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**Translating Historic Vernacular: Can Anyone ‘Make it Right’?**

The catastrophic devastation wrought on the Lower Ninth Ward of New Orleans by Hurricane Katrina in August 2005 created an urban void in what once was a culturally rich residential community. In 2007, the languishing neighbourhood, slow to stabilize and even slower to regenerate, was injected with hope and capital to support rebuilding in the form of the ‘Make it Right’ Foundation. Benefactor Brad Pitt teamed up with twenty-two architecture firms, representing a who’s who of prolific architects, to design and construct homes for those who had lost everything.

The architects were confronted with a place physically barren, but surrounded by a heritage of vernacular design spanning generations. Design components of what is conceived as traditional New Orleans architecture, the result of an amalgamation of lessons learned through centuries of inhabitation of the region, survived intact throughout swaths of the city and in the collective memory of residents and local architects. Synthesis of those historic components with new techniques and designs to meet the needs of the post-Katrina neighbourhood was the goal, with informed translation of effective components of the past to the present. However, in many instances, the celebrity architects who participated in ‘Make it Right’ misinterpreted ubiquitous forms, redeploying them in ineffective ways - practical design components lost in translation.

Almost a decade after the storm, a neighbourhood has grown from devastation. Houses, which have risen in the Lower Ninth Ward, display characteristics associated with New Orleans architecture, but some more effectively adapt the past to the needs of the present. While some introduce intriguing new hybrids, yielded from inventive application of new methods and materials to historic forms, others miss the mark. The lessons learned in the successes and shortcomings of ‘Make it Right’ can drive the next iteration of the perpetual reinvention of the New Orleans vernacular.
When the levee wall standing above the Lower Ninth Ward neighbourhood of New Orleans ruptured during Hurricane Katrina, a surge of water from the Industrial Canal crashed down, decimating everything in its path. Houses, which were not immediately obliterated, languished in rancid water, rendering those left standing uninhabitable. Even before the city was pumped dry, it was clear that the Lower Ninth would thenceforth be forever transformed – the devastation was wholesale and indiscriminate – 4000 homes were lost in the neighbourhood. Bureaucratic gridlock and inhospitable conditions ensured an unchanging “moonscape” in the months following Katrina. Limited resources and already strained infrastructure staved off development immediately following the storm; the area remained largely a barren wasteland for more than two years, even as other areas of the city began to rebuild and resume a pre-Katrina normalcy. Actor Brad Pitt, motivated by the prolonged desolation and inaction of other agencies and organisations, spearheaded the formation of the Make it Right Foundation (MIR). Pitt, through MIR, vowed to help re-establish the neighbourhood for displaced residents to return, asserting to “build for safety and storm resiliency”, utilizing “some of our great architectural minds” while “protecting New Orleans’s rich culture”. In December 2007, more than two years after Hurricane Katrina had laid waste to the area, Pitt entered into collaboration with GRAFT Architects, ultimately expanding to work with twenty-one other firms, to begin the schematic process. Tasked with rebuilding a neighbourhood from the ground up, the architects selected, including such prolific international firms as Gehry Partners (Los Angeles), Morphosis (Santa Monica) and MVRDV (Rotterdam), were prompted with the opportunity to translate the existing urban vernacular of arguably one of the most architecturally rich cities in the United States. With the objectives clear and the collective creativity and talent vast, there was much promise and potential in the project with the possibility of creating a new vernacular

1 The 2000 census shows the Lower Ninth was a predominantly residential, lower-middle class neighbourhood populated by a strong majority of African American families. Robert Charles Peterson, “Tenure Insecurity in Post-Disaster Housing: Case Studies in New Orleans and Tegucigalpa” (PhD diss., University of New Orleans, 2009).
3 There is much reading on the matter to appeal to those interested in fields beyond the realm of pure architectural critique. While there is much to be said along the lines of politics, water management, urban planning, and social justice (just to name a few subjects), the ultimate (still unrealized) architectural manifestations which rise in place of the former houses are the focus of this paper.
5 Government inaction was not the sole roadblock in recovery. The pre-Katrina impoverished state of the neighbourhood inhibited revitalisation; inability to act due to financial constraints on part of the residents who survived the storm precluded many from returning from exile.
8 Other architects include Adjaye Associates (London), BNIM (Kansas City), Constructs (Accra, Ghana), Elemental (Santiago, Chile), GRAFT (Berlin), Hitoshi Abe (Sendai, Japan), Kieran Timberlake (Philadelphia), Pugh+Scarpa (Santa Monica), Ray Kappe (Berkley) and Shigeru Ban (Tokyo).
borrowing from traditions and lessons omnipresent in the myriad of styles in New Orleans. The established ideas could be questioned, considered, and a new manifestation could be moulded from innovative materials and technologies, embracing environmentally sustainable and ecologically responsible practices. Not only did the project seek to rebuild the neighbourhood, but it promised to be a prototype for future development. Bankrolled by a benefactor with very deep pockets and far reaching connections, MIR was intended to explore the potential of New Orleans form and introduce cutting edge materials and methods which would, in standard application, be prohibitively expensive at the outset, but through repetition and value engineering, become available to the masses.

The cause was noble, and the influx of money and publicity to one of the hardest hit areas of the city brought about valuable discussions and further assistance. But to many in the architecture community, MIR has become a divisive project. The houses which have risen over the subsequent seven years have come under much scrutiny and architectural critique. The homes in the Lower Ninth Ward would not have captured the attention of architects had they not been made into a high profile project where the major selling point was design - after all, anyone with the proper qualifications could design houses for the area. However, MIR sought out architects with extensive portfolios in order to augment what could have been simple boxes to meet the basic needs of the community with “whatever added magic outstanding architects could bring.”

Of the twenty-two architects to participate in MIR, six are from the region and intimately aware of the nuances of designing to address the unique climactic and social needs of the city. For the remaining firms there was a steep learning curve of New Orleans motifs and typological conditions; the city itself was an open design book with two centuries of architecture available for study. The design decisions made by the contributing architects, and the ultimate physical manifestations of those designs, has triggered vitriol among architectural practitioners and scholars in the city. The role of translated forms of the past, adaptations for the needs of the present, and inherent planning for the future in the designs lead to a better understanding of why MIR has been so heavily criticised among the local architectural fraternity.

What to Translate?

The traditional forms of architecture of New Orleans did not develop by happenstance; rather, they are the aggregate of lessons learned and problems solved through design adaptation over time.

9 Tom Darden, director of Make it Right, mentions the “more than 30 distinct architectural styles [that] make up what is typically considered traditional New Orleans design.” While styles vary greatly, there are a few discernible typologies which comprise much of the New Orleans housing stock. Taylor Royle, “Our Response to the New Republic,” Make it Right, 18 March 2013.


12 Moore, “Brad the Builder.”

Even while stylistically there are vast differences across the city, motifs and characteristics manifest in prevalent typologies; embellishments and ornament supplement to lend character to the gamut of visual appearances, “styles”, from neighbourhood to neighbourhood.14 It is not a sense of vanity or misguided adherence to forms of antiquation, which drive the repetition of language. Rather an understanding by those who build presently, of the ideas refined through iterative design over previous generations, yields the amalgamation that makes New Orleans architecture distinctive.15

The most ubiquitous residential form in New Orleans is the shotgun house.16 The form of the type is basic, but the ideas manifest in the design can be extrapolated to other grander typologies. While the origins of the shotgun are subject to debate, the lineage of the form can be traced back to early habitation in the region. By the 1930s, shotguns comprised more than 50% of the housing stock of New Orleans.17 In the intervening decades, much of the architectural geography has changed, though tens of thousands of shotguns still remain, found in almost all neighbourhoods of the city, comprising a sizable portion of the extant, habited stock.18 The most basic shotgun is an enfilade arrangement of two or more rooms, running from the street edge to the back of the lot on which the house sits. There are dozens of variations, suiting the needs of the inhabitants, coinciding with the time period in which they were constructed and adjusting to site constraints. This simplistic formal arrangement, lending inherent flexibility, has led to its longevity in the city.

14 A fact addressed by MIR director Tom Darden, see note 8.
One of the driving forces of the form derivation of the shotgun is climate. During the spring, summer and autumn months in New Orleans, temperatures and humidity are high. Additionally, New Orleans streets are prone to flooding due to heavy deluges which strain the drainage systems of the city. The shotgun typology copes, through its design responses, with high precipitation rates, high temperatures and high levels of humidity.

Vertically, starting at the foundation, the houses are raised above grade on piers to allow for cooling breezes to pass beneath the floors. This response has a secondary benefit of elevating finish floor heights above the adjacent street level by approximately a metre, abating the effects of common street flooding. Beyond the raised floor, the rooms of traditional shotguns have tall ceilings of three or more metres. Working in tandem with clerestory venting, the height of the ceilings allows the warmest air to rise above the occupants of the house and then be vented via transoms and attic vents. The roofs of shotguns are pitched, with deep eaves and covered porches or verandas which protect façades from direct sun exposure and thus solar heat gain.19

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In plan, the straightforward room arrangement and narrow form results in a structure with limited interior partitioning. The lack of obstructions allows for cross-ventilation and breezes to clear the rooms of collected heat. In the hottest months, when there is little wind and the air in the house stagnates, the porch provides a shaded place in full exposure to wind, a place of refuge when the house gets too hot. With air conditioning a relatively new arrival in relation to the built environment, these methods allowed inhabitants to cope with the oppressive conditions of life in the bayous and swamps in and around New Orleans.

While air conditioning and electricity have greatly altered the demands placed on the design for comfort, there is still much to be taken from the shotgun example. One of the benchmarks of MIR is sustainability. Passive systems, developed to meet needs in pre-modern designs, can be utilized to reduce reliance on energy-consumptive active systems. Additionally, due to storms and dated infrastructure, there are times when electricity service is not always reliable – MIR was an opportunity to design houses to be (more) comfortable in those times.\(^\text{20}\) The principles which have existed from the times of the earliest shotguns are immutable: "critical regionalism has the potential to guide design practices for a long time to come."\(^\text{21}\)

Beyond purely functional justification of translation, it is important to recognize that there is a social and cultural sense tied to longevity in design. Porches evolved to provide occupants respite from heat developed to meet a climatological need, but they outlived their original purpose with the invention of air conditioning. However, by this point they had taken on a secondary, social importance, with the development of a strong ‘front porch culture’. The porch, adjacent to the right-of-way, allows neighbours to interact with passers-by and foster a sense of community.\(^\text{22}\)

Following Hurricane Katrina, front porches served well beyond the social spaces they had previously,

\(^{20}\) A limited few in New Orleans still choose to inhabit homes that are not serviced by air conditioning, and are able to bear the extreme heat and humidity in century old houses due to the understanding of the climate which was built into them. Katy Rechdahl, “Some New Orleanians have learned to live without air-conditioning.” *The Times-Picayune* (New Orleans), 16 September 2012, B1.

\(^{21}\) Wiley, Amber, e-mail message to author, 24 April 2014.

becoming places for people to “vent, cry and laugh” – a place for healing. Not limited to shotguns, houses of many typologies across the city have front porches, lending to a distinctive streetscape.

The ubiquitous porches provide a backdrop for the intricate social ballet which unfolds – the “serendipitous” encounters lending a sense of neighbourhood which is patently ‘New Orleans’.

In tandem with the climatological drivers of design, the social and cultural implications of design are powerful. They are intertwined with the daily life of the New Orleanians and directly lend form and character to the streetscape and neighbourhood – two facets which extend beyond the realm of the individual and affect the overall feeling of the city. The creation of successful new design through translation sits at the confluence of both pragmatics and the emotional, nostalgic or conditioned, in order to yield a sense of normalcy often sought after tragedy – comfort in the known. This is not advocating outright imitation, which disserves the contemporary needs of a society through perpetuating antiquarian means and devalues that which survives of the historic fabric. It is not even necessary to adopt the form of that which was extant before the storm in that location, but rather to understand the vernacular which developed in New Orleans to combat the unique climatological challenges, and fulfil the distinctive social demands placed on structures in the city.

“Celebrity Architecture”

Faced with a seemingly barren landscape, it would have appeared to some as through the neighbourhood was a tabula rasa awaiting the wilful strokes of eminent architects on which to create a vibrant neighbourhood from their knowledge and renown. Rather than a clean slate, however, it was a site loaded with the biases and knowledge of the past on which to deploy not an idealized ‘utopian’ architectural vision, but rather a conceived (not contrived) neighbourhood. With very little extant vernacular context left standing in situ, and little of exceptional architectural merit to replace, the firms who answered the call by MIR were faced with how to acknowledge the greater context, which lay in the rich heritage of the neighbourhood and the city at large.

The selection of the lead architects GRAFT is intriguing when one considers the concept of translation. The name GRAFT originates from “transplants in the field of medicine”, and it is noted that “positive properties of two genetically different cultures are combined in the new biological

24 Culvahouse, “Stoop, Balcony, Pilot House.”
26 Katie McCaskey, “Can Ugly Homes Make it Right?,” AOL Real Estate, 30 November 2009.
29 Much of the housing stock that had existed in the neighbourhood prior to Katrina dated post-WWII.
That is seemingly to say that hybridisation is embedded within the firm’s philosophy with their goal to seek “architecture of new combinations, the crossing of different cultures.” In the solicitation of additional firms for the project, the brief included the innocuous criterion of “interest in New Orleans”; a modest proposal for an outcome which hoped to directly react to the heritage of New Orleans archetypes. In the statement, there is recognition of at least a tangential relation between designing in an environment and taking interest in it, for designs do not exist in a vacuum, and successful designs relate to or fully engage their surroundings.

The architects of MIR, designing for a post-disaster setting, not only had to address the aesthetics of the design but also the social and psychological forces at play in the neighbourhood. They were tasked with not merely replacing structures, but returning to the area a sense of “selfhood and identity” which was tethered to the tectonic of the place. When surveyed, many returning residents to the Lower Ninth “expressed some difficulty in relating to their new houses” and they “would have preferred for their new house[s] to look more like their ‘old’ houses”; – a neighbourhood grounded in historical antecedents to retain continuity between that which was lost and that which is new. The concept of “‘place’ [a]s part of the identity of these citizens” is clear.

In addition to engaging with an unfamiliar location, social normalities and climate, the more prolific architects selected for MIR had to negotiate typologies which manifest a great departure from

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31 “Missions Statement,” GRAFT Lab.
32 Firestone, “New Orleans Post-Katrina.”
34 Verderber, “Five Years After.”
35 Allen, “New Orleans One Year Later.”
much of their work. Many of the “great architectural minds” which Pitt tapped to participate rarely
design modest single-family houses; while their renown comes from “luxury items such as iconic
museums and private villas”, the needs of low-income housing, including an emphasis on practicality
are hardly applicable to the typical work the firms are engaged in.36 The qualification of designing
imposing grand public spaces or villas for the wealthy does not directly (or even indirectly) translate
to the needs of the MIR houses. MIR took famous, talented architects and had them design small-
scale, affordable housing.

Translating, Ingenuity, and a New vernacular

Across the board, the MIR houses exhibit many components which were picked up from the historic vernacular typified by the shotgun houses of New Orleans. Among the more than 100 completed houses there are instances of intriguing translations of traditional architectural components. However, no one house succeeds at addressing the climactic responses of the simple, historic shotgun. In some way, the shortcomings are the result of a failure to tie disparate translated components together. While the deficiencies of the houses vary with each design, many can be tied to a single cause, which manifests in differing facets of each house, depending on how the architects chose to meet the challenge.

Following Hurricane Katrina, federally mandated minimum elevation requirements were imposed in an attempt to prevent devastation should another catastrophic flooding event occur.37 In the Lower Ninth, the required heights sit well below the storm surge flood level. In order to address the disparity, the MIR architects chose varying approaches to fulfil Pitt’s goal to “mitigate the threat of future storm damage.”38 The importance of the sense of safety provided by addressing the concern cannot be understated; roughly 80% of the city was flooded in the aftermath of Hurricane Katrina.39 Specifically in the Ninth Ward, where one of every fourteen died in the flood, the issue of “storm resistant” construction is paramount, both as a practicality and for the mental health of those who returned.40 Through the neighbourhood, there are three responses, each presenting unique challenges.

The first MIR homes were raised on pilotis well above grade. At the outset, this was seen as the way to prevent future flooding, serving a community which grappled with the destruction caused by Katrina. However, the inability to easily mediate between the ground and the first floors, some up to three metres in the air, became a challenge. The need for close proximity to the ground is both

36 Moore, “Brad the Builder.”
38 Royle, “Our Response to the New Republic.”
cultural and pragmatic. In addition to the ‘front porch culture’, often cited as the central reason for having protected outdoor space along the adjacent street, accessibility into homes raised off the ground can become a challenge for the many elderly and disabled residents of the Lower Ninth. In the raised MIR homes, this was often mediated with costly lifts which become inoperable with loss of power.41 A successful attempt to bridge the vertical disparity socially (though not provide for accessible entry), the house by David Adjaye and Asem-Pa has a unique tiered staircase leading to the front door. The raked seating alongside the stair provides gathering space which can accommodate the needs of large and small social groups. The arrangement is an interesting response to the level disparity. However, there is a glaring shortcoming. With no shading, like the roofs found on the porches of houses in New Orleans for two-hundred years, the space is rendered uninhabitable for many months of the year.

As house designs began to be duplicated, and the costs both fiscally and socially mounted, houses were constructed closer to grade, meeting the minimum government requirements while still sitting well below the storm flood elevation.42 These homes better preserve the “human-scaled” neighbourhood, allow easier access for those with limited mobility, but expose the residents to the potential for catastrophic flooding in the future.43

A single design sought a solution to allow for flood protection while retaining a traditional elevation – the ‘float house’ by Morphosis.44 The house sits a metre above grade on a foam “chassis” anchored to steel masts, with break-away utility connections, allowing the house to float should the neighbourhood become inundated with water.45 The design successfully retains vernacular form

41 Moore, “Brad the Builder.”
42 The elevation “turn[s] their front porches into catwalks” and causes overshadowing and restrictive conditions on narrow lots, akin to “a Mini Cooper boxed in by SUVs.” Bernstein, “Brad Pitt’s Gift.”
through design ingenuity by translating the language of the past, recognizing the importance of the spatial relation between the front porch and the street, and implementing new technologies and design ideas to create a prototype for a wholly new response.\textsuperscript{46} While the house has been criticized for over-the-top ornamentation and a garish colour scheme, the parti makes the design exemplary, demonstrative of comprehension of a fundamental component of regional vernacular design and successful extrapolation facilitated by new technologies, to meet demands of new environmental realities.\textsuperscript{47}

Beyond the shortcomings related to the mediation between ground plane and the first floor, another common issue among many of the designs is the relationship of the front façade and the street. Most of the houses have porches which address the street, demonstrating the architects' recognition that traditional New Orleans homes address the street in that way. However, traditionally, the front porches connect the most public rooms of the home to the public right-of-way via the main entrance of the home. This provides a zone of interaction which fittingly bridges from the street to the public entry of the home. There are multiple instances in MIR where the front door is far removed from the front façade of the home, relegated to the side of the house, or recessed too deeply to address the street. In conjunction with this, many houses have front porches which are only accessible from the interior of the home. This condition changes the fundamental public-public relationship of the porch. The homes by Constructs, Hitoshi Abe, Kieran Timberlake, and Pugh+Scarpa's all exemplify this concern.\textsuperscript{48}

\textsuperscript{48} “Architects,” Make it Right, accessed 6 May 2014.
'Float house' and Asem Pa took the restriction of elevation and took steps to design new solutions while incorporating vernacular components. Rather than force occupants to adapt their ways to an element of the houses that may not ever be needed, the houses react to the environment, translating architectural language of the neighbourhood and city from the past to the present while anticipating future needs. The houses offer solutions that meld lessons taken from archetypical structures of New Orleans and translate them, through the usage of new materials and ideas, into practical, executable forms for prototypes, provoking a dialogue about a new vernacular.

**Conclusion**

Architecture is a referential art. The vernacular forms of New Orleans attest to the maturation and longevity of the aggregation of styles and formal components employed and refined through generations. Over centuries of occupation, New Orleanians have developed methods to address the climatological needs of the region through construction and design methods meant to mitigate the extreme heat, humidity, solar exposure and precipitation which typify the region. The aggregation of elements is not merely a coincidence, but is the result of layered adaptations to the needs of the place.49 With each subsequent generation’s usage of the forms, the connection with the culture of New Orleans and social importance grows stronger.

The devastation of Hurricane Katrina on the Lower Ninth Ward offered a rare opportunity born from an unfortunate event. Make it Right, Brad Pitt, and the architects who answered the call to help rebuild the neighbourhood were faced with a barren physical landscape, imbued with a complex cultural landscape and a history of design. Many of the designs clearly demonstrate knowledge of the forms which comprise New Orleans. However, many miss the mark of translating the historic vernacular into new context. Success would not be achieved through the construction of replicas of historic homes on the streets of the Lower Ninth, but rather through an intimate understanding of the facets which make up the historic vernacular of the city. In this approach, exemplified through

49 Levine and Taylor, “The Upside of Down.”
the ingenuity of the ‘float house’, but represented in many other instances at various scales, new homes could emerge, envisioned by architects who reinterpret the forms in new materials. Make it Right was not an exercise in style, but rather one of methodology and climactic and social response through design, a test to take the aggregate lessons of generations and apply them to new design with new methods.

New Orleans has a rich intact historic fabric, rare in the United States, and it is important to take full advantage of the architectural heritage the city has to offer. There is potential to use the adjacent neighbourhoods as a library and learn from both the good and bad, to use the ideas refined over time but restate them and adapt them to modern materials and needs – translate them. Typologies must be flexible. Language changes, and so too must the language of design in response to new demands. However, the core of the language cannot and should not be disregarded.

The context of post-disaster reconstruction framed the concept of translation of the antecedents being imperative to those returning, to affect a sense of normalcy from that which is seemingly not all that normal. The Make it Right homes brought attention and resources to a languishing community and without MIR and Brad Pitt, the Lower Ninth Ward would likely look similar today as it did on 1 September 2005. Instead, on the crest of the North Claiborne Bridge a brightly coloured community stands amongst the few surviving, weathered and twisted live oaks, a testament to the influence architects have upon the visual landscape of a place.

The shortcomings of many of the designs are numerous, but that there are houses there at all today is a small victory. It is still very much a community that will grow and change over time; many of the ideas incorporated in the designs are still being tested. Time will tell how the influences of the architects proliferate into a new vernacular for New Orleans, but the lessons learned through the process will hopefully result in more ‘done right’ in the future.

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