The sustainability of a financialised urban object: the case of Sihlcity in Zurich

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ABSTRACT

By combining several types of use, the major urban objects such as private, multi-purpose complexes (commercial and leisure centre) or public / private ones (sport stadiums and commercial centre) that have recently multiplied in Switzerland can contribute to the construction of "the city on the city". In parallel to these changes of a technical nature, we are also witnessing the growing intervention of institutional investors in the financing and ownership of these complexes. The purpose of this article is to demonstrate how the intervention of new financial actors is modifying the production of sustainability in the case of urban objects. More specifically, this consists of developing a conceptual framework that makes it possible to grasp the situated relations between financialization, sustainability and territory. This conceptual framework is then applied by means of an analysis of Switzerland's largest multi-purpose complex, which has been purchased by financial actors.

Key words : institutional investors, sustainability, urban object, institutionalist and territorial approach

CREDITS

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Introduction

Urban objects such as football stadiums, commercial centres or airports are today considered to be crucial elements for improving the sustainability of the city. Creating them is, in fact, one of the public authorities' major levers in order to offer the most effective and sustainable public services possible on the one hand, and to improve the overall functioning of the city, the conurbation or even a larger area on the other. Within this framework, and in order to combat urban sprawl, one current priority area is that of increasing the density and multi-purpose aspect of activity in the city. Over recent years, the multi-purpose complexes that have multiplied in Switzerland's major cities are moving in the direction of "building the city on the city". These urban complexes unite various purposes, whether private (commercial, leisure, residential or offices) and public/private in the case of partnerships (football stadium plus commercial centre). In parallel to these sustainability concerns, we are today witnessing profound changes in the financing modalities of the built environment. An increasing number of private and financial actors are becoming involved in the financing and ownership of urban objects. In Switzerland, these "investors by trade" can be either financing companies quoted on the stock exchange or institutional investors such as real estate funds quoted on the stock exchange, pension funds or insurance companies (Theurillat et al., 2006).

This hold by financial actors on the urban environment undeniably brings with it a certain number of changes to the city's production. (Clark, 2005). To our knowledge, research work on the integration of sustainability and investment policy for the urban environment on the part of financial actors is recent and as yet not extensive. To date, research has more specifically addressed the role played by major US pension funds in the creation of sustainable funds within the framework of urban revitalization operations (Hebb 2005a and 2005b; Hagerman, Clark and Hebb, 2005 and 2006; Hagerman 2007a and 2007b). However, these different experiences have not been approached by means of the processes, i.e. by the concrete conditions and modalities of investments in projects from the angle of sustainability and of the various actors involved.

The objective of this paper is to demonstrate how the intervention of new financial actors modifies production and sustainability in the case of urban objects. In particular, it is a question of developing a conceptual framework that makes it possible to grasp the relations between "finance", "city" and "sustainability" via the reconstitution of the urban production network. More precisely, this framework is based on the process of producing an urban object and a three-dimensional analysis (Crevoisier, 2004): firstly that of the actors and their relationships; secondly, the technical, economic and financial aspects and finally, the process understood in terms of a series of relationships that evolve in time and space. This is what we term an institutionalist and territorial approach. Here, sustainability is understood as being a product of interactions between the various actors, who will define the urban object, create it, and then operate it.

The first section of the article describes the way in which the anchoring of capital can take place, and how sustainability can be taken into account within a local context, which leads to the presentation of an institutionalist and territorial approach to urban production. In the second part, the pertinence of this approach is illustrated by an analysis of Switzerland's largest multi-purpose complex, which has been purchased by financial actors. In conclusion, we return to the approach proposed and the lessons that can be learned from the case study.
1. A conceptual framework linking financialization and sustainability

This section aims to build up a territorial approach to the system of producing the multi-purpose complexes that have developed in Switzerland over recent years, in order to link "financialisation" and "sustainability". The system is, in an initial phase, reconstituted from the angle of the various actors involved in the urban production process, using two fields of literature from urban geography that handled issues related to the "financialization of the city" and "urban sustainability" separately. In our opinion, this separation illustrates logics that are basically contradictory, and which can be revealed via the concepts of voice and exit developed by Hirschman (1986). This can provide a wider picture of the difficulties of linking the financial and real spheres of urban production. This will permit us, in a second section, to propose an institutionalist and territorial approach to urban sustainability.

1.1. Financialization, city and sustainable development: relations that appear contradictory at first glance

Financialization and sustainability of a city appear represent contradictory relationships. On the one hand, recent work on the "financialization of the city" has revealed changes to the production system, resulting in the intervention of financial actors in the financing and ownership of the urban environment. By becoming a type of asset, the urban environment is also subject to spatial comparison and the threat of exit on the part of investors. On the other hand, within the framework of sustainable urbanism, the production system is viewed from a wide angle since it is based on a participative approach that potentially involves all the actors within an urban project. Placing these different actors into perspective will make it possible to present the pertinent system thereof, for the case of the multi-purpose complexes built in Switzerland.

The financialization of the city: the transformation of the production system, and the city subjected to exit

Some literature on the urban real estate markets reveal that the intervention of financial investors in the ownership of company property leads to a dissociation of the function of investor and real estate owner and that of economic entrepreneur and tenant (Halbert, 2004; Marty, 2006). The rupture of the logic of specialized investment, whereby the investor is also the owner of his building, renders the production system more complex and leads us to make a distinction between three types of rationale.

Firstly, by becoming a type of asset the built environment is evaluated according to a rationale based on methods of financial management and on the establishment of ratings depending on criteria of risk and yield. These evaluations may lead to different types of conduct on the part of institutional investors, depending on their positioning strategies (with criteria such as core, value-added or opportunist), both within the real estate market in general and within operations for urban renewal in particular (Adair et al. 1999 et 2003). Investment rationales can, however, be highly subjective (Roberts and Henneberry, 2007) or simply based on speculative, short-term logics (Nappi-Choulet, 2006). An urban infrastructure is consequently a financial product that is supposed to have a double advantage for institutional investors. On the one hand, the advantage is that of procuring fixed, regular yields based on the rents, which are then distributed to shareholders in the form of dividends or added value (real estate

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1 By "urban environment"; we mean urban infrastructures, buildings (belonging to private companies - commercial or offices), or public utilities (e.g. hospitals), or public facilities (traditionally in the hands of the public sector (transport and communications, utilities, etc.)
investment companies and funds, for example), or to members in the form of benefits (insurance companies and pension funds). On the other hand, the advantage is that of diversifying portfolios.

Secondly, for those who operate or rent real estate, the infrastructure is an *economic product* and a *work space*. These actors have a real economic rationale, i.e. one based on achieving turnover by supplying goods and services to consumers. In the case of real estate projects, whether entirely private or as public / private partnerships, the users / tenants who are of interest to the institutional actors depends on the combination of purposes: essentially commercial, leisure, offices, hotels or high quality apartments (Fainstein, 2009). Investing in the urban environment will thus depend on the intended purposes of the urban projects.

Thirdly, and since it is no longer simply a specialised physical object, the urban infrastructure is a *commercial product* that must be sold to third parties. The role of real estate promoters is therefore essential. These promoters, who are usually development companies, also handle the setting up of urban projects, which must be negotiated and positioned among investors and operators. They thus intervene in the co-ordination of the various specialized professions (architects / engineers for the design; general contractors for the construction; real estate experts and advisers to evaluate profitability - in terms of economics and financial - of the project).

The entrepreneurial role of development companies was highlighted in the success of urban projects (Healy et al., 2002; Guy et al., 2002). Torrance (2009), within the framework of developing a global market for urban infrastructures, traditionally in public hands (networks: highways, water, electricity; buildings: hospitals, for example), demonstrates the essential role played by the various specialized professions in the investment system of the built environment. Institutional investors and future owners of the built environments, acting from a distance, in fact need intermediaries in order to gather the local information that is essential for investments.

In fact, the production system is, in this case, centred on the private actors. With the emergence of financialization, the production system is becoming more complex: the financial actors must therefore be clearly distinct from the real estate entrepreneurs, who handle questions relating to the development and execution of projects. In parallel, and by becoming a type of asset, the built environment is subject to a *spatial comparison and thus the threat of exit* (Hirschman, 1986) on the part of the private actors, and more specifically the institutional investors. With the internationalization of the real estate markets (Nappi-Choulet, 2006), this comparison can take place from a considerable distance. It can also be a double one, since it can take place on the *real markets* on the one hand, and on the *financial markets* for the built environment on the other. The institutional investors quoted on the financial markets (real estate companies and investment funds, for example), must take into account the behaviour of the investors (the shareholders) on the financial markets. These latter invest according to a portfolio logic based on the comparison of the risks and yields of various categories of assets (stock in companies, State bonds, derivatives, etc.) (For a discussion of the notions of risks and yields, both real and financial, see Corpataux et al., 2009). More fundamentally, this comparison is based on the possibility for investors to sell their financial stocks rapidly (liquidity) in order to purchase other assets in other companies, sectors or regions (mobility) (Corpataux and Crevoisier; 2005).

**Sustainable development as a "collective territorial construction"**

Work on the relations between "city" and "sustainability" stresses the fact that construction methods and the planning of cities are today factors that are increasingly marked by the precepts of sustainable development. In short, this can be interpreted as an alternative model
aiming to render the city more compact by "building the city on the city", unlike the functionalist model of separating the urban functions (zoning). Rebuilding the city on the city thus leads to various reflections in terms of social and functional mixing, the preservation of cultural heritage, and the insertion of the built environment within the urban fabric (Emelianoff, 2002), or even in terms of urban metabolism (linked to the consumption and use of materials and energy) (Bochet and Da Cunha, 2003).

Sustainable urbanism is also a new way of perceiving the urban production system. For some authors (Gumuchian et al., 2003), all the legitimising actors other than those who are strictly institutional are called upon to act on the space in which they live. This new form of democracy - which is at times called dialogics, in which experts and laymen share their knowledge (Callon et al., 2001) - is based on the idea that sustainable development constitutes a social apprenticeship process based on participation, information and joint action (Da Cunha, 2003). Going beyond personal, contradictory interests is possible by means of voice and negotiation, which makes it possible to reach compromises between all the stakeholders and to design sustainable actions. The multi-actor processes are also multi-criteria ones, in the sense that the territory intervenes as a multi-dimensional (economic, social and environmental) entity, to be planned for the long term within the framework of a territorial equity that aims to avoid problems that are internal to a territory then going beyond it (Zuindeau, 2000).

Implementing the principles of sustainable development within the frame of public/private governance is not, however, without certain ambiguous aspects. These can be of two types.

The first applies to the limits of the participative approach (or collaborative planning), on which sustainable urbanism is based. According to Fainstein (2005), the post-modernist vision of urban planning is an ideal one that ignores questions of conflicts and powers among the different stakeholders within urban production. Others consider that participative approaches are both cognitive and social but that they cannot succeed without references to the objectives of sustainability, which must be established at the outset (van Bueren and Heuvelhof, 2005; van Bueren and de Jong, 2007). Research has often placed emphasis on the tools that make it possible to improve multi-actor co-ordination, but in doing so neglect what is normative (Mayer et al., 2005). Moreover, sustainability produced by the interplay of actors intervenes both as a norm (by the definition of objectives and indicators), and as a process.

The second ambiguous aspect refers to the process of negotiation itself, within the framework of the social dynamics of urban revitalisation projects. Dumont and Andrieu (2006) demonstrate that when defining sustainability objectives at the outset of a project, it is likely that changes will be required as it progresses. In fact, the objectives of "high environmental quality" of planned buildings in a district, established at the outset, have been negotiated in a way that reduced their quality and that permitted - in exchange and in terms of equivalent costs - the creation of social housing within the framework of an objective that was one of social mixing. For Thévoz and Schaeffer (2007), beginning negotiation with the various private actors (land owners and investors) supposes a certain capacity on the part of the local public actors.

In fact, the urban production system is understood in a wide sense from the sustainable urbanism point of view. It can include, within the framework of an urban project and beyond the chain of the various private actors, the urban services, the politicians, their associations, the inhabitants of a district, or all the inhabitants within the framework of an urban district, for example. Consequently, the various actors - involved to varying degrees - in a localised urban project are considered to be territorialized and thus participants in local debate and in the negotiation process, which Hirschman (1986) calls voice.
A breakdown of the various actors involved in an urban project

The convergence of the two fields of literature mobilised permits us to establish the main lines of the public / private governance related to producing sustainability from the angle of financialisation, and as present when creating multi-purpose complexes in Switzerland. We can distinguish between four main groups of institutional actors for which the urban project has a specific significance and which intervene according to specific logics of action, i.e. according to their role / functions and their interests in the project (Fig. 1).

Beyond the three groups of private actors presented below (making a distinction between the financial, economic and commercial logics respectively), there is the group of actors whose profession is to handle collective interests and thus to provide specialized public services. The role of the public actors is a double one, and for this reason we speak of politico-administrative logic. On the one hand, the municipality intervenes as an institution that plans the urban space. On the other, it is a political institution consisting of elected officials with differing views of urban development. For a politician, for example - for whom it is important to be known and to ensure that projects are completed - an urban infrastructure project can be a proof of success and make it possible to valorise the fact that certain sustainability aspects have been taken into account in the project (e.g. a project for public use, the Minergie label, etc.). The urban object is, in this case, an urban amenity for its inhabitants, and also contributes towards urban attractiveness at the regional or national level.

Other actors can also intervene within a real estate project, but indirectly since they are not "direct clients" of the different professions mentioned. They may be associations (for the protection of the environment or inhabitants of a district) or inhabitants who intervene to defend either collective or individual interests.

**Figure 1: the logics for action on the part of actors within a multi-purpose urban complex**

Source: Author's own material

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2 This is the Swiss equivalent of the High Environmental Quality certification for buildings.

3 Note: The multi-purpose complexes in Switzerland were not the subject of wide participative negotiations, such as those for "green" districts.
1.2. A territorial approach to urban production that links financialization and sustainability

Our approach here is intended to be territorial and institutionalist. It consists of identifying how sustainability can be constructed via the process that emerges from the first outlines of a project for a multi-purpose complex and until its operation - and of course including the design and construction phases. It consists of three dimensions (Crevoisier, 2004). First of all come the technical, functional and financial relations that characterize sustainability, with the latter created as the project moves forward. Secondly, there are the relations among the actors, which are addressed via the institutions (Bazzoli, 1999; Gislain, 2004; Hodgson, 1998, 2006) and the justifications (Boltanski and Thévenoz, 1991; Boltanski and Chiapello, 1999) underlying them. Finally, there are the technical and social relations that characterize this production of an infrastructure and which are deployed in space and time, based on an initial context, and have effects on this context in return: this is the territory.

Sustainability as a technical, economic and financial urban object

Any urban object is characterized, first of all, by its technical properties: what are the characteristics of the buildings (location, dimensions, type of materials, specific features of the terrain, insertion within the transport networks, energy equipment, etc.), their purposes (housing, offices, commercial, public services, etc.)? These technical choices also correspond to the economic and financial characteristics. The type of activity defines a certain degree of profitability, and choices of constructions render certain savings possible, etc. The economic and financial risks are also largely the result of these choices (work on pollution removal, construction work, search for investors and tenants, etc.).

These choices can also be sustainability issues, i.e. those that can provoke debate regarding the projects. The question of traffic (size of car parks, use of public transport, etc.) or that of energy, the issue of public areas or even of inserting the project within the district or town, etc. also leads, simultaneously, to the question of cost allocation and benefits, plus that of risk sharing (e.g. who will finance the technical installation that will be efficient in the long term, and what will be the consequence on the profitability of the tenants?)

The institutional constructions of the sustainability of an urban object

What the sustainability issues involve is defined by the actors who intervene according to their specific logics of action. The issues are brought by certain actors (e.g. an investor wishing to build using the Minergie label; the public actor initiating reflection on sustainability in an indirect way via legislation on urban planning and the built environment or the landscape). They are subject to negotiation, and evolve towards compromise solutions. Within this framework, the various actors mobilize the institutions, both formal (laws, regulations) and informal (negotiating traditions, etc.), their resources (financial, technical), and use their competencies and expertise (reports). The institutional articulation negotiated among the various actors within urban projects can be examined at three levels (Commons, 1934).

First of all, there are the various legal and regulatory norms that constitute a framework for urban projects and that represent the basic level for the negotiations. These can be national norms applied on the regional / local level: on urbanism and construction, protection of the environment, labour laws, etc. or legislative frameworks for real estate investments or for institutional investors. Today, relations between private and public actors are leading to developments regarding legislation that are both original and intended to favour different forms of public / private partnerships in various countries.
The negotiations are concluded by a certain number of agreements. If these are initially agreements in principle, conventions, or even informal agreements, they lead to more formal, precise agreements as the projects take on concrete form (construction permits, ownership or leasing contracts). Within this framework, calling upon external expertise is extremely frequent with a view to evaluating risks, profits and the costs to be born when making a commitment to a process that always contains a degree of uncertainty (for example market surveys).

Finally, once the agreements are formalized, new questions that were not foreseen or new problems arise. This leads to a new phase of negotiations in order to manage the uncertain aspects of the projects as they take on concrete form.

**Temporal and spatial aspects of the sustainability of an urban objects**

A territorial view of the social construction of sustainability consists of identifying the various temporal and spatial aspects within which an urban project will be created. For example, an urban object is characterized by a specific location in the city. It has a certain catchment area for commercial activities, and is led by public or private actors in various locations, etc. Regarding time, it is necessary to reflect on the technical lifespan of the installations and the time horizons of the various actors. A political term in office lasts four or five years, a commercial investment is, in principle, made for twenty years (according to the longest lease), and a financial investment in "bricks and mortar" can be made for just a few days on the financial markets!

A territorial and institutionalist approach to a project consists precisely of identifying the way in which the agreements between the various actors within the network are put in place, in order to guarantee a certain anchoring in the territory for them all (voice) or, on the contrary, the possibility of exit. Four phases can be distinguished within an urban project.

Firstly, the territorial context (the matrix) within which the project is launched constitutes the pre-project phase. The availability of land, the ownership rights to it (public or private property), the legal framework and the public authorities who are - or could be - involved at various levels, the private actors that can be mobilized for the project, the attitude of associations, the nature and scope of the sustainability issues, the range of technically feasible solutions: all these are examples of the many dimensions that characterize the territory when a project is started. However, what is in fact crucial is the quality of the relations between the various actors - private and public - that characterize the local context. This first, highly exploratory phase consists of identifying and jointly negotiating the technical and economic characteristics (purpose, profitability, etc), the actors that will participate, the agreements that will bind them (concerning costs, risks, benefits), and the territory (location and modalities of its insertion into the territory, co-ordination in terms of timing). Generally speaking, the process can begin from any of these dimensions, whether by the action of a promoter following the availability of a plot of land in a city centre, or following a request by public authorities (call for tender for a PPP project).

Secondly comes the development phase of the project. This runs from the initial concept of it to its finalisation and obtaining the construction permit from the local authorities. The development phase will consist of defining each of these dimensions via intense negotiation between the political and administrative public actors, the promoters, the investors / owners and the various associations. Once the construction permit is issued, this phase usually ends with the signature of an ownership contract between the investors / owners and the builders (who can belong to a single full-service company). The project is consequently considered to be financially feasible by the investors. The contract also includes the ownership of the land
and the property (or its leasing within framework of obtaining leasehold rights), its operation (rent contracts already concluded), and the construction work to be carried out.

Thirdly, there is the construction phase of the project. The general contractor plays the principal role and intervenes as the entity in charge of the material quality of the infrastructure. If all the surfaces are not rented out, it is also at this stage that tenants are sought. Consequently, in this phase dominated by a logic of technical and economic know-how for the execution of the project, various issues that were not defined in the construction permit or the contracts (for the general contractor, leases, mandate to find tenants, etc.) will arise. Here, too, various issues regarding sustainability must be addressed and resolved.

Finally, there is the operational phase of the project. This is the long-term phase par excellence that permits the investors / owners and the users / tenants to obtain (or not) a yield on their initial investment. From a sustainability point of view, this is the phase during which an impact study on the territory can be established. These multi-purpose projects are thus characterized by the articulation of highly diverse time frames for the actors and the object itself. The entrepreneurs do not have the same time frames as the investors, but they must reach agreements in order to co-ordinate their actions. For private actors - whether investors / owners or tenants / users - whose mobility also varies, the question is that of the modalities of anchoring (long-term involvement or possibilities for exit).

2. The case of Sihlcity in Zurich

In 2007, Sihlcity was the first major project for a multi-purpose "Urban Entertainment Center" (UEC, with spa, cinema, library, hotels and restaurants, offices) created in the heart of Switzerland's largest conurbation. This urban object was developed by one of the country's main promoters and purchased by financial actors for a total cost of CHF 615 million.

Our study of this urban project was carried out in 2008 on the basis of documents (construction permit, environmental impact study, market analysis, etc.) and ten semi-directive interviews of at least one hour and a half with all the actors involved (investor / owners, promoter and builder, main tenants, specialized urban services, managers, architect, association for the protection of the environment). This situated approach to the Sihlcity project permitted us to identify the problem of traffic as being the major issue concerning sustainability. This lead to a compromise named "Fahrtenmodell" which made it possible to reduce car traffic, and is now a reference for other projects in Zurich and other Swiss cities.

During the development construction and operational phases of the project, this challenge was the subject of intense negotiations, and evolved considerably. Applying the approach developed in the previous section of this paper, we are presenting this evolution here by describing, in turn, its technical content linked to the economic and financial aspects, the actors involved and their logics of action, while showing the institutionalist and territorial aspects of this challenge.

2.1. The context of the project: a conflict dating back twenty years

The question of traffic must first of all be placed within the framework of the global problematics of the project and the application for a construction permit.

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4 This specific case study is part of a multicase study of other main urban projects in Switzerland. The analysis of this specific case and the made-up of the conceptual framework benefited from a comparison with the other studied projects. The research was part of a national programm research on the sustainability of the built environment (NRP 54).
At the beginning of the 1980s, the full-service company Karl Steiner - as the promoter and constructor - developed an initial project for a single-purpose office complex (Project Utopark) on land belonging to an industrial company with which a promise of sale for the land had been concluded (exclusivity agreement). Although the compliance of this major project (of a total ground surface of 96,000 m²) was not called into question, the City of Zurich opposed it. An office district was not deemed appropriate at the location in question. After a legal conflict that reached national level (the Federal Tribunal), the promoter obtained the construction permit in 1999. The economic window of opportunity had however closed in the meantime since the potential tenants (insurance companies and banks) had rented other premises. The promoter was therefore forced to develop another concept for valorising the land.

When drawing up its new project, the full-service company wished to avoid repeating the failure of the Utopark project. Having identified the economic development potential of the land, the company decided to begin a process of negotiation with the city in order to clarify the requirements that would permit a new project to be accepted rapidly, on land for which the exclusivity agreement had been renewed with the owner. In addition to the advantage of belonging to a single owner, this large piece of land (41,991 m²) did not raise any problems on a legal level. In fact, no modification of the plan for the purpose of the complex was necessary, since the overall plan by the municipality had foreseen a focal zone at that location (City of Zurich, 2005). Finally, the land had an excellent location, less than three kilometres as the crow flies from the city centre: a conurbation of over one million inhabitants. The site was moreover well served by public transport and beside the highway.

During a first meeting in the spring of 1999, between the full-service company and representatives of the public sector, the City seized the opportunity provided by its dominant position to issue two mandatory requirements that formed part of the local policy of "building the city on the city". Firstly, for a project of that size, the full-service company had to call upon the services of a renowned architect. Secondly, the construction project needed to be multi-purpose, i.e. to include a mix of purposes for the surface area, and not be a single-purpose project as "Utopark" had been. It should also be noted that the change in direction at the head of the City of Zurich's executive between the period of conflict and the new Sihlcity project was an element that favoured the start of negotiations on a new basis.

2.2. The development phase of the project

It was during the development phase of the Sihlcity project that negotiations were the most intense, concerning issues of sustainability and notably around the question of traffic, which was progressively institutionalized and recorded in the construction permit in the form of a model for traffic ("Fahrtenmodell").

Two periods can be distinguished during this phase of drawing up the "Fahrtenmodell". The first ran from an initial architectural and multi-purpose concept until the issue of a first construction permit, which was a period of negotiations and seeking solutions, and took place between the full-service company and the City of Zurich. The second period was from the issue of the first construction permit until that of a second one, and an agreement with the Association for Transport and the Environment (ATE). During these two negotiation phases with the local actors, the full-service company also negotiated with private, non-local actors: potential investors / owners and tenants / users. The challenge for the promoter was thus to articulate the sustainability requirements for obtaining the construction permit with those of profitability, in order for the project to be attractive for the private actors.
The institutionalization of the "Fahrtenmodell"

Complying with the requirements of the City of Zurich, the full-service company called upon a local firm of architects that enjoy international renown. A master plan for the project was drawn up. This first concept, named "Sihlcity" and based on the idea of "city in the city" contained the first elements regarding the question of traffic. It foresaw the construction, below ground, of a car park with 1,321 spaces, in accordance with the legal basis for the City of Zurich (Cite of Zurich, 1996). This legislation stipulates that the number of parking spaces mainly depends on the type of use (e.g. 100 spaces for a cinema, 450 for a commercial centre, etc.). The master plan was the point of departure for negotiations between the City of Zurich (notably via the urban planning department and transport departments), the full-service company and the firm of architects that had been commissioned.

The first construction permit: the first Fahrtenmodell

The City's intention was to reduce traffic drastically within the Zurich conurbation. This included prior reflection regarding the production of traffic, by co-ordinating land development and transport policies with the aim of influencing the methods of transport used by the public - notably by encouraging them to use public transport. The representatives of the City thus initiated debate regarding the traffic generated by Sihlcity. A new model for managing mobility and reducing the number of individual journeys (Fahrtenmodell) was proposed in place of the traditional, legally established model.

The promoter - having already lost 19 years on the development of a project for which it owned the land - also become involved in the Fahrtenmodell. It involved half of the clientele using public transport, downsizing the car park (805 spaces instead of the 1,321 as permitted by to legislation) and restriction of the use of the car park by vehicle flow control. In return, however, the new model permitted a more global, flexible management of the car park than the legal model.

This model, applied for the first time with the Sihlcity project, was at the economic heart of the project and thus constituted a major risk for the promoter. For that reason, the challenge for the promoter throughout all the negotiations with the City was to ensure that the question of traffic did not significantly add to the costs of the project and above all that it did not penalise its economic viability and financial profitability, i.e. the work that was taking place on finding tenants and investors.

Consequently, bilateral negotiations were held regarding an evaluation of how the project would be inserted into the road and public transport networks. Firstly, it was necessary to examine whether Sihlcity was already well served in terms of transport infrastructures and to measure the potential for clients depending on the methods of transport. Secondly, this led back to the question of financing, in the case that public transport services for Sihlcity were improved.

A study by a specialist firm brought in by the promoter confirmed the opinion of the City of Zurich, which believed that Sihlcity was already well served by the public transport network and that the city was therefore not legally obliged to do more. The study demonstrated, on the one hand, the economic viability of Sihlcity (with an estimated 20,000 visitors per day), and the existing transport services for Sihlcity using the transport network, which would permit over half the clients to use public transport (10,700), plus over one-tenth by a form of "green" transport (1,300 visitors on foot or bicycles).

The promoter was thus in a position to request the City to finance a certain amount of development work regarding connections to the existing collective and individual transport
network. The financing of this work by the City was thus considered to be part of the application of the Fahrtenmodell by the promoter, and particularly since the latter believed that the Sihlcity project was of benefit to public transport company because it would bring it more users.

The City of Zurich, however, stood firm since it believed that Sihlcity was not a project in the public interest. A "round table discussion" took place in 2002, in order to clarify what would be included in the construction permit. In addition to some facilities (tram stop and pedestrian and cycle lanes), the promoter finally bore the cost of constructing the entrance and exit from the Cantonal road to the car park (CHF 12-15 million) and the operating costs for the first two years for extending a bus line (CHF 1 million). Following the said discussion, the construction permit was issued a few days later, containing the principles of the Fahrtenmodell (City of Zurich, 2002). The permit confirmed the use of public or "green" transport for 60% of the clientele and 805 parking spaces, and specified precisely the procedure to follow in case the limits for traffic flow were exceeded (fixed at 10,300 per day and 1,300 per night).

Thus, within the framework of setting up the Fahrtenmodell and the City of Zurich's refusal to participate in its financing, the promoter became a prisoner of the excellent connections between the land it owned and the transport networks, demonstrated by the study that was commissioned. For its part, the City of Zurich found an advantageous way of co-ordinating its transport policy with the plan for developing the district, since the costs for doing so were borne by the full-service company.

The second construction permit: institutionalization of the Fahrtenmodell

Despite these measures and the issuing of the construction permit, the question of traffic arose again in the spring of 2002 while the promoter was in full swing regarding negotiations with the future users and investors. The Association for Transport and the Environment (ATE) appealed against the construction permit, claiming its lack of precision regarding the procedure to be followed in the case the traffic flow limits were exceeded.

Three actors therefore came together during 2002: the City of Zurich acted as the mediator between ATE and the full-service company. For the company, it was important to settle the problem rapidly and to find a solution that did not jeopardise the project and the pre-established agreements with the main tenants and investors. On request by the City, the agreement between the ATE and the promoter was laid down in a second construction permit, issued at the beginning of 2003, in order for the Fahrtenmodell to become public and permanent. This second permit notably clarified the methods for calculating the number of parking spaces, the limits to traffic flow, and the sanctions to be applied if they were exceeded (City of Zurich, 2003).

The anchoring of a "glocal" investor

The full-service company agreed to finance the improvement to the traffic connections in order to demonstrate to the potential users and investors that the economic profitability would not be put at risk by the Fahrtenmodell. In other words, it was a case of proving that Sihlcity was easily accessible by a potentially numerous clientele. The other argument, more specifically intended for investors, was the innovative concepts of the "city in the city", with a mixture of commercial and leisure usage on a large scale, intended to respond to demands by the clientele.

The first market surveys revealed Sihlcity's excellent accessibility, the potential for developing the district in terms of population (40,000 inhabitants) and jobs (50,000) in an area
with the highest population density and purchasing power in the country. They also stressed that the south of Zurich was relatively poorly equipped in terms of shopping centres and leisure complexes, plus the attractiveness of the original concepts of an Urban Entertainment Centre and a "city in the city" that united the past with modernity thanks to maintaining three industrial buildings.

These first studies were subsequently refined by another specialized firm. Their additional surveys primarily concerned the economic viability of the project. Given the restrictions to individual transport, it was essential to focus on shops offering "lightweight" products (i.e. not furniture, etc.). By means of an analysis of competition within the conurbation and the optimisation of the surfaces according to use (shops, cinema, hotel, etc.), a calculation of potential turnover was then produced. Then, using this data, the rents that could be charged were determined, plus their potential evolution over time (Wuest&Partner, 2001 and 2002). These studies constituted the starting point for actively seeking tenants / users and investors / owners.

Regarding the tenants / users, the first contacts to be established were those with the leading commercial chains requiring considerable space, around which smaller commercial chains would follow suit. In order to identify potential investors in Switzerland and abroad, a market analysis was carried out by the same specialised firm. From the outset, the promoter had estimated that Sihlcity was too large a project for most Swiss institutional investors. A call for tender was thus launched to four Swiss investors and fifteen foreign ones, in order to stimulate bids.

The project was finally purchased in 2003 by the bank Crédit Suisse, whose registered offices are in Zurich and that rapidly showed interest in the Sihlcity project. The purchase took place when only half of the surface area was rented, by four main tenants. The investor's interests in the project were multiple. First of all, at the time, real estate investment funds were developing rapidly, having been presented as more solid alternatives following the 2001-2002 stock exchange crisis. The various means of real estate investment open to the Crédit Suisse meant that it had liquidities to invest. The concept of the UEC was deemed viable and would permit the bank to diversify its various investment alternatives. For Sihlcity, the Crédit Suisse set up an original operation, i.e. a co-ownership structure that united five investment funds and an affiliate real estate company (Swiss Prime Site), managed by Crédit Suisse Asset Management Real Estate (CSAM-RE). This first "pooling" thus made it possible to absorb the CHF 600 million paid for the project, while diluting the risk.

In addition to this financial operation, the Crédit Suisse needed premises for its own offices. In fact, it already owned a considerable amount of office space opposite the future complex. It was thus perfectly familiar with the problems of the district in terms of traffic and with its potential regarding commercial and leisure facilities. One could be led to believe that these were the elements that permitted it to accept the Fahrtenmodell and the agreement with the ATE more easily.

2.3. The construction phase: economic optimization and cost control

Once it had signed the purchase contract, the Crédit Suisse then began to seek users / tenants for the rest of the commercial surfaces. It therefore took over the role of entrepreneur and no longer only that of financial intermediary. In parallel, the owner sought to optimise the profitability of Sihlcity in two ways. Firstly, the connection to the transport network was improved by the financing of an extension to a tram line. Secondly, a new plan for attributing usage was drawn up in July 2003 with a view to increasing the total surface area (in compliance with the considerably leeway that was provided for in the construction permit).
The construction as such was carried out by the promoter / builder as a full-service company. This meant that the latter had to construct the complex at its own risks, within the framework of the global sum paid\(^5\). The Crédit Suisse was also confronted with additional costs (CHF 15 million). In order to minimize the amounts and to monitor the full-service company, the Crédit Suisse called on a specialised firm. Consequently, during the construction phase, the challenge for the Crédit Suisse was to ensure that its major investment of CHF 600 million would be profitable, while minimizing the additional costs by means of calling upon external expertise on an ongoing basis.

2.4. The operational phase: management of the Fahrtenmodell and profitability perspectives

Since its opening in March 2007, the management of the complex has been carried out by a specialised company - an affiliate of the Crédit Suisse that has recently focused on the management of multi-purpose centres on behalf of institutional investors.

At the beginning of the operational phase, the challenge for the management company and the Crédit Suisse was to optimise the viability of the Fahrtenmodell, notably by controlling the commercial zone, i.e. keeping within the limits imposed in terms of traffic and the convention with the ATI. To do so, and as soon as the construction work was finished, two measures were taken. Firstly, and in compliance with the convention with the ATI, a home delivery service was rapidly established. This made it possible to extend the sales surface. Secondly, a promotion campaign encouraging the public to come to Sihlcity by public transport or on foot was launched, and was financed in partnership with Zurich's public transport authorities.

To date, the traffic restriction measures and the potential use of public transport by half of the clientele has not affected Sihlcity's profitability. For the first nine months, the turnover was in line with forecasts (Sihlcity, 2008). Moreover, since the maximum traffic flow limits were not exceeded, the question of traffic does not - for the time being - constitute a sustainability issue for the owners of Sihlcity.

Today, the specialised company concerned is still monitoring the profitability of the complex, at six-month intervals, on behalf of the six co-owners. Moreover, certain changes to the concept of the centre are foreseen by the end of the first contracts. To date, therefore, the challenge of focusing on public transport and green mobility to maintain the shopping area seems to have been met.

2.5. The Sihlcity Fahrtenmodell: a compromise articulating sustainability and financialization under "restrained voice"

The question of traffic, which led to the establishment of the Sihlcity Fahrtenmodell, was the major sustainability issue within the project. This challenge - and the current compromise - were a part of the project's evolution throughout the various phases, and in which various actors were involved (Figure 2). The development phase was crucial. It was characterized by the double constraint of inserting an urban object into a financialised system based on exit, and into an urban system that is subject to localized sustainability concerns (voice).

First of all, the full-service company and the City of Zurich needed to reach agreement in order to overcome a conflict that had existed for nearly 20 years. The promoter needed to

\(^5\) The price of the land was CHF 56 million and the pollution removal - borne by the landowner - cost CHF 12 million. By selling the project to the Crédit Suisse for 600 million, Karl Steiner received CHF 532 million to develop and build the project.
intervene regarding the question of traffic, brought into the debate by the City of Zurich. The negotiations for the Fahrtenmodell, firstly with the public actor and then with an association, above all concerned territorial questions, i.e. traffic management and the sales zone. In this context, the promoter needed to deal with the City's capacity to block the project, and that of the tenants and potential investors to exit. The promoter's asset was the possibility of using its exclusive rights to valorise an extremely well located piece of land. Subsequently, the glocal investor took over the entrepreneur's risk, and invested in order to further improve the public transport services in order to attract potential tenants.

The full-service company was consequently within a sales logic, i.e. one of producing and selling a "product". By succeeding in articulating the various logics via a sequential negotiation process, the promoter was able to develop technical solutions that were sustainable, profitable on paper for the users and investors in the medium term, and profitable for the promoter on the relatively short term. When the negotiations were concluded, it appeared that the solutions for managing traffic went beyond legal requirements. The anchoring of the Crédit Suisse within the project, as a glocal actor, was extremely important. The Crédit Suisse took a double stance: it handled the finalisation and operation of the project, and played the role of the financial intermediary while permitting the six funds that participated in the operation to preserve the possibility of exit for the investors on the financial markets.

Other sustainable development measures were taken within the Sihlcity project. Contrary to the traffic problem, however, they did not place the economic driving force of the project at risk. In addition to the multi-purpose aspect of the complex, the City of Zurich demanded the preservation of three existing industrial buildings, plus the guarantee of a major public area within the framework of the "city in the city" concept. The other technical elements that were discussed and were contained in the first construction permit arose from respecting the standards required within the zoning plan (dimensions and purpose of the buildings; relaxation area, ecological offsetting by the creation of naturalised roofs), the law on constructions (modern heating / cooling system partially using geothermic heating), measures arising from the environmental impact study (waste management linked to the pollution removal work and the construction, with removal of half the debris by train, protection of surface water and groundwater and, in this framework, the refusal of permission to construct an underground car park).
Conclusion

This article was based on the fact that our society has undergone two major changes over the last 15 years, i.e. the development of market finance and concerns regarding sustainable development: these two movements are to a large extent contradictory. How, then, are they articulated in the concrete production of urban objects?

This article provides some responses to the question, on two levels. On a conceptual level, the framework developed in the first section and applied in the second makes it possible to describe and to understand the relations between financialization and sustainability. The territorial approach, and in particular with a highly pragmatic conception of sustainability, in a situational context, made it possible to establish the link between these two "global" movements and the way in which they appear: as challenges for relationships between actors, and finally the way in which they are opposed or can be articulated within local contexts.

Regarding the case study, various lessons can be learned regarding relations between sustainability and financialization that at the outset could appear contradictory, yet bearing in mind that these are not valid overall.
In the case of Sihlcity, which in general seems to have been a successful articulation between financialization and sustainability, it would appear that the relations between the actors behind the sustainability challenges, the economic actors and finally the financial investors form an interlocked set of bilateral relations, yet no multilateral discussion, debates or negotiations took place. The "Fahrtenmodell" was built up progressively, around the central actor - Karl Steiner during the first phase and the Crédit Suisse during the second - and thanks to partitioning between actors, distinct time sequences, and to dissociations in the spatial aspects of the actors concerned. At the outset, the crucial negotiations concerning sustainability were between the City of Zurich, the Karl Steiner company, and then with the Association for Transport and the Environment. Only then did the negotiations between Karl Steiner and the Credit Suisse take over. We should however note the extremely special, and perhaps unique, role played by the Crédit Suisse, which acted as an entrepreneur taking over the risks of the project, a global financial actor that mobilized its international investment funds, and finally as a local actor perfectly knowledgeable about the city and even the district where the project was located.

More generally, one could assume that the relation with financiers quoted on the market would not be as easy, since there is a clearer dissociation between the entrepreneurial function and that of investor. Even in the case of Sihlcity, in fact, the institutional investors quoted on the markets and who in reality purchased the project were completely absent during the design and execution of the project. They intervened only for the purchase of the completed complex, and for a specified amount and yield. There is thus a clear dissociation in time between the qualitative aspects that are crucial for sustainability and handled at the outset by the public actors and the entrepreneur, and the quantitative aspects of yield and financial risk that intervened at the very end of the process, when everything had been defined in qualitative terms. This dissociation is also a spatial one. In fact, the financiers (in principle institutional investors) are not usually local actors and do not wish to take an active part in local projects. In the case of Sihlcity, the extraordinary coincidence between a glocal actor like the Crédit Suisse and the project certainly played a facilitating role. More specifically, the double role of a financial actor that mobilized the funds it managed and acted as an entrepreneur was clearly one that avoided long negotiations, which would have been unavoidable if it had been necessary to reach agreements between dissociated actors.

This final point demonstrates that relations between sustainable development and financialization - generally contradictory - can nevertheless be articulated in a concrete situation. The territorial approach developed in this article has permitted reflection on this paradox thanks to the identification of the relationships and the partitioning that was built up by the actors as the project progressed.

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