There are a number of different future-city visions being developed around the world at the moment: one of them is Smart Cities: ICT and big data availability may contribute to better understand and plan the city, improving efficiency, equity and quality of life. But these visions of utopia need an urgent reality check: this is one of the future challenges that Smart Cities have to face.

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DISCUSSING POST-HURRICANE KATRINA URBAN REGENERATION IN NEW ORLEANS

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ABSTRACT

By providing a wide literature review, post-hurricane Katrina uneven urban regeneration in New Orleans is presented here by framing it within a historical perspective in order to underline how environmental threats too often seem to be not so much “natural” but rather man-made as well as to highlight both the reasons and the ways in which, in post-disaster reconstruction, competitive growth has been valued over equity, by directly benefiting those who were already the most advantaged. The aim is to highlight how environmental disasters can be considered as socially constructed phenomena, as they cannot be seen as a single event but rather as a process made by a series of progressive steps occurring within different spheres, which do not necessarily concern the environment only.

KEYWORDS:
Environmental Disaster; New Orleans; Neo-liberal; Hurricane Katrina.
“环境灾害是”（新自由主义者）机会吗？
论新奥尔良受卡特尼娜飓风袭击后的城市重建

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摘要

本文通过文献回顾，展示了新奥尔良在卡特尼娜飓风袭击后城市重建中不均衡现象，并从历史的角度强调了频繁发生的环境威胁并非那么“自然发生的”，而更是人为导致的。同时，进一步分析了在灾后重建中，由于既得利益群体受到直接照顾而导致竞争性增长相较于公平性而更受到人们青睐的原因和方式。本文的研究目的是强调环境灾害是人为造成的。它不是单一的事件，不仅关系着环境本身，而更是由不同领域的渐进发展所构成的。

关键词：
环境灾害；新奥尔良；新自由主义；卡特尼娜飓风
1 HISTORICAL AND CONTEMPORARY ENVIRONMENTAL RISKS

1.1 FACING CONTEMPORARY ENVIRONMENTAL THREATS

The flooding of the city of New Orleans in August and September 2005 following hurricane Katrina is considered as one of the greatest catastrophes suffered by an American city in the last century. Not by chance, such disastrous event is often compared with the 1906 San Francisco earthquake and fire. This is due to the fact that not only most of the urban fabric has been destroyed, with 1,500 dead people and tens of thousands without their homes, but also because of the million people permanently displaced, overloading further local systems. Not to mention the billions of dollars of infrastructure lost: around $40–50 billion including direct property losses ($20–22 billion), still ongoing economic losses ($4–8 billion), and emergency assistance ($16–20 billion).

A wide literature exists on the disastrous management of post-hurricane Katrina in New Orleans, and many scholars draw attention to the way in which climatic extremes – as well as the global financial crisis, energy exhaustion, pandemics and terrorism – contribute to construct an apocalyptic frame that fits well the assumption of the «inevitability of capitalism and market economy as the basic organizational structure of the social and economic order, for which there is no alternative» (Swidgedouw, 2010). Within such a (constructed) catastrophic scenario – and despite the dramatic evidence of climate change – economic growth (i.e.: just one of the three “pillars” of sustainability) ends to remain in an absolute prominence in the political agenda, while ecological and social aspects are neglected or, at least, incorporated into the first one through the concept of “ecological modernization”, so that profit, planet and people are seen not only as reciprocally implicated, but also as mutually (but asymmetrically) reinforcing, with the third one as the weakest (Boström, 2012), claiming for an actual integration (Connelly, 2007).

But, as post-Katrina urban regeneration projects clearly show, poorer communities are recognized to be more vulnerable not only to the effects of climate change, but also to the effects of adaptation and mitigation intervention (Marino & Ribot, 2012). In this sense, Swyngedouw (2010) focuses on the depoliticizing character of concepts such as “sustainability”, “resilience” and “adaptation”, real «boundary objects» (Star & Griesemer, 1989) – i.e.: something that can be differently interpreted by the actors involved while retaining a core set of shared meanings, by allowing not only mutual understanding, but also productive misunderstanding, thus creating a connection between different perspectives and interests – whose appeal consists of defending a socio-economic status quo, i.e.: nothing but the result of capital mode of production, which precisely is the underlying cause of the ecological crisis itself (see, e.g.: Harvey, 1996; Hartman & Squires, 2006).

In addition, while underlining how such concepts are applied to a wide range of contexts with a wide range of intentions (McEvoy et al., 2013), what is often underlined is the relationship between catastrophic scenarios and the efforts to transform government into a leaner, less directive, more flexible entity (Diefenbach, 2009) – what Žižek (2011), following Lacan, calls «power turned into administration, relieved of its radical responsibility» – with «the growing feeling that adaptation to new social conditions is a sine qua non of survival» (Argyriadis, 2010) into an apocalyptic wilder and more unpredictable risky environment (see: Beck & Levy, 2013), which seems to be immersed in an «extended present» (Reith, 2004) due to the «space-time compression» (Harvey, 1989) given by information technology of a globalized economy.

This means that, differently from the past and in contrast to earlier assumptions about the “knowability” and controllability of the world, contemporary advancement in calculation – Max Weber’s «rational enterprise» (2003 [1958]), i.e.: calculated risk taking (see also: Appadurai, 2012) – has paradoxically ended to generate a sense of radical indeterminacy, where complexity easily turns into chaos.

Such an interpretation undoubtedly offers relevant theoretical insights into how post-disaster recovery are too often addressed, individuating (neo-liberal) causes and unequal social effects. But it fails to solve the
question concerning how to plan to face future risks, i.e.: the ways in which planners, despite their limited capacity in forcing wider global political and economic trends, can positively contribute to a more sustainable city/society. In this sense, post-Katrina unequal reconstruction usefully helps to shed lights on the not merely technical nature of planning itself, by better focusing on the political dimension of the so-called "expert knowledge" (and the related implications).

By providing a wide literature review, post-Katrina uneven urban regeneration is presented here by framing it within a historical perspective in order to underline how environmental threats too often seem to be not so much “natural” but rather man-made as well as to highlight both the reasons and the ways in which, in contemporary reconstruction, competitive growth has been valued over equity, by directly benefiting those who were already the most advantaged. The aim is to highlight how environmental disasters can be considered as socially constructed, as they cannot be seen as a single event but rather as a process made by a series of progressive steps occurring within different spheres, which do not necessarily concern the environment only.

1.2 LIVING TOGETHER WITH ENVIRONMENTAL DISASTERS

Being located in a highly dangerous place on the subsiding delta of the lower Mississippi river, facing different kind of environmental hazards is not something new for the city of New Orleans: its geophysical vulnerability is given by the below-sea level, bowl-shaped location, accelerating subsidence, and rising sea level. Kates et al. (2006) refer of 27 major floods over the past 290 years. A further pressing problem consists of powerful tropical storms occurring during the late summer and early fall season, as in the cases of both back-to-back hurricanes in 1722 and 1723 and a pair of 19th-century calamities.

As a consequence, during nearly three centuries extensive flood protective structural systems were erected, hurricane and river flood forecasting were established and evacuation plans were elaborated by both local and federal organizations, within the frame of an ordinary maintenance managed by local authorities and communities, so that generally the recurring river and hurricane floods produced limited impacts. An example is given by the fact that, after a series of river floods during the colonial period, the government mandated that all landowners build and maintain levees for riparian properties, in order to protect rural agricultural and urban commercial territories.

Furthermore, since the early 1900s people were made aware of risks through newspapers and warning flags and, following the 1915 hurricane, storm forecasting, evacuation plans, preparation of secure structures (generally schools) provided with food and water, and mobilization of government, railroad and shipping companies as well as civic organizations increased (Duffy, 1966). In the 1940s standardized warnings were used and an accurate predictions broadcast on radio started. Finally, by 1949 a guidance for coordination of disaster response efforts (not only floods and hurricanes, but also fires and epidemics) was included into a local plan required by the State Office of Civil Defence.

It is worth remembering that, differently from the past, since the early 20th-century hurricanes large corporations, such as railroad and public utility companies, emerged as the most capable of responding, especially as concerns repairing damaged infrastructures. This rescaling trend increased with the post-World War II expansion of Federal involvement: for example, the 1947 hurricane response was marked by the participation of US army, as in the case of hurricane Flossy in 1956. By the 1990s, Federal Emergency Management Agency (FEMA) and the State Department of Emergency Preparedness had assumed

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1 I am tremendously indebted to all US friends from community development, labour, social justice and advocacy organizations not only for their invaluable help in collecting data and publications (especially the highly interesting papers on the city’s social history), but also for their encouragements and useful feedbacks.
responsibilities formerly delegated to civil defence organizations, while the National Guard, the Coast Guard, the Red Cross, local law enforcement, and other government entities continued roles performed under the previous administrative apparatus.

Following hurricane Betsy in 1965, a method to calculate a hypothetical “standard project hurricane” was developed by the Weather Bureau and the Corps of Engineers. It stated a forecasted probability of recurring of only once in about 200 years, with winds of 100 miles/hour and a speed of 11 knots/hour. This guided initial hurricane protection levee design and construction following hurricane Betsy in 1965, which had the most extensive impact on New Orleans: in fact, it flooded 43% of the city and seriously damaged over 14,000 homes, with an evacuation involving local, state, and federal officials together with the Red Cross and private companies. Thanks to the new protection system, infrastructure, schools, and businesses functioned at near-normal level one month after the disaster.

In addition, not only the Congress almost immediately provided funds to expand and strengthen the region’s levee system (Colten, 2006), but it also considered flood insurance legislation with «a new sense of urgency» (id.). This led to the creation of the National Flood Insurance Program (NFIP) in 1967. New Orleans qualified to participate – subscriber rates in the area were the highest in the country (Colten, 2005) – and updated its building codes to call for higher floor elevations.

1.3 NATURAL OR MAN-MADE?

But advancement in protection following hurricane Betsy (1965) generated an unexpected and undesired effect. While before Betsy a relatively small population lived in the most vulnerable locations, a combination of new hurricane protection levees and modest-sized storms with little damages led to a non-unpredictable population growth. In fact, as there were no restrictions on development within the expanding levee system, people were allowed to settle in the recently protected suburban areas. As a result, between 1965 and 2005, developers built 22,000 new homes in previously uninhabitable sections of eastern New Orleans (Burby, 2006), so that the city lost population to its suburban territory.

An example of such relevant shift is given by both the neighbourhoods around Jefferson and St. Bernard parishes, in which the number of households swelled between 1960 and 2000 from 55,351 to 176,234 and from 8,104 to 25,123, respectively. This means that the pre-Katrina estimated population of 437,186 inhabitants lived in a bowl, half below sea level, between the natural levees of the Mississippi river and the built levees (pierced by canals) along Lake Pontchartrain (Colten, 2005). At the same time, while new housing in the city increased in the most flood-prone areas, the levee system crept toward completion: construction proceeded in fits and starts and costs spiralled, making it ever more difficult for local partners to secure adequate funding. Thus, on the one hand, competition among Louisiana interests, economic cycles, and national spending priorities disrupted steady funding. On the other, little consideration was given to the fact that each component was part of a comprehensive protection system. As a result, at the time of Katrina in August 2005, some portions of the hurricane protection system were nearly complete, while others were about one-third complete: protection and the reduction of risk remained uneven (Colten, 2006).

With a ring of levees around the urban area, subsidence within that circle, and increased land cover, New Orleans faced increasing problems from rain-induced flooding. In the 1990s, the Corps of Engineers developed a massive program – the Southeast Louisiana Drainage Project – in order to improve the region’s internal drainage and thereby reduce flood risk from precipitation by enlarging the capacity of both the drainage system and the pumps lifting the water into the river and lake. This system was largely in place by 2005 (Colten, 2005) and, according to Ergen (2006), it had demonstrated its benefits. But, despite such
improvement, when Katrina passed over the area, levees proved inadequate: overtopping and failure in several locations allowed floodwaters to rush through the low-lying neighbourhoods. This means that the crucial unanticipated event during Katrina was the failures of levees along the major canals and the subsequent flooding of the city. In fact, even if levee overtopping could also be foreseen, the four massive breaches could not, so that, at the peak of flooding, some 80% of the city was under water. Following a second inundation due to hurricane Rita in late September, it took 53 days from Katrina's landfall to pump the city dry. In addition to incomplete protective works, the State's emergency plan had not been updated. In fact, following hurricane Betsy in 1965, engineering designs for new and improved protective works took into account the estimated frequency and magnitude of a standard project hurricane and its effects, but land subsidence and rising sea level were measured at that time. Nineteen years later, these estimates were still being used even if subsidence within the levees had lowered the land surface and sea level had risen. On the other hand, the multi-decadal rhythm of frequent hurricanes and the frequency of more intense hurricanes enhanced by global warming have increased as well. Furthermore, publicly available risk assessments in the form of FEMA maps of the 100 year floodplain had never included sea-level rise or land subsidence effects. It is worth underlining that an extraordinary event such as Katrina, which had been partly experienced in hurricane Betsy (1965), had been anticipated by the expert community for many years, reported on publicly just two years before Katrina in a widely disseminated account in the newspaper, and simulated in an emergency exercise a year before Katrina. Therefore, New Orleans was a catastrophe waiting to happen with extensive and repeated warnings from both scientists and the media that the “big one” would eventually hit the city.

Katrina brought severe but not catastrophic winds, record rainfalls and storm water damage, followed by the collapse of major canal floodwalls, allowing water to fill the bowl in about 80% of the city. All of these are only partly natural phenomena and have undoubtedly been made worse by human location decisions: extraction of groundwater, oil and natural gas, canal development and loss of barrier wetlands, internal rainfall storage and global warming (not to mention the design, construction, and failure of protective structures). It is precisely in this sense that the disaster seems to be not so much “natural” but rather “man-made” (Pelling, 2001). And, as the uneven reconstruction clearly shows, it was socially constructed (Hartman & Squires, 2006).

2 A NEOLIBERAL STORM?

2.1 PUBLIC HOUSING AND CITY’S BLACKNESS.

Prior to hurricane Betsy, population growth trends rapidly resumed after calamities: neither epidemic disease nor floods stymied population growth. This, of course, was due to national and regional immigration patterns during 19th-century, when waves of Irish and, later, Italian immigrants continued to arrive in the city despite yellow fever epidemics. Following hurricane Betsy in 1965, however, a different set of interrelated factors conspired to stimulate a further population adjustment: interstate highways and, overall, a general out-migration of affluent whites from urban centres pushed depopulation of the city. In fact, between 1960 and 2000, it experienced a general population loss and, overall, a shift from a white (62% in 1960) to black majority (67% in 2000). As already highlighted, while the Corps of Engineers began improving levees around the urban core, they also built improved protection for adjacent suburban areas, including Jefferson and St. Bernard Parish, and eastern New Orleans. Thus, the combined influence of transportation changes, white-flight, and expanded hurricane protection area, plus the “oil bust” of the ‘80s, produced a more socially
segregated city, with a spatially concentrated poor population, while, at the same time, the city area became a more dispersed urban region, particularly by 2005 (Colten, 2005; Burby, 2006).

The increasing of black poor population meant that public housing became a crucial component of New Orleans's housing market (Reichl, 1999): in fact, immediately prior to hurricane Katrina, one in every ten residents of New Orleans lived in some form of public or government-supported housing and, given the black presence among the poor in the city, nearly 100% of the city's public housing residents were black (and 64% female) (in: Pardee & Gotham, 2005). Thus, pre-Katrina New Orleans was a poor city with many people living below the poverty line: it is worth remembering that a series of legislation of the late 1960s and early 1970s, known as the Brooke Amendments, ensured that the very poor would have access to public housing by tying the cost of rent to a tenant's income. This legislation required a rent ceiling of no higher than 25% of a resident's income, but it did not provide sufficient compensation to local housing authorities for the massive loss in rent revenue that it created.

This reduction in public housing resources furthered the poor conditions of public housing units because it meant even fewer funds for maintenance (see: Kamel, 2012). In 2004 New Orleans reached the seventh highest poverty rate (23.2%) within the USA as well as the second highest concentrated poverty among the 50 largest cities in 2005 (in: Berube & Katz, 2005). But it was not simply a matter of poverty, which, however, was worsened by the replacement of the strong unionized local port economy by a low-wage, tourism-dependent economy.

It is worth remembering that, as shown by the well-known “anniversary parade” (organized by indigenous black associations) that run every Sunday from August until April (see: Regis, 2001; Gotham, 2007), New Orleans – «the most un-American American city» (Spain, 1977) – has always played a relevant role within the history of Afro-American activism and collective action against socio-spatial racial and economic segregation. In the USA race is a «marker of class and status» (Gans, 2005) and New Orleans is no exception, though its racial ordering is more complicated than most US cities. Hirsch and Logsdon (1992) provide a detailed account of the unique ethno-racial origins of the New Orleans region, leading to the city's three-tiered racial structure that includes also Creoles. Furthermore, in addition to the city's unique Afro-American and French fusion roots, New Orleans also incorporated refugees from St. Domingue (Haiti) following the slave revolution that established the first free society by people of colour in the Western hemisphere, so that colour-led and colour-focused organizing and political development has always been central to the city's development and identity.

New Orleans' historical residential settlement patterns were traditionally mixed racially and by class, with slaves and non-white or immigrant domestics that lived in the neighbourhoods behind their white employers. As such, the construction of segregated public housing in the 1930s and 1940s was one of the first and most demonstrative contemporary acts of «legally enforced residential segregation» (Fussell, 2007). As a result, on the one hand, as «ethno-cultural divisions» mean «colour, class, language, religion and geography» (Hirsch, 2007), racial symbolic boundaries ended to overlap with New Orleans's political, economic and neighbourhood (i.e.: socio-spatial) spheres, with a constant struggle for the distribution of political and material resources. On the other hand, the city's tripartite racial system co-existed in tension with the traditional “American” black-white dichotomy, with Creoles that historically resisted this black-white ordering, challenging the American colour-line.

Since «buildings and their neighbourhoods were the settings where New Orleanians defined their identity, developed their customs and rituals, and understood their sense of place» (Kingsley, 2007), public housing was architecturally and culturally significant: in fact, given the city's historic architecture, disproportionate poverty and inequality, and intense resident and economic segregation, New Orleans communities were
organized entirely around dense, close-kin and neighbourhood networks, whose physical and visible symbol consisted of public housing.

But, even though tourism and hospitality industry had long “othered” such black identity, marketing it as a short, «swinging» (Woodside et al., 1989) getaway from normal life, in order to represent the «respectability of blackness […] key values of […] respect, fiscal power, order, solidarity, peace, community uplift, and beauty» (in: Regis, 2001), before Katrina New Orleans still was «one of the nation’s most working class cities» (Mizell-Nelson, 2008), where urban struggles included both Afro-American and Creole activism as well as strong waterfront unions. As a result, contentious racial and cultural politics between the city’s neighbourhoods and tri-partite ethno-racial populations (Hirsch & Logsdon; 1992, Hirsch, 2009, Hirsch & Levert, 2009), between the city and its suburbs, and between the city and the state, reinforced the city’s socio-spatial isolation as a predominantly poor, predominantly black, predominantly democratic city in the US “deep South”.

2.2 POVERTY AS A DISEASE (AND PLANNING AS A THERAPY) ON THE BACKGROUND OF WIDER RESCALING PROCESSES:

Despite being well-informed of the worst case scenario of a rare hurricane event such as Katrina impacting New Orleans, local, state and federal governments appeared as completely unprepared for the nightmare that unfolded from the breached levees and the reality of the poorest and most vulnerable struggling to survive in the rising flood waters. The Army Corps of Engineers bore responsibility for maintaining the now crumbling levees, so that disaster response (and its failure) fell under federal jurisdiction (Davis, 2006).

When Katrina struck, Republicans controlled both houses of Congress and the White House. President Bush was «severely criticized at home and abroad for an abysmal response to the storm», by focusing on «the issue of race and accusations of racism manifested as indifference» (Graham, 2009) because added to the scale of Katrina’s physical destruction was the unequal impacts suffered by the city’s poor – predominantly Afro-Americans, predominantly renters (see: Baxter, 2014) – due to the city’s disproportionate poverty, racial inequality, and urban decline. Bush responded to criticisms by acknowledging the legacy of racism and inequality that left New Orleans so vulnerable to Katrina, but his recovery policy reflected his Administration’s agenda of further government privatization and rollback of social services (Berger, 2009).

Not by chance, a Bush’s declaration was: «the private sector is critical in the rebuilding effort» (in: Dreier, 2006). This is why, according to many scholars, under Bush, Katrina recovery was irrevocably shaped by ideological, controversial federal redevelopment decisions.

In fact, on the one hand, the federal government handed out no-bid contracts for cleanup, refused to expand federal service provision to meet the needs of the displaced, and used tax credits as the primary vehicle for reconstruction. On the other hand, in June 2006, the Department of Housing and Urban Development (HUD) announced its plan to demolish the so-called “Big Four” public housing projects and to replace them with mixed-income properties, substantially reducing the number of affordable units (for a detailed account, see: Graham, 2009). What is to be highlighted here is that one of the “Big Four” (C.J. Peete) was situated on natural high ground that was relatively unharmed in Katrina’s flood waters and had seen its populations expand to more than 100% of pre-Katrina numbers.

On the other hand, the local authorities – which are described by Hirsch and Levert (2009) as «ineffectual, corrupt, racially polarized» (with citizen distrust as a result), being New Orleans a regime-less city, having neither a shared agenda, nor governing coalition, nor resources, nor «a scheme of cooperation» (Burns & Thomas, 2006) – soon proved to be incapable of facing the «cement life jacket» (Powell, 2007) due to
enormous reconstruction challenges, without a strong economy to pull the city back from the brink. Furthermore, both the city and the State of Louisiana lacked a collaborative tradition even with the federal government, so that, since the beginning, the mayor Nagin prioritized his relationship with the White House in deciding how to proceed in post-hurricane recovery (Burby, 2006). Anyway, there was little alternative at the local level: in fact, having the city lain off 3,000 workers, was effectively bankrupt, and was practically «disintegrating» after Katrina (id.).

Federal and local policies, however, were sustained by a sort of institutionalized ideology about status and moral worth of different social groups (see among the others: Thompson, 1998), especially poor Afro-American women. More generally, New Orleans – as a declining, low-income black city - came to symbolize the social isolation and immobility ascribed to an Afro-American urban «underclass» (Wilson, 1987) and this paradoxically led to blame the city and its residents for their misfortune after the storm.

Representations of the typical “cultural pathologies” assigned to low-income urban African-Americans – irresponsibility, disorderliness, fatalism (see: Lipman, 1998; Wilson, 1987; Thompson, 1998; Berger, 2009; Flaherty, 2010), i.e.: a sort of anathema to white Protestant “American” ethic of hard work, efficiency and rationality, mirrored in US citizens’ high geographic mobility, privileging the nuclear family, «weak ties» (Granovetter, 1973) and architectural and design homogeneity - were merged by the media with economic malaise, white population decline, lack of a strong government regime, local corruption and high crime in order to highlight the city’s disease and, consequently, the need of a “therapy” given by an intervention from outside (see: Imbroscio, 2008; McCann, 2001; more generally, on planning as a therapy, see also: Calabi, 1979; Scoppetta, 2014).

Especially the “Big Four” started to be described by media – advocating for de-concentration strategies – as «welfare queens», «isolated and steeped in abject poverty [...] insular neighbourhoods where strangers were not welcome», «breeding grounds» for crime, disorder, dysfunction and pathology, with residents as «among the most violent underclasses in the country», living in one of the most «seriously challenging big cities» in the USA (press articles cited in: Dawson, 2006).

On such a background, not surprisingly the Congressman Richard Baker exulted: «we finally cleaned up public housing in New Orleans [...]. We couldn’t do it, but God did» (in: Hirsch & Levert, 2009; Flaherty, 2010). Similarly, James Reiss, one of the mayor Nagin’s closest advisers and richest contributors: «those who want to see this city rebuilt want to see it done in a completely different way: demographically, geographically and politically. [...] I’m not speaking for myself here. The way we’ve been living is not going to happen again or we’re out» (in: Powell, 2007). According to the HUD Secretary Alphonso Jackson, New Orleans would become «smaller and whiter for the foreseeable future» (in: Graham, 2009; in general, on arguments of this kind, see: Smith, 1996).

Such declarations seem to be aimed at definitively cancel decades of non-white government in the city. In fact, across the city’s 73 officially recognized neighbourhoods (and the almost 200 unofficial ones), family and inter-generational networks were deeply rooted at the neighbourhood and even block level, with high degrees of sense of community and commitment to place, both important ingredients in Chaskin’s (2001) model of community capacity. This had led to the growth of a black political leadership (Germany, 2007) which was involved in a partnership concerning how War on Poverty funds ($100 million) had to be spent in the city in less than a decade. Furthermore, Black activist groups had come together with white liberal elites to develop federal programs by driving funds into low-income racially segregated neighbourhoods (Spain, 1979; Mahoney, 1990). Even though this period of inter-racial collective action had ended in violence between Black Panthers and the police, it had provided an opening for mayor Moon Landrieu to integrate City Hall, and for a new generation of black leadership to enter politics.
In addition, even Creoles – which historically resisted the traditional American black-white ordering – had shifted from their originally radical politics and had elected Dutch Morial, the first non-white mayor of New Orleans (Hirsch, 2009), a position Creoles held until 2010. This is why, in his re-election campaign in 2006, the mayor Nagin faced a racially polarized electorate over the possibility that whites could re-take the mayor’s office for the first time since 1978.

2.3 HURRICANE KATRINA AS AN UNEXPECTED OPPORTUNITY

According to many scholars (see e.g.: Arena, 2007; 2011), post-Katrina reconstruction is to be framed within the neo-liberal shift concerning public housing occurred since the end of the 90s in the USA. Currently, just over 1 million units of public housing is home to 2,03 million people (Right to the City Alliance, 2010), which are some of the poorest and most vulnerable in the USA, with the elderly (31%), disabled (32%), children (41%), single mothers, black and Latinos overrepresented, and an average income of $11,295 (with 49% of non-elderly, non-disabled households getting their primary income from wages).

This is why public housing has become the predominant symbol of the federal government’s failure to address the persistent problem of urban poverty in the USA as well as one of the few policy arenas still remaining outside the uncertainty of the market.

Following the de-concentration thesis – based on the idea that physical and social isolation of urban poor communities leads to a “culture of poverty”, made by high rates of crime, disorder, violence, drug use and unemployment, and limits their exposure to the economic opportunities, role models and values present in middle-class communities and constituting a fungible social capital (Greenbaum et al., 2008; Goetz, 2003) – a federal program (HOPE) was developed (see: Reichl, 1999; Pardee & Gotham, 2005; Popkin et al., 2009). It consisted of the demolition of public housing and their replacement with re-built mixed-income properties as a strategy for combating poverty by incorporating the poor into the market as well as a tool for urban development. Supported by federal subsidies and in partnership with housing authorities, private developers and community-based organizations, through the 2000s about 100,000 “severely distressed” units were demolished and replaced with about 60,000 new units at a range of rental prices.

It is estimated, however, that 60% to 70% of tenants never returned to the former sites (Ehrenfeucht & Nelson, 2011), and a portion of residents disappeared from housing authority’s rolls entirely (Popkin et al., 2009). Further criticisms describe the program as a land grab and a gentrification tool, since the “rationale for mixed-income development […] has nothing to do with lifting families out of poverty and is simply based on enabling the private development of valuable inner city real estate” (in: Joseph et al., 2007). The focus is on privatization, gentrification (Slater, 2006; Imbrosco, 2004; see also: Thompson, 1998, Lipman 2009), deregulation and the weakening of the state and social safety net as a tool to enter in the globalized economy at the expense of the poor (Jessop, 2002; Peck, 2006; Gotham & Greenberg, 2008). A further argument points out that, even if mixed-income policies are technically race-neutral yet have explicit implications for poor urban non-white communities (Joseph et al., 2007).

Even in New Orleans, prior to the storm, the St. Thomas redevelopment into the physically attractive New Urbanist River Garden (with less than 20% of former tenants returned – see: Graham, 2009) had been the flagship of the described trends towards de-concentration and mixed income communities. At the same time, the city reached the highest vacancy rate of any major US city at that time, with almost 1/5 houses empty in the decade prior to the storm.

After hurricane Katrina, instead, New Orleans was transformed from a weak to strong housing market. Indeed, the centrepiece of the Bush administration’s Gulf Coast recovery strategy was the creation of a Gulf
Opportunity (GO) Zone (modelled on Empowerment Zone legislation from the 1990s) providing $8 billion in tax breaks to stimulate business investment or expansion and affordable housing redevelopment in the devastated area, which included zones with modest hurricane damage.

Prior to Katrina, HUD (which in 2002 had taken control of the local housing authority) had hosted about 5,100 families in public housing and 9,000 using vouchers (49,000 people, more than 10% of the city’s population) (see: Kamel, 2012). As the state devoted the vast majority of its re-development funds ($10.4 billion) to making (mainly white – see: Fussell et al., 2009) homeowners to rebuild their properties (despite disproportionate damage to the city’s non-public housing), allocating only about $1 billion to rental properties (Clark & Rose, 2007), displaced tenants were significantly under-represented in the city’s recovery plans.

Furthermore, as thousands of evacuated residents’ home were likely inhabitable, housing destruction became an urgent problem that led to a tenants’ permanent dislocation from the city. Without their voice, the city’s recovery process ended to be dominated by elites, i.e.: government, business representatives and the white residents whose house was comparatively unscathed or who possessed resource to rebuild. On the contrary, considering the city’s «unique character and […] intractable issues of race and class seemed to call for deep knowledge of local people, organizations, and practices» (Rubin, 2009).

Katrina has removed a significant portion of the city’s undesirable, seemingly intractable, pre-storm features utilized mainly by the working and very poor – beyond public housing, failing public school system, hulking public hospital. The (whiter and wealthier) city today has about 335,000 fewer people (current 158,353 inhabitants, of which only 22% African-Americans and no longer 67%) than prior to the storm. The New Orleans City Council, with a white majority for the first time in two decades, has approved demolition of public housing (see: Nelson et al., 2007) – imbued by the people and networks that lived in them over generations (Kingsley, 2007) - in December 2007 (in: Graham, 2009). At the same time, «half of the working poor, elderly and disabled who lived in New Orleans before hurricane Katrina have not returned. Because of critical shortages in low-cost housing, few now expect tens of thousands of poor and working people to ever be able to return home» (Browne-Dianis & Sinha, 2008).

3 WHICH LESSON FROM KATRINA?

Today, CJ Peete and St. Bernard (now Harmony Oaks and Columbia Park, respectively) are mixed-income communities under development, while the Lafitte site, the only one with developer commitment to one-for-one replacement, stands empty after the bottom fell out of the tax credit market. Replacement mixed-income developments, however, will offer fewer than 2,000 units, of which only about one-third will be deeply subsidized at public housing rates.

At the same time, despite a waitlist of over 17,000 families and rather than remediating and reopening indisputably needed housing, those already existing are systematically demolished (spending $3 million) and about 80% of pre-storm public housing residents were given vouchers, despite the shortage of housing in the local rental market, where rents have risen anywhere from one-third to double (Kamel, 2012). Obviously, the bottom fell out on those credits given the US housing market collapse and global economic recession has obviously worsened the situation.

According to Hirsch and Levert (2009) government/elite post-Katrina redevelopment plans reflect «social engineering thinking going on […] about whether poor, black people […] have the right to come back». Even if the “right to return” is mentioned in HUD demolition plans (Graham, 2009), in the reality it is tied to whether or not individuals and communities had the resources to reclaim their homes and neighbourhoods,
so that «entire neighbourhoods are struggling to prove their right to exist by showing they can rebuild» (Powell, 2007). While the state – supported by its planning/policy networks (Domhoff, 2009), i.e.: by the dispersal consensus (Imbroscio, 2008) – is empowered to decide behind closed doors the future of their life-space, given their sort of “circumscribed citizenship”, for marginalized and vulnerable households, the choice to fight or accept development is extremely imbalanced.

This is why, despite the fact that demolition had been proceeding around the USA with limited opposition for almost fifteen years, even if cutbacks have arguably displaced more people than Katrina (Foster, 2007), the “battle for public housing” in New Orleans has become so outsized and symbolic (see, e.g.: Flaherty, 2010; Foster, 2007 and many others...).

But this ends to hide the need for planners of learning from Katrina’s mistakes, even in the light of a different approach to human-nature relationship. After all, what sets resilience in human communities – including planners’ community – apart from biotic ones, (still) is the capacity to learn from past experiences and employ strategies to contend with future events.

More generally, Katrina as a case-study offers very useful insights into the risks – already clearly highlighted by Davoudi (2012) – related to the ways in which notions are translated from the natural and physical sciences to the social sciences on the basis of the assumption that social systems operate in similar ways to the those in the natural or physical world. Such a “migratory process” of scientific concepts tends to produce «boundary objects» (Star & Griesemer, 1989; see also: Brand & Jax, 2007), i.e.: “objects” (such as texts, ideas, projects, and so on) provided with different and only partially overlapping meanings, so that they can be interpreted differently by the actors involved, by allowing a mutual understanding or, if one wishes, productive misunderstanding that, however, can usefully favour connections between different cultural perspective and interests.

An example in this sense is given by the concept of resilience. By now a large literature exists on the different meanings of a term (among the many, see: Alexander, 2013; Carpenter et al., 2001) which is increasingly adopted by academic scholars, policy makers and practitioners on a variety of scales and in a variety of ways: as a descriptive or normative term, as a (sometimes ethical) paradigm or as a theory (Strunz, 2011), as a desired outcome or as a process leading to a desired outcome (Kaplan, 2010).

Even in the natural and physical sciences, however, very different meanings co-exist. From an engineering perspective, resilience is the ability of a system to return to its preceding equilibrium state after a disturbance. On the contrary, the ecological concept of resilience rejects the idea that systems can and should return to their pre-crisis state, as they rather seek to adapt and evolve in the aftermath of that crisis by changing their own structure and configuration, so that resilience means establishing a new equilibrium. Evolutionary resilience goes forward by assuming that the drivers of change are not only external, but they can also be internally produced and involve gradual processes of change rather than sudden and unexpected shocks (see: Holling, 1973; but also 1996).

Thus, which resilience planners refer to when they use the term in planning theory and practices? Explicitly clarifying the approach becomes a relevant matter not only in terms of intellectual honesty but also (and especially) in the case of planners aimed at sharing their “expert knowledge” with local communities in order to empower them by also considering (also historical) practices and communities bottom-up initiatives as relevant knowledge sources (from a methodological point of view, a useful and detailed example in this sense is given by RESilienceLAB’s experiences, in: Colucci, 2012).

In fact, especially if resilience is intended within the framework of the complexity theory, not considering the constructive role of synergies and feedbacks would lead to the suspect that resilience necessarily implies winners and losers, the latter having to “adapt” while the former having not.
As a matter of the fact, already-marginalized households are generally likely to be amongst the losers, raising important issues of socio-political economy at the local or even higher level (Berkhaut, 2008). As a consequence, assessments of resilience in social-ecological systems should not only consider the most general system level, but also take into account possible trade-offs and asymmetries in resilience between different groups and individuals within the same system, especially when - as in the case of New Orleans - the framing of system boundaries is a matter of conflict. As post-Katrina unjust reconstruction clearly shows, the use of resilience as a wide "umbrella term" risks to appear as a way to hide conflicts and power relations, by creating further tensions not only among those involved in implementing resilience, but especially among those who find themselves forced to become resilient. Therefore, a simple and unreflecting application of the resilience concept into social and political matters will inevitably run into substantial difficulties. Many authors point out that other concepts with a stronger social focus should be connected with the notion of resilience, in order to remove the suspect of resilience as a technical apolitical framework, in which the transformative dimension in terms of social justice ends to be ignored or forgotten. For instance, in order to be usefully applied in planning theory and practices, a concept that should be combined with resilience is "vulnerability", i.e.: «the state of susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt» (in: Adger, 2006).

A further concept consists of "agency", a term typically used to characterize individuals as «autonomous purpositive and creative actors, capable of a degree of choice» (Lister, 2004). In this way, resilience could be able to capture under its "umbrella" also the freedom people have to negotiate their own lives (including their own resilience) (in this sense, see: Mackinnon & Derickson, 2012).

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**IMAGE SOURCES**

Fig. 1: NASA image of Hurricane Katrina 2nd landfall. http://earthobservatory.nasa.gov/NaturalHazards/natural_hazards_v2.php3?img_id=13082

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