SUR
SUSTAINABLE URBAN REGENERATION

Center for Sustainable Urban Regeneration, The University of Tokyo
東京大学・都市持続再生研究センター

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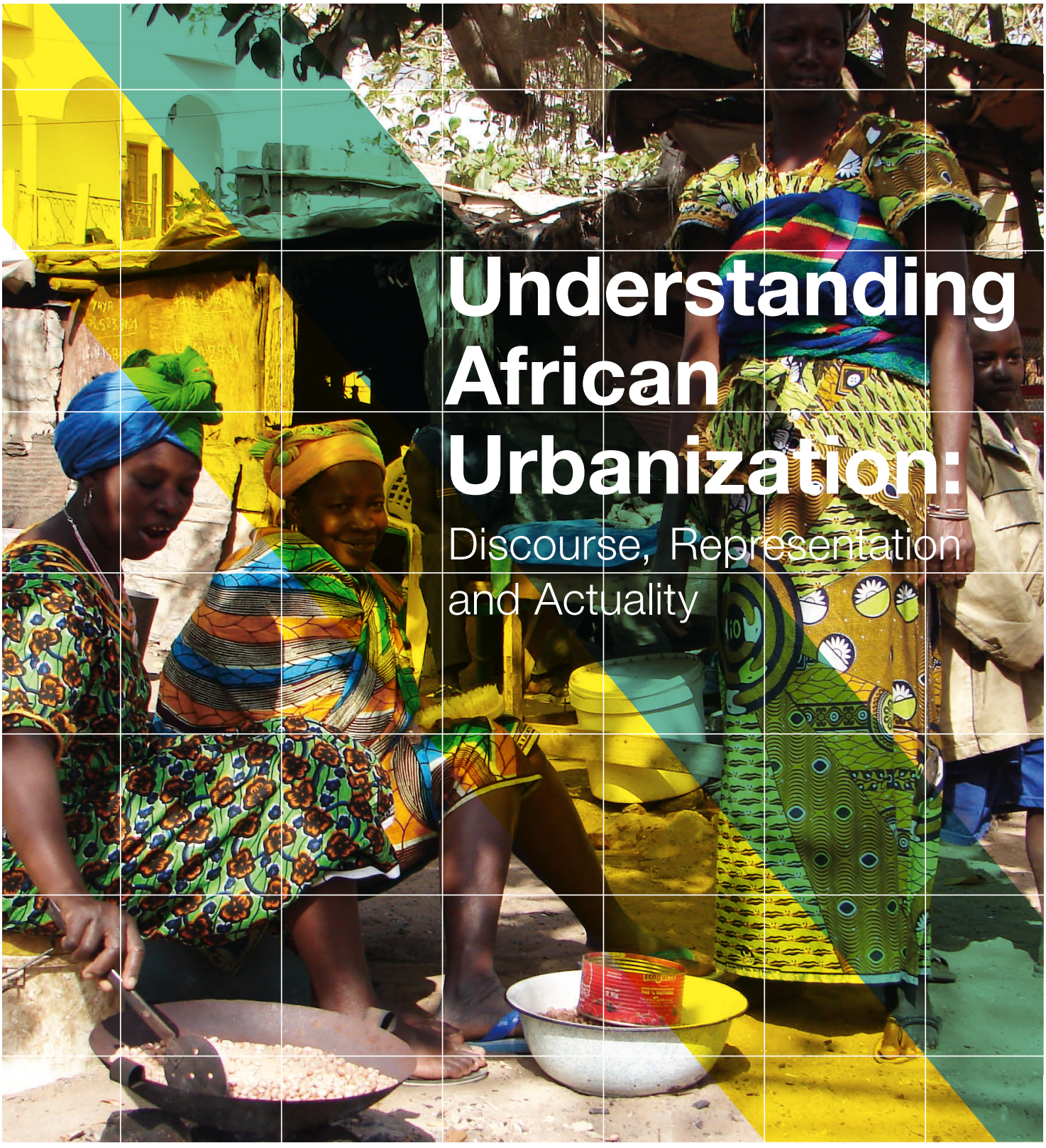

Understanding African Urbanization:

Discourse, Representation and Actuality

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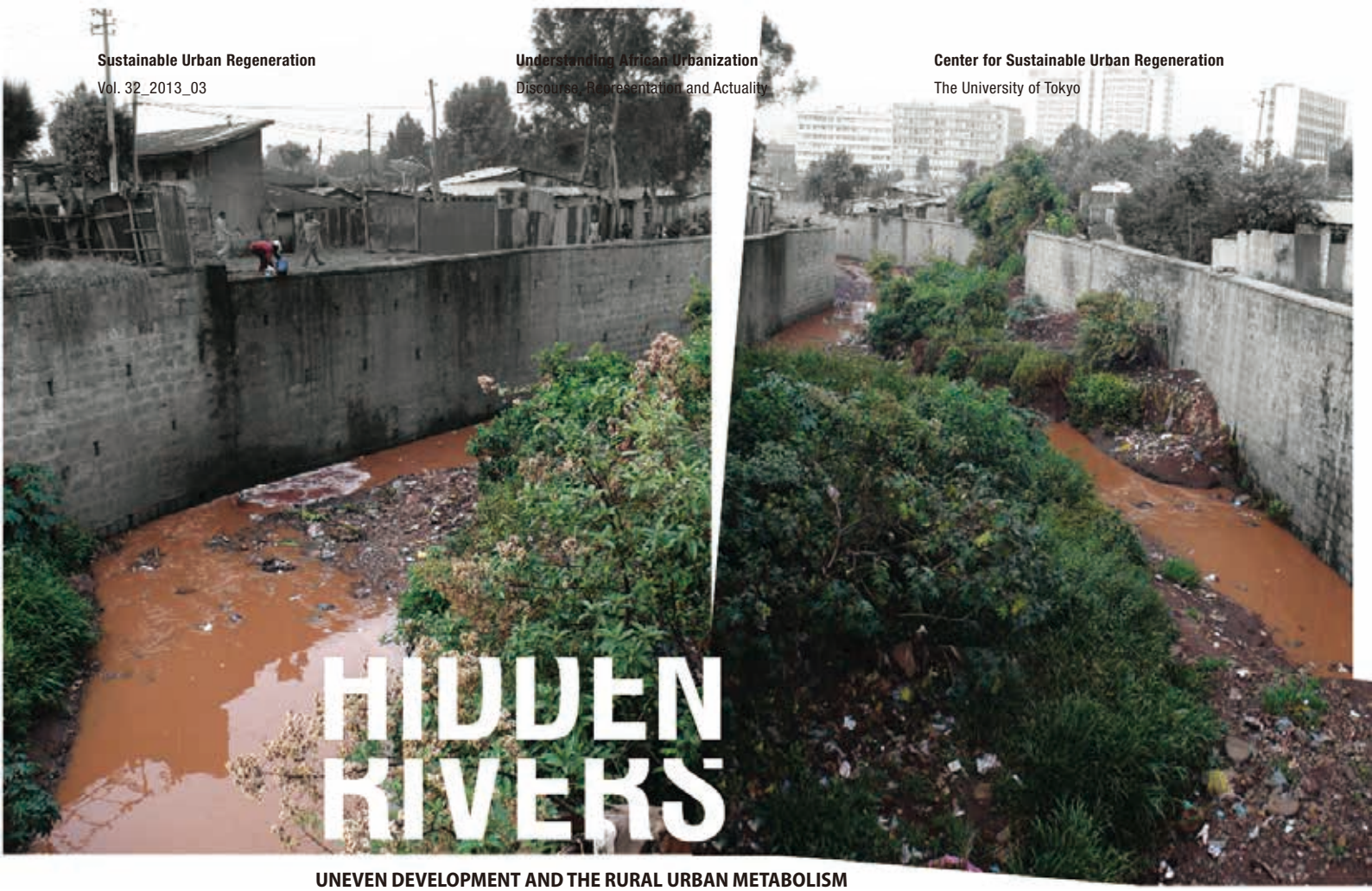


HIDDEN RIVERS

UNEVEN DEVELOPMENT AND THE RURAL URBAN METABOLISM

Matthew SKJONSBERG

A door can keep you out, or let you through — a wall divides one space and creates two new ones. Just so, innovative infrastructure has a legacy of both facilitating and precluding access to natural resources. Infrastructure is now conventionally deployed for the wholesale extraction of natural resources in many regions of the world to devastating effect, permanently obliterating the nature of the region and precluding inhabitation of it in the future. Alternatively, by emphatically prioritizing the ecological continuity of river corridors whilst enabling access for those who inhabit the land, infrastructure can be created so as to provide for the city while further enabling life on the land. For instance, Thomas Telford (1757-1834), the first president of the Institution of Civil Engineers, and the first to build an internationally recognized 'longest span' bridge, championed "a range of improvements to harbors and inland communications to stimulate the economy and stem (human) migration" in the Scottish Highlands.[1] Then, as now, record numbers of the rural population were leaving for the city — a trend he sought to counter with infrastructure. With a sensitivity to the existing culture and landscape that affirms his being "a veritable child of the Scottish Enlightenment," his sustained work in that region included great works of civil engineering such as the Caledonian Canal, whose 24 locks involved establishing key areas with fill and mud 128 meters (420 feet) deep, as well as more modest works, such as Bonar Bridge [Fig.1], whose sympathetic design and craftsmanship prompted the poet Robert Southy to describe his first encounter with the bridge thusly: "At last I came in sight of something like a spider's web in the air…oh, it is the finest thing that ever was made by God or Man!"[2] Telford's stated objective was to provide access to the resources that enable individuals to take initiative and to improve their own conditions. Incidentally, as industrial interests grew so did their reach into regions previously isolated. Numerous of these piers, road improvements and major bridges were exploited and ultimately usurped by railroads, and whether intentionally or inadvertently these wonders of engineering facilitated irreparable damage to districts by others who lived elsewhere. His Bonar Bridge was long ago replaced with a standard industrial era bridge — one better suited to the high volumes of traffic and rates of speed conducive to global commerce.

[Fig.1] Thomas Telford, Bonar Bridge 1811/12 - Highlands, Scotland.

Since then the industrial power harnessed by engineers and their clients has enabled access to vast natural resources — and for the first time in recorded history we live in an era when the majority of people on earth live in cities, a trend that is foreseen to continue until some 75% the world's population is urbanized by 2020.[3] In 'developed' and 'developing' nations the story is the same — rural regions are despoiled and depleted, further motivating their populations to relocate into urban regions, leaving vacated land to be exploited by industrialized economic interests. From the sand tar mines in Canada, to mountaintop removal for coal in Virginia, to deforestation in the Amazon, to the erasure of entire landscapes in Asia, the reach of these exploitative forces is vast and systemic. Likewise, when you visit African countries today you find works of infrastructure whose ubiquitous presence and monumental scale can be read as evidence of the complicit role of the planner, engineer and architect in the exploitation of natural and social resources there. And even when there is a will to do well for those in affected areas, such efforts may be surreptitiously undermined. Famine was widespread in Ethiopia in the 1980s, and in 1985 the concert Live Aid was held to provide food support — and did. But in Ethiopia it is widely believed that the food drop locations were strategically situated so as to depopulate certain regions abundant in oil and other natural resources. Currently in Addis Ababa, the highland capital of Ethiopia, the major East-West highway, built with international funding, links industrial zones throughout the city and at opposite ends of the periphery. Unfortunately this highway bisects neighborhoods and open spaces, severing social and spatial flows. The highway design incorporates neither bridge, tunnel nor level pedestrian intersection for miles at a time, and one can witness, night and day, young and old alike just inside the highway barriers, watching and waiting for their moment to dodge through traffic and dart across as many as eight lanes — with an additional barrier in between — to get to the other side [Fig.2]. In contrast to the stated objective of Telford to use infrastructure to 'stem migration' — that is, to enable people to inhabit rural regions — these rural migrants are driven 'by hook or by crook'[4] into the low-wage economy of the city, and even then they must vie with the infrastructural obstacles literally put in their way.

[Fig.2] Pedestrians crossing the east-west highway in Addis Ababa.

RESOURCEFULNESS OVER RESOURCES

Telford's efforts implicitly addressed the underlying issues of the distribution of wealth and of sustainability — both subjects of contemporary relevance. His logic seems to be structured like this: if the land and its resources are to be exploited, it is possible that those who have a more direct relationship to the land may be more reliable when it comes to restraining that exploitation within the constraints of 'propriety.'[5] He likely saw firsthand the broader effects of the lack of this restraint, which is the acceleration of an economic phenomenon known as 'uneven development' outlined as follows in *The Encyclopaedia of Political Economy*:

> *A useful summary of the process of uneven development, as a necessary aspect of capitalism, comes from volume one of Marx's Capital (ch 27, paragraph 15). Here he states that a major contradiction of capitalism is the simultaneous emergence of concentrations of wealth and capital (for capitalists), on the one hand, and poverty and oppression (for workers), on the other. This "general law of capitalist accumulation," as Marx termed it, highlights capital-labor conflict, and is one way to ground a theory of uneven development. But thinking about uneven and combined development dates further back, at least to Marx's Grundrisse (1857-58), where unevenness represents the condition for a transition from one declining mode of production to another rising, more progressive mode. In general terms, then, uneven development can relate to differential growth of sectors, geographical processes, classes and regions at the global, regional, national, sub-national and local level.*
>
> *The differing conceptual emphases are paralleled by debate surrounding the origins and socioeconomic mechanisms of unevenness. Neil Smith (1990:ch3) rooted the equalization and differentiation of capital – the fundamental motions of uneven development — in the widespread emergence of the division of labor. Ernest Mandel (1968:210) searched even further back, to "private production" among different producers within the same community; insisting that "differences of aptitude between individuals, the differences of fertility between animals or soils, innumerable accidents of human life or the cycle of nature," were responsible for uneven development in production.*[6]

In urban Addis Ababa, as in major cities around the globe, the population is expanding at an accelerating rate — from 1 million inhabitants in 2000 to 4.5 million in 2010.[7] More than three-quarters of the inhabitants live below the poverty line in informal settlements, lacking much, but perhaps clean water most of all.[8] Water shortages even to those who have the infrastructure and facilities is commonplace — but it turns out only 5% of Ethiopia's water supply is made available to the public — 95% is not [Fig.3]. Situated at the base of Mount Entoto's southern flank, Addis Ababa's north-south rivers, streams and seasonal flows run at almost perfect half-kilometer intervals throughout the city and can be relied upon to directly provide ample water supplies [Fig.4] — so the underlying issue is one involving the management of resources rather than their availability.

[Fig.3] Water resources in Ethiopia: Annually 110 billion m^3, 57 billion needed — 5%, or 5.5 billion, used.

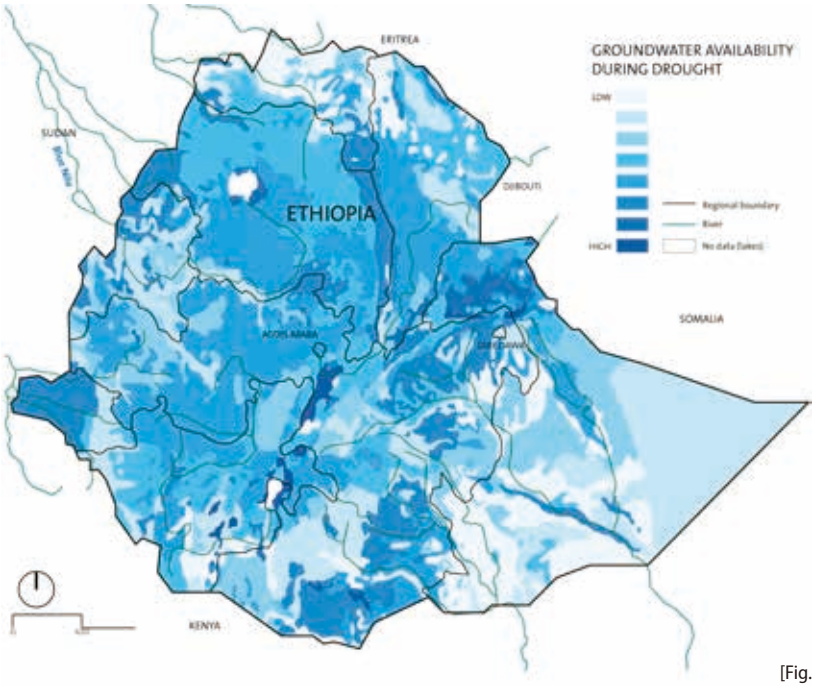
[Fig.4] River network in Addis Ababa.

To maximize land within the city and control flooding due to seasonal flows, authorities have understandably facilitated and enabled the walling-in of these rivers. This has the incidental effect of effectively rendering these rivers largely unavailable for public access except as dumping grounds (see intro image), which in turn makes this water source unsuitable for other uses downstream. Commercial interests have strategically occupied adjacent sites and established industries that utilize the canalized river for waste removal [Fig.6], but this is clearly disadvantageous to the cities inhabitants, many of whom can still be seen picking their way though the piles of garbage to bathe, swim and draw water from the often badly polluted mountain water. The health effects of this policy are largely unknown, but one can surmise they are potentially serious as many of the adjacent industries emptying their waste here deal with the powerful chemicals and solvents related to heavy industry. So individuals and communities must obtain access to water by some other means.

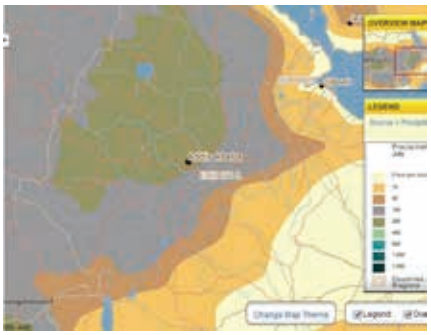
[Fig. 5] Heavy industry occupies strategic sites along water routes.

SUSTAINABILITY FACTORS

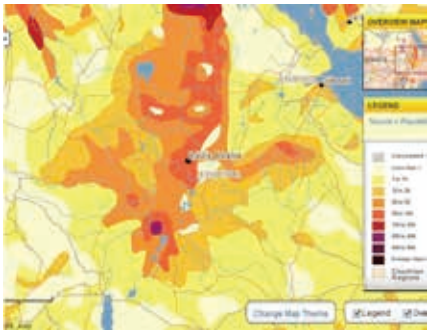
To understand how such conditions can be intervened upon it is helpful to zoom out and to evaluate the issues that give rise to these circumstances. One helpful result of the international interest in Ethiopia has been that substantial international investment has been made in documenting and mapping the region, and large-scale issues such as these may be readily identified, correlated and queried in publicly accessible GIS databases.



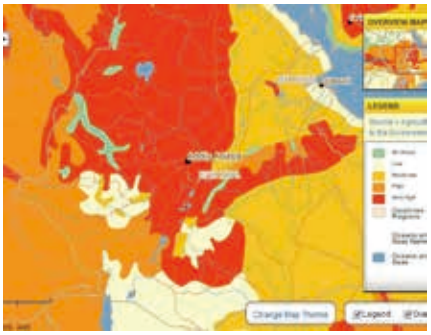
[Fig. 6] Groundwater availability during drought.



[Fig. 7] GIS precipitation.



[Fig. 8] GIS population density.

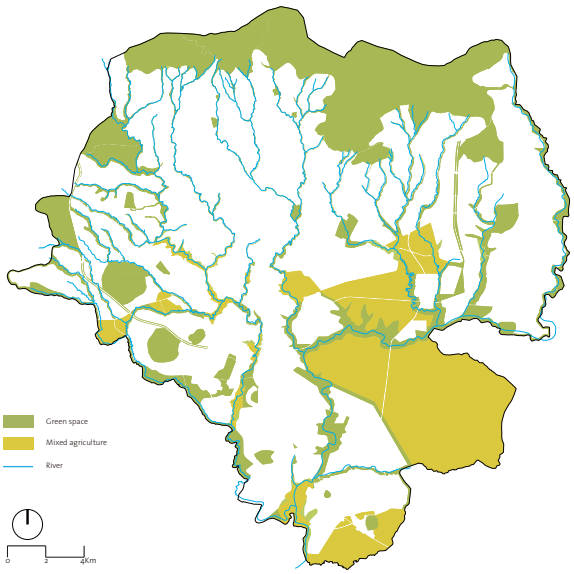


[Fig. 9] GIS in red: Severe threat to soils.

Seasonal precipitation readings confirm that rainwater is in abundance [Fig.7], and when considering regional and national sustainability, the correlation between annual precipitation levels and population density is fundamental [Fig.8]. 'Severe Threat to Environment from Intensive Agriculture' is a particularly revealing dataset [Fig.9: Note areas in red]. When deployed across Ethiopia's naturally thin soils during intermittent drought, subsidized intensive ranching has resulted in the severe over-use of the land. Situated as they are directly within this reading of severe soil quality degradation, subsidized ranches and the methods contribute substantially to this environmental threat, as their operations involve extreme soil nutrient depletion and water intensive activities. It is widely anticipated that within 15 to 20 years the soil will no longer be productive — which is to say, it will no longer be capable of sustaining growth. One example of viable alternatives the approach that led to these negative inadvertent outcomes is found close at hand, in the age-old strategies of local nomadic and pastoral tribes.

Nomadic seasonal herding methods are ten times as sustainable by numerous indicators, including soil quality — pastoralists being highly mobile and their impact comparably light on the land. Even so, ranching operations receive virtually all of the government agricultural grants and subsidies that are available. Addis Ababa's cattle market is the largest in North Africa, and for years the policy has been to obtain the cattle from these subsidized ranches — a policy that must now be reevaluated. Contemporary reinterpretation and reinvigoration of pastoral techniques could now be supported by government to the widespread benefit of all involved, including the ranchers, who can learn the new pastoral tradition, and the dispossessed Afar, Anuak and Ogadentribes, some of whom are implicated in recent violent acts triggered, they say, because their land was stolen from them — they were displaced, ostensibly by international oil interests. In response to these social considerations it is clearly opportune for the city of Addis Ababa to support the nomad/rural population — which together constitute over 80% of the national census. There is even reason to believe that supporting the resident transients may more effectively support the transient residents as well.

The rivers in Addis Ababa start at the Entoto chain of mountains, north of the city, and flow south and southeast. In addition to these year-round rivers, there are many seasonal creeks that flow only during the rainy seasons. The intensity of these seasonal rains and the erosive force of the flooding they create are evidenced by the wild, steep slopes of these ravine topographies. If this water is slowed it will harbor productive habitats, green belts, and if collected it will provide for the population. The green belts, including rivers and green riverbank, play a formal role in defining the city's internal boundaries and territories — unfortunately, as previously noted, they also tend to become solid waste dumps and neglected, polluted spaces. Green frames have been planned for, and some green belts along the rivers



[Fig. 10] Green frames of Addis Ababa.

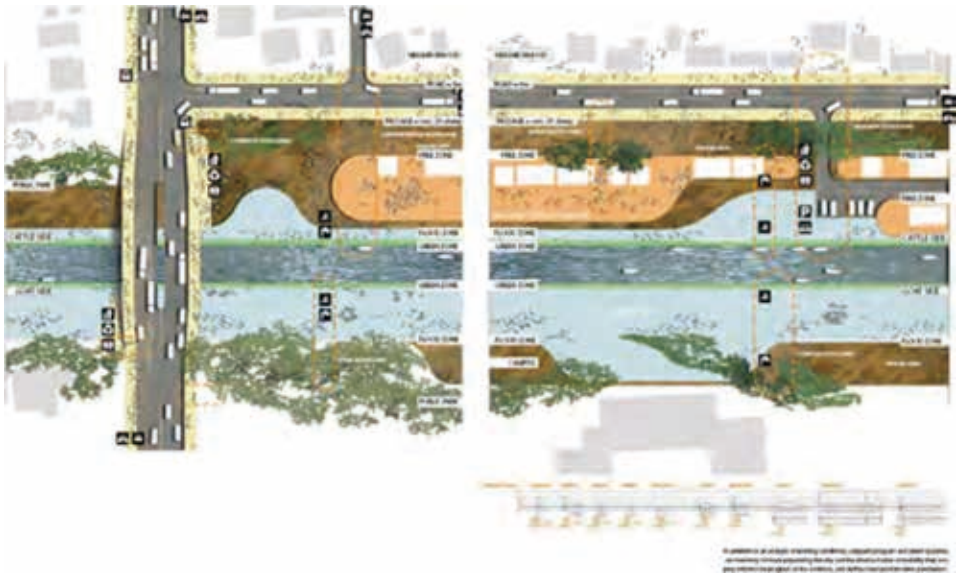
have begun to be realized according to the City of Addis Ababa Structure Plan of 2002 [Fig.10];

> *GREEN FRAME DEVELOPMENT*
> *Forest, woodland, buffer, and conservation areas should be located along rivers and streams; on flood prone, swampy, and steep areas of slope greater than 15% and around large scale industries, cemeteries, ground-water resources; landslide prone and eroded areas.*
>
> *GREEN BELT*
> *A standard depth of greenery on either side of rivers and streams at least 10 meters from the riverbank on each side in addition to a walkway 5 meters in width should be developed. Specialized facilities such as parks, botanical and zoological gardens could be integrated.*[9]

There is an urgent need to implement the recommendations outlined here regarding fundamental social and physical infrastructures. Through an analysis correlating the *need for nomadic mobility* through the city with the *need for clean water* in the rivers and the *need for healthy riverbanks* that are stable and accessible, a number of readings emerged that led to strategies for grassroots initiatives to implement the commendable intent of the structure plan in lieu of the financial support the city has hitherto been unable to provide.

PERFORMATIVE CORRIDORS

Performative Corridors is a strategy that yields space to seasonal flows of water while establishing continuous open space mobility corridors along existing rivers for seasonal flows of pastoralists [Fig.11]. In order to address relevant mobility factors — both within the city, and at the periphery — this strategy establishes movement drawn through a dual network consisting of roadways and green corridors. Here, programmatic compatibility is ascertained and bundles of linear circulation program are determined (i.e. vehicles and animals are separated, and, as local herdspeople emphasized that cattle and goats don't mix well, they have the option of circulating across the river from one another. This linear program is then strategically supplemented by clustered infrastructural elements, serving to make the corridors accessible to both formal and informal activities. These activities have numerous incidental outcomes of benefit to alternative economies — including addressing water quality and management, solving erosion problems, and establishing a nomad access network throughout the city. In addition to an analysis of existing conditions, adjacent program and latent qualities, an inventory of those populating the city, and the diverse modes of mobility they employ, informs the program of the corridors and defines their performative parameters.

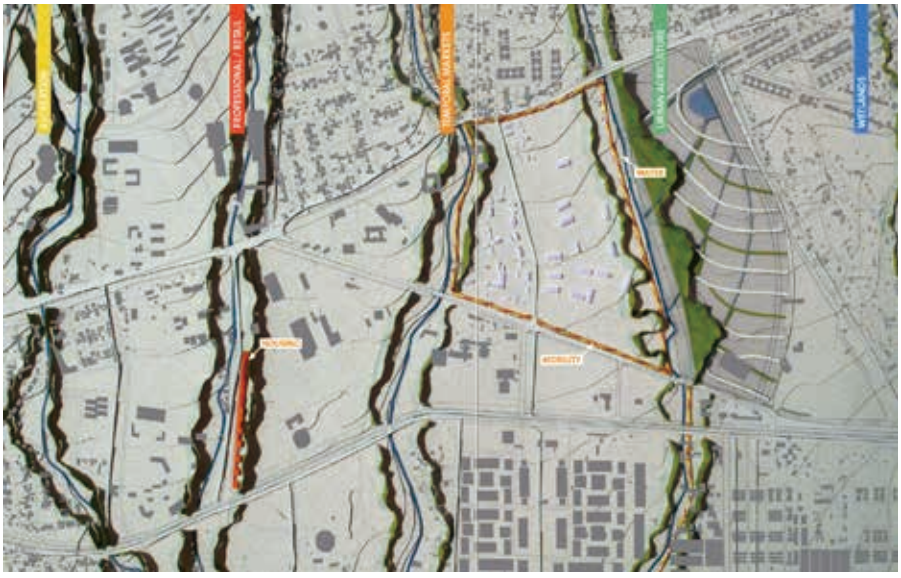


[Fig. 11] Accessing Performative Corridors.

Again, this strategy is in line with the recommendations of the Addis Ababa Structure Plan of 2002 — an important and effective outline of key strategies of benefit to the city. Having considered the document as a whole, we determined to advocate the correlation of parallel informal and formal forces through community networks, so that implementation of the Structure Plan is an inevitable outcome of activities that are certain to happen. The development priorities according to the Structure Plan are as follows;[10]

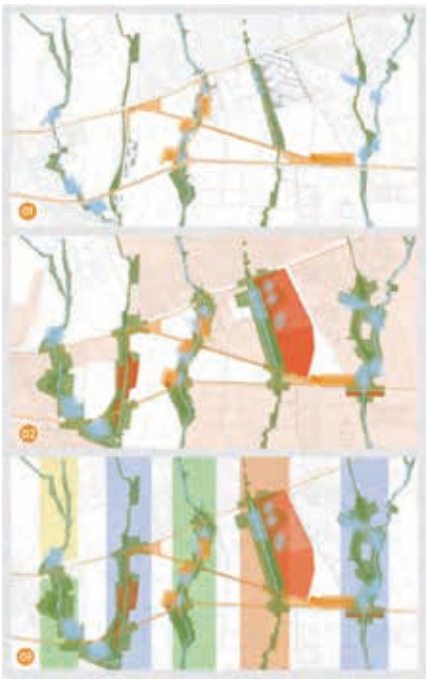
3.3.1 City Polycentrality
- including subcenters adj. to site
3.3.2 Market De-centrality
- improve quality of access/circ.
- provide parking + storage
- provide social spaces + sanitation
3.3.3 Strategic Investment Areas
3.3.4 Urban Road Network
3.3.5 Urban Mass Transport
3.3.6 Housing
3.3.7 Social Services
3.3.8 Greenways + Water Services
3.3.9 Manufacturing Ind. + Storage
3.3.10 Historical Structures

Those prioritized in the interrelated strategies outlined here are in **bold**. The current Structure Plan for the city of Addis Ababa identifies a number of crucial infrastructures and strategies that are fundamental to the long-term sustainability of the city. By focusing on [3.3.2] Market De-centrality, we seek to establish both long-term sustainability in the city's most sensitive zones and to enable the informal economy to strategically support the implementation of Structure Plan elements [3.3.4], [3.3.6] and [3.3.8].
When considering the possible rationales by which to identify locations for the de-centralization of animal markets, we determined that because of the informal status of suppliers (many are nomads or rural pastoralists), proximity to housing, water, and mobility were of primary relevance as they are fundamental to life. The cities' latent and generally neglected green corridors [Fig.12] have deep intrinsic value as relates to these three issues, and can provide the relevant underlying form determinants for the project.



[Fig. 12] Potential green corridors - Based on their proximity to the city and on existing qualities, inhabitants and adjacent activities, these corridors establish district, elicited identities: (left to right) Recreation, Professional/Retail, Temporal Markets, Urban Agriculture and Wetlands.

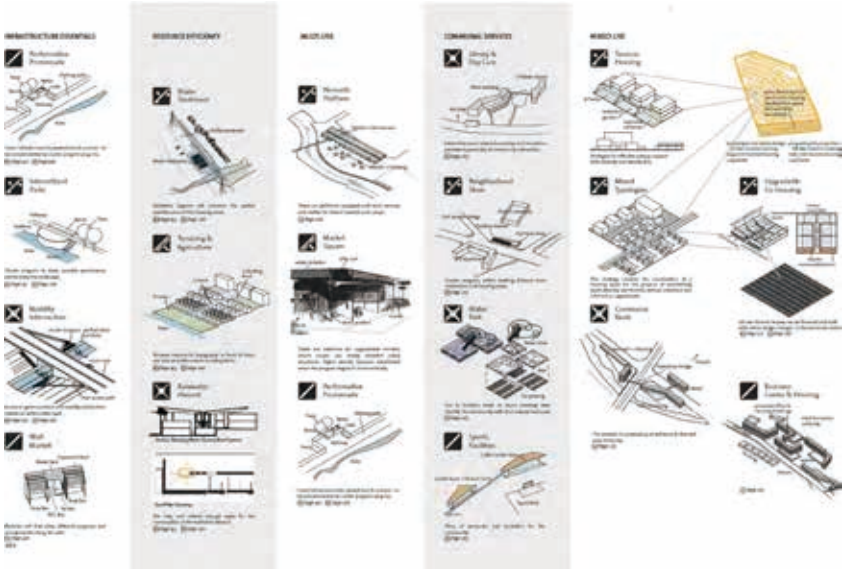
In support of 3.3.2 'Market De-Centrality', the scheme explicitly proposes a market decentralization strategy. Addis Ababa's many river corridors provide an opportunity to establish an alternative infrastructural network, enabling pedestrians, bicycles, and livestock to move from point to point throughout the city —- substantially avoiding vehicular traffic, and creating an altogether different urban experience. The new cattle markets required are to be located adjacent to these corridors, which are programmed to provide for mobility, water and housing for cattle herders — a solution to the current, problematic law requiring livestock be transported through the city by truck. This provides an incentive to nomadic herdspeople, who now must opt to either break the law by bringing their cattle to market on foot, at the risk of having their animals injured by vehicles or impounded by the authorities, or pay for transport and lose substantial profit for having to pay a middle man. The water strategy focuses on the different uses of water — bathing, swimming, farming, etc. — and coordinates them according to recreational water use, market and animal water use, agricultural irrigation and constructed wetlands for wastewater treatment. A subsequent comprehensive water strategy will address informal and formal economies of water. The housing strategy involves the coordination of three housing types for the purpose of maintaining diversity: apartments, vertical; individual; and informal, or *upgradeable*. The developer's site is related to urban agriculture, and as the complex grows, so diverse types of density are established throughout the site and in the periphery.



[Fig. 13] Phased implementation.

The strategy anticipates a phased implementation, of which the first phase involves correlating those activities triggering the transformation — primarily market decentralization, the economic driver, and water treatment, the quality of life determinant [Fig.13]. The first water interventions fundamentally have performative and spatial impacts, preparing for the re-discovery of the diverse corridors by the city's inhabitants. With this functioning set of mobility corridors, both housing and markets are enabled by the infrastructural efforts of the first phase. As the corridors and the activities they host are established they also opportunistically gain area, and as the second phase is implemented over time the entire network of natural corridors is systemically established. As the corridors in the city reach into the surrounding landscape – modeling a sustainable linear urban/rural network — the contrast of vehicle-free greenways with the congested city recalls early descriptions of Addis Ababa as the city that 'emerges from the forest.'

The third phase of implementation focuses on establishing maintenance and community networks. When advocating the informal, or coordinating its advocacy, it becomes clear that often people will do in social groups things of benefit to the group that they would not be willing to do on their own. When people are involved in social groups, whether an NGO or a church group or other community group,



[Fig. 14] Intervention index - Each intervention possesses a prototypical quality that enables contextual interpretation in different locations. The compilation functions both as lexicon and grammar.

local authorities find they can rely on their accountability and they are happy to work with such groups. These community networks are both flexible and accountable — and so make good partners both for the informal and the formal interests involved. One example of the structure of such partnerships in the US is found in the 'Adopt-A-Mile' program used for highways [11] — the government is responsible for infrastructure, and designated social organizations, for whom it is a point of pride to be fastidious, maintain the cleanliness and coordinate the use of the section.

We developed a set of strategic interventions to be deployed opportunistically in support of the phased implementation of the corridor scheme. Each intervention possesses a prototypical quality that enables duplication — reinterpretation — in different locations throughout the site, actively linking the 'formal' and the 'informal.' Since the prototypes respond to urban phenomena and the corridors to existing local qualities, the effect of these new interventions is to contribute to the city as a whole. The compilation works as both index and glossary.

BRINGING HIDDEN RIVERS TO LIGHT

The Structure Plan of the city of Addis Ababa is an important and valuable planning document — likely the most effective the city has established to date. Yet, because of 100% government ownership of land in Ethiopia, currently development in Addis Ababa, and in the nation generally, is approached on a 'tabula rasa' basis: this approach incidentally displaces many thousands of inhabitants and destroys the capability of the land to support habitat. This widely unpopular method is unfortunately also institutionalized through the city's Structure Plan, which promotes the provision of 'clean sites' for developers. This notion should be reevaluated for numerous reasons. First, the immediate result is to neutralize the land, hence the project in question, detaching it from the deep structure of the land and from the city's spatial qualities and potentials. The new West-East highway cited previously is an example of this detachment, in that it neglects to acknowledge the existing ways in which Addis Ababa's population moves and connects. The broader implications of this sensibility can be read in the countryside, where tribes like the nomadic Ogaden are responding violently to such displacement. These impoverished nomads formed the Ogaden National Liberation Front, who in 2007 attacked and killed 65 Chinese oil prospectors and their 8 Ethiopian guides, who had been authorized by the government to establish an oil field on the Ogaden's ancestral land.[12] In the city itself, a policy of displacement not only causes unrest, but literally dislocation — when hundreds of people are moved forcibly from a 'clean site' in the center of the city to one on the periphery. Under these circumstances, social and economic networks are ruptured — and spatial qualities and potentials are fractured. Both rural and urban, Addis Ababa is a thriving city with great potential to generate new urban ecologies, and new agricultural identities. Acknowledging these complex conditions, this strategy for *performative corridors* purports to establish a bond between 'governors' and 'governed' through community networks — a step towards what is referred to at the Addis Ababa as *mixity*, or *open-source urbanism*.

Performative Corridors was developed in collaboration with University of Addis Ababa in the context of the ETH-Zürich's MAS-Urban Transformations in Developing Territories under the chair of Marc Angélil, and several iterations of the work have been published. It featured in the Swiss Pavilion at the 11th International Architecture Exhibition in 2008 and subsequent catalog; in the book *LEARNING FROM ADDIS: Addis Ababa's Informal Urbanism*, we structured a narrative that was speculative — based on a design process — while in *Cities of Change: Addis Ababa* the author's narrative was structured around seven metrics, identified as 'stocks' and 'flows': 'stocks and flows' of people, water, space, material, capital, information, and energy. The 'hidden rivers' alluded to in the title deal with these 'flows' as well. This implication is relevant to the broader question of how urban design can contribute to sustainable city-making. In an introductory essay to the book, Marc Angélil and Dirk Hebel describe 'the flux model', a theoretical framework within which,

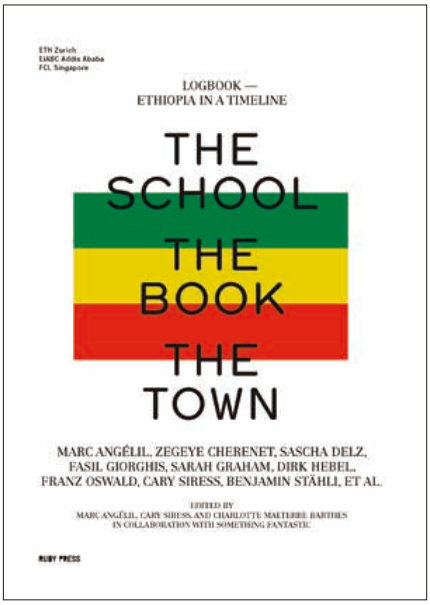
> *"... the city is viewed as a dynamic system, one delineated by stocks of resources and interrelated networks of material flows, including input and output cycles relative to long term development. Considering that stocks, flows, and (the metrics of) their transfer coefficients are temporal, or time-dependent,*

the research models the behavior of urban systems according to parameters that change over time. At the core of the research is an investigation into the flux of people, water, space, material, capital, information, and energy addressed in terms of both their physiological demands and morphological consequences. Ultimately, the impact of stocks and flows on the constitution of cities, and the potential for steering their principles toward the principles of sustainable development form the main thrusts of this endeavor."[13]

A grassroots pilot project implementing our strategy was initiated in 2008, and in 2010 the engineering group Arup was contracted by the City of Addis Ababa to establish a 'climate change masterplan.' Shortly thereafter Arup, who had come across the work and found it 'to give a usefully nuanced picture of the present conditions in Addis,' contacted us as authors of 'one of the most closely relevant papers' in *Cities of Change*, 'Parallel Urbanism', stating, "We are particularly interested in making sure we don't retread previous work and also that the workshop outputs are very practically focused on defining projects which can and will be funded." They were intent to focus on 'green-blue infrastructure', the urban river corridors and 'green/open/natural spaces of the city', working on 'a wide range of issues including urban sanitation, planning new development areas, mobility and transport corridors, flood risk management, urban heat island' etc.

[Fig. 15] Performative Corridors presentation panels and models.

We gladly responded to their queries as to who was involved from the city and other agencies, and which NGOs and international donors or lenders were involved. This work subsequently provided the basis for the C40 Workshop jointly hosted by the city government of Addis Ababa and Arup in order to develop their strategic development framework for metropolitan Addis, with representatives from the Mayor's Office, City Bureaus, federal government institutions, funding agencies and NGOs in attendance. Opening the workshop, the Mayor of Addis Ababa stated that he hoped, "the workshop would provide a strategy for the future and…have an immediate impact on the sustainable development of Addis Ababa. Sessions will focus on possible projects to improve river corridors and promote water and waste management in an area of the city identified for urban renewal. At the end of the workshop, I hope viable projects would be presented to the Mayor's Office and then to funding agencies…this consultative meeting is vital to learn more about urban riverbank management, flood control. Addis Ababa is blessed with an extensive network of urban river corridors but they are generally neglected. I hope the workshop would explore possible solutions for river corridor and green infrastructure regeneration and development."[14] Whether dealing with the flows of people or flowing water, infrastructure and policy together establish the framework. As designers of infrastructure addressing water flows, as for policy makers responsible for population flows, the best options will likely always involve bringing hidden rivers to light.



[Fig.16] *The School, The Book, The Town: Logbook – Ethiopia in a Timeline*, Ed. Charlotte Malterre Barthes, Berlin: Ruby Press. The project described here is further contextualized in this publication which will be issued by the Chair of Prof. Dr. Marc Angélil at the ETH-Zürich.

[Fig. 17] Green/Blue infrastructure.

Notes and Citations

[1] Kenneth, P. and Chrimes, M. (ed) (2001) The Great Builders, Thames Hudson, 68-70.

[2] Kenneth, P. and Chrimes, M. (ed) (2001) The Great Builders, Thames Hudson, 70.

[3] O'hara, P. (1999) The Encyclopaedia of Political Economy, Routledge.

[4] 'By hook or by crook' is a commonly used expression to describe determination or resourcefulness, i.e. 'I am going to get it done by hook or by crook.' Interestingly, it has recently been used more commonly to refer to mild forms of coercion, emphasizing the injustice involved with the threat of violence — by 'hook', interpreted as a physical object to ensnare, and 'crook' as in a thief or corrupt politician (this use of the term popularized in the U.S. by President Nixon's use of the phrase 'I am not a crook'. This use of the term is not consistent with the origin of the phrase, however, which was agricultural — the shepard staff has a specific shape to enable its use in herding sheep: at the top end is a rounded semi-circle, the outside of which (the 'crook') can be used to push sheep in a direction, and the inside of which (the 'hook') serves to pull them.

[5] 'Propriety' is a term riddled with sociological implications, and is related to ownership — whether or rights or of knowledge or of assets. In this case, it involves ownership of oneself — that is, self-control in the context of society. 'Impropriety' likewise describes the social unacceptability for behaviors that, while not technically illegal, are regarded as immoral or otherwise degenerate. 'Ownership in absentia' effectively does away with such social structures, and it may be seen thereby that the sense of propriety is currently of diminished influence.

[6] "Addis Ababa" from Wikipedia, http://en.wikipedia.org/wiki/Addis_Ababa

[7] Marc, A. (ed) (2007) Learning from Addis: Addis Ababa's Informal Urbanism, ETH-ZÜRICH.

[8] Addis Ababa City Government (2002) City of Addis Ababa Structure Plan.

[9] Addis Ababa City Government (2002) City of Addis Ababa Structure Plan.

[10] "Adopt-a-Highway" from Wikipedia, http://en.wikipedia.org/wiki/Adopt_a_Highway

[11] New York Times" on 25 June, 2007. "Numerous documented examples of these abuses exist, including a Human Rights Watch report issued in 2005 that documented a rampage by government troops against members of the Anuak a minority tribe in western Ethiopia, in which soldiers ransacked homes and beat villages to death with iron bars, among other offenses."

[12] City of Addis Ababa website, http://www.addismayoroffice.gov.et/

[13] Marc, A. (ed) (2010) Cities of Change: Addis Ababa, Birkhauser.

[14] City of Addis Ababa website, http://www.addismayoroffice.gov.et/

Frontispiece: Noboru Kawagishi and the author

Fig.1: From William Daniell's A Voyage round Great Britain (1814-25)

Fig.2: Vanessa Meister and the author

Fig.3-6, 10-15, 17: Noboru Kawagishi, Sebastian Alfaro-Fuscaldo, the author

Fig.7-9: ESRI

Fig.16: Ruby Press

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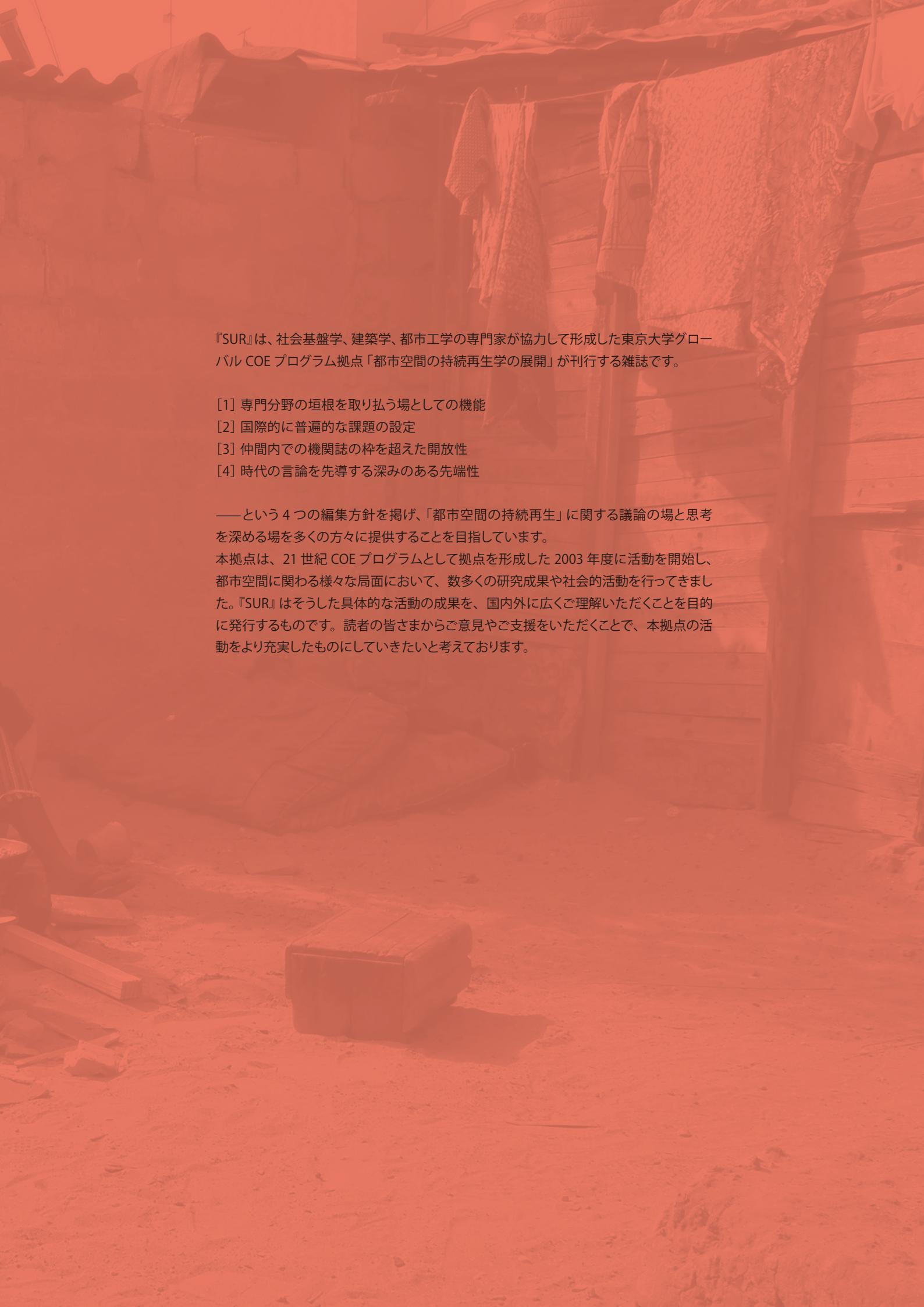

『SUR』は、社会基盤学、建築学、都市工学の専門家が協力して形成した東京大学グローバル COE プログラム拠点「都市空間の持続再生学の展開」が刊行する雑誌です。

［1］専門分野の垣根を取り払う場としての機能
［2］国際的に普遍的な課題の設定
［3］仲間内での機関誌の枠を超えた開放性
［4］時代の言論を先導する深みのある先端性

――という 4 つの編集方針を掲げ、「都市空間の持続再生」に関する議論の場と思考を深める場を多くの方々に提供することを目指しています。
本拠点は、21 世紀 COE プログラムとして拠点を形成した 2003 年度に活動を開始し、都市空間に関わる様々な局面において、数多くの研究成果や社会的活動を行ってきました。『SUR』はそうした具体的な活動の成果を、国内外に広くご理解いただくことを目的に発行するものです。読者の皆さまからご意見やご支援をいただくことで、本拠点の活動をより充実したものにしていきたいと考えております。