

FONT : FORM : FUNCTION : The unstated identity of the built word

Nandita, R V College of Architecture, Bengaluru, India, nandita@rvca.in

Abstract: The paper explores the juxtaposition of the font on a form for a function and a framework of design identities resulting from it. Are the identities of the font, form and function mutually inclusive or exclusive in a built environment? Can the type establish its identity independent of the architecture that is hosting it? Can the built structure be complete in its identity without the built word? What is the identity of the typeface in a built word and how can it be stated? While the built environment proliferates through its varied forms and functions, the fineness and sensitivity with which it responds to the font type that is integral to its identity is explored, experimented and showcased here.

Key words: Built word, Architectural styles, Functional font, Formal font, Environmental typography, Architectural signages, Design identities

1. Introduction

Words are custodians of history and time. The essence of a place or a time period has typically been expressed through words that capture its spirit and encapsulate it in a written or oral medium. While the word celebrated the essence, the type added character. Words came together to build an expression But what about the *built word*?

The juxtaposition of the font in a word, on a form, for a function, results in the formation of a framework of identities. While the built environment proliferates through its varied forms and functions, a sample of the fineness and sensitivity with which architecture responds to fonts and resulting identities is documented here.

2. Font & Function

Explorations related to typography as a built word in architecture, varies in function from being permanently associated with the built structure like in the inscriptions on the walls of Indian temples to being in a transient visual depiction mode as in the billboards that form the facades of buildings in Time Square, New York. In these cases, the architectural form receives the type offering its surface as a source for information. In war memorials, the type depicting the names of the dead is elevated to an eternal, emotional and sacred stratum while the architecture that manifests the type is just a backdrop. *Whatever be the function, the font eventually nestles with in the form.*

3. Font & Form

3.1 The Built font : Transition from being built to being digitally written

Architecture has been experimenting, exploring and crafting 'typefaces' across time periods. Some of these 'built' fonts seen in architectural monuments, styles and movements have further influenced the emergence of other typefaces. The transition from a built font to a digital type can be noted in fonts like TRAJAN and BAUHAUS.

Roman Emperor Trajan was instrumental in the erection of a victory column in Rome, Italy in AD 112, the monument now known as Trajan's column [Fig 1 & 2]. The inscription plate at the base of this Roman victory column was meant to be read from below, because of which the bottom letters are slightly smaller than the top letters, to give effective perspective for readability. [Fig 3 and 4]



Figure.1 The Trajan Column commissioned by Emperor Trajan and built by Architect Apollodorus of Damascus.



Figure.2 Closer view of the Trajan Column



Figure 3 A drawing by artist Giovanni Battista Piranesi illustrating the inscription at the base of the Trajan Column



Figure.4 The inscription plate above the entrance at the base of the Trajan column

The script in the inscription was mainly used in the monuments and less often meant for manuscript writing. Based on this built font, type designer Carol Twombly developed Trajan the digital typeface for Adobe in 1989. [Fig 5].



Figure.5 Trajan Font developed by Carol Twombly for Adobe in 1989.

Moving forward in timeline, the Bauhaus was a significant movement which aimed at bringing artists and craftsmen together and had a great influence on art, architecture, graphic design and other allied design fields. Herbert Bayer, architect and graphic designer, who studied at Bauhaus and later headed the printing and advertising section of Bauhaus in Dessau, developed the Universal Typeface in 1925. In the typeface, Herbert Bayer developed a simple clean lined geometrical form for the fonts with ease of legibility at the forefront. [Fig 6]

The significance of this font is that unlike Trajan which was a stone surface expression, later adapted to print digitally, the universal font of the Bauhaus epitomized the functional aspiration and honest spirit of the movement as seen in its architecture and was created to migrate between the print and built mediums effortlessly. The design essence permeated seamlessly in the expressions of both the design fields without a distinction of dominance of the built form or its word.



Figure.6 A sampling of Bauhaus and Bauhaus 93 type by Lebetonbrut [20 April 2012].

The following sections will examine the occurrence of the built font as a conscious construct in architecture. Here the type, through a built word crafts itself on to the built form thereby becoming an integral part of the building's identity. This is analyzed through buildings where the type co-situates with the built as a layer in manners that are seminal to the identity of the font and the form, thereby rendering a distinct function as well.

3.2 Font in Form : as a representation of an iconic movement

In 1927 Rudolf Arnheim wrote of the Bauhaus 'It is a triumph of purity, clarity and generosity. Every object displays its construction, no screw is concealed, no decorative chasing hides the raw material being worked. It is very tempting to see this architectural honesty as moral, too.'

The Universal Typeface which characterized the Bauhaus movement was the chosen font for hosting the name of the Bauhaus building in Dessau. The vertical listing of each letter of the word 'Bauhaus' in this typeface set a new way of expressing the built font clearly indicating that the finesse and crafting of each letter mattered. [Fig 7] It also demonstrated that creative liberties were taken with the built font even when the building conformed to a design philosophy.



Figure.7 Bauhaus building in Dessau as seen from the south-west: workshop wing. Photograph by Lucia Moholy, 1926

Each letter was mounted as a layer on the architectural surface making it belong to the form yet separated from it. The dynamism of the shadow pattern cast by this font configuration on the vertical surface created a stark contrast to the orderly lines of this

modernist building. [Fig 8] Clarity of perception and legibility was seen even in the font's shadows with minimal distortion. These letters being produced in the workshops of Bauhaus made it an even more iconic representation.



Figure.8 'Bauhaus' sign on the Dessau Bauhaus building around 1930s

The font became a key aspect of this piece of architecture. The identity of the font started to emerge as not just a disseminator of information [i.e. to convey the building name] but as an identity giver as well - a visual layer to the built form, which was as important to the building as its glass façade or its steel structure. [Fig 9]



Figure.9 Type designed by Herbert Bayer for the Bauhaus in Dessau, above the entrance to the workshop block. Photograph by Jim Hood, May 2005.

3.3 Font in Form : as branding the architecture

In the 1930s, the growth of the entertainment industry made an impact on architecture, along with the prevalent modernist movement. The architecture of pleasure emerged as a phenomenology contesting the 'modern' philosophy of architecture along with various social and psychological theories in the backdrop of industrialization and urbanization. As a signage, the type representing the building name [read as a brand] was 'constructed' on to the building as a visual language.

Bruce Peter in his book Font follows fun: Modernism and modernity in British Pleasure Architecture, observes 'The regularization of time in work place led workers to prize their quality time of leisure hours all the more. A consequence of these phenomena was the increasing desire for stimuli to match or outdo those of the everyday city.'

The telegraph newspaper in Britain notes 'The Odeon chain was a cultural icon and architectural landmark of English cinema in the Thirties. The style of the buildings embraced the modern movement and art deco. Common architectural features were strong lines, curved corners, glazed tile facades and neon lights.' [Fig 10 & 11]



Figure.10 The famous cinema house Odeon in Kettlehouse, Kingstanding, Birmingham in 1935 Photograph by John Maltby / English Heritage archive



Figure.11 Odeon on the High Street, Brentwood, Essex in the thirties. Photograph by John Maltby / English Heritage Archive

Architecture that catered to pleasure like the cinema halls, theaters and stadiums aspired to be a spectacle during the day as well as the night. The fonts that heralded the branding

of the architecture in phenomenal scales marked the skyline with their graphics during the day. Being neon lit in the night created a surreal experience, hyper stimulating the users of the aura of a lifestyle of 'modernism' as an attitude. The identity of the built form that still exercised restraint to follow the modernist design philosophy of those times, leveraged on the playfulness of branding offered by the 'built' font.

This phenomenon of branding the built form by fonts eventually found its grandest expression in Las Vegas, the entertainment capital of the world, where the neon lit fonts brand the city as well. [Fig 12]



Figure.12 Hard Rock LIVE: Concert Venue, Las Vegas, USA

Ginza district in Tokyo is an epitome of urban life in a neon forest of glowing signage. Here more than the font, the advertisement images act as a graphic camouflage to the architecture taking branding to a different level altogether. [Fig 13]



Figure.13 Ginza shopping district in Tokyo, Japan during the day ; Photograph by Andrew Eckford

3.4 Font in Form : as interpretation of pragmatics

Gradually the rudiments of the building itself were interpreted differently and a new identity emerged. In the Minnaert building, Utrecht University, The Netherlands designed by Neutelings Riedijk Architects, the structure that holds the building is integrated to the font that spells the name of the building 'Minnaert' [Fig 14].

The one story high font also forms the edge of a cycle stand, a mode of transportation widely used in the country thus drawing attention as a cultural marker too [Fig 15]. The font as the structure supporting the form renders a playful, sculptural anthropomorphic quality to the form.



Figure.14 The Minnaert building, Utrecht University, The Netherlands; Image Credits: Roland Vaandrager



Figure.15 The cycle stand in the Minnaert building, Utrecht University, The Netherlands; Image Credits: Wilma Kwan 2003, updated 2005

3.5 Font in Form : as a figurative layer to architecture

As typologies reinvented themselves, architecture extended beyond function or user centric-ness. Certain museums dedicated to brutal phases witnessed by humanity essentially necessitated an experience centric design. When this intended attribute is built into its architecture through a word, the font offers a temporal and experiential layer to

the built form. This is evoked in House of Terror, a museum located in Budapest, Hungary designed by architect Attila F. Kovács.

Rick Steves and Cameron Hewitt in the travel article on Budapest's House of Terror write 'Budapest is home to one of the most powerful museums in Europe. Illustrating the grim decades of Nazi and Communist repression, the museum is the former headquarters for the secret police of both the Nazi and Communist governments. The building's awning has the word TERROR cut out of it, and when the sun projects through these letters, it symbolizes the terror which was projected onto the Hungarian people for fifty years.'

Symbolizing the contained experience in the museum, the built container exhibits a stoic solemness while the font adds an evocative layer that shifts and morphs, at times even disappearing leaving behind the statement of hope - free of terror. [Fig 16]



Figure.16 Outside photo of House of Terror, in Budapest, Hungary ; Image Credits: Terror Haza Museum

3.6 Font in Form : as a pause to articulate the architecture

Architecture moved on to demonstrate a conscious acknowledgement to material culture development and technological advancements by exploring forms intentionally than intuitively.

Buildings were typically elucidated by architects through sketches, writings or interviews, explaining the design intention of the project. When this design philosophy got expressed through words that was literally constructed into the building itself, the built font formed a hiatus in the architecture, articulating it in ways that compel its users to pause and mull over the intent of the architecture.

Both these aspects of font in a form is demonstrated in the Wales Millennium Centre located in the Cardiff Bay area of Cardiff, Wales which is an arts centre designed by Jonathan Adams, of Percy Thomas Architects. Inaugurated in 2004, the centre primarily has a large theatre [Donald Gordon Theatre] and two smaller halls with support facilities. The centre's distinct character is rendered by the font on the copper oxide treated steel dome of the main theater which forms the building's main feature. [Fig 17]



Figure .17 Wales Millennium Centre, Cardiff Bay, Wales; Image Credits: Gordon Plant

Welsh poet, Gwyneth Lewis wrote the poetic lines which are built above the main entrance of the Wales Millennium Centre. The meaning of the Welsh version is '*Creating truth like glass from the furnace of inspiration*'. The English line is '*In these stones horizons sing*'. Internally illuminated at night, the built font forms windows to the support areas like the bar. [Fig 18 & 19]

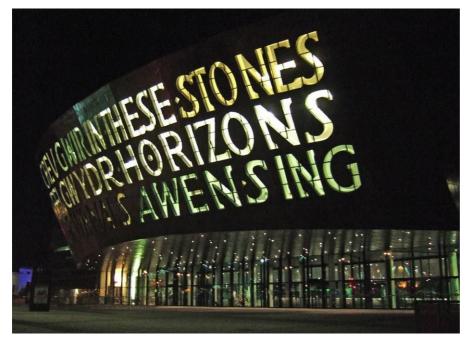


Figure.18 Wales Millennium Centre at night; Image Credits: Lisa Sinclair



Figure.19 Behind the fonts: Internal windows in bar area; Image Credits: Grahamwell

3.7 Font in Form : as a existential skin to the built mass

In due course, fonts themselves have attempted to become the form of a building. Agave Library in Phoenix Arizona designed by Will Brunder Architects does this. The fonts envelop the building as a skin forming a façade to the limited budget utilitarian building adding a civic identity to this public building. [Fig 20]

Clifford A. Pearson in Architectural Record notes, 'The curving billboard with giant letters sliding off to one side is made of vertical strips of galvanized-steel hat channels attached to steel I-columns and tube beams, the freestanding structure serves as a false front announcing the library. Leaving narrow spaces between the steel channels and using reflective film for the letters spelling out agave, the architect made sure the supersize "scrim" (56 feet at its highest point) plays with shadow and light during the day and catches headlights at night. "It's a cowboy front with a scale and presence big enough to signify the civic role of a library," says Bruder, referring to 19th-century Western buildings that used false fronts to seem grander than they really were.'



Figure .20 Agave Library Facade; Image Credits: http://willbruderarchitects.com

3.8 Font in Form : as objectified aesthetics

Advent of digital technology in architecture has offered a range of not just production tools but has released thinking of built forms in ways so far unfamiliar, adept to be sculpted with precision and freedom.

Joseph Rosa in his book Next Generation Architecture Folds, Blobs and Boxes states 'Throughout the twentieth century, designers and architects have broken the orthodox box of Modern Architecture, established by the International style, questioning its ideology and pushing the boundaries of what shapes could be built. Today's digitally educated designers continue to redefine architectural pedagogy and practice, producing forms that can be described as folds and blobs, as well as the new digital boxes.'

Exemplifying digitally morphed forms is 41 Cooper Square, designed by architect Thom Mayne of Morphosis which occupies an entire city block housing the Albert Nerken School of Engineering with additional spaces for the humanities, art, and architecture departments in the Cooper Union's campus in Cooper Square, Manhattan, New York City. [Fig 21]



Figure.21 41 Cooper Square from north side; Image Credits: Pentagram

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The integration of the type in to this amorphous built form as a signage and way finding method is done with an attitude to objectify aesthetics, a statement that goes with the design attitude of the building. J. Abbott Miller who propounded 'Dimensional Typography' where in computer technologies play a vital role in typographic communication, worked with Morphosis to merge the design aesthetics of the font with that of the form.

The type finds its place in three critical junctures - at the entrance as building signage [Fig 22 & 23], as donor signage in the underside of a stairwell in the 9 stories high central atrium [Fig 24] and as door signs [Fig 25]. The main signage which appears proper in the front elevation gets distorted as one moves closer to the building at the entrance. The font is given physicality by making it three dimensional and then extruding it beyond the edge, cutting it to add transparency in the lower half by extending the building's skin of perforated steel to it.

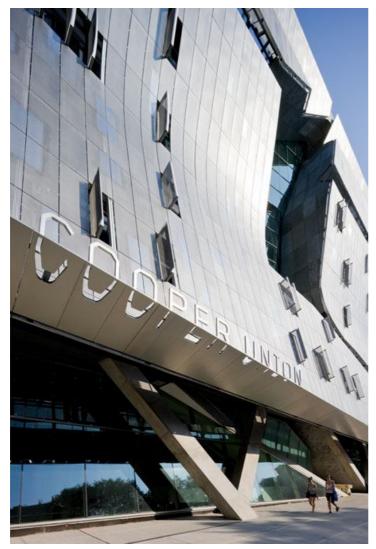


Figure.22 Optically extruded letterforms on the facade of the new Cooper Union building; Image Credits: Pentagram



Figure.23 Foundry Gridnik was selected as the font for its resemblance to the lettering on the original building; Image Credits: Pentagram

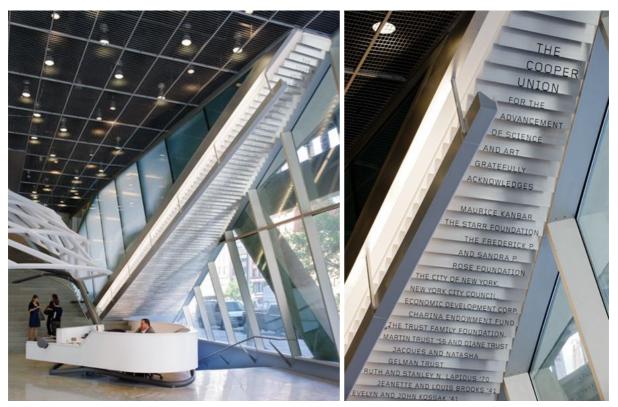


Figure.24 The lobby atrium with the staircase having donor signages cascading down on the underside; Image Credits: Pentagram



Figure.25 Donor signage appears on vertical steel corner guards outside the classroom doors. The visible edges of the typography create a pattern in the halls; Image Credits: Pentagram

4. The Identity

Typography has been the substance and at times just an applied skin to the form and function in spatial systems. While the form crafts the font catering to a function, the identity of the built word has remained unstated. It either remains subservient to the built structure or dominates the building to an extent that the building seems like a visual mirage. Else it is delinked with the spatial and temporal dimensions of human interference in the built structure becoming just a graphical statement.

5. Conclusions

Architecture conventionally has not been the word keeper. Historically, when permanence of expression was required, the written word found its presence in the built form as architecture exceeded the temporality of any other form. *The word was built in architecture quite literally!*

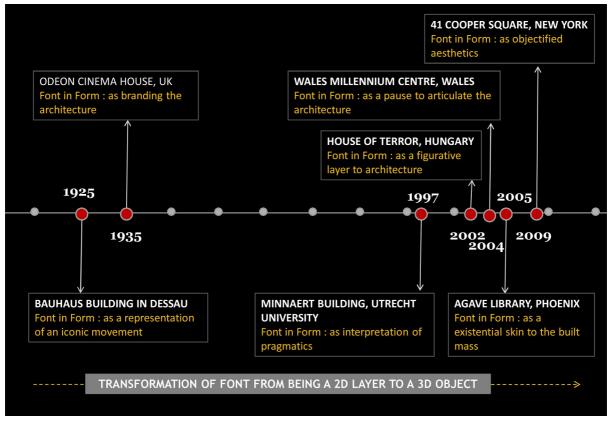


Figure.26 Font & Form : Timeline representation.

Analysis of the listed examples through a timeline denotes a transformation of font from being a two dimensional layer to becoming a three dimensional object: a reckoning design force in the built form [Fig 26]. The sensitivity with which the type is expressed in architecture has been a reflection of the societal preferences, material culture of the region and the technological advancement witnessed in the time period.

The association between architecture and typography is multi layered in intent, engaging in a dialogue with the spatial world crafting and molding it with its own subtlety and finesse. The craft of the built font has been dictated by the form and function in architecture resulting in a framework of identities that have unstated co-existence [Fig 27].

The fields of typography and architecture have generic overlaps but have blatant gaps as well that has led to these identities remaining unstated. The font in a form for a function has predominantly been incidental and not been a conscious agenda in architecture [Fig 28].

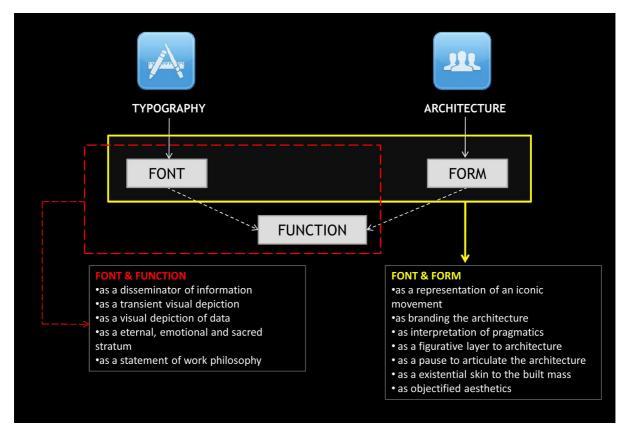


Figure.27 Font : Form : Function : The framework of identities

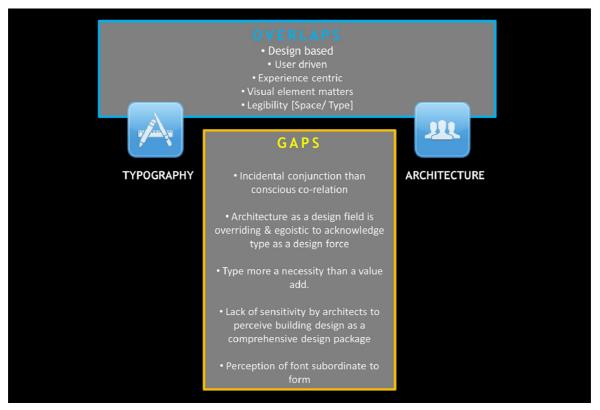


Figure.28 Typography and Architecture : Overlaps and Gaps

Buildings currently becoming overtly exuberant visual images, techniques of form making like fold, bend, wrap, twist, distort, extend etc, are being used to integrate the font into the form as well. The fonts represent the design intent mainly of the designer merely forming a graphic visual language. At times, owing to a predisposition of a design philosophy or lack of one, architecture becomes completely devoid of type or the built word becomes mismatched with the form and function of the building.

There is a need to develop a framework or method of design process where architecture and typography integrate to evolve a higher order of design with finesse and sensitivity.

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