The BP Deepwater Horizon Disaster: Zombie Housing for Nomads

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INTRODUCTION

On the evening of April 20, 2010 a massive explosion occurred in the Gulf of Mexico in five thousand feet of water sixty miles off the coast of Louisiana. An immense ball of flames erupted high into the clear night sky as eleven men lost their lives. An over budget, problem plagued deepwater oil exploration platform had imploded—the BP Deepwater Horizon. The limitations of extreme engineering technology were laid bare for the entire world to witness as this rig fell to the ocean floor, in ruins. For three months thereafter its ruptured wellbore spewed an over 200 million barrels of crude oil into the Gulf. The unprecedented damage inflicted upon the region's delicate aquatic ecosystems, its seafood industry, tourism, and the communities directly impacted, garnered extensive media attention and scrutiny by global environmental advocacy organizations. Governmental agencies with supposed regulatory oversight of the U.S. deepwater drilling industry were caught wholly unprepared. Unfortunately, the dysfunctional governmental response was nothing new to residents of the U.S. Gulf Coast.

Just five years earlier, Hurricane Katrina slammed into this same region, inflicting the loss of 1,837 lives and incurring over $200 billion in property damages. Then, as now, a lethargic governmental response, plagued by dysfunction at virtually all levels—federal, state, and local—resulted in a tedious period of recovery fraught with innumerable setbacks and false promises.[1] This time, however, the disaster was caused by private industry. Yet once again, the individuals, families, and businesses adversely impacted were forced to rely, ultimately, upon their own resources, their intense inner determination, and resiliency.[2] Widespread skepticism prevailed among those impacted, understandably, due to the highly flawed governmental response to Katrina. One thing would differ radically between Katrina and the BP Horizon Disaster: in this case the perpetrator of the disaster would be held accountable for all cleanup costs. This would include the provision of temporary housing for all cleanup workers brought in, near and afar, to assist in mitigation efforts.

The following discussion centers on the phenomenon of *zombie housing*, defined for purposes of this discussion as generic, placeless, Spartan-like living quarters typically provided in the aftermath of natural and human-made disasters. The continued deployment of this minimalist mode of living accommodation, and their broader encampments contexts, continues to be a source of debate and controversy. It is increasingly being called into question as a dismissive act—yet it remains the option of first resort for the housing of uprooted individuals and families dislocated from their homes, as well as for migratory persons seeking paid, post-disaster mitigation work opportunities. Hurricane Katrina is examined in this context as a backdrop to the hardships encountered along the Gulf Coast in the aftermath of the BP Horizon Disaster. The core objective is to examine the zombie-like living quarters provided by BP for the small army of nomadic, migratory workers hired to clean up the massive volume of oil ruptured from the failed drilling platform. The socio-cultural legitimacy of these accommodations is further examined, as are rea-

sons why, paradoxically, architecture continues to be dismissed as a legitimate medium for rapid response in post-disaster scenarios.

The figure of the migratory nomad throughout history has long been of keen interest to social scientists and in film and literature. Recently, cultural geographers have defined the postmodern nomad as a remarkably unsocial being, a mere statistical data point on a map or chart. An underclass. In the abstract, an entity to remain socially and geographically undifferentiated, even dismissed. In recent years, an underclass of post-disaster mitigation workers has arisen that is migratory. It is comprised of nomadic individuals who relocate from one disaster site to the next. This has grown to become a statistically documentable population and is predicted to accelerate as disasters increase in frequency across a broader geographic spectrum in the coming years and decades. Meanwhile, the US Census Bureau continues to overlook its existence.

Persons and groups uprooted either by choice or by default have been viewed as a threat to mainstream societies at least since the gypsies and nomads of the Middle Ages. Then, as now, their existence symbolized the dysfunction of a threatened societal order that assumes a *whole* person, i.e. moral, ethical, and contributory, should be rooted to a particular place—a home base of one's own. A member of a community, in good standing. Contemporary migratory persons caught in this trap include nomads, gypsies, prisoners of war, and more recently, post-disaster victims. The latter are currently categorized for statistical purposes in the U.S. as Internally Displaced Persons, or *IDPs*.

In the 20th century, wartime, post-war, and post-disaster internments of IDPs occurred—some voluntary, most involuntary. The tribal Bedouin of Libya, under Italian fascism, were subjected to neatly subdivided barbed wire detention encampments, beginning in 1930. These places expressed the epitome of rational spatial planning, reductivist living quarters, and Spartan amenity. They were one kilometer-square enclosures arranged so that detainees—inmates in effect—were forced to set up their tents in a rigid grid pattern with broad street-paths. This allowed for maximum surveillance. It forced the Bedouin to exist within a strictly bounded territory: a highly controlled, fixed space, in stark contrast to their prior unfettered movement across their territory.[3]

Similarly, the migrant worker camps constructed in California under the auspices of the Farm Security Administration (FSA) during Roosevelt's New Deal the 1930s, in effect, incarcerated families and unaccompanied individuals (referred to as hobos) in substandard living conditions, often fenced in with barbed wire and armed sentries at the gate. The grim plight of these IDPs was depicted dramatically in John Steinbeck's classic 1939 film *The Grapes of Wrath*. The Great Depression by the mid-1930s had displaced tens of thousands in search of a better life. It is well documented how they were tempted from afar with good wages and plentiful work only to arrive to learn this was not to be the case. The FSA sent out teams of photographers to capture the plight of these migrant families. These documentarians discovered the most appalling conditions: stuck in broken down vehicles overloaded high with whatever they could transport from their former life. In addition, air views' of these camps were photographed. The resultant images of the migrant worker camp for IDPs at Schafter, California (1938) revealed a precise rectangular encampment divided into a grid crisscrossed by broad circulation paths. Within each block of living space there was a laundry, toilets, and facilities for personal hygiene.[4] Paradoxically, these pristine aerial views afforded an image of sanitized, prescriptive, rational space, in stark contrast to the disordered chaos on the ground. Thousands of displaced migrants were amassed within and beyond the gates of these camps. One FSA photograph taken by Dorothea Lange contained a message advocating for improved living conditions and for the establishment of a genuine sense of place. It read, "Constant movement does not favor the development of normal relationships between citizens and communities, and between employer and employee for the proper functioning of democracy." At the time, Lange's editorialized comment served as a call for greater acceptance of transitory persons and groups.[5]

Large encampments of Federal Emergency Management Agency (FEMA) trailers, some with as many as 300 units per site, sprang up across New Orleans in the days and months following Hurricane Katrina. Thousands of IDPs were housed in these minimalist, faceless, zombie-like living quarters. Their occupants had been made to feel like transitory migrants in their own city. Adding insult to injury, New Orleanians are a deeply rooted population, a people strongly connected to place. At the time of the disaster in 2005, 87% of New Orleani-

ans were native-born residents. Tens of thousands of sad stories have been recounted of involuntary relocation from place to place after the Hurricane. It was a nomadic existence that consisted of shifting between family, friends, and strangers for months, even years.[6] Eventually, FEMA would deploy a total of 97,000 trailers to the Gulf Coast in the fall of 2005 and early 2006. The units themselves were poorly built, providing little amenity for their inhabitants, and were subsequently proven to be unhealthful. They caused respiratory sicknesses, nausea, and migraines. The U.S. Congress held hearings on this housing crisis.[7] Voluntary FEMA encampments (actually involuntary, if one needed to be back home due to one's job, for instance) were hastily set up in neighborhoods across the city, on school play yards, parking lots, in vacant lots, and on city and federally controlled property. In one case, an encampment of fifty units was actually set up *inside* a large warehouse (in Metairie).[8] Similarly, the post-disaster accommodations provided for BP-contracted cleanup workers would function as an extension of this same bureaucratic mindset. Only this time, the housing would be provided by the private sector—for a sizeable portion of cleanup workers who had become displaced due to the adverse outcomes caused by the massive oil spill.

The Floatel at Port *Fouchon*

In the weeks following the explosion that ruptured of the oil well's blowout preventer, BP scrambled to assemble a small army of cleanup workers. These hourly contacted workers were trained in one day and then sent out the next to scour beaches, marshes, and to operate boats deploying hundreds of miles of oil boom skimmers across the open waters of the Louisiana Gulf Coast. The strike zone would eventually extend to Mississippi to Florida. Thousands of workers scraped the beaches of thick concentrations of accumulated crude oil.

Oil companies often have to house exploration crews in remote locations for extended periods of time. Over time they became "expert" in no-frills accommodations. After the Deepwater Horizon explosion, BP subcontracted to construct two colonies of modular units that could float on the water. The plan was for these adapted barge installations to be relocated as needs change later in the cleanup operation in the event significant amounts of crude oil wash up elsewhere. These floating hotels—*floatels*—were constructed on the decks of standard oil industry service supply barges. One such colony was built at Grand Isle and a second at Port Fouchon, Louisiana, fifteen miles away. The Port Fouchon installation was the larger of the two colonies and is therefore examined in some detail below. A small, extremely remote settlement itself, Port Fouchon is the oil and gas industry's hub on the Gulf of Mexico. At Port Fouchon, an aggregation of nearly 100 modular units was placed atop five separate barges that sat side by side in the water along one dock, in a high security section of the port.

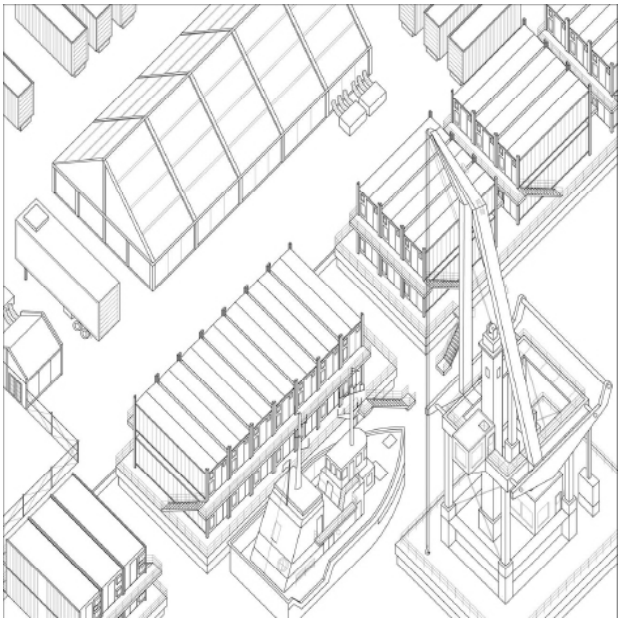
Port Fouchon is literally at the end of the road, but feels like the end of the earth. It is reached only by a single two-lane road (Louisiana Highway 1) that snakes its way through bayous and small towns with names such as Cut Off and Golden Meadow and a bridge that snakes across a long span of nearly open water. The port is not so much a conventional town as a purely functional switching station, not unlike a railyard for ships, workers, equipment, and cargo. All the buildings are elevated 12-15 feet on pilotis' and there are few signs of any real community, or *genius loci*, in a traditional sense. There are no permanent residents. It is a 1,300-acre parcel easily accessed by ship yet barely accessible via land. As for coastal land loss, a tremendous amount of the surrounding wetlands have vanished and subsidence of the remaining dry land is occurring at a rapid rate. It is a rough and tumble place.

Each modular unit provided by BP was 40-foot long by 12' by 10' corrugated steel box. They resembled oversized white shipping containers, stacked two high and from three to seven units across, atop the barges (Figure 1). The words 'Martin Quarters' were painted in black letters on their sides, offering the only clue that they were stuffed with people instead of cargo. There is only one door to each module and a steel walkway doubles as circulation access and smoking gallery (Figure 2). The barge floatels at Port Fouchon housed more than 500 workers in 2010 to assist in the largest oil spill cleanup operation in U.S. history. These accommodations were viewed by BP to be the best, i.e. cheapest and most expedient, means to deploy a large number of workers close to the main "theaters of operation" within the oil spill's strike zone. Generators pumped in cool air to the modules and provided electricity. Four additional tents on dry land housed up to 500 additional workers. An infirmary was located on site (in a tent) and

a helipad was created for emergency airlifts to hospitals in nearby towns. Most workers were trucked in and out of the encampment to buy food or to go to the few local bars for entertainment. Few owned their own vehicles.

The accommodations were Spartan at best, and windowless. Each pod contained twelve bunks, with a bathroom for every four. As per Coast Guard standards, each occupant got thirty square feet of space in his (there were few women) module. The barge had ten washers and dryers, a kitchen, and an infirmary. Food was served in an adjacent tent, on land. This type of module typically has been used on small barges to float alongside an oil platform rig to supplement onboard living accommodations, but never before at this scale. Cleanup operations vessels stationed at the floatel dock ferried workers to work each day and usually returned them by 6:00PM (Figure 3). BP had planned initially to build more than two floatel encampments but have not done so as of this writing. The buzz of a helicopter flying overhead accompanied this author of a tour of the Port Fouchon installation. An axonometric view illustrates the precise arrangement of the floating modular units and adjacent support facilities on the land, in a scene eerily reminiscent of the aerial photos taken of the FSA migrant/nomadic encampments in California in the 1930s (Figure 4). Similarly, the chaotic, makeshift, thrown together scene on the ground is quite different from how it looks from the air. From above, it appears as a rational, neat, tightly ordered compound that provides "benevolent" accommodations for a nomadic population in need of work in rough economic times.

On the landside, the entire encampment was enclosed in a 6-foot wire mesh fence. Armed guards with rifles were stationed at the main checkpoint. It was a military-like atmosphere, with checkpoints, strict departure/arrival policies, and a strict curfew. There was virtually nothing to do within the encampment during non-working hours—no place to watch a film, hang out, to get away, and above all, no contact with loved ones, families, nor any opportunity for place attachment. These transient nomads had little in common with each other, as they were a racially and ethnically disparate cohort. The floatels were a neutral zone for existence, not for *living*. A rash of violent attacks and arrests occurred on weekends in "the town." Nearly every incident involved floatel occupants.[9] The workers actually went on strike (in summer 2010) to protest the substandard living and working conditions.[10] Immediately, national worker rights activist groups injected themselves in this protest of the alleged human rights violations that were being perpetrated onboard the floatels.[11] Meanwhile, nearby on dry land, a parallel effort was underway by BP to place many hundreds more cleanup workers in toxic recycled Katrina FEMA trailer encampments, in an ironic *redux* of the aforementioned post-Katrina conundrum.[12]



Where are the Architects?

In the aftermath of the 2010 BP catastrophe, the global need for sustainable, dignified, and healthful emergency housing has never been greater. But where are the architects? Why were there no off-the-shelf prototypes with far greater architectural integrity readily available for implementation? Where is the U.S. federal government and the private sector industry in all this? What antecedent conditions resulted in this failure of response? There are many underlying reasons for what occurred and why little continues to be done. Here are but a few possible factors that contribute to this unfortunate situation:

Dominance of the Engineers—The engineering profession dominates the industry as the provider of choice in emergency and offshore housing. An emphasis on bare bones functionality and logistical expediency has usurped any attention to anything that might be equated with the broader, classically based Vitruvian principles of architecture (commodity, firmness, and delight). The largest U.S. federal contracts are held by a relatively small handful of very large engineering corporations.[13] These well-connected corporate interests are dismissive of "housing" that aspires to anything beyond bare minimum standards—especially if it is to house easily dismissible nomads. Perhaps what might be viewed as most disturbing to any reflective, socially engaged architect is the resemblance and close packing of the modules at Port Fouchon to the propane canisters stored on racks in a supply yard a mere few blocks away (Figure 5).

Architects' Traditional Disdain for Bureaucracy—Most architects are disinclined to communicate with engineers and politicians in a genuinely collaborative manner. It is this lack of assertive leadership that holds the profession back from making further inroads into elevating the design quality of post-disaster emergency housing. This, in large part, accounts for the continued reliance on residential accommodations that appear placeless, unrooted, and wholly generic. The "Katrina Cottage" prototypes built in post-Katrina Mississippi stood out in stark contrast to the sidelines stance displayed by the mainstream architectural profession.[14] This advocacy effort was extended in the aftermath of the Haitian earthquake in 2010.[15]

Lack of Professional Training and Preparation—Schools of architecture continue to do far too little to foster a sense of genuine critical engagement among the students—in terms of inculcating the personal initiative, motivation, and perseverance to respond quickly and adroitly to society's needs in the aftermath of disaster. Architects are not trained to communicate well if at all with bureaucracies. This bias begins in students' earliest design studio experiences. Engagement is essential yet is pushed aside. The design culture of the schools is somewhat improving in this regard but much more significant improvement is in order. A *Rapid Response* design studio taught by this author at Tulane University proved effective in this regard—resulting in the first LEED Silver rated design/build completed building in New Orleans—although more initiatives of this type are needed, whether arising from design–build contexts or otherwise.[16]

Terms of Engagement

Negative stereotypes of nomads and migrants are nothing new. History is filled with examples of the search for something better. The denial of meaningful connections to a place—especially if a new, unfamiliar place—is unacceptable. The BP Deepwater Horizon Disaster underscored the need for diverse types of post-disaster housing for diverse occupants. This remains the fault of BP and its subcontractors and therefore they shoulder the main responsibility. One size does not fit all. As for the public sector, the slowing evolving policies on the part of HUD and FEMA—the current controlling agencies of the post-disaster housing industry in the U.S.—remain unacceptable. The ability to personalize one's otherwise zombie-like living quarters must be of high priority.[17] Regardless, quality architecture can be integral to a humane first response, whether in the private or public sector. Too often the architect remains the passive bystander when direct intervention is clearly in order.[18]

The transient nature of BP's small army of disaster mitigation workers made it convenient to perpetuate deep-rooted cultural biases toward this presumed "underclass." Nomads are viewed as "conveyors of 'vague essences' where the use of this term is equivalent to *vagabond*.[19] Yet a migrant is in a certain respect rather different from a nomad. Tim Cresswell writes:

> "…the nomad is constituted by lines of flight rather than by points or nodes. While the migrant goes from place to place, moving with a resting place in mind, the nomad uses points and locations to define paths. While sedentary people use roads to 'parcel out a closed space to people,' nomadic trajectories distribute people in open space. The nomad is never reterritorialized, unlike the migrant who slips back into the ordered space of arrival. The metaphorical space of the nomad is the desert…shifting across this tactile space making the most of circumstance. The State, on the other hand, is the metaphorical enemy of the nomad, attempting to take the tactile space and enclose and bound it. It is not that the State opposes mobility, but that it wishes to control flows…(via) directed paths of movement." [20]

Perhaps the BP mitigation workers are a 21st century nomadic equivalent to the Medieval journeymen laborers who traveled across Europe building the majestic Gothic cathedrals. The Church-State (substitute BP), for its part, managed their construction, solicited workers, created divisions of labor between mental and manual, paid them, and proceeded to control them. The consequences of the BP Deepwater Horizon Disaster will be felt for decades. The terms of engagement regarding deepwater oil and gas drilling in U.S. waters have changed. Lives and livelihoods have been profoundly transformed. The stories of families suddenly unable to work are well documented.[21] The losses sustained by the seafood industry, tourism, and throughout the entire regional economy will be felt for years to come.[22] Environmentalists continue to mobilize to track the conflicting information provided by BP and the government. The national six-month moratorium on deepwater offshore drilling in U.S. federal waters was controversial.[23] As with any disaster, there are winners and losers.[24]

A quasi-militaristic policy towards temporary living accommodations robs people of connecting with one another and with a particular place. This pattern was repeated throughout the 20th century and apparently continues to be repeated in the 21st century as well. Esoteric and inventive architectural speculations might well be of intellectual value within the academy, yet of little value whatsoever in the lives of post-disaster cleanup workers, refugees, or evacuees returning to their former communities.[25] In personally speaking with a number of the workers living on the BP floatel barges at Port Fouchon, it became apparent that most were from far beyond Louisiana and were merely in search of a job, a paycheck. Many had left their families back home to temporarily work for BP in the latest example of disaster capitalism.[26] They came from hundreds of miles away. These odd-job occupational nomads move from Point A to Point B and beyond. Their plight and their exploitation by BP is a stark reminder of the uncontested world of corporate meaning and power in America. Their plight is equally about the tensions caused by unshakable conceptualizations of what it means to be on the move in a highly mobile society.

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ENDNOTES

1 These ranged from the failed Road Home program in Louisiana to the erratic, haphazard impact of the low cost bonds for private sector reconstruction issued through the flawed, federally-created *Gulf Coast Opportunity Zone* (GO Zone) initiative of 2006.

2 BP assumed much of the financial burden for the disaster. In August of 2010 it established a $20 billion fund to compensate aggrieved parties, although the outcome of this remain to be seen.

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