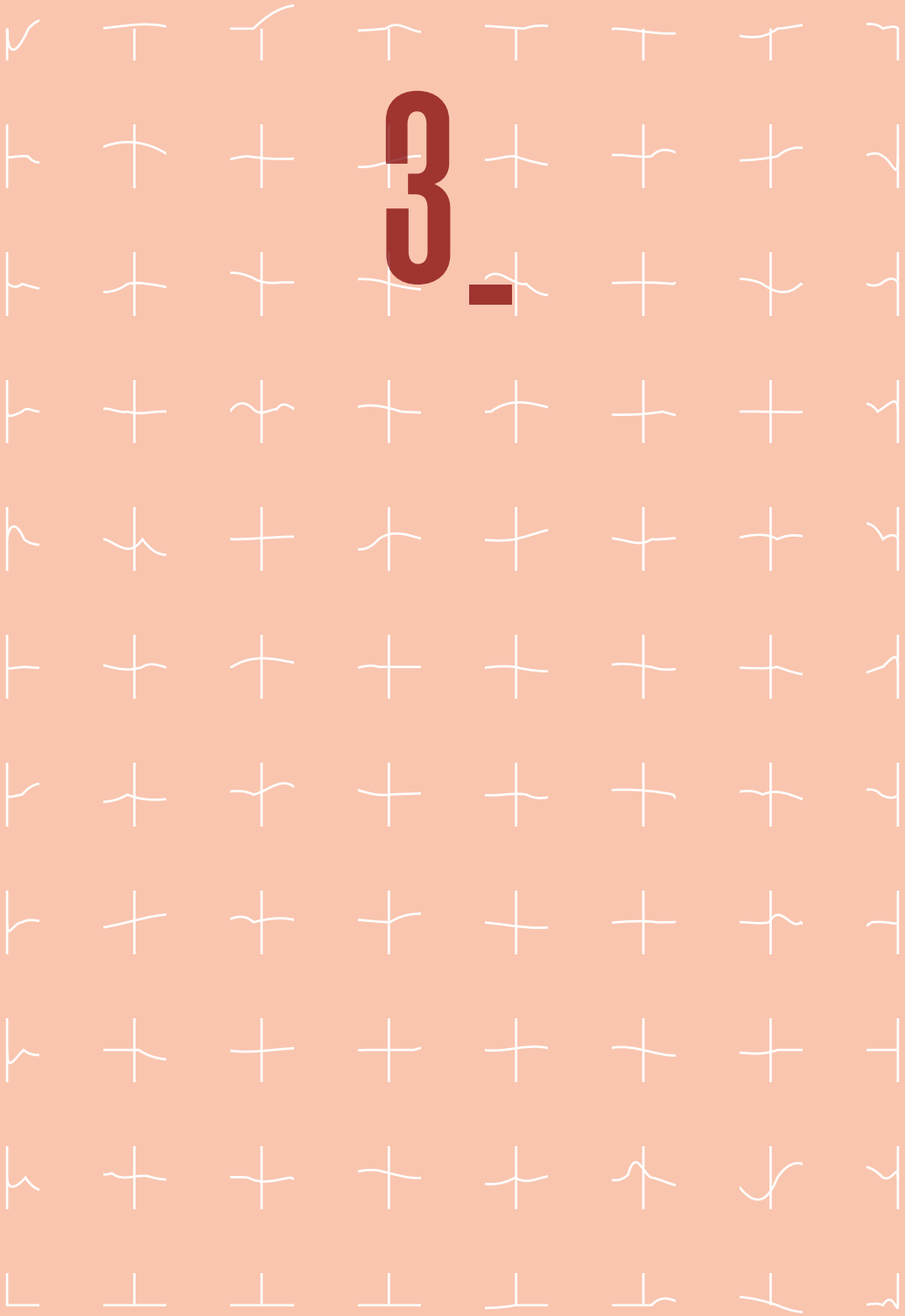
3_



STRATEGY

Reconstruction needs a completely new design strategy, a subversion of current city-making mechanisms that allows one to reinstate the community, with its aspirations and needs, as the center of the process of controlling urban metamorphosis. Four dichotomies define the required innovations: top-down / bottom-up, aspiring to a change in conceptual and operative approach; cataclysmic credit / gradual credit, proposing different financial mechanisms; layers /cells, sketching a new urban form; and project / process, aiming at a radical rethinking of design systems. The laboratory of reconstruction, an on-site space capable of hosting dialogues and activities, provides the toolbox required for the initiation of a successful switch in operational practices.

STRATEGY

3_1 TOP DOWN / BOTTOM UP

It is impossible for the current design methods, forged by the masters of modernism in a completely different global scenario (TAFURI 1973; HEYNEN 1999), to intervene in complex urban and social environments and face the challenges posed by large-scale modifications of urban patterns. The rigidity of urban planning, architecture, and the construction sector is witnessed by their incapacity to provide solutions for reconstruction that go beyond shelter (CHARLESWORTH 2014), thus making it necessary to define a path toward an alternative urban vision. Current organizations, time frames, technologies, building techniques, construction companies, real-estate mechanisms, and design practices are all incapable of facing the uncertainty, conflict, and dissonance underlined by the urban metamorphoses triggered by the cities under pressure paradigm.

In the case of extreme events, the current approach, mainly applied by national state powers or transnational organizations, is a top-down vision that can be adapted with minor modifications to post-disaster "rebuilding" (SCHWAB 2014), informal settlement "upgrading" (BANERJEE ET AL. 2012; SKINNER ET AL. 2015), "build back better" mechanisms (UNITED NATIONS 2015), or "rehabilitation" of marginalized neighborhoods (BARTLING 2014). The top-down approach favors large companies that operate with sizable infrastructures and big financial loans. Urban metamorphosis is defined and undertaken as a single project that is run, often at a distance, by a large design firm, with coordination, execution, and timing problems. This top-down approach is completely detached from the needs and hopes of local communities and often leads to the establishment of infrastructures and services that are out of scale and unmanageable in the long term. Most importantly, the top-down approach fails to break the cycle of violence, poverty, and insecurity, and it is incapable of building peace and transitioning toward a sustainable future.

It is necessary to switch toward an opposite bottom-up strategy by defining new design tools that accept the necessary undefined nature of the final

results within a guiding urban vision (SENNETT 1970; SENDRA AND SENNETT 2020). A bottom-up approach imagines design processes as something to be ideated and conducted directly with and by the local community, through the self-organization of a local workforce. We have to start from the assumption that the reconstructed city of the future might (and often should) be completely different in character from the current city that has hosted and favored violence, social distress, or disaster. The bottom-up approach applies not only to urban patterns and territories, but also to cultural and social systems, as well as to economic structures and administrative organizations. The alternative approach leads to a complete rethinking of design disciplines by imagining urban design as a regeneration tool that triggers continuous, complex, creative, unforeseeable, circular, and sustainable changes.

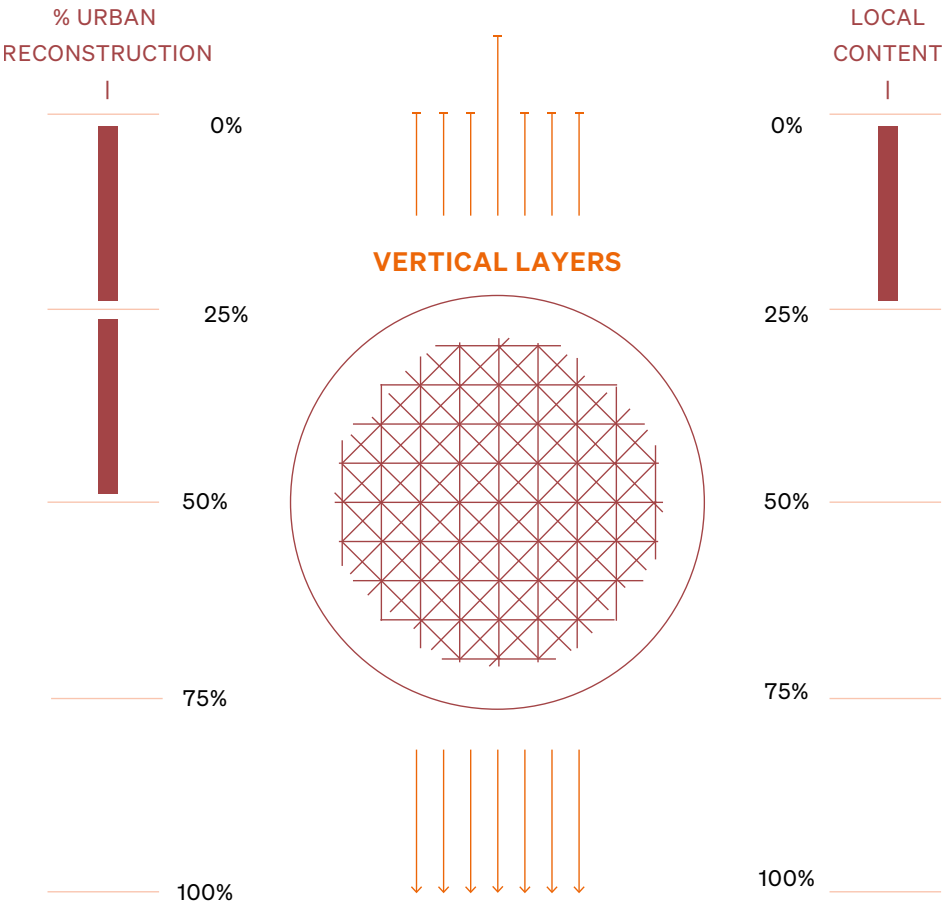
3_2 CATACLYSMIC CREDIT / GRADUAL CREDIT

A bottom-up strategy starts with small loans given to many people and implies a city generated by a sum of small interventions that together shape the urban environment and are continuously negotiated with a centralized power, the role of which should be limited to the few choices that cannot be made at the lower level. Currently, extreme events generate high media attention and external financial support that tends to rapidly fade away in the medium- or long-term time frame once media coverage has been attracted to different areas. Donors and international support flow conspicuously in the immediate aftermath of a destructive event, but the lack of a general strategy often leads to the construction of "white elephants" (ROBINSON AND TORVIK 2005; BOWEN 2009) which, rather than initiate positive economic and social cycles, are investment projects with a negative social surplus.

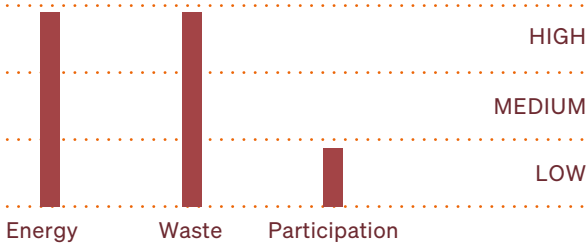
A top-down approach focused on big-size intervention tends to minimize the local content (OLAWUYI 2021) of reconstruction operations, often leaving only around 10–15 percent of the total financial budget on site, while the greatest amount of funding is drained by big international firms, the only ones able to participate in large-scale reconstruction operations. The current approach is incapable of generating a "lanes' economy" (GRIMA ET AL. 2020), where the benefit of reconstruction funding trickles down to the local community or even guarantees local employment, the only possible tool to sustain urban reconstruction in the long run.

Cities and territories involved in extreme events remain under the lens of the global public opinion for a short period and are then "helped" by an external hand that provides immediate relief, but in the longer term deprives the local community of the economic support and social strength necessary for a durable reconstruction. In the 1960s, Jane Jacobs had already pointed out the importance of

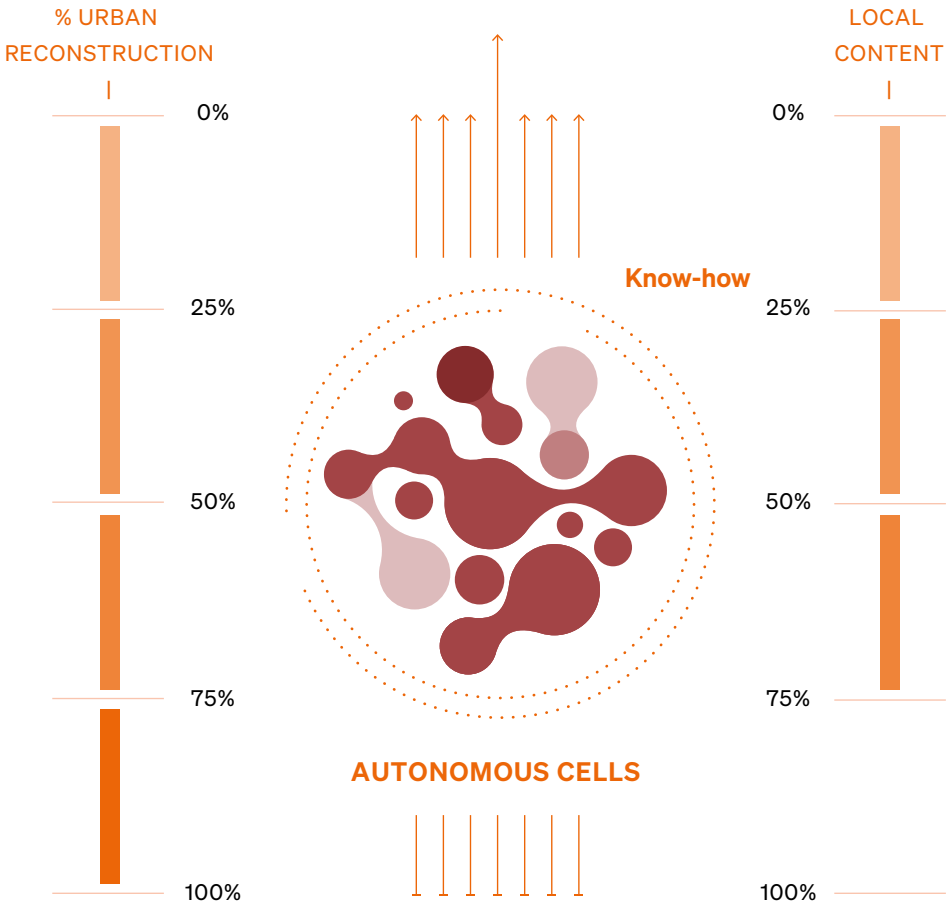
TOP DOWN



BIG
–
LOANS
COMPANIES
INFRASTRUCTURES



BOTTOM UP



SMALL

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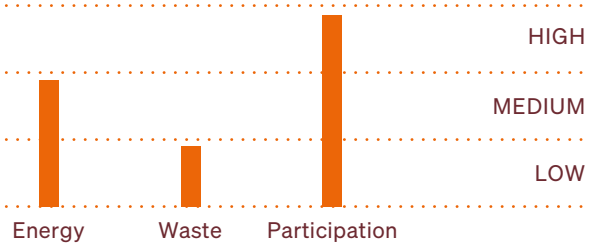
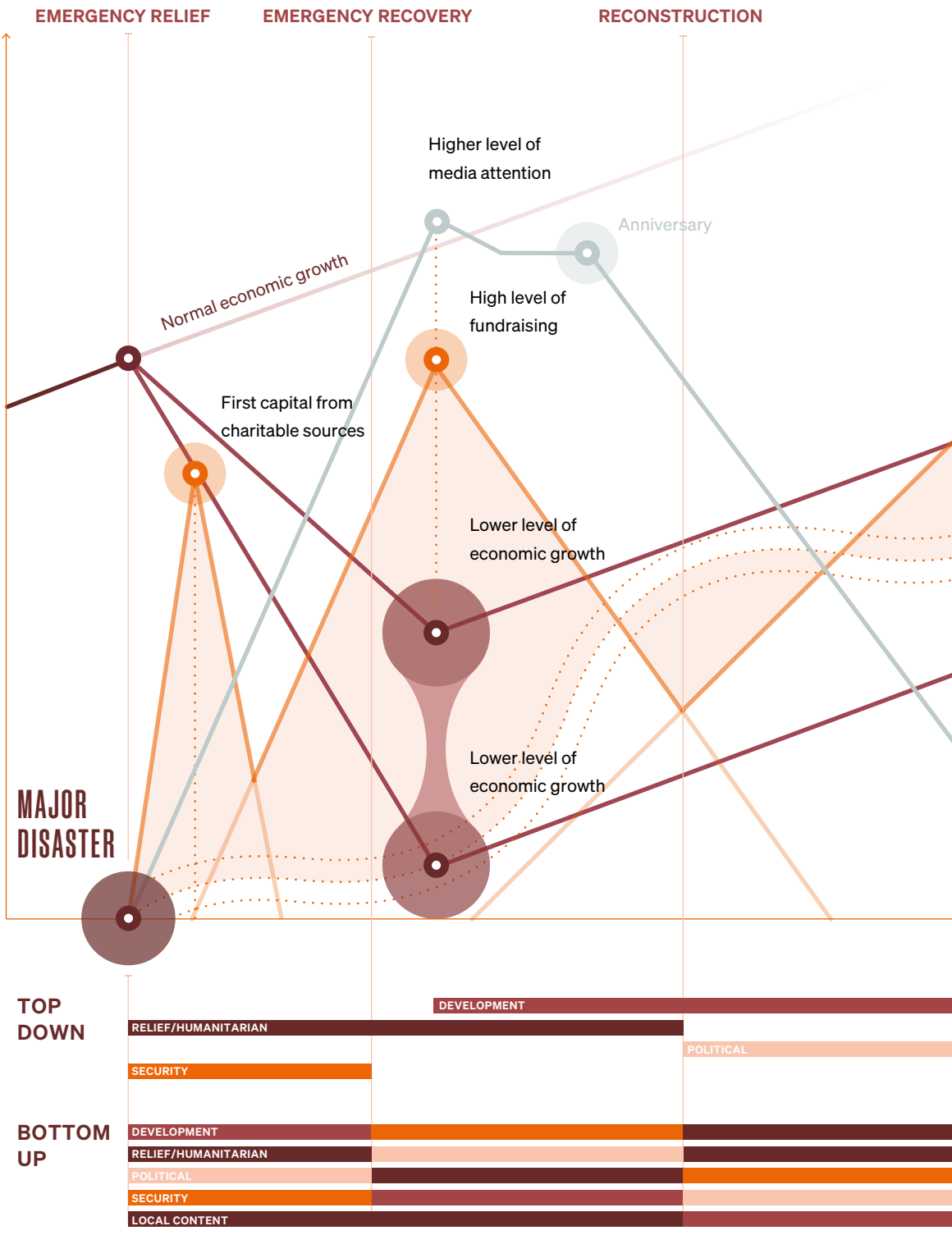
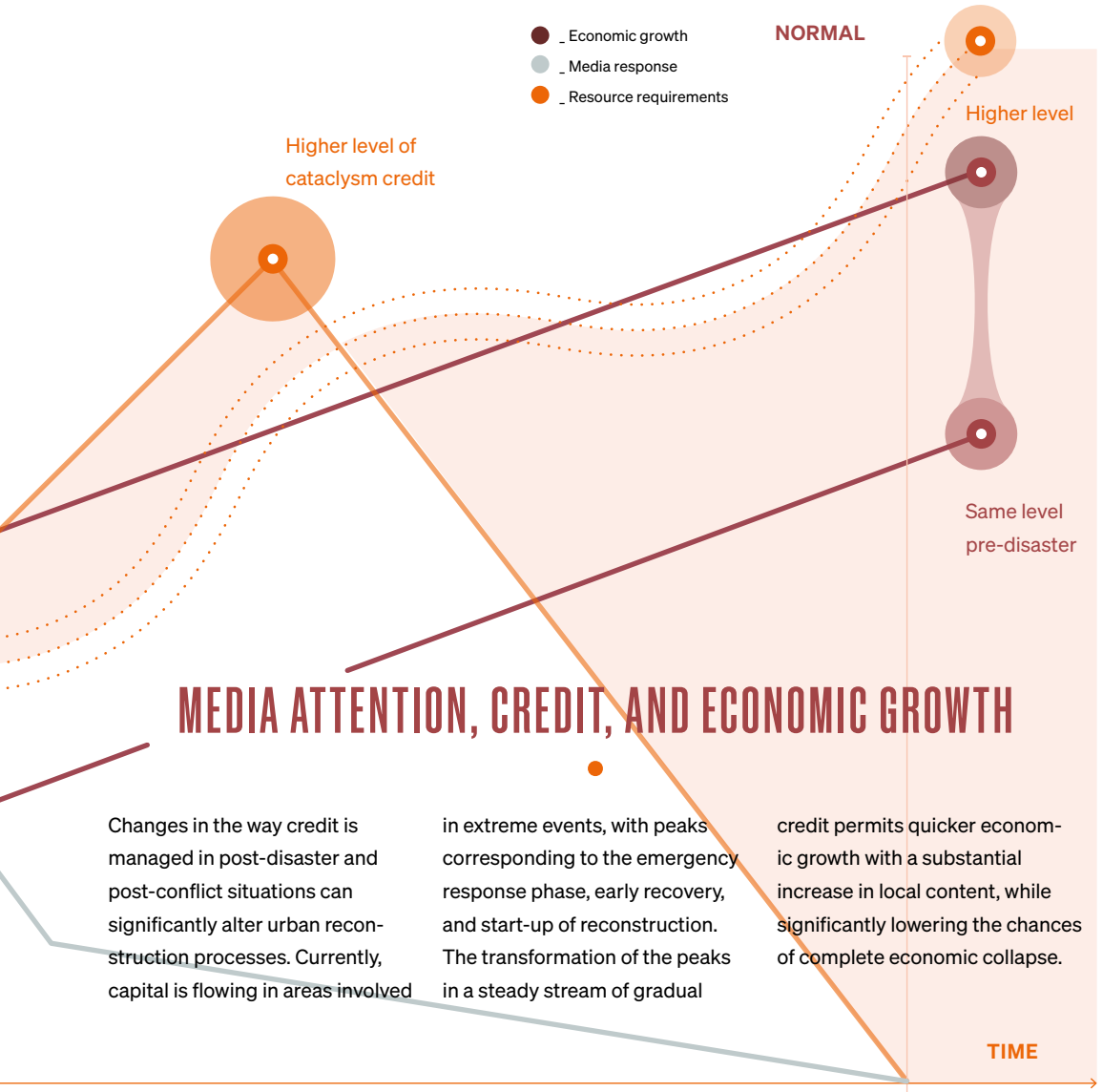
LOANS
COMPANIES
INFRASTRUCTURES




EMERGENCY RELIEF
EMERGENCY RECOVERY
RECONSTRUCTION
Higher level of media attention
Anniversary
Normal economic growth
High level of fundraising
First capital from charitable sources
Lower level of economic growth
Lower level of economic growth
MAJOR DISASTER
TOP DOWN
DEVELOPMENT
RELIEF/HUMANITARIAN
POLITICAL
SECURITY
BOTTOM UP
DEVELOPMENT
RELIEF/HUMANITARIAN
POLITICAL
SECURITY
LOCAL CONTENT



MEDIA ATTENTION, CREDIT, AND ECONOMIC GROWTH

Changes in the way credit is managed in post-disaster and post-conflict situations can significantly alter urban reconstruction processes. Currently, capital is flowing in areas involved in extreme events, with peaks corresponding to the emergency response phase, early recovery, and start-up of reconstruction. The transformation of the peaks in a steady stream of gradual credit permits quicker economic growth with a substantial increase in local content, while significantly lowering the chances of complete economic collapse.

credit as the cornerstone for triggering positive urban metamorphosis, in her book *The Death and Life of Great American Cities*: "money shapes cataclysmic changes in cities. Relatively little of it shapes gradual change. Cataclysmic money pours into an area in concentrated form, producing drastic changes. . . . three kinds of money behave not like irrigation systems, bringing life-giving streams to feed steady, continual growth. Instead, they behave like manifestations of malevolent climates beyond the control of man—affording either searing droughts or torrential, eroding floods. . . . City building that has a solid footing produces continual and gradual change, building complex diversifications" (JACOBS 1961).

A qualitative reconstruction must start from the modification of a credit system that, rather than acting as a cataclysmic force on the city, must become a gradual chance for continuous, positive modification. Financial support can be split into a myriad of smaller loans, provided that a guiding principle of design and a control mechanism have been put in place. Smaller loans given to local workers have a much greater chance of remaining in the local economic flow and generate further benefits on site. Gradual credit can be distributed, with forms of solidarity lending (ARMENDÁRIZ AND MORDUCH 2005; YUNUS 2007) applied to groups of community members willing to reconstruct their home or business and also to small-scale entrepreneurs who can produce materials or provide services required in the reconstruction process. The bottom-up approach must be matched with a radically different financial model that entails different goals: from the quicker possible return to a stable condition to the management of a fluid one in which the urban pattern undergoes continuous modification, permitted and favored by a new distribution of credit.

3_3 LAYERS / CELLS

The top-down approach that characterizes current city-making processes is carried out in the urban environment through the development and application of a series of layers: infrastructures (MARX 2022), water distribution (BAKER 2009), energy supply (EICKER 2018), public and private housing (ROLNIK 2019), or basic services (JUNGINGER 2016). Each layer is seen as a detached subject with its specific professional figures, construction mechanisms, and service providers. Often, key design decisions affecting urban forms are not planned in light of the desired urban features but as responses to a sum of input linked to one or more layers; the final result is a dull urban environment that is capital-centric, speculation-driven, and investment-dominated, that is incapable of achieving sustainability in an integrated vision, and, more importantly, that is lacking any kind of urban quality given by significant mixed-use spaces.

The layered vision of the city leads inevitably to low-density and low-quality urban sprawl (BRUEGMAN 2005), a monofunctional city that, while representing on average 90 percent of urban environments, is the symptom of a development model which wastes natural resources, minimizes social interaction, and forces an outdated lifestyle (BROWN 2009; KEUCHEYAN 2014). Despite relevant cultural and economic differences, global urban sprawl tends to show homogenization and hypersimplification processes. Rather than be built to host lively communities, it seems to be constructed "for privatized consumption built around the car and celebrated at the mall; for residential enclaves that exclude those deemed undesirable; for the security of gated communities and fortified leisure centers; and for a predictable homogeneity of built forms that imply safe investments" (HARRIS 2015).

Emergency response systems in the case of extreme events accelerate the production of sprawled urban patterns: the top-down approach applied through a vertical order—subdivided into functions (infrastructures, education, health, etc.) and entrusted to different organizations (local administration, international organizations, NGOs, etc.)—generates urban spaces with the sole objective of sheltering the highest possible number of people in the shortest possible time. It is a noble goal, which, however, does not produce a true urban environment but rather a soulless repetition of living modules, regardless of their technological and constructive quality.

The alternative is a city imagined as an organic constellation of cells, a recurring idea that submerges and resurfaces continuously in the history of urban design (PIACENTI 2022). Urban destruction can be the chance to completely reverse current settlement mechanisms in favor of a city formed by a sum of defined and self-contained urban cells, autonomous elements of a calibrated dimension (MUMFORD 1961) that can dialogue with each other and host a population of around 10,000 inhabitants each with a high constructive density. Urban cells can be defined and built through a series of delocalized, small, and widespread interventions that allow one to act simultaneously in multiple different areas, optimizing time, financial resources, infrastructure, and workforce while minimizing land consumption and waste. The reconstruction of large-scale urban settlements can be achieved as a sum of small cells, connected with low-impact sustainable infrastructure and subdivided by green-productive areas. The defined scale of the cells allows local communities at the neighborhood scale to become the protagonists of reconstruction through communitarian design mechanisms and direct intervention (LOZANO 1990).

The urban cell model strengthens community bonds, and it can even act as a seed for peace in violent situations, while the small scale of the interventions permits intervention in fluid conditions, stabilizes small areas, defines short- and long-term goals, and strengthens resilience and attachment to place.