

P / REFERENCES OF DESIGN

ACROSS TIME AND STONE: EVOLUTION OF TYPOGRAPHY IN DELHI'S HISTORIC ARCHITECTURAL MONUMENTS.

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ABSTRACT | This paper delves into the symbiotic relationship between type design and the built environment, focusing on typographic inscriptions on monuments in Delhi. Delhi's rich architectural and urban history, which serves as a hub for various cultural influences and historical eras, is the driving force behind the choice of the city as a case study. Three iconic monuments—Humayun's Tomb, India Gate, and the Indian War Memorial - are selected for their temporal diversity and the common thread of grief and loss of individuals or soldiers in wars, reflected in their typographic content. The study meticulously documents and analyzes typographic elements, including inscription methods, script styles, content presentation, and spatial integration, while also considering the materiality of the inscriptions, such as the use of different types of stones and forms. Findings reveal a dynamic evolution in typography across different eras and materials, highlighting the resilience and adaptability of type design in conveying messages of remembrance and loss within the urban landscape. This research contributes to understanding the evolution of type design, particularly within the context of memorial inscriptions in Delhi, addressing a literature gap. Aligning with the conference's theme of civic engagement through art and design, the paper explores the intersection between typography and materiality in urban artifacts. Ultimately, this study deepens our appreciation of typography's role in shaping cultural heritage and commemorating moments of significance in the built environment.

1. Introduction

Communication has undergone significant evolution throughout history, with typography emerging as a powerful tool that leaves a lasting impact due to its documented nature. In the diverse culture of India, characterised by languages, scripts, and typefaces, typography has played a pivotal role across various historical epochs. Looking at historical monuments, where we see great application and use of typography in their architectural spaces, raises a question! Does this typographic inscription in architectural monuments have any impact on users? How are these typographic inscriptions and their use evolving in and around the same geography? Thus, this study delves into the intricate dynamics of typographic evolution, exploring the changes in its application across different temporal periods. By scrutinising various factors influencing typography, including advancements in tools, technology, craftsmanship, materials, and colour palettes, this research endeavours to unravel the complexities surrounding its implementation in architectural monuments. Through meticulous analysis and examination, we seek insights into the nuanced evolution of typographic expression within India's rich cultural and historical context.

2. The Object of Study: Typography

2.1 Typography and Communication

Typography has played a crucial role in human communication and expression throughout history. From the earliest forms of written language to the intricate designs of modern digital fonts, typography has evolved to convey not just information but also emotion and aesthetic appeal. Typography is more than just arranging letters; it is an art form that merges artistry and technology to convey meaning and emotion (Lim, 2022).

Today, typography permeates print and digital media and physical spaces like urban environments and architectural designs. Its evolution from handwritten scripts to digital typefaces has transformed how we interact with written language in various contexts. Moreover, the diversity of scripts and styles across different cultures and periods underscores the dynamic nature of typography and its impact on visual communication (Haveman, 1997).

The evolution of typography has paralleled advancements in architectural and urban design (Haveman, Andrea. *Typography: Visual Connections to Art and Architecture through the Ages.*). As human activities have diversified, so too have the spaces we inhabit, ranging from intimate domestic settings to sprawling urban landscapes. Typography is crucial in shaping these environments, serving functional purposes like signage and wayfinding while contributing to a space's aesthetic and identity. Integrating typography into architectural design reflects a symbiotic relationship between written language and built environments. Whether it is the nameplates on residential buildings, the signage in commercial areas, or the monumental inscriptions on public structures, typography enhances architectural spaces' usability and visual appeal. Moreover, the historical evolution of typography can be traced through the diverse array of scripts and styles found in different architectural contexts worldwide (Smith, 2011).

2.2 Typography and Architectural Monuments

Architectural monuments serve as tangible manifestations of cultural heritage and historical narratives, often adorned with inscriptions and decorative elements that reflect the aesthetics and values of their respective periods. Famous landmarks that witness centuries of cultural exchange and political upheaval dot the architectural landscape of Delhi, a city with a rich and varied history. Delhi's monuments represent a tapestry of architectural styles and typographic expressions, from the towering Qutub Minar to the stately Rashtrapati Bhavan. These structures serve as landmarks and repositories of collective memory,

embodying the stories and aspirations of past civilizations. By examining the typography adorning these monuments, we can gain insights into the socio-cultural dynamics and historical narratives that have shaped the built environment of Delhi and its surrounding regions (Chernyh & Raspopova, 2020).

3. The Context: The City of Delhi

3.1 Delhi's Architectural History

Delhi, as the capital of India, epitomizes the nation's cultural, political, and historical significance. Its secular ethos has fostered a harmonious coexistence of diverse religions, beliefs, and ideologies throughout history. Known as Indraprastha in ancient epics, Delhi has evolved into a modern metropolis of global importance, bearing the imprints of various dynasties and empires. The city's architectural landmarks, such as the Qutub complex and Rashtrapati Bhavan, narrate conquest and cultural exchange tales. These monuments symbolize Delhi's rich history and cultural heritage, showcasing architectural prowess from the Delhi Sultanate to the Mughal era. Each structure, from majestic forts to intricate tombs, reflects the social, political, and religious dynamics that have shaped Delhi's identity over centuries. Delhi's monuments are a living testament to its enduring legacy, inviting visitors to explore its diverse architectural heritage. From ancient ruins to modern marvels, they offer glimpses into the past while celebrating the diversity of human achievement. In essence, Delhi's architectural landmarks are symbols of resilience, cultural richness, and the timeless allure of architectural excellence. Selecting Delhi as the focal point for research provides a rich landscape for exploring the intricate interplay between architecture, urban development, and cultural heritage. With a history spanning over a millennium, Delhi is a testament to the enduring legacies of multiple civilizations and dynasties. From its ancient origins, including the legendary city of Indraprastha mentioned in Hindu epics, to its prominence as the capital of the Delhi Sultanate and later the Mughal Empire, the city's architectural heritage is imbued with a wealth of historical narratives and artistic achievements (Singh, 2019).

Delhi's architectural and urban history offers a captivating narrative of the city's evolution from ancient times to the present. This journey is etched into the city's built environment, showcasing various architectural styles and urban landscapes. Delhi's architectural legacy is a testament to the city's cultural richness and historical significance. From ancient settlements to Mughal-era monuments, the city's landmarks, such as the Qutub Minar and the Red Fort, reflect a blend of indigenous craftsmanship, Islamic influences, and colonial architecture. Delhi's urban history also highlights its role as a center of commerce, culture, and power. The city has been a hub of trade and cultural exchange through the centuries, resulting in vibrant urban centers like Shahjahanabad and Lutyens' Delhi. Despite rapid modernization, preserving Delhi's architectural heritage remains a challenge. Balancing urban development with heritage conservation requires innovative strategies and community engagement. Researchers gain insights into urban dynamics, cultural identity, and heritage preservation by studying Delhi's architectural and urban history. This understanding informs discussions on urban planning, sustainable development, and the adaptive reuse of historic buildings. In essence, Delhi's rich architectural and urban history provides a lens through which to explore the complex interplay between cities, societies, and the built environment, enriching our understanding of urban life and cultural heritage (Chernyh & Raspopova, 2020).



Figure 1. a. Humayun's Tomb (elevational front view from the entrance) (Author, 2024). b. Light show at India Gate (view from east during the night) (Author, 2024). c. National War Memorial (view from the entrance) (Author, 2024).

3.2 Diverse Cultural Influence in Delhi

As India's capital, Delhi encapsulates the country's rich cultural diversity, drawing people from varied regions, religions, and backgrounds. This amalgamation fosters a vibrant urban landscape where different traditions coexist harmoniously. Throughout the year, the city pulsates with a myriad of festivals and events, spanning religious and cultural spectrums. Diwali, Eid, Holi, and Christmas are just a few examples, each offering opportunities for cultural exchange and mutual celebration. Delhi's cultural vibrancy also extends to its thriving arts scene, with numerous workshops, exhibitions, and performances held regularly. These events showcase various artistic expressions, from traditional forms like classical music and dance to contemporary innovations in theater and the visual arts. Such platforms promote cultural exchange and foster a sense of community and an appreciation for diverse artistic traditions (Singh, 2019).

Delhi's cultural diversity serves as a source of enrichment for residents and visitors, embodying India's ethos of unity in diversity. By embracing its multicultural heritage, Delhi exemplifies the inclusivity and tolerance that define the nation. The city's diverse cultural influences underscore its role as a dynamic cultural hub, where myriad voices come together to create a vibrant tapestry of shared experiences and traditions.

3.3 Historical Eras

Delhi's historical significance spans millennia, with remnants of ancient settlements dating back to antiquity. However, during the Mughal and Colonial ruling eras, the city witnessed the construction of many iconic architectural monuments that continue to define its urban landscape today. The Mughal era, in particular, left an indelible mark on Delhi's architecture, characterized by grandeur, symmetry, and intricate ornamentation. During the Mughal rule, the emperors and nobility commissioned the construction of numerous architectural marvels, including forts, palaces, tombs, and mosques. These structures, such as the Red Fort, Humayun's Tomb, and Jama Masjid, are enduring symbols of Mughal architectural prowess and cultural patronage. One notable aspect of Mughal architecture was the integration of typography, mainly Arabic and Persian calligraphy, as a decorative element in their monuments.

4. The Subject of Study: Typography in Delhi's Architectural Monuments

4.1 The Purpose of Typography in Delhi's Architectural Monuments

Typography shapes society, and as discussed, the monuments that integrate typography into their architecture have their role in making a certain impact on people. During the Mughal period, architecture was not merely ornamental but conveyed profound spiritual and poetic messages. Arabic inscriptions from the Quran, Persian poetry, and royal decrees adorned the walls and gateways of Mughal buildings, imbuing them with a sense of divine beauty and cultural sophistication. The elegant curves and fluid lines of calligraphic script added a layer of visual richness to the architectural ensemble, enhancing the overall aesthetic experience for viewers. Moreover, the integration of typography in Mughal architecture reflected the empire's cosmopolitan ethos and cultural synthesis. The Mughals created a distinct visual language that transcended linguistic and cultural boundaries by incorporating elements of Islamic art and Persian aesthetics into their architectural designs. This fusion of artistic traditions enriched Mughal architecture and facilitated cultural exchange and dialogue among diverse communities. In essence, the integration of typography in Mughal architecture exemplifies the intersection of art, culture, and religion in the built environment. Through skillful calligraphy, Mughal architects transformed stone and marble into expressions of spiritual devotion and aesthetic beauty, leaving behind a legacy that inspires awe and admiration in Delhi's architectural landscape (Baydoun & Kamarudin, 2020).

Many iconic monuments built during different periods in Delhi share similar purposes and functions despite variations in architectural styles, materials, construction techniques, and technological advancements. While the aesthetics and design elements may differ, the underlying agendas behind their construction often remain consistent throughout history. Most monuments built simultaneously share similar aesthetics in the typography incorporated into their spaces. Whether celebrating victory, honoring sacrifice, or asserting authority, these monuments serve as tangible expressions of human creativity, resilience, and aspiration, connecting past, present, and future generations in a shared cultural narrative (Canepa et al., 2019).



a.

b.

c.

Figure 2. a. Lodhi Garden, 15th century (inscriptions on the tomb's entry) (Author, 2024). b. Humayun's Tomb, 15th century (inscriptions in the grave) (Author, 2024). c. Safdarjung Tomb, 17th century (inscriptions on the entrance to the staircase) (Author, 2024).

In the examples shown above (Fig. 2. a, 2. b, and 2. c), all the monuments were built during the Mughal era. However, the material used in the Safdarjung Tomb changed as it was built more recently (~200 years later than the other two monuments). In contrast, in Lodhi Garden and Humayun's Tomb, the inscriptions depict similar visual language, even though the intention with which both monuments were built was drastically different.

4.2 The Role of Typography in these Monuments

Typography has significantly influenced the design and ornamentation of monuments across Delhi's historical landscape. Virtually every iconic monument in the city features typographic inscriptions, showcasing a diverse range of writing styles, scripts, and languages. These inscriptions serve multiple purposes, from conveying historical narratives and religious teachings to commemorating significant events and honouring individuals. For example, with its towering height and intricate architectural details, the Qutub Minar is adorned with Arabic calligraphy inscribed in the Kufic script. These inscriptions, primarily verses from the Quran and the names of the patron rulers, serve to glorify the achievements of the Delhi Sultanate and proclaim the supremacy of Islam. Similarly, the Red Fort, a UNESCO World Heritage site, features Persian inscriptions that adorn its walls and gateways, highlighting the grandeur and authority of the Mughal Empire (Berger, 2014).

Rashtrapati Bhavan, the official residence of the President of India, features Sanskrit inscriptions from ancient Indian texts, symbolising the continuity of Indian civilisation and the principles of governance. Despite the diversity of writing styles and scripts, typographic inscriptions in different monuments across Delhi often have similarities. For instance, Arabic calligraphy is prevalent in both Mughal-era monuments and Islamic religious structures, reflecting the influence of Islamic art and culture in the region. Similarly, Sanskrit inscriptions can be observed in Hindu temples and colonial-era buildings, underscoring the enduring legacy of India's linguistic and cultural heritage. In essence, including typography in Delhi's monuments serves as a visual expression of cultural identity, religious symbolism, and historical continuity. These inscriptions not only enhance the aesthetic appeal of the monuments but also imbue them with deeper layers of meaning and significance. By studying the typography used in different monuments, researchers can gain insights into the socio-cultural context, religious beliefs, and artistic traditions that have shaped Delhi's architectural heritage over the centuries (Arora, 2014).

5. Case Study: Three Architectural Monuments from Delhi

The choice of three monuments from Delhi, namely the Humayun Tomb, India Gate, and Indian War Memorial, presents a fascinating opportunity to explore the temporal evolution of perceptions towards similar structures across different eras. Each monument embodies distinct historical contexts and cultural significance, offering insights into how societal values and attitudes towards commemoration and remembrance have evolved. Studying these three monuments in tandem provides a comprehensive understanding of how temporal evolution influences the perception of similar structures. From the imperial legacy of the Humayun Tomb to the nationalist sentiment embodied by India Gate and the contemporary reverence of the Indian War Memorial, each monument reflects the nation's changing socio-cultural dynamics and collective memory. The evolution of these monuments in the eyes of beholders underscores the enduring significance of commemoration and the power of architecture to shape historical narratives.

5.1 Humayun's Tomb

Humayun's Tomb, located in Delhi, is a UNESCO World Heritage Site. Built in the 16th century, it serves as the final resting place of Emperor Humayun. The tomb's symmetrical design, char bagh (four-part) layout, and intricate decorative elements, including intricate calligraphy and ornate carvings, exemplify the grandeur of Mughal craftsmanship. It is renowned for its elegant Persian-influenced architecture and its role in inspiring the design of later Mughal monuments, including the Taj Mahal.

5.2 India Gate

Situated in the heart of New Delhi, India Gate is a monument commemorating the Indian soldiers who lost their lives in World War I and the Third Anglo-Afghan War. The towering archway, inscribed with the names of over 13,000 soldiers, serves as a poignant reminder of India's contribution to the Allied forces and the price paid for freedom. Surrounded by lush lawns and ornamental fountains, India Gate is a popular destination for locals and tourists, especially during commemorative events.

5.3 War Memorial

The National War Memorial, inaugurated in 2019, is dedicated to honoring the sacrifices of Indian soldiers who have fallen in the line of duty since independence. Located near India Gate, it comprises several elements, including the Amar Chakra (Circle of Immortality), the Veerta Chakra (Circle of Bravery), and the Tyag Chakra (Circle of Sacrifice), each representing different facets of valor and sacrifice. The central obelisk, known as the "eternal flame," symbolizes the undying spirit of the soldiers.

6. Comparative Analysis

Among the three structures, built in different eras from 1571 to 2019, the oldest structure, Humayun's Tomb, took the longest to build. While the most recent structure, the National War Memorial, was built in the shortest time, the size of the structures also varies greatly, with Humayun's Tomb being the largest and the India Gate being the smallest. The materials used to build the structures also vary, with Humayun's Tomb made of red sandstone, marble, and quartzite, the India Gate built in beige sandstone, and the National War Memorial prominently made of granite.

Table 1. Selected three monuments and their information.

	Humayun's Tomb	India Gate	National War Memorial
Year Built	1571	1931	2019
Construction Time (Years)	9	10	3
Architect	Mirak Mirza Ghiyas	Sir Edwin Lutyens	Yogesh Chandrahasan
Area (Acres)	66.8	10.56	40
Materials	Red sandstone and marble	Red & yellow sandstone	Granite
Religious Elements	Quranic quotes	-	Eternal Flame (Amar Jyoti)
Inscription	Persian, calligraphic	English, serif	English, sans serif
Events	Heritage walks	Light shows, marathons	Retreat ceremony, flag down
Colour	Natural	Natural	Gold
Estimated Daily Visitors	5000	10000	3000

As we can see, the three structures have been built over a long period, from 1571 to 2019. The oldest structure, Humayun's Tomb, took the longest to build, while the newest structure, the National War Memorial, was built in the shortest time. The size of the structures also varies greatly, with Humayun's Tomb being the largest and the India Gate being the smallest. The materials used to build the structures also vary, with Humayun's Tomb being made of red sandstone, marble, and quartzite, the India Gate being made of red and yellow sandstone, and the National War Memorial being made of granite.

The three structures also have different religious elements. Humayun's Tomb is decorated with Quranic quotes, while the India Gate has an eternal flame (Amar Jyoti). The National War Memorial does not have any religious elements. The inscriptions on the structures are also different. Humayun's Tomb has inscriptions in Persian calligraphy, while the India Gate has inscriptions in English serif script. The National War Memorial has inscriptions in English sans serif script. Finally, the three structures have different events that take place at them. Humayun's Tomb hosts heritage walks, while India Gate is a popular spot for light shows, protests, and marathons. The National War Memorial hosts retreat ceremonies, flag-down events, and family events.

All three monuments today have created their unique perceptions among visitors. Humayun's tomb today represents the majestic architecture. The scale of structure overpowers other elements; typography is integrated into the built form; it adds to the aesthetic, never becoming the point of attraction. This is different in the case of the war memorial, where the events are hosted every day. The emphasis is on the names of the *Shahid Jawans*, as well as the fact that the events that caused their loss are recent and are fresh in the minds of the visitors compared to those of the other two monuments, making the use of type more impactful.

Table 2. Typographic inscription and its execution on the selected sites.

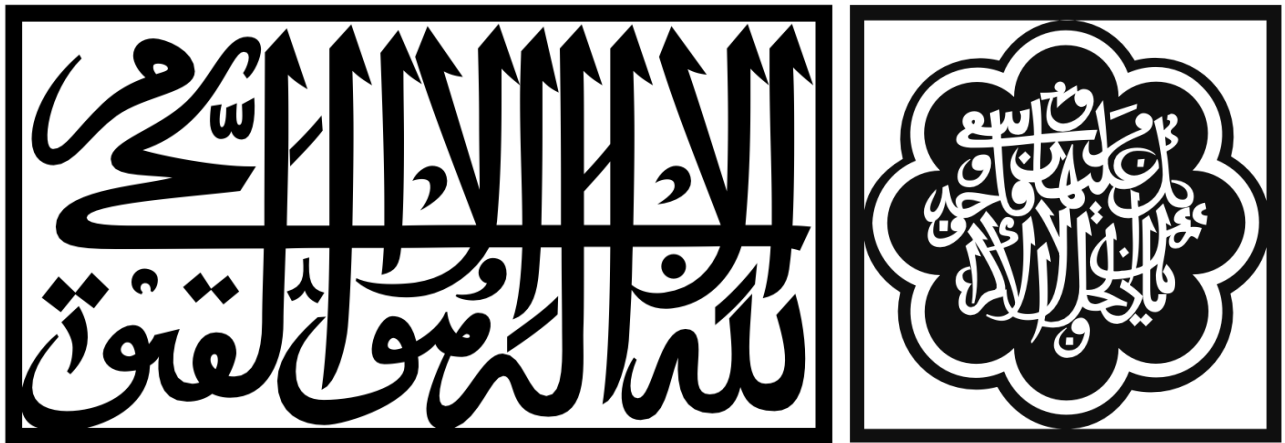
Structure	Inscription	Color	Materials	Tools
Humayun's Tomb	Persian, calligraphy	Natural	Marble	Hammers & Handheld chisels
India Gate	English, serif	Natural	Sand Stone	Hammers & Handheld chisels
National War Memorial	English, sans serif	Gold	Granite	Granite engraving machine

6.1 Humayun's Tomb

- **Typeface:** Not a single, identifiable typeface, as the inscription uses calligraphy, specifically Nastaliq script. This script emphasizes flowing lines, exaggerated curves, and contrasting stroke thicknesses.
- **Style:** Formal, ornate, and elegant. The use of calligraphy reflects the artistic traditions of the Mughal era and adds a sense of grandeur and religious significance.



a.



b.



c.

Figure 3. a. Typographic engraving from Humayun's Tomb on white marble (quote from the Quran) (Author, 2024). b. Digitally made typographic art from Humayun's Tomb (Author, 2024). c. Cross section of the levels of engraving on Humayun's Tomb typographic art (Author, 2024).

اللَّهُ لَا إِلَهَ إِلَّا هُوَ الْحَيُّ الْقَيُّومُ

1. "Allahu la ilaha illa huwa alhayyul qayyum."

The translation of this verse from the Quran is:

"Allah! There is no deity except Him, the Ever-Living, the Sustainer of Existence."

“كُلُّ مَنْ عَلَيْهَا فَانٍ وَيَبْقَىٰ وَجْهُ رَبِّكَ ذُو الْجَلَالِ وَالْإِكْرَامِ”

2. "Kullu man alaiha faann. Wa yabqa wajhu Rabbika zul jalaali wal ikraam."

Is a part of verses 26-27 of Surah Ar-Rahman in the Quran.

These verses are translated as follows:

"Everything on earth will perish,

And there will remain the face of your Lord, owner of Majesty and Honor."

Several factors impact the legibility (Lieberman, 1977), which is based on the ease with which one letter can be told from the other, of Arabic calligraphy on Humayun's tomb. Firstly, the intricate nature of the script and its elaborate carvings pose challenges for readers unfamiliar with the style. Secondly, weathering and erosion over time diminished the clarity of the inscriptions, affecting readability (Lieberman, 1977). Additionally, the positioning of the calligraphy, placed on a horizontal plane, requires closer inspection for effective readability, which is the ease with which the eye can absorb the message and move along the line. Contrast and lighting conditions, influenced by natural elements, further obscure the carvings, making them less discernible.

6.2 India Gate

- **Typeface:** Identified as Garamond, a serif typeface known for its elegance and readability.
- **Style:** Traditional, serif, and legible. The use of Garamond creates a sense of dignity and timelessness, aligning with the monument's purpose as a war memorial.



a.



b.

Figure 4. a. Typographic engraving over India Gate on sandstone (Author, 2024). b. Cross section of typography at India Gate (Author, 2024).

The choice of Garamond for the inscription at India Gate raises intriguing questions about the context of its construction and its significance in typographic history. Garamond is renowned for its elegance and readability in book typography, its adaptation for a monumental scale is indeed unconventional. This departure from its traditional usage prompts speculation about the deliberate departure from convention and its implications for the visual impact of the inscription. Moreover, the challenges posed by factors such as the background's colour and the text's size highlight nuances in legibility that deserve careful consideration.

6.3 National War Memorial

- **Typeface:** A custom sans-serif typeface explicitly designed for the memorial. It features sharp edges, geometric shapes, and a condensed letterform.
- **Style:** Modern, bold, and impactful. The custom typeface reflects the contemporary nature of the memorial and aims to convey strength, sacrifice, and remembrance.



a.



b.



c.

Figure 5. a. Typographic engraving from War Memorial on Brown Granite (Names of *Shahid Jawans*) (Author, 2024). b. change in the landscape from 2015 to 2019 (as the war memorial was built) (Priya & Kumar, 2021). c. cross-section of the levels of engraving on brown granite (Author, 2024).

Several factors influence the legibility of the custom sans-serif typeface at the National War Memorial. Firstly, the edges and condensed letterforms of the typeface contribute to its aesthetic but pose challenges for readability at a distance. Secondly, the geometric, compact shapes used in the design add complexity to the letterforms, requiring closer inspection for adequate interpretation. Additionally, the style and colour aim to convey strength and remembrance, but the intricacy of the letterforms affects clarity, particularly in adverse lighting conditions. The memorial and its typography are crucial for visitors to appreciate their significance, emphasizing the importance of materials on-site.

- **Script vs. Typeface:** Humayun's Tomb stands out for its unique use of calligraphy, offering a handcrafted and culturally specific touch compared to the standardized typefaces used in the other two monuments.
- **Serif vs. Sans-serif:** India Gate employs a traditional serif typeface that exudes a sense of history and respect. At the same time, the National War Memorial embraces a modern sans-serif design for a more direct and impactful message.
- **Formality:** Humayun's Tomb and India Gate lean towards a more formal style, reflecting their historical significance and grandeur. The National War Memorial adopts a slightly less formal approach, prioritizing clarity and legibility for a wider audience.
- **Color:** While the typeface and style analysis focuses primarily on the inscription itself, it is worth noting that the color choices also contribute to the overall impact. Humayun's Tomb uses natural stone colors, India Gate blends in with its surroundings, and the National War Memorial's gold inscription creates a stark contrast and demands attention.

6. Epilogue

6.1 Discussion

The War Memorial excels in overall readability due to meticulous attention to anthropometric factors, ensuring that the text is positioned at eye level for readers at an optimal distance. Additionally, using a striking gold color against the brown granite backdrop enhances legibility, making the text highly visible and easily discernible. Conversely, the text is scarcely visible at India Gate from a distance, with only the word "India" being readable due to its more extensive scale. To decipher the names of Sahid Jawans, individuals must approach the monument closely, yet visibility remains limited. The absence of color contrast between the text and background, the non-linear layout, and erratic stone joinery all contribute to this lack of readability. Moving on to Humayun's Tomb, Persian challenges contemporary readers. However, despite this linguistic barrier, readability is enhanced through well-defined grooves and a clever play of levels on white marble surfaces.

Furthermore, the typography's calligraphic style adds to the inscriptions' aesthetic appeal. Despite the enduring prominence of these monuments, changes in perception and understanding over time have altered the significance of their typography. With successive generations lacking historical context, there has been a decline in the appreciation of the typographic inscriptions' relevance, relegating them to mere objects of artistic appreciation devoid of contextual understanding. This underscores the importance of preserving and promoting awareness of typographic heritage to ensure its continued appreciation and understanding.

6.2 Conclusion

In conclusion, all three monuments utilize distinct typographic choices that effectively complement their individual design, purpose, and historical context. The technologies, tools used, and artistic and design abilities the artisans possess defined the visual languages of the monuments, thus shaping the visual

landscape of the era. Humayun's Tomb's ornate calligraphy reflects artistic traditions; India Gate's serif typeface conveys dignity and timelessness; and the National War Memorial's custom sans-serif design delivers a bold and contemporary message.

From this study and documentation of the monuments of Delhi, we can relate the use and application of various styles of typefaces in architecture in different temporal periods.

References

- Arora, D. M. (2014). Typography culture in oldest living city of the world. *LALITYA: International Research Journal of Fine Arts*, 1(1), 36-46.
https://www.researchgate.net/publication/333668370_Typography_culture_in_oldest_living_city_of_the_world
- Ayiter, E. (2012). Further dimensions: Text, typography and play in the metaverse. In *2012 International Conference on Cyberworlds* (pp. 296-303). <https://doi.org/10.1109/CW.2012.50>
- Baydoun, Z., & Kamarudin, Z. (2020). The Islamic calligraphy styles and scripts in Muslims' architecture: An overview.
- Berger, C. (2014). Typography, placemaking and signs. A four-part SFI white paper series. *Signage Foundation, Inc.*
- Burt, H. E. (1949). Typography and readability. *Elementary English*, 26(4), 212-221. National Council of Teachers of English. <https://www.jstor.org/stable/41383630>
- Canepa, E., Scelsi, V., Fassio, A., Avanzino, L., Lagravinese, G., & Chiorri, C. (2019). Atmospheres: Feeling architecture by emotions: Preliminary neuroscientific insights on atmospheric perception in architecture. *Ambiances*, 5. <https://doi.org/10.4000/ambiances.2907>
- Chernyh, D. G., & Raspopova, N. V. (2020). Font as a category of aesthetics and a means of communication in design, art, architecture. *IOP Conference Series: Materials Science and Engineering*, 962(4), 042007. <https://doi.org/10.1088/1757-899X/962/4/042007>
- Cunningham, C. (2000). The rise of typography and the decline of epigraphy? Architectural inscriptions in the nineteenth century. *Bulletin of the Institute of Classical Studies*, 44(Supplement_75), 143-161. <https://doi.org/10.1111/j.2041-5370.2000.tb01970.x>
- Haveman, A. (1997). Typography: Visual connections to art and architecture through the ages.
- Jubert, R. (2006). The Bauhaus context: Typography and graphic design in France. *Design Issues*, 22(4), 66-80. <https://doi.org/10.1162/desi.2006.22.4.66>
- Kusdiwanggo, S., & Amiuza, C. B. (2020). Urban typography as a reflection of talkative behavior in Malang City. In *Proceedings of the International Conference of Heritage & Culture in Integrated Rural-Urban Context (HUNIAN 2019)*, Malang, Indonesia. <https://doi.org/10.2991/aer.k.200729.031>
- Lieberman, J. B. (1977). *Type and typefaces*. Myriade Press.
- Lim, S. (2022). A study on the interactive expression of human emotions in typography. *International Journal of Advanced Culture Technology*, 10(1), 122-130. <https://doi.org/10.17703/IJACT.2022.10.1.122>

- Lowry, G. D. (1987). Humayun's Tomb: Form, function, and meaning in early Mughal architecture. *Muqarnas*, 4, 133-148. <https://doi.org/10.2307/1523100>
- McGee, D. (2003). Architecture in the age of printing: Orality, writing, typography, and printed images in the history of architectural theory (review). *Technology and Culture*, 44(2), 377-379. <https://doi.org/10.1353/tech.2003.0081>
- Priya, T. L., & Kumar, J. (2014). Memory, interventions, and the India Gate. *Department of Architecture, School of Planning and Architecture, New Delhi, India*.
- Puineuf, S. D. (2011). Quicksands of typography: The futurist experience in Central Europe during the 1920s. *International Yearbook of Futurism Studies*, 1. <https://doi.org/10.1515/9783110237771.61>
- Singh, D. N. C. (2019a). The evolution of Delhi metropolitan area: A historical, demographic and geographical perspective. 10(5). Available at <https://shorturl.at/5VHrI>
- Smith, A. M. (2011). Architecture and typography: The space beyond the text. *Dalhousie University Halifax, Nova Scotia*. Retrieved August 16, 2024, from <https://dalspace.library.dal.ca/handle/10222/13369?show=full>

About the Authors:

Rana Shinde, a PhD student at the Indian Institute of Technology, Delhi, has experience in architecture and visual design. During his Masters, he developed an interest in typography, which he pursued by working at the Indian Type Foundry, India's leading type foundry, where he worked on various scripts to create a wide range of typefaces. In this research, he incorporates his interests in architecture and design, focusing on the integration of typography in architectural monuments, ultimately shaping the visual landscape of the city over time.

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