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INHABITING
THE
ANTHROPOCENE

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Stream 03/Inhabiting The
Anthropocene

Stream is a multidisciplinary platform for reflection that acts as both a laboratory for PCA agency and a space for exchange. Launched in 2008 by Philippe Chiambaretta, the research is compiled on a bi-yearly basis.

After exploring the affinities between culture and the economy, and the changes in our relationship to the world of work, *Stream03* addresses the planet-wide phenomenon of accelerated urbanism that has arisen from globalization. Our era is one of deep mutation. Demographic explosion has led humans to gather in large metropolises, which have become the main places for the resolution of challenges—between the growing consciousness of the environment and the omnipresence of digital technology—with their accompanying search for forms of economic, social and sustainable development.

Internationally-renowned academics, artists, scientists, and thinkers each open up to *Stream* in the form of lengthy interviews, essays, and portfolios, from a variety of disciplinary fields (philosophy, economy, geography, and sociology, among others) and creative practices, of which contemporary art, design, and experimental architecture are just the beginning. The result is a heightened understanding of the Anthropocene and its implications for both the architecture and the urbanism of tomorrow

nature, a way of thinking and acting which open things up to tomorrow's world. The fossil ideology has pushed us apart from living nature. We are coming back to it, notably on account of global warming to which we have undoubtedly contributed. There is a longing to get closer to this nature which makes our lives possible, provides us with our clothes, with biomass, and the like. DIY cultivation has become central again, including in urban spaces and in private gardens. Asking ourselves why so many people want to have their own vegetable garden would lead to many insights. Why do we have gardens? We want to see a tree grow. In the city, we want more than green spaces, we want living plants, bushy things, fruit trees which mark the passing of the seasons. The city, which has no temporality, needs nature, which symbolizes the passage of time. Nature is massively re-entering the city. There is not only urban agriculture but also the introduction of biological life in urban spaces—in public gardens, in parks, or on roundabouts. Re-greening the cities has become a real contemporary issue. In a way, it is the time scale of biological life which is reoccupying space.

“Re-greening the cities has become a real contemporary issue.”

Luc Gwiazdzinski is a geographer, professor of urbanism at Charles Fourier university, Grenoble, and president of the Pôle des Arts Urbains.

THE MALLEABLE, ADAPTABLE METROPOLIS: TOWARD A TEMPORARY AND TEMPORAL URBANISM

By Luc Gwiazdzinski

Time, “the meaning that human groups have given to change” (Tabonni, 2006), is key to the comprehension and management of societies, and a major issue for humans, organizations, and territories. It is naturally embedded in sustainable development approaches, which “respond to the needs of the present without compromising the abilities of future generations” (Brunstland report, 1987). Nonetheless, time remains key to understanding and to action; a control gauge that is much less-often called upon than energy or space in the production and management of cities and regions.

Times are changing, however. The spaces and times of our cities are undergoing transformation and desynchronization; they engender tension and inequality and various actors and institutions are forced to adapt. Above and beyond the first individual and collective responses, these transformations concern academics, urban planners, and municipal officials more generally, instigating changes in their ways of seeing, thinking, and governing. The materiality of urban space is thereby taken into account, along with flows and schedules, in an effort to design more livable, welcoming, and human cities.

These transformations also compel us to develop tools for a chronologically-based urbanism, inciting reflection on the dynamic character of a “malleable city” (Gwiazdzinski, 2007), in addition to the versatile nature of space and the built environment in relation to the time of day, the day of the week, or the year. This type of reflection on sustainable cities attempts to limit the consumption of space, reduce energy use, and maintain urban intensity with its attendant social life.

Urban planning, under the impulsion of modernism, has long been considered solely from the perspective of space. Time-based approaches are still a neglected field of public policy. However, the ongoing changes in our relationship to time and space call for a reevaluation of these values. Luc Gwiazdzinski identifies the reasons why he theorizes a greater use of time-based planning to address the challenges of sustainable urban development, insisting on the notions of temporary and temporal urbanism while promoting a malleable and adaptable metropolis.

A CENTRAL ISSUE

While it has become mundane to speak of space-time from the point of view of philosophy or physics, it is far less common to talk of space-time in terms of the city and the land. Yet, urban society, like any other, produces its own temporal system (Sorokin, 1964), which is the result of the social activities that take place there. As “the abstract measurement of concrete things” (Sue, 1994), time is but a convention; the product of the social activities that it manages to measure, harmonize, and coordinate. Social life proceeds within multiple times that are often divergent and contradictory in nature, and whose unification is relative at best. Such a precarious coalescence is worth analyzing in detail.

LONG FORGOTTEN

Time has long been the neglected stepchild in reflections on regional planning and development, in favor of infrastructure. Social politics have most often been considered a function of the material aspects of city life. Hardware has been preferred—or even opposed—to software. There are few disciplines or scholarly pursuits based on time, whereas there are so many specialists of space. The temporal dimension has been neglected by planners and town councilors with inversely proportional intensity to its importance. It constitutes an essential aspect of urban activity, yet until now, urban planning has always focused on arranging space to make better use of time (Gwiądzinski, 2001, 2012). The opposite approach that consists of time-based planning in order to effect the occupation of space is far less common. Many urban planning studies focus on space, but few on time, space-time relations, or its representation. Analysis of the formalization of urban change and its forms has long been privileged, favoring long-term city development approaches “to the detriment of an approach that would have aimed to provide the components of a typology with which the diversity of social times and their combination could be organized.” (Lepetit, Pumain, 1993). However, times are changing.

A LIVING BEING

Cities are not set in stone. One of the classic metaphors of the city is that of a living being which develops according to historical, social, political, and cultural events. Urban materiality is subject to continuous change (construction, destruction), which affects economic and social space (the emergence of new activities, new groups, and new practices), legal space (restrictions, the privatization

“Social life articulates itself over a multitude of divergent—often contradictory—timeframes ...”

of space), and/or politico-administrative space (changes in constituencies). Social life articulates itself over a multitude of divergent—often contradictory—timeframes, whose relative consolidation, which are part of a precarious hierarchy, poses a problem for any society (Gurvitch, 1963). The entire city is an ephemeral, fragile and fugitive, difficult-to-grasp universe; a labyrinth that evolves in time and space; a function of daily, weekly, monthly, seasonal, and secular rhythms in conjunction with more subtle forms of events, accidents, and unexpected uses. Times and schedules provide the tempo; they synchronize the occupation of space and define the limits of our lived spaces, be they mastered or alienated. The users of a city do not simply occupy its spaces but also its times. Though urban materiality—the outer shell that humans have created for themselves in the form of buildings—develops slowly, populations succeed each other according to diverse sets of rhythms and temporalities which are often difficult to pinpoint (Gwiądzinski, 2001). Some spaces come to life while others wane, some empty out while others fill up, some open up while others are continually in operation.

RAPID TRANSFORMATIONS

The rhythms of our lives evolve quickly, the culmination of a number of phenomena. Humans now live for approximately 700,000 hours. In less than a century, life expectancy has increased by 60 percent and the total number of working hours has been divided by more than half. Leisure time has experienced a five-fold increase, now amounting to fifteen years of human life (Viard, 2012). The amount of time people spend sleeping has decreased. The “24/7 city” is no longer a figure of speech: its direct physical consequences have been observed and analyzed (Gwiądzinski, 1998, 2002, 2005). Society has revised its biological cycles and the city has changed. Individuals have become more mobile as a corollary. They are multi-topical: they inhabit many different places. They are multi-active: they perform a number of activities as opposed to one single function. They are increasingly unstable: in their families, at work, in their geographic location. They are increasingly hybrid and unpredictable, and yet the range of urban offerings remains relatively static and rigid.

“The rhythms of our lives evolve quickly.”

These transformations have drastically changed our relationship to space and time, to the rhythms of our lives and our cities (Bailly, Heurgon, 2001). Traditional quotidian socio-spatial frameworks, in addition to the usual boundaries of our territories and our timetables, have been pried open. Activities have sprawled out; spaces, times, and priorities have fragmented and been recombined. New practices, constraints, and opportunities have emerged, for cities as much as for individuals. The rupture that has occurred in the synchronization of spaces and times has fused with a new form of temporality. Agitation, mobility, and a sense of urgency and speed have installed themselves as new values, in a strange sort of inversion. In the absence of feeling, only

noise—even violence—and speed allow us to truly grasp the present moment. This need to exist hardly manages to hide the difficulties of a society whose malaise lies in its inability to revisit the past, to project itself into the future, and to collectively build for the long-term. Such “neo-situationism” is evidence of our imprisonment in an emotional present, from which some suggest we should free ourselves (Emmanuelli, 2002).

Reunited by flows of information, humans never seemed to have lived in such a temporally dislocated manner. Acceleration, the advent of a global temporality, the rupture of social time and general desynchronization incite people, institutions, and territories to compete with one another. From the denizen who wants to take advantage of the city both day and night, to the salaried worker who seeks to avoid working an atypical schedule, everyone becomes a little schizophrenic. Our schedules are breaking under the pressure of desynchronization: everyone juggles their professional, family, and social lives, their workloads and their everyday obligations. Information technology and modern communications provide an illusion of ubiquity. Faced with an ever-mounting number of responsibilities and with the difficulty of mediating them, the “fatigue of being oneself” (Ehrenberg, 1998) sets in, threatening the most fragile with overexertion.

On another scale conflicts arise between the individuals, groups, regions, and neighborhoods of the “poly-temporal city” who no longer share the same rhythm of life. Worse, new types of inequality begin to divide populations, organizations, and neighborhoods, as they are not equipped to deal with the acceleration and increasing complexity of social time.

INDIVIDUAL AND COLLECTIVE FORMS OF ADAPTATION

In order to overcome the consequences of these changes and the tensions that accompany them, people, associations, and regions have reorganized and adapted at different scales.

SLOWING DOWN

From an individual point of view, some have decided to get around the “cult of urgency” (Aubert 2010) by letting go; taking a break or regaining control of their lives and opting for relaxing hobbies such as walking, yoga, gardening, or bargain hunting. Elsewhere, academics and essayists have for a number of years been eulogizing idleness, and networks such as Slow Food and Cittaslow have begun to flourish. The do-it-yourself and hobby crafts movements have accompanied the development of the

“There is a trend toward the hybridization of practices, times, and spaces, and to new assemblages, alliances, and collaborations...”

shared Web and shared software (Flichy, 2013). Michel de Certeau described the practice of “bricolage” (de Certeau, 1990) to articulate the idea that artisan-like inventiveness can sometimes be considered as an art form—the art of the detour, of craftiness—which allows us to avoid the constraints of the established order

OPTIMIZATION

Technologies, Sharing, and Collaboration. Some technologies favor adaptation as a way to deal with desynchronization. In the absence of shared meal and work schedules, appliances such as freezers, DVD/VCR recorders, micro-waves, and mobile phones allow each individual to organize life according to their fancy. There is a trend toward the hybridization of practices, times, and spaces, and to new assemblages, alliances, and collaborations: co-construction, co-development, co-habitation, co-conception, and even co-voiturage (car sharing). No longer based on a traditional hierarchical structure, collaborative work is undertaken with the help of new information and communication technologies—even if people are not in the same place and time.

“The borders between the times and places of work and of pleasure are dissolving.”

Adaptability and Hybridization. The borders between the times and places of work and of pleasure are dissolving. “Third-level spaces” develop, in which a mix of different activities take place: café-libraries, café-laundromats, business-and-art incubators, day care centers inside train stations which have been

converted into supermarkets, rooftop gardens, eco-museum housing estate.

Modularity. There is also a trend toward optimizing available space, as in the offerings of a well-known Swedish retailer, who proposes “convertible solutions” for spaces of a limited size. “In today’s cities,” explains Mia Lundström, the company’s strategic director, “the average space per person is fifteen to twenty square meters. It makes sense that space optimization would be one of our key ambitions. Of course, unlimited spaces and resources inspire us. Yet finding solutions for compact spaces is an even more exciting challenge, because it forces us to be more creative.” Modular, adjustable, and convertible furniture is fashionable, as it allows people to optimize their living space—day beds, sofa-beds, fold-away-beds, folding chairs, coffee tables that easily turn into dining tables, detachable cubes, furniture on wheels. On another scale, modular housing projects are being developed that adapt themselves to the life-cycles of their residents. Developers are offering adaptable homes which are able to accommodate the unexpected: partitions can be moved, rooms can be added on. Recreational vehicles and trailers further enable multi-purpose lifestyles; they provide a hybrid form of transport and habitat. Elsewhere, time-share housing also integrates different solutions.

Rotation. Examples of revolving activities have always been indigenous to the city: carnivals that take possession of public spaces for anywhere from a few hours to a few days; circuses that are set up in city squares; markets under bridges; schools in which forms of community activity take place in the evening; or streets that are appropriated as football pitches. Faced with the rarity of space and the need to facilitate encounters, the city adapts, and new uses of public space develop at different temporal scales. These can include but are not limited to the closure of certain riverbanks on Sundays; the ban on driving cars downtown in the evenings (Rome); the annual conversion of roadways into man-made sandy beaches (Paris); the refashioning of parks into outdoor cinemas at dusk; the alternation of public squares as gardens in summer or ice skating rinks in winter (Brussels); the right to park in bus lanes at nighttime. Each of these efforts is part of the differentiated use of the city and its public spaces according to the time of day or night, the day of the week, or the season (Gwiadzinski, 2006).

Optimization of Temporary Spaces and Amenities. In a context of economic restructuring and flux, precarious forms of habitat crop up within the city. Slums and encampments, canvas shanties and cardboard-blanket fusions overwhelm a whole host of “species of spaces” (Perec, 1974): vacant lots, interstitial tracts of land, in-between plots, abandoned urban areas, inhospitable access points to transport infrastructure. In 2006, eighty-five thousand people lived in makeshift shelters in France alone. In response to increases in rent, the unavailability of social housing, and the culmination of personal and professional difficulties, a majority of them sought refuge in year-round campgrounds. Provisional situations become prolonged stays; seasonal fittings are reworked into semi-settled outposts.

EVENTS AND TEMPORARY INTERVENTIONS

Artistic and Cultural Events. Other forms of collective adaptation are identifiable at different scales in both time and space, mainly in response to the need to facilitate meetings, forms of socialization, and cultural consumption. Our agendas for the “metropolitan season” quickly fill up with events, demonstrations, parties, and festivals—in France, these can include the *fête des voisins* (meet-your-neighbor day), the *videgrenier* (neighborhood garage sale), the *brocante* (flea market), the *fête de la musique* (annual national music festival), and the *Nuit blanche* (all-night art festival), among others.

New rituals such as these celebrate memory, identity, and a renewed sense of belonging in the city. They enable people to act like kinsfolk despite living in contexts of continuous territorial competition; they allow citizens to maintain the illusion of social connection in opposition to a rather diluted form of quotidian collectivity (Gwiadzinski, 2001, 2011). The regime of the “intermittent metropolis” is established: a temporal counterpart to the archipelago’s spatial character. The fleeting and festive event-based city unfolds. Conservation and cultural heritage are allowed to preside over space on a yearly, weekly, or hourly basis.

Winter, summer, nighttime, evening, and soon mornings, lunchtimes and after work hours are identified, set apart, and designated to construct a “spectacular” rhythm, in contrast with arrhythmia. These types of ephemeral art events enable the tactical overturning of space and time; a transformation of the city to which art—and especially street art—is called upon. Artists help themselves to the city; they take hold of its boulevards and refashion them on a whim. Over the course of a few hours or a few days, their interventions sculpt new rhythms, invent new places, and fill in the blanks; they remodel space and time. Events are the thread from which alliances are woven, they bring the everyday to life, transfigure the real, and make public space more human, for a time. The arsenal of their apparatus is light—it simply rustles the urban fabric rather than rupturing it. Events are fugitive and sometimes cyclical space-times. They embed themselves in competitive environments before self-destructing and allowing the city to return to its usual state. They reveal the temporal and sensorial dimensions of the city, they uncover the importance of a style of urbanism and regional planning that takes these dimensions into account. All of these characteristics allow events to remap terrain: its positions, its centralities. They constitute an outpost for the integration of time and rhythms in the observation and planning of urban spaces. They are examples of “presential” and “situative” identities, in which culture shifts from one of objects and their materiality to one based on meeting and exchange.

Artistic Détournements and Temporary Installations. Many artists and activists have intervened in public space, for example to change the urban furniture. This act is part of a general movement to play around with urban formations by questioning their adaptability and flexibility within the street and surrounding real estate: the artist The WA transformed a garbage can into a basketball net, while *Démocratie Créative* in Strasbourg, turn public squares into playgrounds. The collective *Etc* experiments with methods and tools in an attempt to make give people back their place in the urban fabric, developing temporary fixtures in a form of participative urbanism. This is also the case with the young Grenoble-based collective *Moducité*. Others engage in the creation of practices to transform public space for a limited time, such as *PARK(ing) DAY*, a worldwide event every September which encourages citizens to turn their metered parking spaces into temporary public parks. The chairs in the *Jardin du Luxembourg*, and the GPS-tracked bicycles on free six-hour-loan in the city of Modena by the group *Snark* are another example of this.

THE POLITICS OF TEMPORALITY

In parallel to these individual and collective adaptations, a public politics of temporality has emerged. The movement started in France in the middle of the 1970s when a taskforce from the Ministry of Quality of Life worked on lengthening vacations, creating flexible working hours,

and making the urban environment more lively. Bison futé (a government information service aiming at reducing traffic congestion, most notably during mass departures for public holidays), flexible schedules, daylight savings time, and school vacation periods organized by region, have survived to this day. At the local level, fourteen municipalities put their efforts together in an attempt to reduce the number of traffic jams, improve services, and reduce waste, particularly in terms of shared amenities and by encouraging friendliness in cities.

In the 1990s, first in Italy and then in Germany and France with the help of the DATAR, the government put in place a number of structures, monitoring agencies, and a strategy of communication, dialogue, exchange, and experimentation that attempted to institute changes in the temporal approaches to cities. Without much funding at all, they promoted a temporally-sensitive point of view on society, suggested new cartographies, experimented with new opening and closing times for businesses and transport schedules. They participated in public debates around such topics as nighttime and Sundays, with the intention of improving quality of life. These local initiatives affected approximately thirty localities (Mallet, 2011), but unfortunately did not result in the adoption of any national policy on the subject of time. This should not prevent us from engaging in important debates on our society, however, in which pressure is mounting.

TOWARDS A TIME-BASED URBANISM AND A MALLEABLE METROPOLIS

Faced with a rupture in space, temporality, and mobility, the richness of communications tools, a polysynchronous and de-centralized mode of organization, and an open form of planning, it has become necessary to take time into account in urban planning.

AN URBANISM OF TIME

Focusing on the articulation of space and time requires rethinking the urban system in terms of flows rather than stock, time more than reserves, the temporary more than the permanent. It is necessary to move from the chronotopical approach in which the “chronotope” is defined as “a place for the convergence of the spatial and temporal dimension” (Gwiądzinski, 2009). It is necessary to rethink the relationship between the city and its users in terms of times and spaces, moving from the event to the ordinary, from the exceptional to the “urban quotidian” (Paquot, 2001). The exact definition of a “time-based urbanism” would be “the ensemble of plans, schedules, and agendas that coherently act upon space and time, enabling the optimal organization of technical, social, and aesthetic functions in the city, in an attempt to create a more human, more accessible, welcoming city” (Gwiądzinski, 2007). Likewise,

it is worth thinking about a “temporary urbanism,” that would focus on the partial modes of occupation of space and time in the city and the “calendars” that would provide for the co-ordination of activities (Gwiądzinski, 2009). Appropriate tools for the spatio-temporal representation of such activities must be developed. Gaston Bachelard and Henri Lefebvre’s “rhythmanalysis” (Lefebvre, 1992) could perhaps be undertaken, according to which, the two scholars imagined a form of politics that would enable people to live in the heart of a multiplicity of rhythms, each naturally layered upon the last, in tension. Choreographers and musicians could be called upon to imagine such “city dances,” constructing a geo-choreography (Gwiądzinski, 2013) and finding the right sort of tempo. This approach necessitates thinking of the “temporal architecture” of the city (Bondiglioli, 1990) and the territory as the expression of urban culture; at once the arrangement of various temporal configurations, and the art of conceiving, designing, and directing their realization. It allows us to employ notions such as “temporal identity and color” which characterize places in space and time, enabling the establishment of their “temporal signatures.” Finally, the necessity of the emergence of new professions: “time architects,” “time managers,” “urban temporalists”—people whose job it is to orchestrate the music of the city and to keep its time.

THE MALLEABLE METROPOLIS

This first “census” of individual and collective adaptations, from the basis of the tools and procedures of chrono-urbanism which still remain to be developed in the current context of transition, provides the basis for the concept of the “malleable city”, a durable city that can be shaped without rupturing it (Gwiądzinski, 2007, 2011).

Malleable on Various Levels. Malleability can be understood at different levels of the production and governance of the metropolis, taking into consideration the issues, practices, and evolving needs within a territorial design logic. The first of these is the development of a project in advance. Malleability lies in the ability to make changes afterwards, but also in taking into consideration existing configurations. It necessitates certain tools: dialogue, co-construction, interfaces, and simulations that are capable of assuring the right level of “imagibility,” according to Kevin Lynch (1969), and the stages upon which projects can be debated and co-constructed. The second level is that of the production of the neighborhood—in which the amenities, housing, and public spaces are flexible, adaptable, and changeable according to their users’ needs. A first direction is the accumulated changeability of urban and architectural space, based on the idea of leaving the city in an unfinished state. The plasticity of the city must be planned for with regard to future changes in the way people use it. “Societies do not slide into the built spaces of the city like hermit crabs into their shells” (Lepetit, Pumain, 1993). A possible direction is to put in place adaptable equipment, with forms that are flexible and can be moved around according to the needs that arise (Gwiądzinski, 2010). The third level,

in which we are particularly interested here, is that of the citizens usage of the existing infrastructure. This requires allowing the population the ability to use existing infrastructure in a different way, or to ensure the multi-functional character of spaces at different scales. Paris Plages provides a possible example of this.

Devices and Regulations for Collective Space. Malleable cities take into account the constant evolution of their uses on multiple scales, particularly when considering the possibility of creating a sustainable city in which the consumption of space is minimized and the intensity of urban interactions is maximized. The malleable city is a place in which spatial optimization occurs by way of adaptability, modularity, and the alternating use of public space and buildings of different temporal scales (sometimes a matter of years, sometimes seasons, sometimes days), and spatial scales (from dense housing schemes to neighborhoods and streets). Malleable cities necessitate the development of a certain number of devices: urban furnishings which are adaptable, modular, and convertible; signage that functions in real-time and which is able to be changed as time goes by; new designs; and most importantly, co-operative forms of planning at each step. It is not a 24-hour city, not a ruptured or fractured city, but a city that functions in a collectively intelligent manner—one in which there is room for experimentation in addition to the ability to make mistakes and turn back.

Reflection on the idea of modular cities requires moving from the notion of “public space” to “collective space,” spaces that are open to everyone: roadways and parking spaces, collective facilities, public transport, access points, green spaces, cultural spaces, businesses, transitional and leftover spaces, semi-public spaces, electronic spaces, or vertical spaces. It requires thinking about new rules and regulations for the alternating use of collective spaces in terms of hospitality, urban life, and the development of exchanges. These affect the agglomeration at all different scales: rules for sharing public spaces between people; spatial limits (zones) and temporal limits (day, evening, night, season, etc.); signage and legibility of spaces both in terms of security and social responsibility; management and planning, including scheduling for the various forms of collective use; definition of a Charter of use for the collective space and behavioral best practices; conflict resolution, particularly between temporary and marginal persons when allocations change; adaptability of the urban devices and their differentiated function in the collective (benches, bus stops, posts, retractable markers and machines, sign posts); toll booths and the cost of utilization at different times of day and on different days of the year; changes to information and its diffusion according to different uses.

Governance and Principles. Detailing the aspects of the malleable city also means thinking of the appropriate spatio-temporal tools for planning and governance: the installation of “local platforms for innovation,” flexible enough to adjust to the tempo of each city; “temporal schema for cohesion” in order to manage different regional agendas; but also the establishment of a principle of “high temporal quality” to

which each project and new public policy would be subject. Finally, flexibility and adaptability require the adherence to certain principles so as to prevent the emergence of new forms of inequality between the individuals, groups, neighborhoods and regions of the polychronological metropolis—as in the right to the city, in Henri Lefebvre’s terms (Lefebvre, 1968), in which there is a notion of participation and of urban equality in both space and time.

Openings. The spatio-temporal approach in our cities is a great source of wealth. It puts the idea of adaptability and the modularity of “malleable” city spaces and regions to the test. It allows sustainable development and creativity to cross-pollinate by associating other actors. More generally, it opens up a host of questions on observation, organization, development, durability, citizenship, and identity. “Temporal ecology” (Gwiazdzinski, 2007), which integrates both the domains of the sensorial and of urban comfort, becomes possible, and in turn allows us to work together and to live in a convivial manner, in the way that Ivan Illich describes (Illich, 1973). The idea of “temporary living,” “mobile living,” “living on the go,” and “habitational flow” are questioned. Such an approach requires us to reflect upon the notion of citizenship itself—a form of “ephemeral and situational citizenship” may even be conceivable. It begs the question of identity as a matter of zones, or of traces; if we can move from having a “territorial identity” to having an “open and situational identity.” Finally, the evolution of the relationships between times, spaces, and temporary habitats incites reflection on the construction of new metropolitan “trust contracts”, even if for a limited time.

The time is nigh; the slack must be taken up. The key to the future is in our hands: we can make choices in favor of the quality of life, sustainable development, and the option to leave things open, assuring the greatest amount of diversity at every level by encouraging the ability to reflect, to design potential plural futures, and to organize for creative activity. In the end, it is about working towards a mastery

“The spatio-temporal approach in our cities is a great source of wealth.”

of time, of negotiation, of conviviality, and of cohesion at the urban level, and against the dictatorship of networks, excessive competition, rupture, fissure, and inequality.

It is up to each and every one of us to set up and maintain our temporal understanding, at the national and local level, in our institutions as well as in our families. It’s up to us to prioritize the issues and to think collectively, to decide if it is worth the effort, and how far we can go. It’s up to us to create new ways of inhabiting the space and time of our cities.

Future of Time

Interview with Étienne Klein

Étienne Klein is a physicist and philosopher, and director of research at the CEA.

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Do you feel that the beginning of the twenty-first century is really a time of rupture? If so, what are the primary factors?

Although we are probably living through one or even many ruptures, that does not mean we are able to identify them properly. In general, we are not really conscious of the revolutions that we initiate, nor are we conscious of the revolutions we undergo. It is a bit like physics: at first, conceptual revolutions are thought of as simple evolutions. In 1905, for example, special relativity revolutionized our concepts of space and time, most notably the way in which they were connected. Special relativity was first thought of as a simple adjustment to Newtonian physics, which it had invalidated. This example is a parabola: the fact that it is difficult, impossible even, to understand the implications of a revolution at the very moment of its occurrence impacts the language we use to speak of it. Prejudices, approximations, and linguistic habits wear down our ability to perceive the radicalism that is inherent to the changes themselves. Once this initial way of speaking of revolution embeds itself in people's everyday thought, it is difficult to rethink it in a way that expresses what it really represented.

Our altered relationship to time is at the very core of contemporary mutations, and the disruption of time has in fact become an obsession for our societies. The result of changes in technology and our new lifestyles, our experience of time is such that it feels fragmented, fleeting, accelerated or multiplied—even though, of course, it can only remain the same. For Stream, the physicist Étienne Klein has investigated the idea of an anthropological rupture before explaining his work in “cleaning up the verbal situation” as regards the notion of time, the changes in our relationship to time, the “chrono-dispersive” society, and the questioning of the notion of progress, and its corollary—our incapacity to project ourselves.