."

7

Jalla, *La copie à l'œuvre*.

8

Zmely, *L'affiche illustrée*.

9

Bonne, "Panoramic Ambitions."

10

Haberstich, "Photography and the Plastic Arts;" Font-Réaulx, Bolloch, Musée d'Orsay, *L'œuvre d'art et sa reproduction*; Uchill, "Original und Reproduktion;" Caraffa, *Instant Presence*; Mambelli, "À Reproduire."

11

Langfeld, "The Canon in Art History."

12

Saint-Raymond, *À la conquête du marché de l'art*. Julia Bärnighausen is currently conducting doctoral research on the photographic and archival practices of art dealers around 1900, with a particular focus on German gallery publications (1912–1949). See: Caraffa, Bärnighausen, "Introduction: Photography, Art, Market, and the Production of Value."

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Freitag, "Early Uses of Photography in the History of Art;" Hamber, "The Use of Photography by Nineteenth-Century Art Historians;" Bredekamp, "A Neglected Tradition?;" McCann, Ravas, "Impact of Image Quality in Online Art History Journals;" Ratzeburg, "Mediendiskussion im 19. Jahrhundert."

documents available online in accordance with the international standard (IIIF) for automated data collection.²⁰ As resources become available, we aim to expand our corpus. However, in the interim, we can conduct a digital analysis of the most frequently reproduced images in these periodicals.

A computational processing chain is utilized to extract illustrations from each published periodical, followed by algorithmically grouping them based on visual similarity.²¹ This process yielded a collection of 14.2 million images organized into clusters of visually similar ones (June 2024). The project team then identified artworks from these clusters using a collaborative work interface called Explore (Fig. 2).²²

Initially, we identified the diverse categories represented by the complete image groups, including religious imagery, advertisements, portraits, artistic works, fashion, and more. Subsequently, we organized these image groups based on content, such as depictions of specific consumer goods and behaviors (e.g., wine, automobiles), genre representations (in photographic portraits, reproductions of painted portraits and sculpted busts), and iterations of certain images (e.g., book covers, artistic pictures). The next step involved analyzing the international circulation of these images by category, followed by dividing and refining our efforts into more specialized themes, such as the distribution of cinema images and fashion images. From this extensive corpus, we established the sub-corpus that forms the basis of this study—a collection of art reproductions. For the sake of corpus representativity, we restricted the research to images published before 1960.

We initially used automatic clustering and then refined our approach by focusing on artistic images that have been replicated at least twice in a minimum of two distinct countries. Further searches were conducted to locate any overlooked duplicates from the initial clustering. Once the sub-corpus was formed, we identified all probable originals, as well as the name of the artist and the assumed date of the original. When the images were unfamiliar to us, the ease of their identification depended on the presence of captions in the source publications. In total, we have gathered and identified 5,255 artistic images, which stem from 344 artworks reproduced in multiple instances between 1840 and 1959. Each unique image was assembled into an “image group,” encompassing the various reproductions of an individual artwork in the press.

This meticulous process sets our work apart from typical “cultural analytics,”²³ where data is often reused without the close considering, contextualization, and enrichment that historical expertise can provide. In the *Visual Contagions* project, we acknowledge the constructed nature of our corpus and that its organization is the result of expert deliberation tailored to the specific needs of our research. We contend that any approach relying solely on apparent insights from quantitatively processed data is inadequate.²⁴ Our methodology emphasizes a multi-scalar approach, articulating the

WORK	COUNTRIES	CITIES	FREQUENCY
Da Vinci, <i>Mona Lisa</i> , 1503–1519, Musée du Louvre (original and later reinterpretations)	10	31	88
Millet, <i>L'Angélu</i> , 1857–1859, Musée d'Orsay	6	10	20
Dürer, <i>The Knight, Death and the Devil</i> , 1513	6	7	23
Dürer, <i>Selfportrait with gloves</i> , 1498, Museo Nacional del Prado	6	7	14
Rembrandt, <i>The Little Tomb</i> , 1652	6	7	11
Rembrandt, <i>The Doctor Fautrieus</i> , 1652	5	8	16
Fra Angelico, <i>Annunciation</i> , 1430 (various)	5	7	18
Dürer, <i>Melencolia I</i> , 1514	5	7	17
Mondrian, (generic neoplasticist square work)	5	6	41
Van Eyck, <i>Madonna of Chancellor Rolin</i> , c. 1435, Musée du Louvre	5	6	17
Monet, <i>Le Déjeuner</i> , 1868, Städel Museum	5	6	15

Tab. / Tab. 1 Art images with the most international circulation between 1840 and 1958 in the illustrated press featured in the *Visual Contagions* project (total comparison corpus: 14.2 million images). This list details the 30 artworks most reproduced in the greatest number of countries and cities, and their frequency. / Reprodukcijske umjetničkih djela s najvećom međunarodnom cirkulacijom u ilustriranom tisku od 1840. do 1958. razmatranom u projektu *Visual Contagions* (ukupni usporedni korpus: 14,2 milijuna slika). Ovaj popis prikazuje 30 najčešće reproduciranih djela u najvećem broju zemalja i gradova te njihovu učestalost. ↑ →

²⁰ See the International Image Interoperability Framework website listed in the online sources.

²¹ For a technical explanation of the computational methodology, and our use of AI, see: Champenois, Joyeux-Prunel, “Visual Contagions.”

²² See the *Visual Contagions* project website listed in the online sources.

²³ Manovich, *Cultural Analytics*.

²⁴ Joyeux-Prunel, “Digital humanities in the era of digital reproducibility.”

²⁵ The first detailed presentation of these results is given in: Joyeux-Prunel, Barras, Carboni, “Une Europe par les arts ?.”

²⁶ See the GitLab website listed in the online sources.

²⁷ On this subject, see: Barras, “Art blockbusters from the past.”

Fra Angelico, <i>Annunciations (columns)</i> , c. 1430, (various)	5	6	14
Raphael, <i>The School of Athens</i> , 1508–1512, Musei Vaticani	5	6	8
Botticelli, <i>Spring</i> , 1477–1482, <i>Gallerie degli Uffizi</i> (with details)	5	5	17
Corot, Tivoli. <i>Les jardins de la Villa d'Este</i> , 1843, Musée du Louvre	5	5	15
Cézanne, <i>La Dame à l'Hermine d'après Le Greco</i> , 1885–1885, private coll. (with original painting from Le Greco)	5	5	15
Vermeer, <i>The Little Street</i> , c. 1658, Rijksmuseum	5	5	14
Clouet, <i>Marie Stuart jeune</i> , 1558, Bibliothèque nationale de France	5	5	11
Meryon, <i>Stryge</i> , 1853	5	5	11
Rousseau, <i>La Noce</i> , 1905, Musée de l'Orangerie	5	5	10
Dürer, <i>Nemesis</i> , 1499–1501	5	5	9
Archipenko, <i>Torso</i> , c. 1919 (various)	5	5	7
Puvis de Chavannes, <i>Sainte Geneviève en prière</i> , 1874–1876, Van Gogh Museum	5	5	6
Ignacio Zuloaga, <i>Un Picador de Braüs</i>	5	5	5
Velasquez, <i>Las Meninas</i> , 1656, Museo Nacional del Prado	5	5	5
Manet, <i>L'Exécution de Maximilien</i> , 1868–1869, Kunsthalle Mannheim	4	8	17
Dürer, <i>Saint Jerome in His Study</i> , 1514	4	6	20
Dürer, <i>Hieronymus Holzschuher</i> , 1526	4	6	12
Liebermann, <i>Flachsscheuer in Laren</i> , 1887, Alte Nationalgalerie Berlin	4	6	12
Tatlin, Monument to the Third International, 1919–1920	4	6	8

automatic and scholarly constitution of the corpus, as well as “close” and “distant” analyses, as complementary and inseparable components.

A GLOBAL, YET EUROPEAN, GEOGRAPHY

One of the initial observations regarding the dissemination of artistic images in the relevant press is that, while their reach is indeed global, it is primarily European (Fig. 3). Although this distribution can largely be attributed to the characteristics of our corpus, it is worth noting that the international spread is less extensive than that of the initial corpus itself. Latin America, as well as North America—both significant in the overall corpus—are much less represented.

IMAGES SEEN MORE THAN OTHERS

Among the millions of images collected by our machines, which artistic images were most visible in international press from 1880 to 1960? Can we determine which works were reproduced most frequently, appreciated, or promoted? By whom were they promoted? Which artists and styles enjoyed more success during this time?

To assess and classify the circulation of the 5,255 art reproductions, we ranked each image group based on three indices: the number of countries in which an image was reproduced, the number of cities where it was printed, and the number of images present in each group. This approach yields a rudimentary but insightful ranking of the varying degrees of images’ dissemination.²⁵ About thirty original works stand out (Table 1 and Fig. 4). The list of the analyzed sources and the operations used for analyzing and ranking the works are available on GitLab.²⁶

The names and works of the artists in question are particularly interesting for exploring one of the ways through which the canon of art history may have been constructed. Works by old masters dominate the list, with a few exceptions. At the top is the *Mona Lisa* (1503–1519) by Leonardo da Vinci. In this instance, we included variations of the artwork (such as *LHOOQ*, advertisements, caricatures, etc.) in its circulation.²⁷ Following, Jean-Baptiste Millet’s *Angélu* (1857–1859), two engravings by Albrecht Dürer, *The Knight, Death and the Devil* (1513) and *Melencolia I* (1514), as well as artworks painted by Rembrandt van Rijn (*The Little Tomb*, 1652), Fra Angelico (*Annunciation*, 1426), Jan Van Eyck (*Madonna of Chancellor Rolin*, 1435), Raphael (*The School of Athens*, 1508–1512) and Sandro Botticelli (*Spring*, 1478–1482). In addition to Millet’s *Angélu*, several other works by 19th-century artists also stand out: from the Impressionist era, Claude Monet’s *Déjeuner* (1868), Paul Cézanne’s *Dame à l'Hermine* (1885–1886), Pierre Puvis de Chavannes’ *Sainte Geneviève en prière* (1877) and Ignacio Zuloaga’s *Picador de Braüs* are subject to a comparable

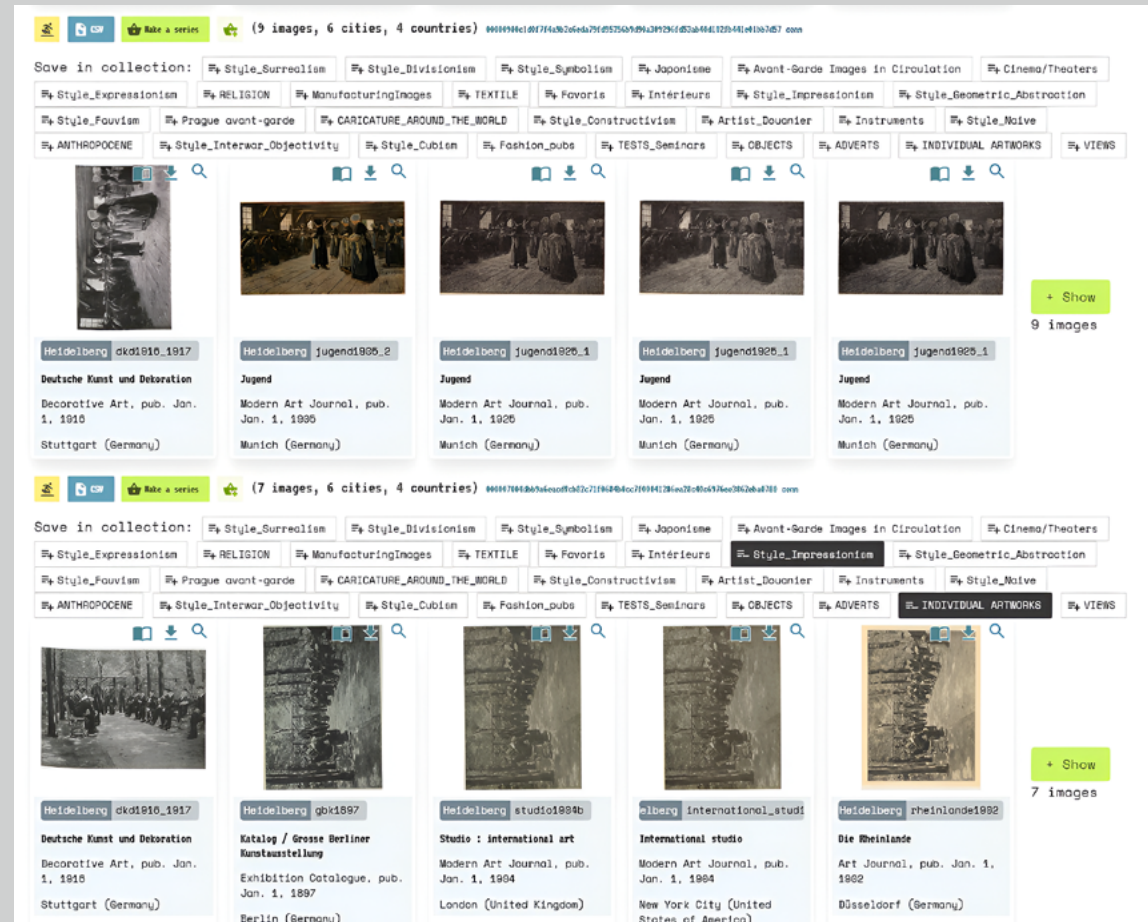


Fig. / Sl. 2 Screenshot of the *Visual Contagions/Explore* platform, in which images extracted from periodicals are grouped by visual similarity. / Snimka zaslona platforme *Visual Contagions/Explore*, na kojoj se nalaze reprodukcije izlučene iz periodičkih publikacija, grupirane prema vizualnoj sličnosti.



Fig. / Sl. 3 Locations of image reproduction: 5255 artistic images from the corpus. © Visual Contagions / Lokacija reprodukcija: 5255 umjetničkih djela u korpusu. © Visual Contagions

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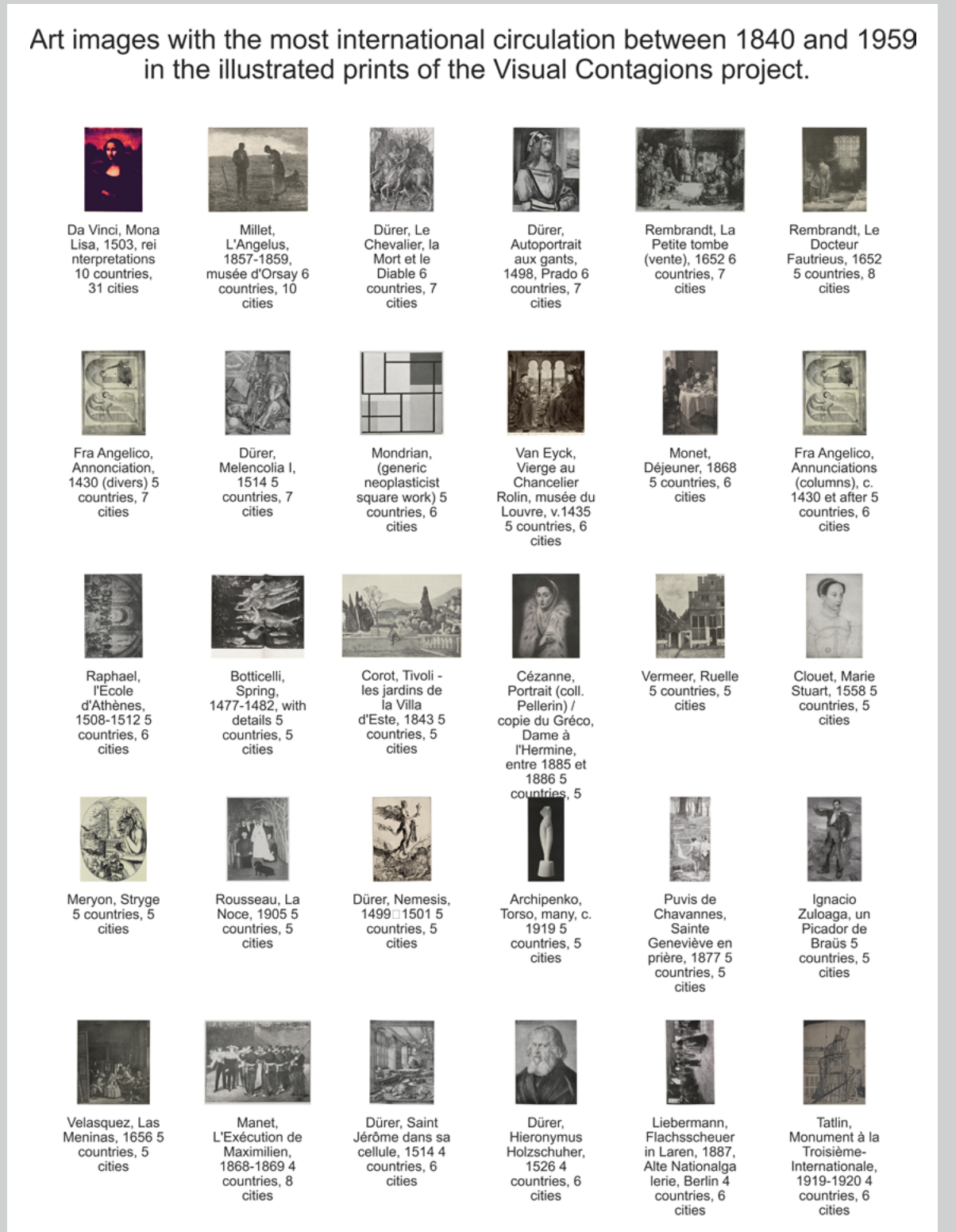


Fig. / Sl. 4 Art images with the most international circulation between 1840 and 1958 in the illustrated press featured in the *Visual Contagions* project. This list shows the 30 artworks most reproduced in the greatest number of countries. Each image is followed by details about the authorship, title, the number of countries and the number of cities in which it has been reproduced. / Reprodukcije umjetničkih djela s najvećom međunarodnom cirkulacijom od 1840. do 1958. u ilustriranom tisku razmatranom u projektu *Visual Contagions*. Ovaj popis prikazuje 30 najčešće reproduciranih umjetničkih djela u najvećem broju zemalja. Svaku reprodukciju prate podaci o autoru djela, nazivu djela, broju zemalja i broju gradova u kojima je reproducirano.

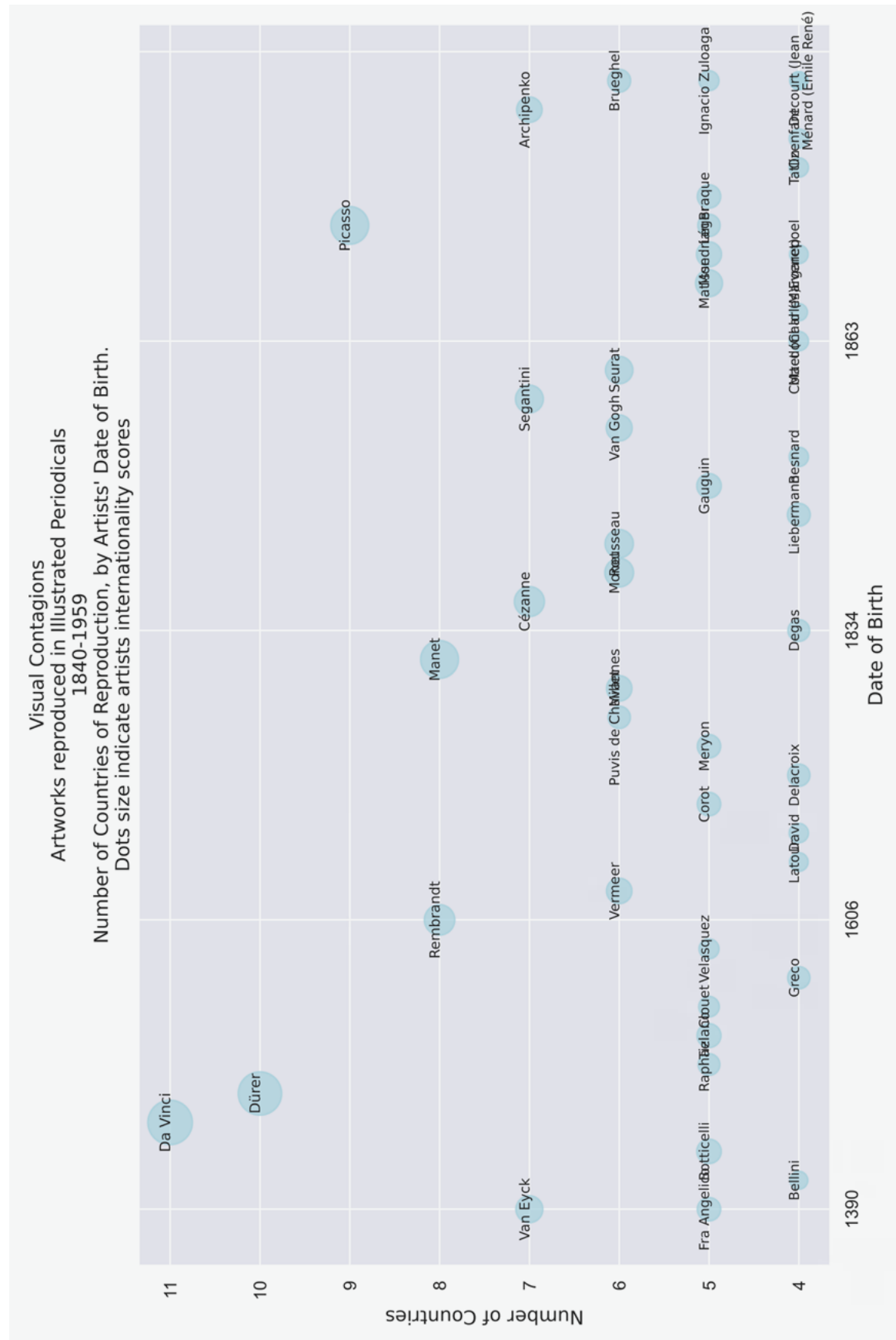


Fig. / Sl. 5 Artists represented in the illustrated periodicals featured in *Visual Contagions* project. / Umjetnici čija su djela reproducirana u ilustriranom tisku razmatranom u projektu *Visual Contagions*. Veličina točke ukazuje na međunarodnu vidljivost umjetnika.

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Fig. / Sl. 6 Relative chronological correlation of artists in the *Visual Contagions* project's database of artistic images. 3559 images representing 344 artworks by 155 artists and distributed across 219 periodicals published in 18 countries between 1890 and 1945. The letter size of the artists' names is not comparable between word clouds. / Relativna kronološka korelacija umjetnika u bazi reprodukcija projekta *Visual Contagions*. Ukupno 3559 reprodukcija koje prikazuju 344 umjetnička djela 155 umjetnika i zastupljene su u 219 periodičkih publikacija objavljenih u 18 zemalja od 1890. do 1945. Veličina slova imena umjetnika nije usporediva između različitih oblaka riječi.

circulation (5 countries), as are two slightly earlier works from the same century, Camille Corot's *Jardins de la Villa d'Este* (1843) and Charles Meryon's *Stryge* (1853). Finally, it is striking that the list includes four works associated with the history of modern art and the avant-gardes, characterized by a shorter and, a priori, more intense circulation: *La Noce* by Douanier Rousseau (1905), Alexander Archipenko's *Torso* (1914) and Vladimir Tatlin's *Monument to the Third International* (1919). We have also included the Neoplasticist works of Piet Mondrian, which tend to display very similar visual content, hence their inclusion in the first ten.

This compilation provides a means to examine, through the lens of illustrated magazines, the symbiosis between historical masters and contemporary artists, as well as between museum culture and the realm of the industrial image. The art images featured in past magazines belonged to a symbolic constellation that challenges our conventional distinctions between ancient and modern, past and present, the deceased and the living.

ANCIENT ARTISTS, MODERN ARTISTS. A REGULAR COEXISTENCE

The phenomenon can be clarified by examining the scale of the presence of reproductions of the artist's works within the corpus. Based on the names of the artists who authored the originals of the reproductions gathered, we have classified the authors of our 344 works according to the presence of their work in press reproductions across countries and periods and according to the artists' years of birth (Fig. 5).

The coexistence of the ancients and the moderns persisted until the 1940s, and while a more detailed chronological and thematic analysis allows for the identification of generational shifts, these do not alter this long-term coexistence within the visual media landscape of the people of that time (Fig. 6).

Prior to the 1890s, our data is insufficient for a reliable comparison. However, what stands out for the period 1890–1910 is the frequent presence of modern artists' names, often surpassing those of the old masters, and often appearing in the same journals. This simultaneity of references suggests that the construction of the ancient and modern canons may have been less distinct than commonly thought. It also implies a relatively late visual construction, or at least confirmation, of the old master canon. For the period 1890–1910, prominent modern figures such as Giovanni Segantini, Édouard Manet, Edgar Degas, and others, whose reputations were solidified by the 1900s through exhibitions and awards, are frequently present. We see their works coexisting with a gradually increasing number of illustrations of old master works, such as those by Dürer and Van Eyck. Most of the modern artists in question are well-known. These are artists who exhibited in what is recognized as an international, cosmopolitan milieu of modern art, which was supported by

prestigious art journals favorable to modern art—particularly the European Secessionist periodicals, which are well represented in our corpus.²⁸

Reciprocally, we observe the increasing presence of old masters starting from the period 1910, contrary to the perception of an era more focused on the recognition of modern artists. It is very likely that the separation between modern and ancient artists is primarily the result of compartmentalized studies based on specific cases or on the relatively segmented field of exhibitions that separated museums, academic salons, and modern exhibitions. Other types of sources, such as journals or perhaps even the world of galleries and auctions, suggest that this specialization was not as clear-cut.

The period from 1915 to 1918 was characterized by an unexpected emphasis on modern rather than old masters, contrary to what one might expect given our historical understanding of the early “return to order” movement in avant-garde painting exhibited and discussed in Paris from 1915 onward.²⁹ We initially expected to see an increase in references to national masters and a decline in reproductions of works by artists associated with the internationalism of the 1910s, in line with the rejection of French or German influences in the public sphere, depending on the location of the discussion. However, this was not the case. Certainly, we do not see many reproductions of artists associated with the avant-garde of the 1910s circulating. Instead, artists associated with the international dominance of Impressionism and its cosmopolitanism in the 1900s, such as Manet, Degas, and Cézanne, as well as Hodler, were much more frequently reproduced. However, works by the old masters are also not strongly represented.

The sudden decline in references to old masters during WWI through the reproduction of their works must first be explained. It is possible that journalists intentionally avoided reproducing them too frequently, as these figures were often quite challenging to associate with a national tradition or ethnicity. Another explanatory hypothesis is that the avant-garde’s renewed interest in old masters during the war was not reflected in the traditional press, which plays a significant role in our corpus for this period. Historiography has extensively studied the avant-garde art press but not the general press, which may have led to a somewhat misleading perception that the war fostered an interest in old masters. Thus, the return to the old masters during the Great War was genuinely avant-garde...

To explain, on the other hand, the continued illustrations of modern artists during the Great War, one could refer to the remarkable nationalization of these artists following their consecration in the art press and criticism from 1905 onwards.³⁰ During the First World War, journalists turned to the reliable values of their national modernities: Degas, Manet, and Cézanne for France; Hodler (who was, in fact, Swiss) for Germany. At this time, certain galleries heavily promoted these modern/national artists abroad, whether or

not linked to the newly invented artistic and cultural propaganda efforts on both sides of the front.³¹ Indeed, after 1915, the exhibition of modern national art abroad was used to showcase a country’s modernity and cultural openness, countering accusations of barbarism.³² These choices in the mainstream press also reflected the cultural propaganda efforts of the time.

Post-WWI, the illustrated press shifted its focus to a younger, avant-garde generation, admiring both historical figures like Dürer and Da Vinci (this time, in line with the widespread return to order in the early 1920s)³³ and contemporary artists like Picasso. This period’s fascination with masters across time necessitates further investigation into how the press influenced the construction of a European Transatlantic canon that intertwined ancient and modern, past and future. As images were often accompanied by articles about their authors (less frequently in the case of female creators), it will also be essential to complement this study with an analysis not only of images but also of the texts surrounding them to understand better how artists’ reputations disseminate.

A VISUAL CULTURE FOR SOCIAL ELITES

The printed visual landscape highlighted by our machines is not solely visual. It is primarily social, economic, and technical—all conditions that a computational approach can help delineate, provided that we have metadata to do so and that we cross-reference the hypotheses generated from the quantitative approach with other indicators, both quantitative and qualitative, derived from other sources and at different scales.

Within our dataset, the analyzed artistic images predominantly circulated within art magazines (Fig. 7). This stands in contrast to the broader social reach and thematic diversity of the images found throughout the entirety of our project’s corpus of illustrated periodicals. It can be argued that, at least until the 1950s, artworks primarily circulated in journals aimed at the elite, except for a few works that managed to cross the boundaries between different types of periodicals. Art images contributed to the social stratification of art magazines—both in terms of cost and aesthetics. For example, art magazines from the 1880s and 1890s used the reproduction of artworks as a mark of distinction.³⁴ The most expensive subscriptions included off-text lithographs, which the magazine often noted were available for purchase.³⁵ Only a few illustrated periodicals targeting the general public reproduced artworks, typically with an explicitly educational goal—one that aimed to make high culture accessible to all social classes, thus reaffirming the association of art images with the upper social echelons.³⁶ However, the artistic images reproduced therein are not found in our corpus. These were images that evidently circulated little, if at all, on an international scale.

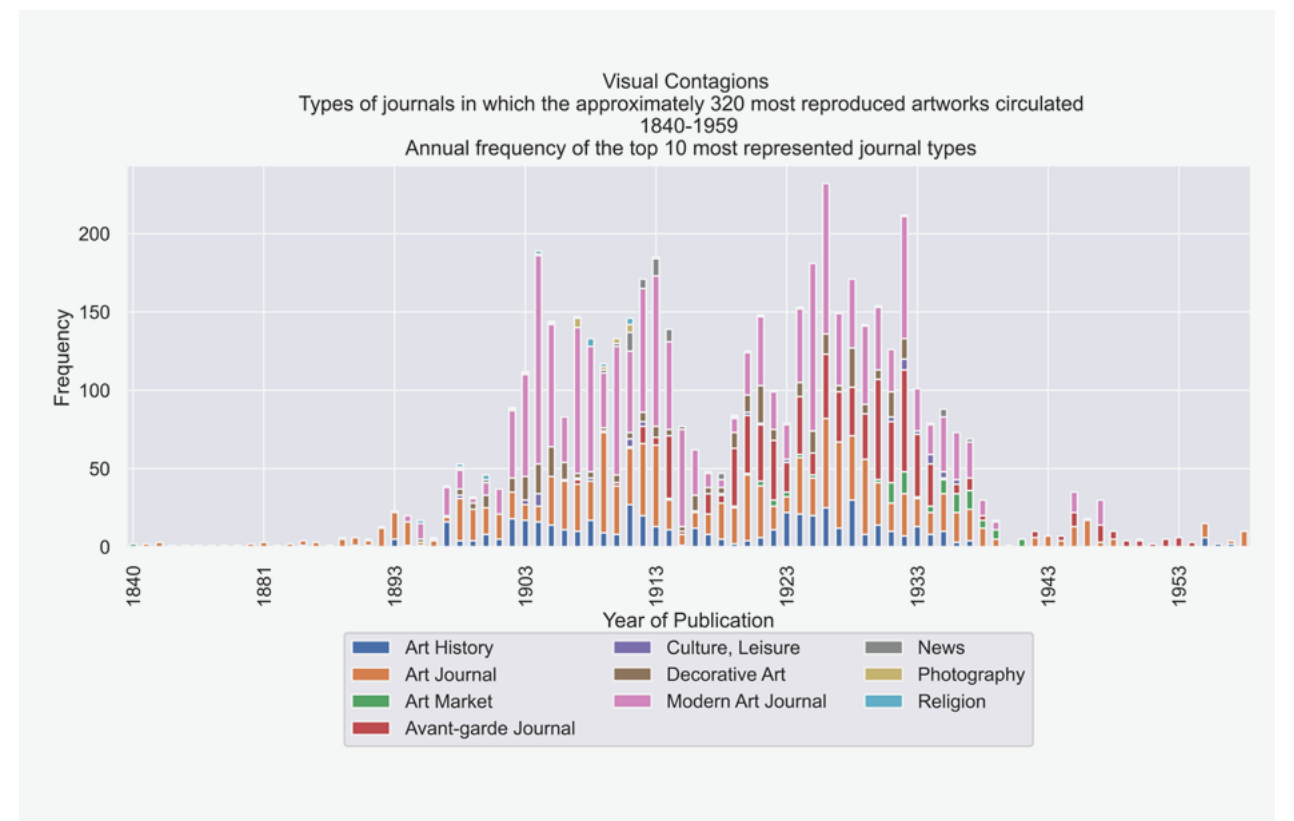


Fig. / Sl. 7 Distribution of magazines publishing reproductions of artworks from the *Visual Contagions* corpus. The journals have been classified by type—only the 10 most represented journal types are displayed. / Distribucija časopisa koji objavljuju reprodukcije umjetničkih djela u korpusu *Visual Contagions*. Časopisi su razvrstani po vrstama—prikazano je samo deset najzastupljenijih vrsta časopisa.

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28

Jensen, *Marketing Modernism in Fin-de-Siècle Europe*; Joyeux-Prunel, *Les Avant-Gardes Artistiques 1848–1918*.

29

Silver, *Esprit de Corps*. See also Part V, in: Joyeux-Prunel, *Les Avant-Gardes Artistiques 1848–1918*.

30

See Part II, in: Joyeux-Prunel, *Les Avant-Gardes Artistiques 1848–1918*.

31

Vollard, *Souvenirs d'un marchand de tableaux*, 382; Jaccard, "La Galerie Moos à Genève et Hodler."

32

Raillard, Trenc Ballester, "Les relations franco-espagnoles pendant la Première Guerre;" Kostka, *Médiation hostile-médiation amicale*; Kostka, "La modernité tronquée?"

33

Silver, *Esprit de Corps*; Crockett, *German Post-Expressionism*; Joyeux-Prunel, *Les Avant-Gardes Artistiques 1918–1945* (Part I).

34

Froloff, "Le Centaure et ses modèles anglais *The Pageant et The Yellow Book*." See also the wider international study by Grilli, *Revue en réseaux et renaissance*.

35

For example, in the magazine *L'Ermitage* (1890–1907).

36

One example is the Illustrated Supplement of *Le Petit Journal*, published from November 1890, which quickly amassed 3 million readers and 1 million buyers. Tétu, "L'illustration de la presse au XIXe siècle."

The magazines that most frequently published art images cater to a wealthy elite, capable of affording, as early as the 1890s, an automobile: indeed, the first advertisements for the automobile in our 14.2 million images appeared in art magazines.³⁷ Advertisements in these art magazines did not feature mass-market products,³⁸ but rather items like transatlantic travel offers, and later, flights between Europe and America. Art purchases remained a pursuit of the wealthy, with galleries increasingly advertising in art magazines. Art images sometimes served as half-page gallery ads, showcasing galleries' established networks (Fig. 8).

The social dissemination of artistic images through the illustrated press does not necessarily expand over the years. Illustrated daily newspapers and current affairs periodicals made a modest appearance in the 1910s. The theft of the *Mona Lisa* in 1911, followed by its return two years later, undoubtedly contributed to this.³⁹ Da Vinci's portrait was much more widely reproduced during those two years, reaching as far as the Americas and Cairo.

Art images from our corpus reappeared in press aimed at broader social strata during WWI, only to disappear in later periods. During the 1920s and 1930s, the most reproduced artworks mentioned earlier were, once again, primarily featured in general art magazines, avant-garde periodicals, and modern art journals.

However, it is difficult to fully grasp the social practices in which the circulation of these images is embedded by looking at them in a vacuum. One way to understand their dissemination is by examining it alongside the circulation of other images that clearly reflect positional social practices, such as automobile advertisements or photogravures of sculpted busts, which are highly prevalent in similar types of magazines. Only archival sources and memoirs, however, allow for a better understanding of how these images were consumed (sometimes cut out, pasted, framed), and could integrate into composite imaginaries depending on social environments, ages, and genders.

PRINTING LOGICS AND THEIR ROLE IN THE CIRCULATION OF ARTWORKS

Several factors can explain the reproduction and international dissemination of art images: the quality of the original works and the perceived genius of the artists (an argument that, according to Gregor Langfeld, remained influential in canon formation discussions as late as 2016);⁴⁰ the relevance of exhibitions and museum events; journals' attempts to distinguish themselves in a competitive market to attract elite readers; and advertising inserts from art dealers. Another possible explanation, stemming from the computational and quantitative approach, is the illumination of how technical and material limitations exerted an influence on the dissemination of artistic visual landscapes. Why, for example,



Fig. / Sl. 8 Advertising page from *Der Kunstwanderer: Zeitschrift für alte und neue Kunst, für Kunstmarkt und Sammelwesen*, no. 4/5 (1922/23), p. 213. / Oglasna stranica časopisa *Der Kunstwanderer: Zeitschrift für alte und neue Kunst, für Kunstmarkt und Sammelwesen*, br. 4/5 (1922./1923.), str. 213.

↑

37 See: Carboni, "The Mediatization of the Early Automobile."

38 On the advertisements in our corpus, see: Joyeux-Prunel, "Cet été, faites grossir vos seins et repoussez vos cheveux." See also: Pradier, "Advertise the Belle Epoque."

39 Coignard, *Une femme disparaît*.

40 Langfeld, "The Canon in Art History."

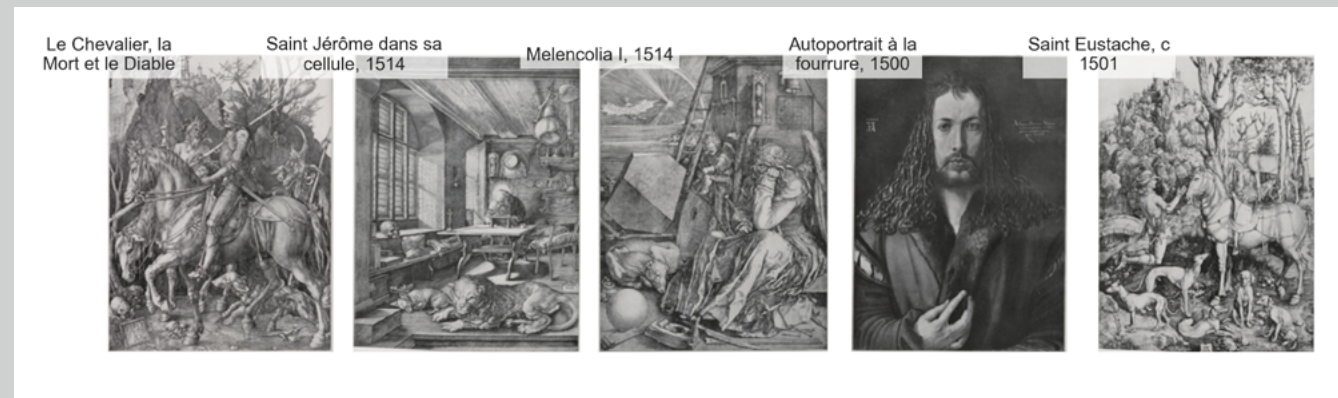


Fig. / Sl. 9 The 5 most reproduced and internationally circulated works by Dürer within the *Visual Contagions* project corpus as of June 2024.
/ Pet najčešće reproduciranih Dürerovih djela s najvećom međunarodnom cirkulacijom u korpusu *Visual Contagions* od lipnja 2024.

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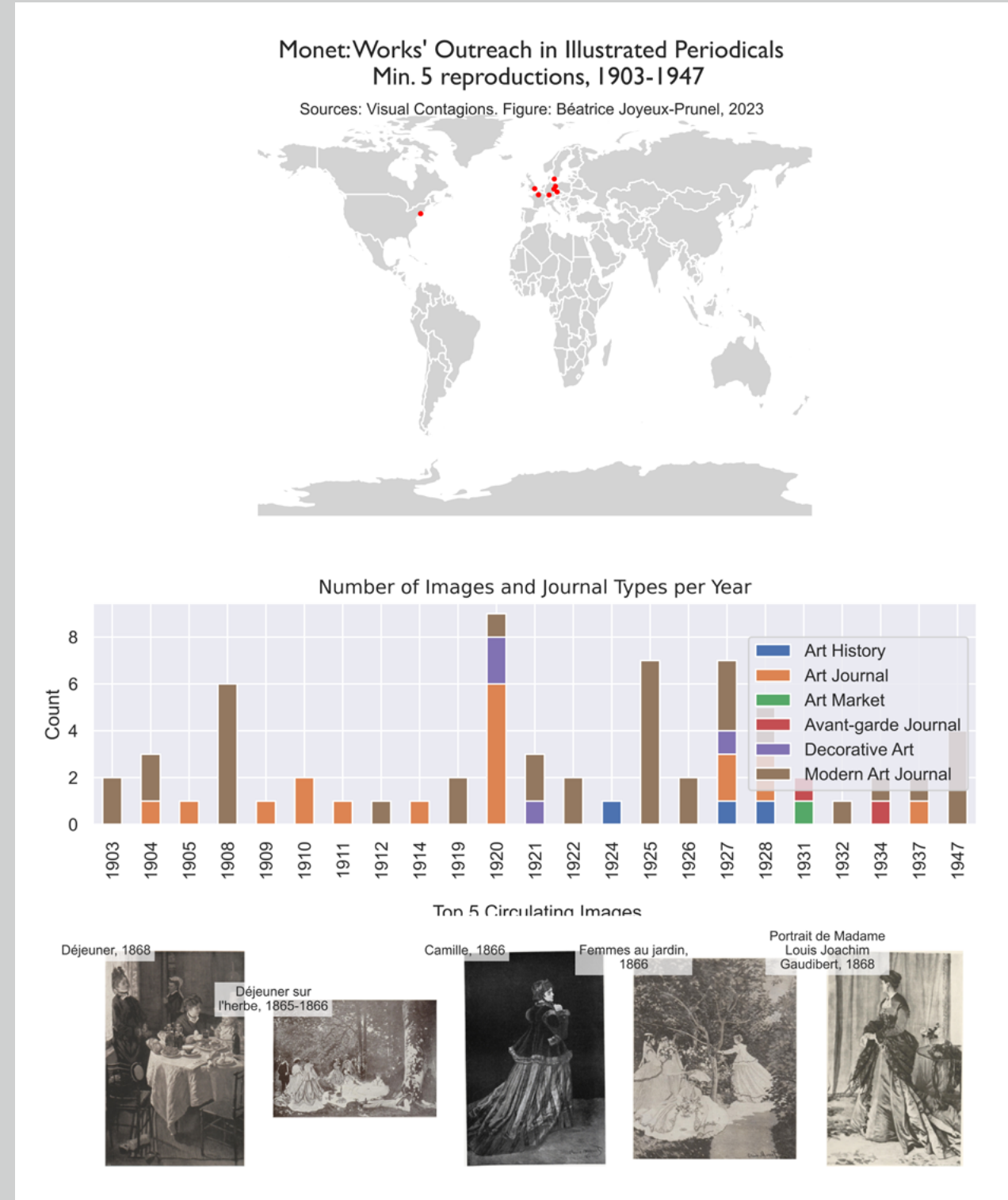


Fig. / Sl. 10 International distribution of Monet's works in the illustrated press.
/ Međunarodna distribucija Monetovih djela u ilustriranom tisku.

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are engravings by Dürer more often reproduced than his paintings? (Fig. 9) In the 1890s and continuing into the 1910s, lithography remained the primary reproduction technique. However, lithography couldn't capture all the nuances of light, shadow, and color in a painting as effectively as engraving could.⁴¹ As engravers could retouch their copies to enhance the contrast and detail of a work being transposed, the reproduction of engravings in magazines consistently yielded better visual results than those of paintings.⁴² This likely contributed to the popularity of engravings by old masters, especially those by artists like Dürer known for their stark contrasts, which made their work well-suited to reproduction. While these technical aspects don't fully explain the phenomenon, they help shed light on why Dürer's works were more readily reproduced and thus circulated more widely.

Furthermore, the cost associated with retouching lithographic transpositions of paintings to enhance contrast contributed to the expense of producing journals. This technical and economic factor likely accounts for the relatively low number of landscapes in our corpus compared to representations of figures. All portrait and figure paintings in our database showcase color contrasts, such as a white face against a dark garment or a light-colored garment or dress. In contrast, landscapes are underrepresented, even those by artists renowned for their landscape paintings. For example, it is perplexing that the most frequently reproduced works of Claude Monet in our corpus are figure paintings rather than landscapes (Fig. 10), considering the Impressionist is internationally celebrated for his outdoor views. The iconic *Impression, soleil levant* from 1874, for instance, is absent from our corpus for the period studied. We do not attribute this omission to the limitations of our algorithm, which struggles to identify landscapes, or to the sometimes-poor quality of the available digital scans. A thorough examination of the sources confirmed the relative absence of landscapes.

By contrast, Monet's most widely reproduced work in our corpus was a figure painting, *Le Déjeuner* of 1868 (Städel Museum, Frankfurt am Main, Fig. 11). The painting was reproduced in 1904 by the English magazine *The Studio* and its equivalent *The International Studio* published in the United States. Then, in 1910, Monet's painting was reproduced in the Parisian magazine *L'art et les artistes* and in 1912 in the Leipzig modern art magazine *Der Cicerone*. In both instances, the reproduction noted the recent acquisition of the work by the Städel Museum. Further reproductions between 1912 and 1928 in magazines published in Leipzig, Stuttgart, Copenhagen, and especially Paris often accompanied articles on Monet (with *Le Déjeuner* presented as one of his most representative early works) or comments related to the Städel Museum's collections. A three-page article praising Monet, published in January 1925 in *L'Art vivant* (Paris) (Monet died on December 5, 1926 in Giverny), produced many more and better examples of Impressionistic artwork.⁴³ The article was illustrated with, in order, a photograph of the painter, followed by reproductions of



Fig. / Sl. 11 Claude Monet, *Le Déjeuner*, 1868–1869. Oil on Canvas, 231.5 × 151.5 cm. Frankfurt am Main, Städel Museum. / Claude Monet, *Le Déjeuner*, 1868.–1869. Ulje na platnu, 231.5 × 151.5 cm. Frankfurt am Main, Muzej Städel.

↑

three oil paintings: *Le Quai du Louvre* (c. 1867, Kunstmuseum Den Haag, The Hague), *Le Déjeuner*, and *La Débâcle à Vétheuil* (1881, Museo Thyssen-Bornemisza, Madrid) — works at least 44 years old in relation to their publication date.

Another example highlighting the importance of technical factors in image reproduction is the articles commemorating Monet's death in *La Gazette des Beaux-Arts* or *L'Art vivant* in 1927, which reproduced few landscapes and only utilized reproductions of works dating from before 1900. Certainly, the landscapes Monet created after 1900 exhibit a cohesive style with subtle tonal variations, making them difficult to reproduce effectively in black and white. Moreover, the landscapes reproduced in several journals, such as *La Débâcle à Vétheuil*, appeared exclusively in Parisian publications and did not circulate on an international scale. In all these instances, the reproduced works are legible and understandable in black and white. Monet himself was aware of the challenges involved in securing good reproductions.⁴⁴ The difficulty of reproduction increased when the artist began to work in even more blurred tones after being diagnosed with cataracts in 1908. His water lilies from this period were not conducive to the black-and-white format of illustrated periodicals.

Access to engravings and photographic reproductions also posed challenges for magazine editors, who often had to negotiate with dealers holding the rights to these reproductions. In ideal situations, editors could acquire original engravings directly from artists, bypassing the need to transfer from one medium to another. However, documentation primarily exists for original engravings, with artists' correspondence being more readily preserved than magazine archives. This archival gap underscores the complexity of understanding the selection and circulation of painted work reproductions, including the social and economic frameworks influencing their distribution across magazines and borders. Some correspondence between artists and galleries confirms the decisive role of dealers in granting or denying permission to reproduce works they were promoting. Monet wrote to Paul Durand-Ruel in 1906: "I don't see any problem with the newspaper in question reproducing something of mine, if you on your side are willing to authorize it."⁴⁵ This is confirmed by the credit given to the galleries within the captions of some illustrations published from the 1910s.

A CONCLUSION OF ART REPRODUCTION AND AURA

To conclude, let's revisit the question of aura raised in the introduction. The preceding study, while limited, suggests (or confirms) that attributing the reproduction and dissemination of artworks solely to the artist's prior reputation, genius, or the perceived quality of their works would be overly simplistic. The criteria for deciding whether an artwork should be reproduced in a publication, as well as the more complex decision to reuse an engraved or photographic matrix

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See chapters 1 and 3 in: Cubitt, *The Practice of Light*.

42

Bogart, *Artists, Advertising, and the Borders of Art*; Lambert, *The Image Multiplied*, 118.

43

Gustave, "Claude Monet et l'impressionnisme," 1.

44

Venturi, Durand-Ruel, *Les archives de l'impressionnisme*, 336.

45

Monet to Durand-Ruel, Mesnil-Beaufresne (autumn 1906), in: Venturi, Durand-Ruel, *Les archives de l'impressionnisme*, 122–23. Translated by authors, original: "Je ne vois aucun inconvénient à ce que le journal en question reproduise quelque chose de moi, si vous de votre côté voulez bien les autoriser."

previously used in another journal involve numerous factors. These include the availability of an existing matrix that facilitates reproducibility (a system of matrix circulation that remains largely unexplored but is beginning to be identified in fields such as chapbooks);⁴⁶ the urgency of current events, such as the theft of a work like the *Mona Lisa* or the death of an artist (a topic explored elsewhere on the case of Giovanni Segantini);⁴⁷ and the suitability of the artwork for black-and-white reproduction, which, as we have seen, was not always possible for certain old paintings (e.g., Dürer) or Monet's landscapes. There are also documented cases of art dealers actively promoting the circulation of works they sold, either through advertising inserts or partnerships with the press (notably for Segantini). Thus, the reproducibility of artworks was not necessarily tied to the artist's prior acclaim.

On the other hand, it is challenging to determine whether the reproduction of artworks enhanced their aura or, conversely, diminished it. In our contemporary era, shaped by the social and cultural impact of social media, there is a tendency to equate aura and influence with the frequency of media appearances. This has led some theorists to argue that Walter Benjamin did not anticipate the developments of today.⁴⁸ This approach appears somewhat simplistic if we acknowledge that Benjamin's concept of the aura of artworks (as the sense of awe and reverence that surrounds an original work) cannot be merely equated with the frequency of its appearance in the press during a given period. Nevertheless, a few points can be observed:

1. The increased reproduction of certain artworks is sometimes a response to a sudden rise in their aura, directly linked to events such as the disappearance of a work (e.g., the theft of the *Mona Lisa*) or the deaths of artists like Manet, Giovanni Segantini, or Cézanne.
2. Historical figures, much like contemporary ones, recognized the value of distributing reproductions of their works to raise awareness and interest in their art (and potentially enhance their aura). Even before the press enabled broader dissemination, they circulated engraved series of their paintings.⁴⁹
3. Importantly, the international dissemination of artistic images rarely transcended the realm of art and art journals and rarely transcended social boundaries until at least the 1960s. One might hypothesize that, within these elite circles, the value attributed to artworks was significant (consistent with Pierre Bourdieu's research on social distinction and the artistic preferences of elites versus lower social classes).⁵⁰ Thus, the relationship between aura and the reproducibility of images must be examined not only through a philosophical and aesthetic framework but also from a sociological, technical, and historical perspective.

These initial results from a distant (digital), quantitative, and comparative approach to the circulation of artistic images in the illustrated press mark the beginning of a larger investigation and call for further exploration, particularly into image reception, which cannot be fully understood through

quantitative analysis alone. Several intriguing hypotheses warrant deeper investigation: notably, the coexistence of the circulation of works by old masters and modern artists in the construction of the aura of artworks and artists through their reproduction in the press; the challenge of artworks to transcend certain boundaries; and the significant technical constraints on image circulation, which may explain why some works became more widely recognized than others. In this regard, while computational approaches are often criticized for not addressing questions of aesthetics, taste, or the (variable) meaning and reception of works, as we have also noted, they nonetheless indicate that reception is not the sole factor at play. The aura of artworks is often reduced to their circulation in texts or images, and the circulation itself is frequently assumed to be the result of positive reception, yet material and social dynamics may have played a more substantial role. The history of the printed circulation of the artistic landscape in the early 20th century is likely shaped more by social, economic, and technical factors than by the aura of works, the genius of the masters, or their popularity among patrons and wider audiences.

46

Carta, Madroñal, *De los cantares de gesta a los cantares de ciego*.

47

Joyeux-Prunel, Barras, Carboni, "Une Europe par les arts ?."

48

Gunther, "L'Aura à l'ère des Singularités Numériques."

49

See note 6.

50

Bourdieu, *La Distinction*; Bourdieu, *Distinction*; Bourdieu, Darbel, *L'amour de l'art*.

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