NIGHTSCAPES, TERRITORIES OF DREAMS AND LIGHTS
REIMAGINING RESIDUAL WATERFRONT AREAS THROUGH NOCTURNAL TEMPORARY USES

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Cities are in constant change. Uninterruptedly, urban areas come to life while other zones are deactivated. As an example, derelict waterfront industrial sites are ubiquitous elements of the contemporary landscape. The reduction of activities related to the secondary sector of the economy as well as the introduction of cleaner energy and production technologies has left large expanses of ruined or contaminated lands without a current use or a future plan. Whenever plans of revitalization are developed, they usually promote the definition of static limits, efficient orders, homogenous forms and permanent uses, mostly diurnal.

In San Francisco, waterfront “voids”, with their empty lots and abandoned buildings, all residues of 19th century infrastructural operations, call to be re-imagined as territories of the 21st century. In this city, the temporary uses of residual spaces are becoming alternative forms of appropriation that contribute to its image as a diverse and creative urban area. These uses can potentially become a design tactic to be employed in the waterfront, and a strategy that acknowledges the fact that cities no longer sleep after dark.

This thesis takes two case sites, one physical and one temporal. The extensive Pier 70, as well as the night, a time usually ignored in traditional design practice, are both taken for the latent potential of their indeterminacy, darkness, vacancy, silence, vastness and emptiness. The proposal develops a series of scenarios that explore the ephemeral, fragile and spontaneous nature of the night through nocturnal temporary uses and light. Both are taken as transitional solutions and catalysts for more permanent, inclusive, and dynamic ways of creating cities.

“Is the night an indeterminate contemporary landscape to be invented?... What is a specifically nocturnal public space? On the basis of which principle does one develop a project? If night means the ephemeral, the fragile, the spontaneous, how does one construct this element without distorting it? To observe the cityscape by night means to ask oneself about nocturnal design values... (the) temporary night is the urban laboratory of many cities.”

Marc Armengaud, Matthias Armengaud and Alessandra Cianchetta
Nightscapes: Nocturnal Landscape
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I have been extremely fortunate to have a great committee. Thanks to Professor Buresh for guiding this project. I found immense value from our one-to-one meetings. The inspiring nature of dialogue that bounded the critiques provided me with many new ideas. Thanks to Professor Crawford who continuously encouraged me to dream. Her research background in everyday urbanism and her interest in the temporary city were central to this work. I also acknowledge her support in the early stages of conceptualization and the never ending energy with which she engaged the project. Thanks to Professor Creedon for believing in me. His supportive teaching, guidance and patience was invaluable.

I also want to thank my family whose support throughout these years of architecture school cannot be measured. My parents, Denise and Héctor, whose love was always, always, always there. To my brother Héctor, thank you for all the encouraging words and for making me smile even in the toughest moments. To my grandmother, Carmen, thank you for all your prayers. To Rubén, you are my little angel. Least not I forget my lifelong friends and teachers in Puerto Rico. ¡Gracias!
The theme: the night
Cities are in constant change. Long-gone is the night solely experienced by people who have alternative, including, transgressive lifestyles. The current reality of the night is that it is a ‘time-space’ rapidly opening to accommodate and shape the life of the ordinary city dweller, and to give space to new modes of social relations.

Yet, the nighttime is an underutilized, even ignored territory in architectural discourse and practice. The night is a complex ‘time-space’ that requires different models and principles of design. Darkness can deterritorialize and destabilize, causing a shift in meaning, form, use and purpose. For that reason, this thesis discusses strategies of design that address the unique characteristics of this temporal space bounded by dawn and dusk, with the purpose of promoting a more vigorous consideration in architectural design.

The material: light
Cities are in constant change. City lights turn on and off transforming not only visibility and safety, but meaning. As part of the thesis project, artificial illumination technologies and luminous surfaces are explored as place making devices that challenge the distinction between infrastructure, structure and space. The immaterial nature, temporal and spatial conditions of light are used to question the notions of boundaries, to challenge the possibility of real-time expansion and contraction of spaces, and to create editable and flexible territories that can accommodate programs, uses and processes that change over space and time.

The structure: temporary uses
Cities are in constant change. As designers, we have always been focused on permanence even though cities are a complex array of impermanent activities. Nowadays, cities are going through an economic crisis, which among other things, is serving as a time to question the viability of permanent interventions and masterplans, proposals that are inherently complex, long and expensive and which most of the times, end up with creating static cities. On the contrary, temporary, transitional or interim uses acknowledge the changing urban condition, and seek to design the space of a short term experience.

Recently, and outside of traditional planning strategies, temporary uses have emerged in abandoned areas, transforming these into vibrant public spaces full of activity. But, how are architecture, planning and urban design practices embracing this temporariness and simultaneously redefining their professional role?

The thesis discusses this question and tries to re-imagine 19th century industrial artifacts through means of temporary uses and events, subject that has recently become a topic of research within design professions. Through the use of an example in San Francisco, design is re-conceptualized as a process of change, temporariness and unexpectedness. Designing for temporary use might be a new form of professional practice in which the potential of sites is revealed in the present, and in which active public participation is encouraged as a continuous instrument to shape the image of a city.

The case site: Pier 70, SF
Cities are in constant change. As part of this transformation, urban areas come to life while other zones are deactivated. The shrinkage of industrial urban activities has left large expanses of abandoned infrastructures, vacant lots and ruined industrial structures without a current use or future plan.

In San Francisco, piers, as well as marinas and man made coves, are part of the urban image and historical development of the city. As a result of rapid changes, brought by the redefinition of the city as a heaven for research and technology, piers are under proposals for rezoning and redevelopment.

For this thesis, the chosen site is the extensive Pier 70. It is located in the Central Waterfront, south of Mission Bay. This area carries the history of the industrial development and maritime past of the 19th century San Francisco, period strongly tied to an intensive ship building activity.

Currently with its contaminated lands, ruined industrial structures and obsolete infrastructures, it is one of the last remaining large under-utilized spaces in the city. The starting hypothesis regarding the Pier 70 is that current plans of redevelopment will reinsert the site into systems of urban diurnal efficiency and curtail public access to the waterfront. This will offer little or no potential for urban life after dark. However, this project aims at transforming this central location, making it publicly accessible through temporary uses and events that revitalize it with diurnal and nocturnal activity.
Cities are in constant change. According to the Vacant Properties Campaign, a typical large city in the United States has 15% of its land sitting vacant or abandoned (Newcombe, 2010). In these deserted territories, buildings and public spaces remain unchanged for a long time, while the activities and needs of citizens have rapidly evolved. The reduction of activities related to the secondary sector of the economy, manufacturing, and the introduction of cleaner energy and production technologies has left large expanses of contaminated lands, ruined industrial structures and obsolete infrastructures. These spaces are becoming ubiquitous elements of the contemporary territory of cities and suburbia.

Abandoned industrial sites are denoted as a type of *terrain vague*. This French term describes ‘abandoned areas, on obsolete and unproductive spaces and buildings, often undefined and without specific limits’ (Andalusia Center of Contemporary Art, 2006). These ambiguous territories, have recently become a focus of interest for photographers, architects, urban designers and planners.

The fascination with these ‘vacant’ and ‘empty’, ‘indeterminate’ and ‘uncertain’ territories is related with the attributes that David Nye considers as components of a sublime object or experience: obscurity, power, darkness, vacuity, silence, vastness, magnitude, infinity, difficulty and magnificence. Together they produce a sense of what the author calls “popular wonder and amazement” (Nye, 1994).

Furthermore, abandoned manufacturing sites offer experiences of escapism, exoticism and spectacle, primary desires sought by leisure and recreation seekers (Ockman & Frausto, 2005). This potential is explained by Ignasi de Sola-Morales who posits that these “strange places exist outside the city’s effective circuits and productive structures... are internal to the city yet external to its everyday use” and that “their absence of limit precisely contains the expectation of mobility, vagrant roving, free time, liberty” (Solà-Morales Rubió, 1996).
1.2 Past and present of the Pier 70, San Francisco

Given the geographical characteristics of San Francisco and the Bay Area, its industrial development and maritime history in the 19th century was strongly tied to an intensive ship building activity. The currently under-utilized site of the Pier 70, formerly known as Quentin Point, Potrero Point, the San Francisco Yard, Bethlehem Steel Shipyard and the Union Iron Works, was the most important setting for this industry. This man-made territory served as a wood and steel shipyard since the 1860s, during the Spanish American War, WWI and WW2, until the area lost its competitive advantage in face of new global shipping routes and containerization, as well as the decline of ship manufacturing in the post-war period (Rubin, 2011). The Port of San Francisco, a quasi-independent agency, purchased the 67 acres (2,918,520 square feet) site in 1982 for $1 (Worth, 2008). After the change of owners, the site bounded to the north by Mariposa St., to the west by Illinois St., to the south by 24th St., and to the east by the Bay, has sustained a limited amount of activity that includes dry-dock repairs with capacity for large ships, storage of towed cars and scrap metal collection, all run by private companies that lease these facilities on a short term basis. Additionally, the Noonan Building is leased to approximately 30 artists and designers who use the structure as studio spaces.
Above: Located south of the Bay Bridge and the Mission Bay neighborhood, the Pier 70 is one of the last remaining large expanses of flat, under-utilized land in the city. The adjacent, low-density, industrial and mixed-use Dogpatch district is connected to the rest of the city by the T Muni line that runs north-south on the 3rd street. The extensive site falls within a 7 minute walk of the 20th street station. Buses 22, 48 as well as the SF Bay Bike Trail also serve this area.

Following page: As a man-made territory that extends beyond the original waterline, the site offers views to iconic sites within the bay and the city, such as the Bay Bridge, Alameda and Treasure Island, the downtown skyline, Sutro Mount and the Twin Peaks. Yet, currently it is one of the longest lengths of inaccessible waterfront land.
Public Trust Lands

"Use of trust lands... are generally limited to those that are water dependent or related, and include commerce, fisheries and navigation, environmental preservation and recreation. Public trust lands may also be kept in their natural state for habitat, wildlife refuges, scientific study, or open space. Ancillary or incidental uses that directly promote trust uses, are directly supportive and necessary trust uses, or that accommodate the public's enjoyment of trust lands, are also permitted." Non-maritime uses shall operate in short-term leases.

Historic Uplands

Not subject to public trust regulations.

Today the isolated and deteriorated waterfront site, an important component of the identity of the city, its image and its history, contains 44 historic structures, most in ruins and seismically unsafe. They are considered the most significant ensemble of historic industrial structures in the western portion of the United States (Port of San Francisco, 2010).

The site also contains obsolete infrastructure as well as a high level of contamination with heavy metals and petroleum hydrocarbons (Bulkley, 2000). Additionally, the southern portion is occupied by the infrastructure of a fuel burning plant, the Potrero Power Plant that closed its operations in February 2011.

Most of the land is under the statutes of the Public Trust Doctrine established in 1969. This policy establishes that the Port should "promote navigation, fisheries and maritime commerce to protect natural resources and to develop recreational uses that attract people to enjoy the Bay and the waterfront" (Burton Act, 1969). Public tidelands comprise most of Pier 70, main reason why the area has had a complex and slow process of revitalization planning.
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Sources: Pier 70: Preferred Master Plan, 2010 and Map of Pier 70 Structures (http://pier70sf.org/mappage/mappage.htm#b11)
Since the 1970s numerous American cities have been developing guides for waterfront revitalization. Most of them have favored investment in which homogenization and privatization are common characteristics because, to the eyes of developers, these models guarantee maximum economic profit. As Jasper Rubin mentions in *A Negotiated Landscape*, “less common in revitalization schemes is the provision of open spaces and expansive areas for passive and active recreation along waterfronts. Even in areas where access to the water or to waterside recreation is provided, designs discourage their use by the general populace”.

Following this trend of waterfront revitalization, the Port of San Francisco has been studying the potential for development of the Pier 70 since 2000. After rounds of community planning and several proposals, zoning and land use changes, and the approval of the 2008 Prop D¹, it is currently in the planning and funding identification phase. The project seeks to extend the “innovation corridor” that was developed in the Mission Bay District. This area houses high-end research, medical and biotechnology facilities, as well as housing and office space.

The initial guidelines for development, as proposed in the 2010 Pier 70 Preferred Master Plan, do not take into consideration other waterfront revitalization projects oriented to providing public access to the bay like the ones related to the 2013 America’s Cup. For this large scale yacht competition, the Port will utilize Piers 14 to 23 and 26 to 32. Additionally the Pier 80, located to the south of Pier 70 will be used as a base for teams, to house temporary structures and as a heliport (Dineen, 2011).

¹ In November 4, 2008, Prop D was approved by 68.07% of voters allowing the city to provide public funds in collaboration with private enterprises to develop Pier 70. The ballot titled San Francisco Financing Pier 70 Waterfront District Development Plan upon Board of Supervisors’ Approval Act: read “Shall the city provide funds to develop Pier 70, based on new City hotel and payroll expense tax revenues from the department, if the Board of Supervisors approves a financial and land use plan for Pier 70?”

The objectives of the planning document for the Pier 70, one of the last large scale vacant territories within the urban area of San Francisco, include adaptive reuse of historical structures and infill development, as well as “setting aside 11 acres for parks, applying to the National Register of Historic Places, maintaining the largest ship dry-dock on the West Coast, limiting parking spaces to capitalize on the nearby T-Third Street light rail line and devoting 3 million square feet to new office and commercial space” (Baume & Cagle, 2010). The land uses that are presented as ‘promising’ include biotechnology, medical offices, general offices, retail/service commercial, exhibition space and light industrial, designated as Production, Distribution, and Retail (PDR) in San Francisco.

The initial schemes for the central part of San Francisco’s waterfront have nonetheless received public critiques as the site represents one of the last remaining large expanses of waterfront in the city, and is close to the vibrant mixed-use Dogpatch District. On one side, the public fears a repetition of the large-scale, campus-style urban design pattern employed in the Mission Bay where access to the waterfront is impeded. This area, just north of Pier 70, lacks, for some, a historical and urban sensibility due to the homogeneity, scale, articulation and architectural style that was selected.

Other positions question the diurnal, static and monotonous nature of the programmatic elements to be inserted in the site. Tim Colen, from the SF Housing Action Coalition, mentions “The port has said they want to activate the waterfront, but we don’t see how they can do that if it’s going to be a preponderance of office buildings. They need to add uses that will enliven it at night and bring in a more diverse crowd” (Dineen, 2011). In other words, alternate programs must be explored to avoid abandoning the site after sunset and during weekends, without fully enhancing its valuable cultural and historical landscape for a 24-hour contemporary city.
Cities do not live only during the day. Yet our thinking of urban conglomerates usually limits itself to the hours of natural light. Contrary to the belief that buildings and urban areas sleep at night, the nighttime is no longer a passive phase. Our contemporary cities stay active after dark, and operate in 24-hour cycles of alternating activities of production, leisure and recondition/regeneration with indistinct temporal boundaries. Multiple factors have contributed to this change, among others patterns of work, household structures, and new forms of community. Altogether they have opened up the night to alternate possibilities, activities and forms of leisure (Roberts & Eldridge, 2009).

The night has always been a complex ‘time-space’ that fascinates artists, writers and flaneurs. This fascination comes from references to tensions and liberties, pleasures and fears, regulation and chaos, disorder and control traditionally associated with it (Amin & Thrift, 2002).

These tropes are still part of our cultural imaginaries even though the night has much evolved during the 20th and first decade of the 21st century. Traditionally, a day was strictly divided into time of production and time of regeneration at night, when the cities and its inhabitants prepared themselves for the next day. Activities during the night were associated with the inefficient, with danger and threat, criminality and immorality.

However, current patterns of utilization of the 24 hours have dramatically changed. Long-gone is the night solely experienced by people who have alternative, including, transgressive lifestyles. The current reality of the night is that it is a ‘time-space’ rapidly opening up to accommodate and shape the life of the ordinary city dweller and to give space to new modes of social relations.
Fixed operations from 9am to 6pm are disappearing, and the economy is moving towards patterns where production and regeneration overlap. Additionally, leisure has become an essential part of everyday life. This lifestyle has blurred spatial boundaries between workspace, domestic space and leisure space, and between the public and the private.

Within the design professions, the lack of exploration of the night is noticeable, even though this time has a latent potential for giving space to new modes of social relations by combining everyday activities with spectacular ones. Traditional discourses in architecture have usually ignored the night as a ‘time-space’, as if dawn and dusk were boundaries not to be crossed. The night remains an unknown territory that lies outside of traditional systems of daytime productivity and efficiency. As a “terrain vague, an undecided territory” (Armengaud, Armengaud, & Cianchetta, 2009), the night is characterized by the latent potential of its indeterminacy, darkness, vacancy, silence, emptiness and lack of structure. As Williams (2008) mentions, these characteristics, both deterritorialize and destabilize, causing a shift in meaning, form, use and purpose in spaces.

For its inherent complexity, the night requires different models and professional practices that embrace the 24-hour cycles. For that reason, the architects and urban planners Marc and Matthias Armengaud, authors of Nightscapes: Nocturnal Landscape, posit, “Is the night an indeterminate contemporary landscape to be invented?... What is a specifically nocturnal public space? On the basis of which principle does one develop a project? If night means the ephemeral, the fragile, the spontaneous, how does one construct this element without distorting it?”

Architecture and urban design, since their early manifestations, have been deeply related to technological developments. Before the invention of electricity in the late 19th century and early 20th, buildings, urban spaces and landscapes had a singular reading, that of surfaces, volumes and spaces under natural light. At night, the only source of illumination available before electricity, were portable oil lamps and candles carried by pedestrians as they travelled. As Robert Louis Stevenson writes in *A Plea for Gas Lamps* (1881), a traveler had to carry his “own sun”...“day and night swung to and fro and up and down about his footsteps”.

The introduction of oil lamps late in the 17th century and gas lamps at the end of the 18th brought light to streets and intersections. This fully transformed the appearance of the urban world and created new spaces and times of socialization and "corporate pleasure-seeking”. Stevenson, trying to explain the conquest of the darkness of nighttime by men, the control of men over nature, mentions “sundown no longer emptied the promenade, and the day was lengthened out to every men’s fancy. The city folk had stars of their own, biddable, domesticated stars”.

The technological revolution that gave birth to electricity totally transformed socioeconomic and cultural conditions by extending the hours of work, shopping and entertainment. In architecture specifically, it engendered a whole new reading of the territory and its buildings, that which takes place only at night. This new reading made possible the association of landscapes and urbanscapes with new meanings and possibilities.

World fairs, expos, amusement parks and commercial districts, most of them transient programs associated with leisure served as spaces for experimentation of numerous technologies of illumination and simultaneously of materials for transparent/translucent materials. These spectacular effects and technologies were soon incorporated into the daily life of cities.
From one perspective, lighting increased urban safety through visual control. As previously discussed, the night had and is still associated with spatial practices outside of social norms. McLane (1992) explains that at night “the feeling of insecurity in a public space is relative to people’s ability to visually dominate the space around them... the better a person’s ability to see their environment, the more secure they will feel”. For that reason, the illumination of streets and buildings opened up public spaces to new uses and new publics.

From another perspective, lighting increased the notion of the city as a theatrical stage in which city dwellers are temporary actors inside the spectacle created by the contrasts between electricity and darkness. To support this, David Nye mentions “electricity de-materialized the built environment... transforming its buildings into enchanting visions... lighting transforms the tawdry and elevates the ordinary people into temporary residents of a mysterious realm”.

However, from a more critical perspective, lighting the urban environment also served to highlight and purposefully erase specific zones of the city at night. Commercial districts became visual poles at the expense of creating abrupt contrasts that erased others, in specific poor or derelict areas which disappeared from public perception after dark.

The reading of visual and spatial information in architecture depends on light. Light can be defined as a form of electromagnetic radiation visible to the human eye. Rays of light move in straight lines and their interaction with objects produces different phenomena, like reflection, diffusion, absorption, refraction, diffraction and polarization which render objects and spaces differently by altering readings of depth, form, texture and color. For that reason, light and architectural spaces are inseparable considerations for designers.

During the day, natural light provides an even, overall illumination of objects and spaces and the eye is capable of perceiving colors with the cones, photoreceptor cells in the retina of the eye. At night, light is emitted by discrete man-made sources. This environment of isolated lights diminishes the visual information that a space can provide, such as color, contrast, depth, form and movement (McLane, 1992) and makes visual perception a slower process (Narboni, 1995). It also challenges familiar spatial relationships between elements. As an example, illuminated objects at night appear closer regardless of their real distance. For this reason, the reading and measurement of the nocturnal visual field is inherently complex and unstable. David Nye, when explaining the sublimity of the electrified early 20th century city, mentions “the city as a whole seems a jumble of layers, angles and impossible proportions; it became a vibrating, indeterminate text that tantalized the eyes and yielded to no definitive reading”.

Early lighting schemes tried to imitate daytime illumination at night making visible the control of men over natural cycles. However, technical explorations as well as the growth of a commercial aesthetic based on light in the mid-20th century started to consider the night experience as a separate time and space, with special visual and spatial experiences. During this period most of the architectural lighting vocabulary still in use in the present was developed and artificial light became an integral component of architectural form definition.

2.3 Night Vision and Spatial Perception

- Reflection
- Diffusion
- Absorption
- Refraction
- Diffraction
- Polarisation
Types of lighting commonly in use in the present can be categorized into four principal groups: general, washlighting, accent and orientation (ERCO, 2008). General light offers an even illumination level that can be direct, indirect, diffuse or filtered. Washlighting provides a uniform illumination level in specific architectural elements to allow a reading of dimensions, proportions and limits. Accent lighting highlights individual objects or elements to make their form and surface readable through high contrast, and finally, orientation lighting serves as signals or to mark paths. The luminaries used to create these architectural lighting types include projectors, floodlights, wallwashers, downlights, pathway lighting, ceiling and wallmounted fixtures and recessed floor luminaries.

Even though numerous technologies of illumination are available, as Margaret Maile Petty argues in The Edge of Danger: artificial lighting and the dialectics of domestic occupation in Philip Johnson’s Glass and Guest Houses, “Traditionally, modern architectural discourse has approached its subject as suspended in a neutral or daytime environment. Temporal conditions and light effects are ignored despite the vital role of electric illumination in the articulation, imaging and occupation of modern (domestic) architecture”. The immaterial nature and transient conditions of light seem to be overlooked as devices that can challenge architectural boundaries between programs, reveal the ‘bones and organs’ of infrastructures, structures and spaces, and heighten the ethereal, ephemeral and illusory qualities of mass to create new territories at night.
Recently digital information technologies and mobile communication devices have been incorporated to illumination and glazing schemes. Sensors, projections, light emitting diodes (LEDs) and pixels have transformed the way illumination is designed and with it the nocturnal landscape of cities and its architecture are becoming responsive and changeable (Seitinger, Perry, & Mitchell, 2009). Projects such as MIT’s Urban Pixels, J. Meejin Yoon’s White Noise White Light, Herreros Arquitectos’ Urban Follies, Memory Walk in Zaragoza and BIG’s proposal for the Audi Urban Future Award are novel examples of flexible, interactive lighting schemes used to temporarily define spaces and create sublime and dynamic experiences with “complex systems of view which no single image can convey” (Nye, 1994).

Herreros Arquitectos’ Urban Follies in Gwangju, South Korea built in 2011 is a small urban intervention in which inmaterial elements such as heat, light, information, sounds and smells are used to bring new life to what the architects call an “urban refuge”. A barrier free ground surface with different materials, colors and textures is articulated with a treetop-height suspended structure that emits sensorial outputs. These allow an intangible interaction between the “folly” and the users.

J. Meejin Yoon’s White Noise White Light was an installation built in Athens in 2004 where the luminous and sonorous experience was responsive to the movement of people through the 50 ft. by 50 ft. gridded field. Each transparent vertical unit was made up of a passive infrared sensor, a microprocessor and three LEDs. As people move, each individual unit emitted white light and white noise. Both were dimmed seconds after movement had stopped, creating a dynamic phenomenon that left traces of displacement in time. The installation consumed 0.66 Watts per sq.ft.

Lastly, BIG proposal for the Audi Urban Future Award published in 2011 is an example of a conceptual proposition to transform the urban ground surface through the use of dynamic and responsive illumination technologies. The static city pavement is transformed into a reprogrammable surface or a “smart street” that changes, and is changed, by patterns of utilization of interstitial spaces between buildings. This allows for the expansion and contraction of the limits of traditionally fixed elements like traffic lanes, sidewalks, plazas and parks in response to real-time desires and uses. The proposal uses small “smart tiles” that collect solar energy and also transform the pressure of people moving on top of the tiles into an electrical charge (piezoelectricity) that illuminates the surface with color, signs and information. The designers also conceptualize that “this collected energy could be transmitted wirelessly to electric cars and personal mobile devices, making electric power truly mobile for the first time!” (BIG’s proposal for the Audi Urban Future Award, 2010). On a small installation inspired by the conceptual project, the designers used 3D sensors to track movements and operate the LED tiles on the ground.

Parallel to high-tech lighting schemes, innovations in surface technologies such as perforated skins, angle selective films, switchable glazing (photochromic, thermochromic and electrochromic), Ethylene tetrafluoroethylene (ETFE), frits, and translucent materials have allowed the creation and popularization of luminous facades that dematerialize the built mass through artificial illumination.
Cities are in constant change. As designers, we have always been focused on permanence even though cities are a complex array of impermanent activities. Abandoned sites are manifestations of the temporal gap that exists between constructed elements and the people for whom they are designed. The architectural and planning professions, have traditionally approached the idea of urban evolution through normative and formalist practices that take into account only the material elements of a city, namely buildings, streets and plazas. Strategies employed include the definition of static limits, permanent surfaces, efficient orders, homogenous forms and permanent uses. These endeavors by nature, are long, complex and expensive.

Nowadays, cities are going through an economic crisis which among other things, is serving as a time to question the viability of permanent interventions and masterplans, proposals that traditionally end up with creating static cities. On the contrary, temporary, transitional or interim uses acknowledge the changing urban condition, and seek to design the space of a short term experience.

As Jasper Rubin mentions in his introduction to the book about the San Francisco waterfront, “not everything important about a place shows up materially”. Urban places are made of physical and tangible elements, but also from immaterial factors, such as “processes and forces” which have an enormous power to shape the built environment. When addressing the design and transformation of urban places and spaces, a disconnection exists between the static nature of constructed elements, the formal urbanism of masterplans and the real-estate market, and the temporal, unfixed, and sometimes invisible nature of processes carried out by citizens.

Recently, and outside of traditional design and planning strategies, temporary uses have emerged in abandoned areas, transforming them into vibrant public spaces full of activity, stages for professional networks and as areas with a capacity to transform the image and livability of cities (Hernberg, 2012). Temporary, transitional, interim, pop-up, meanwhile or placeholder uses accept the uncertain and transient urban condition. As La Varra (2000) states these alternative uses, either instant parks, outdoor markets, short-term retail outlets or event locations, represent a new form of public space created by the public itself.
Temporary activities are a new model of urban tactic that fills the gaps and gives life to the urban experience. To foster public activity, a mix of use types must potentially take place in a given site, either simultaneously or sequentially. For that reason, accessibility and affordability of cultural uses must allow the inclusion of a diverse population.

Bottom-up temporary uses are usually related to art, music, food, culture, entertainment, start-up businesses, underground and migrant/cultures, all groups in need of affordable spaces. For that reason, these uses require a low cost appropriation that benefits from the existing qualities of the site. The intervention of designers must be minimal but attractive, and make use of existing structures, potential views, natural elements and remaining materials, as well as employing digital technologies to support new modes of activities in the public space. Designing for temporary uses seeks to fill the urban void by creating the space and time of a finite experience. Eventhough planned for a short term, these uses can provide long term positive impacts to its surroundings.

First, given that the active and creative public participation is encouraged, individuals actively redesign the city and its image. Temporary uses can allow spaces to become incubators for new professionals, people who then become a continuous instrument of its improvement.

Second, this mode of spatial occupation can challenge current urban policies by addressing the diversification of working and living patterns of citizens. They can also address the structural complexities and financial shortages of cities, creating spaces that truly respond to the conditions of contemporary urban life.

Finally temporary urban uses can potentially become a relevant instrument in urban management and could serve as a catalyst to larger, more permanent projects.

Variation of temporary uses over time

Since the 1960s designers have engaged in explorations that address the transitory nature of urban uses. Proposals range from large scale conceptual studies to small scale constructs. What is common in all of these projects is the desire to capture the attributes of temporality in architecture, its fragile, spontaneous and ephemeral nature. Change is a visible constant in these precedents but so is obsolescence.

From 1968 to 1970, the architect Peter Cook from Archigram, an avant-garde, futurist and pro-consumerist architectural group, developed a research project that imagined a movable aerial city. The Instant City would be made of a plastic balloon structure that attached itself to existing and culturally isolated rural British towns or declining industrial cities to create a media event for the enjoyment of the general public. The project proposed inserting art, events, temporary structures, media infrastructure such as billboards, projectors and screens, and other stimulations. It would travel through England and be deployed on top of “dormant” cities, stay there for a limited period and then move to another location. Eventually, all the cities would share the vibrancy of metropolitan areas and be better linked through a network of telecommunications (Centre for Experimental Practice, 2010).
In 1984, the architect Cedric Price presented a proposal for the South Bank Center to reactivate the central waterfront in London by creating a short life structure to be removed when no longer necessary. Against the commission guidelines set by the Greater London Council, Price proposed a raft of balloons supporting multiple canopies. These flying surfaces, installed in existing misused or underused sites, would house temporary exhibitions underneath. All types of permanent building were to be avoided in order to provide London with its last space of emptiness and air.

In 2010, the stage designer Börkur Jónsson erected the Electric Hotel in London. This temporary, lightweight and outdoor performance structure was assembled at the King’s Cross Central, a derelict industrial site in the center of London. Built from containers to resemble a four story building, during the day, it was a generic, muted structure. At night, its multiple rooms were lit and became visible from the exterior. The public sat on the outside of the structure from where they were able to look into individual performance stages as well as listen to different rooms using headphones. Both interior and exterior of the structure were transformed by light and music into a nocturnal experience sited in an unusual place.

The city of San Francisco had 5,299 empty lots in 2010 for a total of approximately 250 acres of land (San Francisco Planning and Urban Research Association, 2010). This equals 96 times the area of Union Square. The bottom-up temporary uses of a number of these residual spaces in San Francisco, such as abandoned infill lots, post industrial sites, parking lots and infrastructural wastelands have contributed to its status as a vibrant, dynamic and creative city.

Temporary uses and events make visible the potentials of alternative urban spaces seldom explored. Yet, these impermanent uses have not been inserted as part of formal revitalization plans. Event-based planning and design that address the always evolving needs of gathering for leisure and recreation of citizen is rarely explored. Policies still restrict the design and construction of temporary structures and the city has not created a fast track approval process for interim uses on vacant lots with previously entitled projects.

In San Francisco and the bay, pop-up or travelling markets, walks, biergartens, outdoor film screenings, concerts and festivals, create temporary social spaces that can gather a diverse population ranging from 100 to 60,000 people at a certain moment in time. Density is built in unusual spaces that keep little to no relation to the normative activity. By doing so, they establish unexplored relationships of time, use and location, create a positive tension, and have become part of the urban imaginary of the city.

Temporary urban events in SF
After a prosperous past of ship building activity that reflects the history of San Francisco, Pier 70 has been lying virtually unused, dark and inaccessible for decades. How could designers take into use the potentials the site offers and also contribute to revitalizing its surrounding neighborhoods?

No longer serving its industrial purposes, the Pier 70 offers a great opportunity for new forms of nocturnal temporary activity to be tested. The development of interim nighttime uses seeks to create a ‘chain reaction’ that alters the current fate of the Pier by diversifying the social potential of the site.

By inserting minimal, flexible, reusable and mobile artifacts, the site is envisioned as a temporary destination in the city within which uses will grow exponentially as the attributes of the site are discovered. By reconnecting the city to the bay, the project aims at becoming a catalyst for the social appropriation of the urban waterfront, and to create an urban space where the city dwellers act as ‘real-time urbanists’ (Hernberg, 2012). Inside the Urban Dream public space is created by the public itself. Individuals paint the city with movement and light.
Nodes of activity aggregate over time. As a result, zones and paths are continuously activated and deactivated. Temporary uses are multiplied and intensified exponentially as the latent potential of the site is discovered, exploded and expanded in terms of population, use and social practices.
The proposed exploration is centered on the extension of the 20th street which leads to a man-made bay were multiple piers used to be located in the mid-century period. The proposal, in which all types of new permanent building are avoided, offers 2 zones of temporary interventions: an aquatic zone and a land zone.

On the land, surfaces of light and points of light are created. The proposal establishes a series of outdoor rooms in between existing structures. These rooms are created through canopies that occupy the void. These flying surfaces made out of tulle would house temporary mixed uses. This simple strategy takes benefit from the existing qualities of the space and buildings, while proposing a low cost appropriation. During the day, the uniformity of daylight would make them transparent, while at night, when illuminated perpendicularly, they would create a floating ceiling that encloses an outdoor urban room.

The fabric that hovers between brick façade buildings, delimits a space for outdoor exhibitions, markets and festivals to happen underneath. The canopies serve as a datum that organizes a series of mobile food vending stations and platforms. In between the main warehouse and the welding shed, the fabric is positioned both horizontally and vertically. There, they serve as curtains that lower and rise to enclose smaller performance spaces. When lit, the volumes become floating solids of changing colors.

Each of these areas is connected by zones of darkness which either could be a tunnel built out of containers and hanged to existing structures, by an open path, marked only by gravel, material that enhances the sonorous experience of moving in the dark, and which would be the only trace left on the site, or by a field of isolated points of light. Mobile pods of light are scattered across the site. These generate piezoelectricity, light, sound and heat, as people step on them. This tactic traces movement and aggregation, and transforms the territory into a flexible and editable landscape.
Diversification of uses over time + operability of curtain systems

00 Vacant spaces in between the industrial buildings are currently used as junkyards.
01 Fabrics can be attached to existing buildings and spanned to cover the void.
02 Fabrics can be lowered to create the enclosure of smaller event spaces.
03 Facades of existing buildings can be used as multimedia projection surfaces.
04 Minimal traces of the intervention can be left on site.
On the water, the man-made bay is reimagined through floating volumes of light and voids of darkness.

The project proposes a series of floating islands of various scales. They insert art, events, and media infrastructure to the odd-shaped space in between the abandoned pier on the extension of the 20th street. These islands serve as temporary congregation and recreation nodes, housing performance stages, multimedia projections, cafes, bars, lounges, galleries, playgrounds, camping grounds, meditation rooms and scenicographic pools. Each island varies in dimension, height, program, openness, transparency, relationship to the water and mode of arrival. Even though the majority are islands of light, a series of pods celebrate darkness, and propose a node for pause and enjoyment of the bay.

Islands aggregate to establish intensified nocturnal uses. They can partially be tied in place by means of barges that attach to the existing pier, and serve as stands or loading decks to access the islands by boat, or migrate within the range of the SF Bay. Every element on land and on water seeks to be lightweight, reusable and mobile. By being so, the intervention creates a series of short life structures to be removed when no longer necessary. By being deployed, these artifacts can be continuously activating other dormant waterfront sites and allowing the population to rediscover the potential of these forgotten but unique locales.
Island typology

- a. cafe
- b. bar
- c. wifi lounge
- d. gallery
- e. multimedia projection room
- f. restrooms
- g. stands

Pods of light
- piezoelectricity generation
- light
- heat
- sound

Outdoor gallery / lounge
a. media + performance pod
b. camping ground / playground
c. water tide garden

Outdoor gallery / lounge
a. outdoor gallery / lounge
b. scenographic pool
c. stands
d. storage

Performance stage
a. performance stage
b. scenographic pool
c. stands
d. storage

Darkness pod / meditation void
a. darkness pod / meditation void
b. ludic + performance pod
Longitudinal section part 1
Transversal section

20th street

machine shop
Through the exploration in the Pier 70, design is re-conceptualized as a process of change, temporariness and unexpectedness. Designing for temporary use might be a new form of professional practice in which the uncertain and changing urban condition is accepted, the potential of sites is revealed now, the focus of design is the creation of the space and time of an experience, and in which active public participation is encouraged as a continuous instrument to shape the image of a city.
Nightscapes

Light

Temporary Uses

General