

THE STATUS OF “THINGS” IN ORGANIZATIONAL LEARNING. THE ODYSSEY OF A STRATEGIC PLANNING TOOL IN THE SOCIAL HOUSING SECTOR

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Abstract

This paper explores the relationship between management systems as instruments of action and activity, through a longitudinal case study. In 2002, French national authorities decided to introduce a strategic planning procedure (RESP) in the public housing agencies, with the objective of imposing good practices through the instrument as true “representation” of practices. Adoption was extensive but disappointing: the expected changes did not take place. New institutionalist theory would describe this type of situation as ceremonial alignment on legitimate standards, decoupled from actual activity. But in some large housing agencies, RESP impact on practices was significant, though in diverse and unexpected ways, as if RESP were an autonomous agent – an “actant” in the vocabulary of actor network theory. The longitudinal study of one agency shows that RESP impacts daily activities as a meaning making mediator, interpreted in dialogical ways by actors, who transform it into a new type of instrument. A theoretical framework, based upon the theory of activity and the concepts of semiotic mediation of activity and dialogism, is proposed.

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In May 2002, the national leaders of the Department of Urban Planning, Housing and Construction (DGUHC)³, in the French Ministry of Infrastructure, and the Social Union for Housing⁴ (USH), after much reflexion, discussion, and negotiations, agree to implement the “Real Estate Strategic Planning”⁵ (RESP) approach. Through this new procedure they aim at transforming the public housing bodies (HLM)⁶, so far bureaucratic institutions, moulded by the culture of public service and regulation, into modern industrial firms, shaped by technico-economic rationality and efficiency values. Official directives impose the “RESP” procedure to the professional circles, to define and systematize the “best practices” in the industrial management of housing buildings: planning of new investment, occupancy rate optimization, forecasting and planning of maintenance, and renewal and construction requirements.

Three years later, in March 2005, far away from the central offices in Paris, operational teams implement the Housing Unit Project approach⁷ (HUP) in their daily operations in the local branches of Silene, the housing agency of Saint-Nazaire, in South Brittany. F. W, the leader of a geographic sector, manages a HUP project which concerns two “critical” towers of 80 apartments each, in a difficult urban district. He planned three phases: (1) to start the project, focused actions to improve the quality and cleanness of common spaces, (2) then aesthetic embellishment actions, (3) last, improve the occupancy structure by diversifying the social profiles of dwellers. Today, he has two important meetings with his colleagues of the central offices. First, with the manager of housing assignments, he must update information about the last occupants who moved in. To make his objectives clear, after the last meeting he had with his colleague, he made a “prospect card” which describes the socio-economic characteristics of the targeted new tenants and compares them with the families already living in the towers. Later in the day, he must meet two customer managers to build a “commercialization card” to attract the targeted prospects to the housing unit.

There is no obvious direct link between the rational, rigorous and long range planning practices of RESP and the HUP method, very close to field operations. Nevertheless, HUP appears as the unexpected outcome of the RESP planning procedure. The “trip” from RESP to HUP actually leads to new organizational practices, as RESP promoters wanted, but those practices are very different from what they expected. A new management model emerges and deeply transforms the respective roles of the central office of Silene and local branches. Conversely some expectations of RESP designers are not fulfilled. For example, long range financial simulations and profitability evaluation are not achieved.

What happened with RESP and how did it evolve towards the HUP unexpected “avatar”? Management systems appear as one particular example, amongst many, of the wandering and metamorphoses of material or informational “things” in organizational life: factories are transformed into offices; machines are dismantled to provide spare parts; past failures or successes are used as teaching material in training sessions; ideas for a failed new product are recycled in the next product generation; accounting software is used for budgeting... Organizational daily life is made of humans and things amongst which / with which / against which, human persons and groups try to find their

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⁶ HLM (habitation à loyer modéré) is the name for social housing bodies in France.

⁷ Gestion de Projet de Site

way. Contrasting the endless world of things which are *not* there, some things are made / meant / to be there, actually involved in organizational activities, transforming them and reciprocally transformed by them. What role do they play? What are they? What relationships are there between “things” and activities, and more precisely, between a specific type of thing, management systems, and a specific type of activity, work in organizations.

1. THE RESEARCH DESIGN: A DOUBLE ODYSSEY

Organization research repeatedly tried to revisit the role and epistemic status of “things” in organizations and their role in collective practices (Blackler and Engeström Ed, 2005). Research faces an epistemic and methodological challenge: are human persons, such as researchers, able to build a meaningful speech about “things” in an abstract way? “Things” is obviously not a concept. As soon as it is attempted to build abstract speeches about them, concepts must be introduced. But then it proves to be difficult to drop the common *a priori* “subject-to-object” posture and to avoid looking at things as “objects waiting for their acting/known subject”... To avoid such dualist perceptions and to keep the discourse about “things” open, it seems more effective to catch them in empirical situations. That is why this reflexion about the epistemic status of “things” will be based on a case story. The case was studied by a team of two researchers. One, a Ph. D. student, had been for a few years, and still was, the CEO of *Silene*, a public housing agency; as a result, he was a key actor of the case. The other researcher, his Ph. D. supervisor, had been investigating the role of instrumental objects in the transformation of organizational practices for a few years. They aimed at reflexively reappraising the past and present experience of a specific management system – RESP - and its impact on organizational practices in public housing agencies. They found a vast range of situations, which seemed to respond to different theoretical frameworks: (i) things, alternately, as **objects** of activity (“natural” constraints of action, “non-subjects”, passive receptors of activity) or as artificial **representations** (planned constraints or specifiers of action, instrumental knowledge crystallization) (Taylor, 1911; Simon, 1981); (ii) things as **social symbols** (identity carriers, institutional rites and ceremonies, conformance and legitimacy vectors) (Di Maggio and Powell, 1983; Carruthers, 1995); (iii) things as **actants** (symmetric anthropology, autonomous agents, boundary objects, knowledge and unfolding objects) (Star and Griesemer, 1989; Knorr Cetina, 1997; Latour, 1999); (iiii) things as **mediators** (semiotic mediation of activity and of dialogical interactions / transactions) (Peirce, 1958; Vygotsky, 1986; Swieringa and Weick, 1987).

On a first level, the metamorphoses of the planning artefact RESP in the French public housing sector appear as a navigation story, an odyssey through institutions and social groups. Once launched, RESP runs through actors’ practices, at times transforms them, and transforms itself. The story of RESP will be told in four chapters:

1. Social residences are viewed as industrial objects and RESP as a rational representation of the world, bound to determine the desired transformation of practices.
2. The intended strategic transformations do not take place. In some agencies RESP appears as pure “myth and ceremony”, oriented towards rule conformance and political legitimacy.
3. However in other cases practices are actually transformed, in diverse ways, according to local situations and managerial purposes. RESP escapes its designers’ original objectives and seems to acquire an autonomous power of agency.

4. Studying more in-depth the particular case of *Silene*, it appears that RESP is involved in the dialogical redesign of activity as a mediating artefact, gradually translated into new tools (e.g. HUP) and new practices.

On a second level, the attempts to understand the RESP odyssey from a theoretical point of view appear as a reflexive odyssey, an “odyssey about the odyssey”, navigation through concepts and theories. In each of the four phases of the case story, the explanatory potential and limits of theoretical frameworks will be explored. As a conclusion of this odyssey, a general explanatory framework, kind of metatheory, based upon the concepts of activity mediation and dialogism, will be proposed.

2. PHASE 1: A RATIONAL INDUSTRIAL PROJECT: RESP AS THE REPRESENTATION OF THE WORLD?

In both the Ministry of Infrastructure and the Social Union of Housing (SUH), there is the same vision of what modern and efficient public housing agencies should be. After introducing management control, scorecards, quality certification⁸, public housing firms are firmly asked to implement rational methods for the allocation of resources, the conservation of the stock of apartments as an important financial asset and the pursuit of long range technical and economic performance. An official note accurately defines the objectives and characteristics of RESP in 2002 (DGUHC, 2002): “it is a strategic plan, it concerns the content of the capital; it provides for the future of capital in relation with environmental constraints and assets and the financial capacities of the firm; it puts an end to short range step by step management”. The note mentions that strategic planning should include four phases: strategic diagnosis; analysis of main issues; action orientation; decisions and final planning. Then the consulting branch of SUH develops and distributes a decision support model, in search of “perfect” rationality: “perfect” in the sense of a rationality which completely abolishes human subjectivity and situated interpretation.

The planning procedure starts with the description of the characteristics of the housing units managed by the agency. Then risk is modelled on the basis of two contingency factors: (i) the market, analyzed by consultants; (ii) the apartment houses, analyzed by employees coming from the different functions of the agency; the model describes the objective characteristics of each housing unit, with indicators for rentals management (vacancy rate, turn over, overdue, social occupancy criteria such as family profiles, employment and salary indicators); technical indicators about the apartment house (types and amounts of maintenance interventions in recent years), cost analysis providing the locative margin of each apartment unit. The model contains predefined generic profiles of housing units, based on thirty variables pertaining to three areas: net locative profitability, market trends corresponding to the location of the unit and unit attractiveness. The system designers stress that “the model is only intended to objectively grasp reality and make comparisons possible⁹”, as the Director of Studies of the consulting branch of the S.U.H., in charge of RESP missions, says. They insist that the model should be “hidden”, because the users of the model in the agencies are “never

⁸ *Cahiers d'Actualités HLM*, n°14, Nov. 1992, « Un guide pour la qualité » ; N°44, Dec. 1996, « Les projets stratégiques d'entreprise pour les organismes HLM ». *Habitat et Société*, N°7, Sept. 1997, « Management : anticiper, décider ».

⁹ « le modèle ne sert qu'à essayer de *cerner objectivement la réalité* et de permettre de créer des comparaisons » (interview).

objective”: “when they must place units in the matrix, the agency actors are struck by the syndrome ‘*and still, it is a fine unit!*’. The product is always technically good, only dwellers deteriorate it”. Sorting and comparative positioning must avoid actors’ “subjective bias”. Therefore data are processed by the system black box, which automatically provides actors with the position of housing units in the list of generic profiles. Four generic strategies have been defined: conservation of commercial performance, simple or complex revamping, offering renewal.

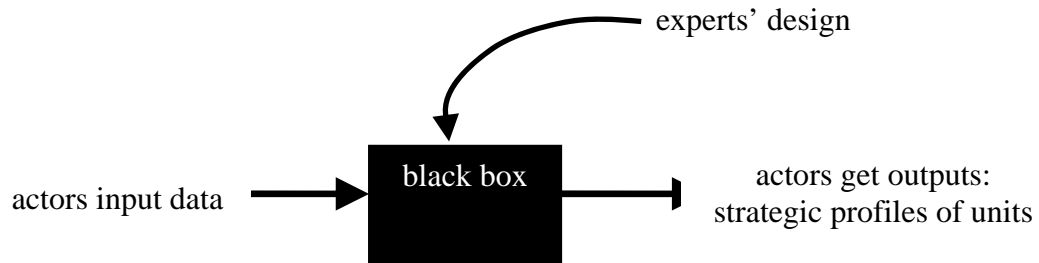


Figure 1: RESP rationalist model

The model is inspired by the Boston Consulting Group growth-share matrix (Stern and Deimler, 2006). Once the units have been ranked in the different profiles and linked with generic strategies, action plans with resource allocation can be determined. The underlying logic is clearly policy standardization, with rationally predetermined categories, objectified decisions for each housing unit, and consolidation at the level of the whole agency, in order to provide a financial 10 year forecast. For its designers, RESP compels management to make rational decisions. Over the years, consultants complexify the model, sophisticate the accounting analysis, and develop the market analysis. RESP is focused on the maintenance and the development of the portfolio of housing assets: what investments and disinvestments should be planned? What maintenance policies should be adopted, from current maintenance to heavy revamping? How should resources be allocated, taking into account commercial risk? To summarize, RESP

- refers to an industrial vision: production, development and maintenance of material equipments, here housing assets;
- is viewed as a way to compel actors to follow a predetermined rational course of action.

RESP designers want to subordinate organizational action to rational principles and to eliminate any subjective influence of actors. Their rationalism can take the form of substantive or procedural rationality. It can be referred to the taylorian philosophy of manufacturing control (Taylor, 1911, 1972): there is one best way to work, which can be determined by experts (process engineering). Actors’ subjectivity can only diminish productivity. Standard processes can and should be imposed. This rationalistic view is adapted to the complexity of housing markets and policies through a contingency approach (Lawrence and Lorsch, 1967): types of markets and types of housing buildings are related with adequate strategies, in a generic way.

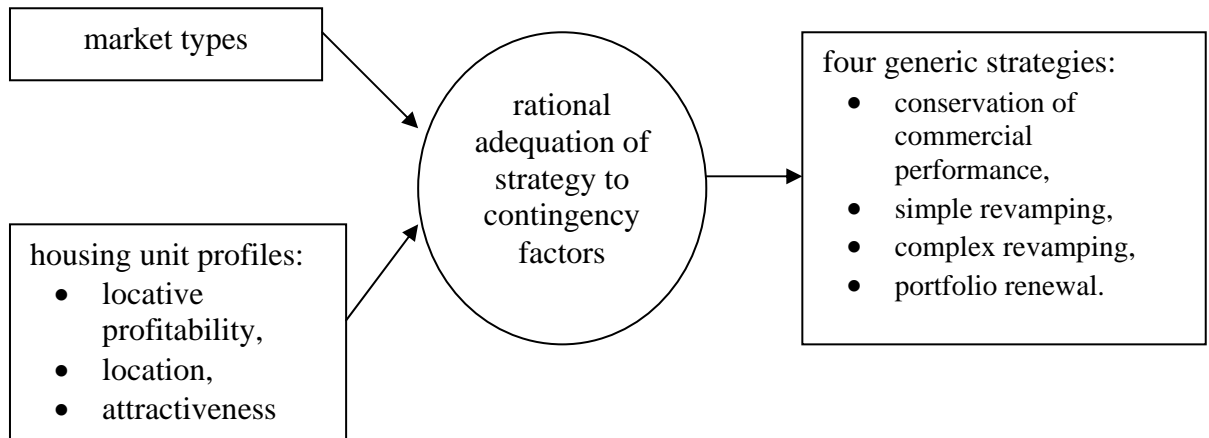


Figure 2: RESP contingency approach

RESP philosophy can also be referred to the cognitivist approach of artificial systems (Simon, 1981), a milder form of rationalism: optimizing is impossible, because of informational limits, but the procedures of thought are logical and can be rationally modelled. In RESP case, the model is supposed to crystallize the experts' ways of analyzing markets, housing products, their fit and the resulting strategies. The experts of SUH endlessly sophisticate their model, making information more complete and accurate, the treatments more conform to real phenomena, the number of evaluated options higher... In particular they try to develop a method to quantify residential "attractiveness" on the basis of quantitative and qualitative criteria.

In the rationalistic theoretical framework, "things" involved in organizational activity can belong to two separated classes:

1. some – in this case, apartment buildings – are "objects" as opposed to subjects: they are the passive focus and application point of activity and knowledge;
2. others – in this case the RESP model – are "representations", i.e. subjective, but logical ways of thinking, concentrating experience and knowledge ("expert system"), crystallized in artificial objectified instruments; they are substitutes for human thought: thanks to them, the employees of public agencies do no longer have to think, because experts thought before and their reasoning is transported to present situations through RESP.

In this type of approach, management systems have three conspicuous characteristics:

- they are *representational*: their effectiveness for action is exclusively related with their structural capacity to replicate real phenomena as a mirror;
- they pursue scientific *truth*: their meaning does not depend on the subjective experience and viewpoint of users, it must be designed to avoid actors' subjectivity;
- they *determine* their own mode of utilization and the operational activities in which they are involved: their prescription does not leave space for interpretation.

Human agency is important in the design phases, but it becomes insignificant in utilization phases. Actors are just expected to collect the required data and input them

into the management system. Instrument and human actor roles are reversed. The instrument interprets situations, thanks to its rational model of activity; human actors are considered as a resource for the instrument.

3. PHASE 2: “RESP” AS A LEGITIMIZATION RITUAL?

RESP procedure seems to unfold as planned. It is extended to the whole public housing sector. At the end of 2005, according to the Ministry of Infrastructure, 80% of public housing agencies practice RESP. SUH maintains a permanently updated report on the RESP experience. Its conclusions are fairly clear: there is a general adoption of the procedure, with quite visible contributions. Most managers of the housing agencies can now master basic financial language and techniques. They can also make use of their RESP documents to negotiate funding with the ministry, the regional councils and the town administrations. Agency leaders are also aware that the technico-financial methods must be completed by the analysis of such issues as urban environment, market or social evolutions.

Nevertheless RESP does not really seem to fulfil its promoters' expectations. Central headquarters must admit that the targeted strategic changes have not been achieved. The synthesis made by SUH in January 2004 (SUH, 2004) sounds like the confession of a failure. It observes that, in most cases, “profitability evaluation, which according to RESP rules should be made for a 5 to 10 year period (DGUHC, 2002), is only achieved for a 1 year horizon. The prospective analysis of the housing unit profitability, mandatory to make strategic choices, is not achieved. The formulation of strategic decisions is in most cases very superficial. Agencies seem to jump from the strategic diagnosis to the action plan phase, in which they define short run orientations; action plans look more like maintenance plans than strategic plans. The phase of RESP financial consolidation, an absolute necessity, is very often limited to a simple quantification of the scheduled maintenance actions. Furthermore, most agencies cannot evaluate their capacity to fund all those actions on a 10 year horizon, for lack of simulation practices” (SUH, 2004). The Ministry regrets that “RESP was transformed into an administrative procedure and it has nothing strategic” (interview with a Ministry senior civil servant, Blanc, 2007).

Actually, in many cases, the planning tool seems to be “swallowed up” by organizations. From an activity point of view, it is not really involved in the core activities of housing entities, such as rental or maintenance. It rather generates new specific activities, dedicated to “RESP operation” itself, “off the field”: data entry, editing, communication. Those activities are mainly aimed at demonstrating that the agency conforms to the official planning policy, rather than concretely transforming operational practices. As a whole, in many places RESP seems fairly decoupled from the day-to-day operations: some expert of the central offices is in charge of maintaining the instrument and producing the required reports. Operational teams do nothing with RESP.

New institutionalist approaches (Di Maggio and Powell, 1991) help us to understand the wide dissemination of RESP in spite of so modest results. RESP serves symbolic purposes of legitimization rather than substantive purposes of technical performance. It has a strong ceremonial function, serving to signal to external authorities (ministry, SUH, regions and towns) as well as internal actors that the housing agency is legitimate.

Such a symbolic function serves a strategy for organizational survival which can be contrasted with technical rationality.

According to the isomorphism concept (Di Maggio and Powell, 1983), the structures and the practices of organizations which are subject to the same institutional pressures converge, due to three types of mechanisms:

- coercive isomorphism: centers of power and legitimacy exert the same type of influence on organizations;
- mimetic isomorphism: when facing highly uncertain situations, organizations tend to seek and adopt models which proved to be successful in comparable conditions;
- normative isomorphism: the development and spread of organizational norms which translate good practices, state of the art, code of conduct, in professional sectors which are institutionally and socially structured.

Those pressures lead organizations to demonstrate their legitimacy through the adoption of generic behaviours. In our case, the organizations belonging to the field of public housing obviously need institutional legitimacy, since they are funded by national and local governments and must implement public housing policies. By pursuing legitimacy, organizations tend to become more and more similar. To maintain ceremonial conformity, they must loosen the link between their formal structure, visible from outside, and actual day-to-day operations (Meyer et Rowan, 1977). As a result, ceremonial alignment on legitimate norms can have a limited impact on activities, because organizational structures, including normative management systems (e. g. accounting, or here, RESP) are decoupled from actual work processes (Carruthers, 1992). This framework seems to fit RESP story. The political and administrative leadership's initiative generates the three forms of isomorphism. A political influence is obviously exerted, since the agencies receive state funding and must show their credentials to ministry and professional centers of power. On the other side, the evolution of the housing sector, the possibilities of deregulation and increased competition and political decentralization generate strong uncertainties. To face them, methods which are likely to provide some visibility can be seen as protective. There is also some conformism of supposed "good management rules", inspired by industrial models. To summarize, in many cases, RESP adoption appears as a ceremonial and technocratic display, with little impact on actors' field practices.

4. PHASE 3: DIVERSIFIED BUT REAL IMPACT ON PRACTICES: RESP AS AN AUTONOMOUS ACTANT?

Under closer scrutiny, in a substantial minority of cases, RESP adoption actually has a significant impact on activities, but not the impact which was expected and desired by its designers. For example, the large regional agency "OPAC N" manages more than 30 000 apartments on a regional territory, with some ten decentralized branches and 700 employees. At OPAC N, RESP has been in operation since 2003. It took more than two years to achieve the diagnosis of the whole housing stock. At the end, housing units are split up into eight strategic scenarios (e.g. current maintenance, commercial maintenance, sale, light or heavy revamping, demolition). A precise list of scheduled technical interventions is defined. A 10-year financial plan, for more than 300 million euros, is adopted. An expert in the marketing department is functionally in charge of the RESP procedure, and he is the only person who can change parameters and formulas. Action scheduling is assigned to the department of technical management and

maintenance. The RESP Excel sheet which links technical and financial views is imposed as a roadmap to geographic branches for their annual budget. As OPAC N leader says, “each branch knows how much funding it is assigned for the next ten years and its budget allocation for the year in course, with possible adjustments in case some unforecast event occurs in the planned period” (interview with OPAC N general manager, Blanc, 2007). RESP is used as a top-down funding and financial plan. The actual yearly scheduling of operations is based on RESP and, in that way, is linked to a long range perspective.

OPAC R manages 36 000 apartments, 12 000 of which are located in critical urban areas (ZUS)¹⁰. Here, the RESP procedure allowed answering two fundamental questions (interview with the Strategy Manager of OPAC R, Blanc, 2007):

- “an important segment of our housing stock is located in sensitive areas; how can we insure its durability and attractiveness for solvent customers?”
- the segments of our housing stock which are not located in ZUS have no priority for government funding; how can we finance interventions there?”

After some time, in 2003, OPAC R managers observe that RESP remains a “kind of methodological tool used by the building stock managers and hardly appropriated by field teams”. Gradually, the approach is revived from 2005. It remains focused on the issue of urban regeneration. The central feature of RESP here is “the evaluation of life expectancy for each building,” with the objective “to make RESP a planning method for all actors”. In the case of OPAC R, RESP allowed focusing attention, implementing an ambitious policy for urban regeneration and striving to return unattractive products to the market.

For another important regional agency, OPAC West (24 000 apartments), RESP coincided with the appointment of a new management team. An exhaustive technical diagnosis of the buildings was achieved. It showed the deficiencies of the “à la carte” revamping policy which was followed so far (“they used to do like the Army: they spent the annual maintenance budget for painting”). The new leadership characterizes that past policy as “bluff”, since it focused efforts exclusively on what was visible (especially façades). RESP gives the opportunity to redefine technical priorities and to remobilise technical teams for a maintenance policy which takes into account real technical needs.

In other cases, RESP is principally translated into portfolio decisions: it generated new construction projects, or to the contrary sale projects. In the case of sales, it is essential to measure the profitability of each housing unit, to avoid selling “cash cows”.

¹⁰ ZUS = Zone Urbaine Sensible.

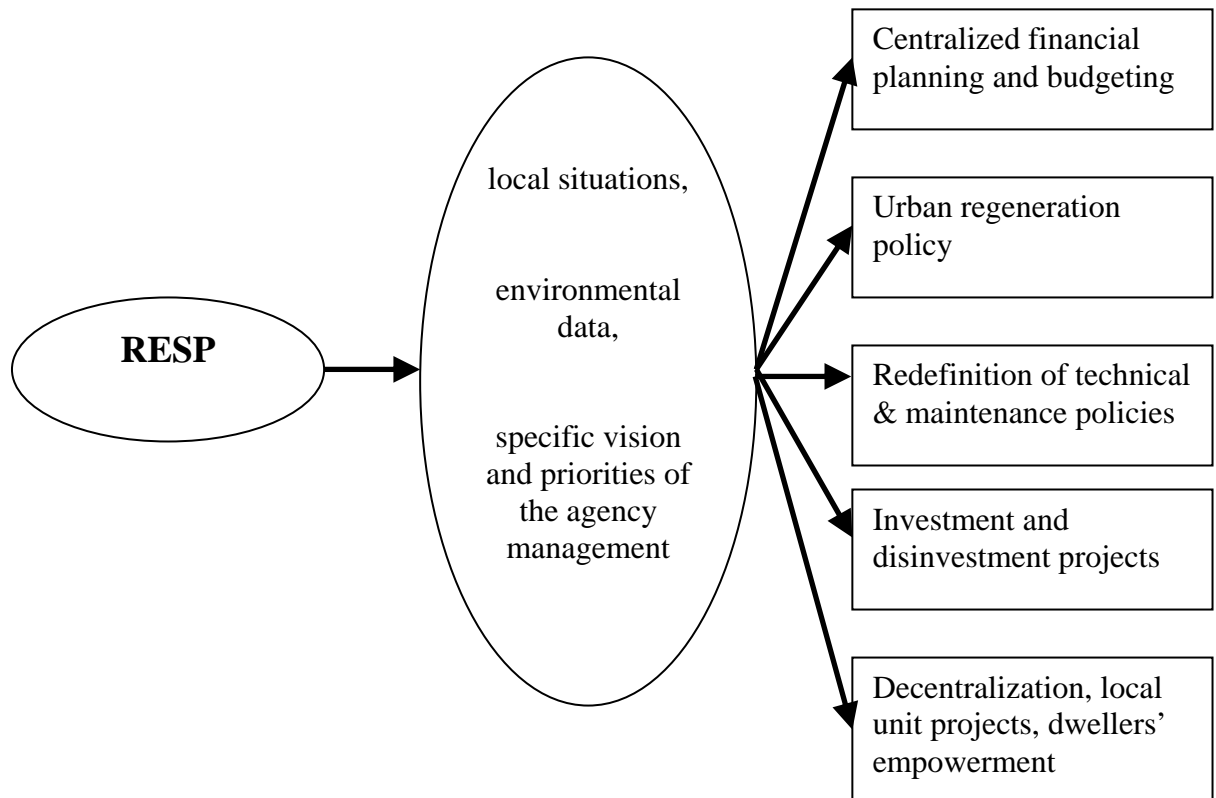


Figure 3: the navigation of RESP in different contexts

RESP directly or indirectly impacts organizational structure, human resources, information systems and performance measurements, or reveals and impulses other policies such as urban regeneration. Diverse RESP approaches coexist, combine, and at times conflict. The adoption of the RESP instrument does not only mean ritual alignment on institutional norms, but at least in some cases, it means the actual transformation of practices, with the imprint of local history and context. The decoupling theory does not seem to be systematically validated by facts. The ceremonial adoption of RESP hides diverse types of impact on practices, sometimes quite unexpected: new financial control practices, or new practices of building management with a strong “life expectancy” focus, or portfolio and project management, or new technical maintenance priorities. The transformation of activity is at the same time triggered and constrained by the structural characteristics of RESP, as if agency managers had to “negotiate” activity transformation with RESP.

RESP escaped the plans and will of its designers. It acquired an autonomous agency power. Greimas’ and Latour’s concept of actant (Greimas, 1985; Latour, 1987) proposes a theoretical framework to understand object agency. In Greimas’ structural semiotics (1985), an actant is “that which accomplishes or undergoes an act, independently of all other determinations” (Greimas and Courtés, 1982). Greimas produced “a generative grammar of narrative, in which a finite number of functional themes in binary opposition juxtaposed with possible roles (subject-object; sender-receiver; helper-opponent), would generate the structures we call stories. Greimas’s actants, like Latour’s, are not actors. Actants are non-human for Greimas as well; they are syntactically defined” (Lenoir, 1994). Actants can be human or non-human, individuals, organizations, or abstract concepts. They are defined by their ability to act, to influence the course of action and to resist other entities. Only actors determine what actants in a situation are.

Latour introduces the actant concept by comparing scientific lab research and fairy tales: “At the beginning of its definition the ‘thing’ is a score list for a series of trials. Some of these trials are imposed on it either by the scientific objector and tradition or tailored by the authors. The ‘things’ behind the scientific texts are thus similar to heroes of stories; they are all defined by their performances. Some in fairy tales defeat the ugliest seven-headed dragons or against all odds they save the king's daughter; other inside laboratories resist precipitation or they triumph over bismuth...At first, there is no other way to know the essence of the hero. This does not last long however, because each performance presupposes a competence which retrospectively explains why the hero withstood all the ordeals. The hero is no longer a score list of actions; he, she or it is an essence slowly unveiled through each of his, her or its manifestations....Behind the texts, behind the instruments inside the laboratory, we do not have Nature...What we have is an array allowing new extreme constraints to be imposed on ‘something.’ This ‘something’ is progressively shaped by its re-actions to these conditions” (Latour, 1987).

In our case, RESP exists as “something” which influences action, builds up competences (in a broad sense: potential capacity to perform in some way) and resists other participants in the situation. It emerges through the diverse reactions of regional housing agencies, which gradually draw the picture of what RESP is – and is not, even if its original designers meant it differently. RESP met all kinds of situations, with initial policy designers (ministry of infrastructure and SUH) and policy recipients (dwellers, citizens), opponents (decayed housing stocks, debt, urban depressed areas...) and helpers (new leaders, motivated employees, subsidies...). RESP gave birth to different kinds of stories, according to the encountered situations: the story of technico-economic rationality, the story of urban regeneration, the story of dwellers’ empowerment, the story of social diversity...

But how exactly does RESP work in each specific situation? RESP is an actant; but why does it act in a certain way in a given situation? What happens exactly when actors try to use it? Latour’s actant theory gives us a general framework to describe how trajectories of meaning are built (the word "meaning" being taken in a nontextual and nonlinguistic sense), through “negotiations”, translations and interactions; here for example, we can imagine that there are interactions between RESP, housing agency managers, actual and potential dwellers, local political authorities, central authorities. But it does not give us precise clues to really analyze *why and how* a specific trajectory A unfolds in situation 1 and another specific trajectory B unfolds in situation 2, why one possibility emerges out of an indefinite number of possibilities. We miss some more analytical framework to understand the situated and dynamic relationship between “actants” and activity. The in-depth and detailed study of one specific case, the Saint-Nazaire housing agency Silene, will help us to analyze this relationship.

5. PHASE 4: ACTIVITY IS TRANSFORMED THROUGH THE TRANSFORMATION OF INSTRUMENTS: MANAGEMENT SYSTEMS AS THE SEMIOTIC MEDIATORS OF ACTIVITY

Thanks to the professional position of one of the two researchers, who was the general manager of Saint-Nazaire housing agency (Silene), an in-depth and longitudinal study of this agency could be achieved.

5.1. From RESP to HUP

At Silene, a new managerial approach, called “ULYSSES”, was started in 2001, before national authorities began to mention RESP. It scheduled action on two axes:

1. improve knowledge of building assets and develop new instruments for the management of technical interventions, in a project managed by the technical director of housing assets;
2. analyze the specific residential situation of each housing unit, to adapt organization and to develop local community management, in a project managed by the general manager.

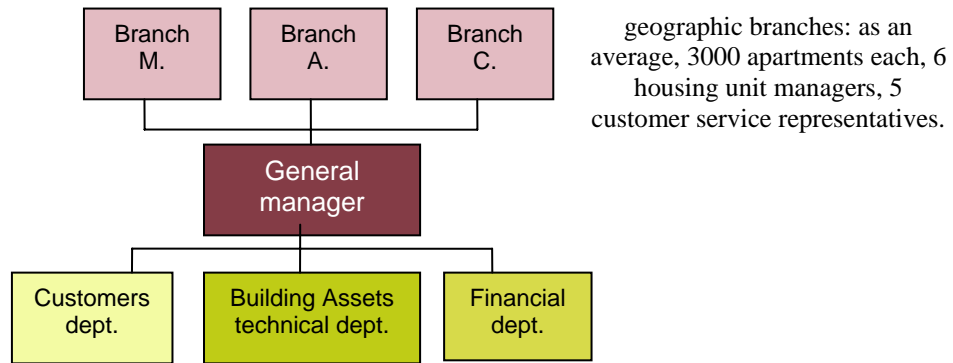


Figure 4: Silene organization

Mid 2002, ULYSSES “meets” RESP. RESP is analyzed by all Silene managers, tested by the executive committee, and finally integrated with ULYSSES: all on the same boat! On axis1, the tools to manage building assets are presented in a form which fits RESP official requirements – here Silene shows its ceremonial conformity to RESP directives. All the housing units are analyzed and ranked. Six classes are defined. Finally, generic strategic orientations are assigned to classes, according to their specific problems. But managers’ attention focuses on two classes, one including twelve units and 1400 apartments, another one including two units and 2000 apartments. They are considered as priorities for action. The Ministry’s note requires that “RESP allows that agencies take urban and social specific contexts into account to define perspectives for the housing units” (DGUHC, 2002). Responding to this general guideline, Silene designs a specific approach for those two classes of buildings, focused on dwellers’ quality of life, rather than on market positioning as the BCG inspired approach of RESP suggested. This choice is underlined by the strong belief that “a firm like ours cannot retain its dignity if it provides such low quality housing”.

ULYSSES axis 2 then focuses on those sites. Local management teams are asked to investigate their situation more precisely. A consultant designs a diagnosis tool for housing units. This “scoring grid” prescribes the field actors’ task as just filling preformatted boxes. The grid is tested but clearly rejected by operational teams, because it only leaves them a very passive role. Furthermore, they find the matrix “too complex, complicated to use, requiring entering a lot of data rapidly” (interview with a branch manager, Blanc, 2007), whereas it does not help them to manage their activity. They consider it as a waste of time. The scoring grid is then abandoned. This reaction underlines the limits of the rationalistic approaches which initially inspired RESP.

A sociologist is then hired to support actors on the field with the objective of designing a tool which allows *understanding* how a housing site operates. All the dimensions of the site situation (urban, social, technical, commercial and financial) must be taken into account. A team of field actors, led by a branch manager, is charged

to identify the specific priorities of one of the sites they manage daily, in need of renovation, and to build ad-hoc action plans. The new approach is called “Housing Unit Project management” (HUP).

The first step of HUP is the “diagnosis by wandering about”: unit managers make the diagnosis of a housing unit by walking around the site¹¹. In that way RESP is interpreted by actors in the precise context of their operational activity. The members of the project team walk all over the site: outside spaces, common places, parking lots. Upon the suggestion of any of them, the group can ask to enter an apartment, visit the basements, or walk from the building to nearby shops, school, healthcare centers... Each participant writes down his/her particular observations about every place, on the basis of a grid which defines three fields: building design (organization of spaces); maintenance management; uses (appropriation, malfunctioning, utilization conflicts, and deterioration) (appendix 1). The diagnosis aims at understanding the causes of problems and building a strategy to solve them. Voluntary inhabitants of the site are involved. They contribute to the “uses” dimension of the diagnosis and can express their expectations for the transformation of the residence.

All the observations are then shared in a meeting room. The map of the housing site is drawn on a large sheet and pinned to the wall. Members’ evaluations are represented by colours: red spots for unsatisfactory components (e.g. basement lighting, parking lots location...), green spots for satisfactory components (children’s games, entrance lighting, benches...). Each participant can react, and argue for or against elements of the diagnosis, pointing at the visual representation. The function of this “representation” is not primarily specular. The visual tool is not expected to reveal the “true” characteristics and shapes of the physical environment, but rather to mediate dialog, help actors discuss and seek agreement, channel and enrich interactions. Causes of problems are discussed. At the end of the discussion, a synthesis is written. The diagnosis phase ends with an agreed selection of renovation priorities (e.g. better protection of pedestrians’ itineraries from car traffic, contracted cleaning service for common spaces...).

After the first pilot implementation, the project manager concludes that “the matrix appears as adapted to make a collective diagnosis. It seemed fairly simple to note down field observations in the boxes of the matrix. Starting from there, we could complete the description with the analysis of statistical data; the picture was gradually enriched to better explain the field situation” (Blanc, 2007). The diagnosis method includes the analysis of quantitative data: occupancy rate, turn over rate, social occupancy, overdue rate... “Sector managers and site managers have a very good memory for the statistical data concerning their housing stock and their customers. They perfectly know the number of complaints, the turn over rate, the overdue rate... They can feel the situation through a few figures that speak to them. They have more difficulties with social data, but they are interested in them and make efforts to appropriate them. For example, they discovered the notion of *Income per Consumption Unit* (ICU) which they totally ignored before but they found it very relevant for their analysis. We engineered the instrument gradually, by incorporating data we first analyzed and dissected and later included in the matrix format.” The diagnosis is also seen as a tool to transmit the voice of the dwellers, “it gives value to our work” (Blanc, 2007). The diagnosis starts a dialogical exchange between central offices and local branches, to jointly build the practical meaning of the situation.

¹¹ « Projets de gestion de site et certification Qualirésidence(s) », *Cahiers d’Actualités Habitat*, n° 116, Nov. 2007.

The second instrument built by the project team in the course of action is the “HUP steering committee”. After the “diagnosis by wandering about”, it appears necessary to establish a steering committee to conduct action. All the senior managers of the agency and the pilot project team take part in it, joined by other managers as required (communication, maintenance, legal issues...). The steering committee brings the new instruments to completion. The project manager formalizes the medium range action plan, with three major chapters: urban renewal, building renovation and services. The project team works out precise actions. For example, “we started action by changing the residential unit team of employees. Then we went on by achieving focused actions for the cleanness of common spaces and to reinforce current maintenance. We signalled the actual starting up of the project by communicating every day about first actions. We also established a partnership with neighbourhood police and the town service for crime prevention to fight night gatherings in tower houses. Last, to involve all the dwellers, we organized meetings to present the project. We selected a few dwellers to participate in a sample group to manage the action plan” (project manager, quoted by Blanc, 2007).

HUP allows different actors – belonging to different professional communities – confronting their views on the housing unit and jointly building a new view, acceptable for all. It is not the “scientific discovery of truth”, but a social objectivation through discussion and agreement – even if agreement is partial and temporary. The discussion uses many types of documents: photos, maps, drawings, diagrams, texts. For example, the commercial manager watches the ground plan and comments: “I am surprised that you did not notice that the main entrance of the unit raised important safety problems for pedestrians”. The building asset manager observes: “it is surprising that you say nothing about parking problems in the back part of the residence. Every time I come here I am surprised to see so many cars parked on the lawns.” The general manager adds: “you stress contradictions between pedestrian moves and car traffic, but you do not mention the informal in-use pedestrian itineraries, created by the dwellers. On the photos you can clearly see a shortcut to go from the first building of the unit to the supermarket” (Blanc, 2007). In the steering committee meetings, the diagnosis, first produced by field actors, is appropriated by the committee members and becomes a common language. A new HUP instrument appears: the “action plan scorecard”, which defines relevant indicators to evaluate the situation of the unit and the action plan progress.

As a summary, with the gradual development of HUP, three basic principles emerge:

- site customization: the high specificity of each site requires improvement strategies which are adjusted on a case by case basis;
- interventions are assembled in a medium range strategy;
- the design and control of projects are entrusted to local teams, within a framework defined by the executive management of the agency.

HUP appears as the unexpected outcome of the RESP planning procedure. Actors take hold of RESP, as an objective and resilient artefact. Having some idea of the uses RESP designers expect from them, they investigate together the actual uses they could make of RESP. They interpret RESP potentialities and shortcomings in the particular framework of their operational activity. A new organization and management model emerges and transforms the respective roles of the central offices of Silene and local branches. Of course, as a parallel and important outcome, agencies also show that they are complying with national authorities’ requirements.

5.2. The management system as a semiotic mediator of activity

There is a flexible / interpretive coupling between activity and instruments, in particular management systems. Actors collectively make sense of the situation (Weick, 1995) and communicate through the instrument, as Swieringa and Weick observe in the case of ROI (Return On Investment) (Swieringa and Weick, 1987). In multidivisional companies, whatever the defects of ROI may be from a rational point of view, actors enact their environment by making use of it. In the same way, public housing agencies organize data collection about housing units and communicate with regional and national authorities through RESP. RESP-enacted environment “reacts” by requiring new practices and new managements systems and procedures (e.g. HUP). Instruments in use are (re)designed in the course of concrete situated utilization and in the day-to-day flow of experience. Immersed in situations where they must act, actors gradually build the meaning of the situation and at the same time translate it into the (re)design of management systems.

At the end, actors created new types of procedure and tools. The instrumental translation of new practices – the development of HUP tools – allows extending the transformation of practices from the limited scale of one local project team to the more global organizational and cultural scale of Silene. The instrumental mediation makes it possible to overcome the immediacy of situation to build new generic meanings. Cultural-historical theory of activity (Engeström, 1987; Adler, 2005) describes the double move of instrument (e.g. RESP) appropriation / internalization and instrument redesign / externalization (e.g. creation and dissemination of HUP). Those theories are derived from the work of the Russian psychologist Lev Vygotsky at the beginning of 20th century: “to explain in a satisfactory way work as human activity fitted for a specific purpose, we cannot limit ourselves to say that work springs from aims, from problems man faces. We must explain it by the use of tools, by the application of original means without which work could not have emerged” (Vygotsky, 1986). The semiotic mediation by languages and tools is at the core of human activity. The mediation by historic, social and cultural systems of signs (Leontiev, 1978) relates activity with generic meanings. Activity theory here converges with situated action theory. Suchman (1987) observes that technical capacity and human competency shape each other in organizing the course of activity. To understand action and performance, it is necessary to analyze arrays of human actors, objects, and written documents, computer coding and other types of instruments.

5.3. Instrument utilization as a dialog

As Silene case shows, actors are never isolated in the activity. Instrumental mediations make activity a permanent dialogical exchange between actors. In the instrument and through the instrument, actors meet others. Interactions between the HUP project manager and his team, between the team and the inhabitants, between the team and the executive committee are made feasible by the reference to HUP instruments, which provide a language: “we can improve thanks to the numerous and demanding exchanges in the meetings with other branch managers, sector managers and steering committee, when we present the diagnosis. All those back and forth moves allow improving the instrument and our handling” (Blanc, 2007). It takes four steering committee meetings, as an average, to build a synthesis accepted by all. The dialogical process transforms, reveals, and develops actors’ positions and enables them to

reengineer activity. Forms of dialog are not always cooperative, they also include contradictions, divergences and conflicts. For Bakhtin (1993), “dialogue is not only possible, but necessary when persons do not share the same meanings”.

In Silene case, dialogical interactions at different levels (within field team, between project team and dwellers, between project team and senior managers) produce a gradual convergence of interpretations towards the notion of *service*. The developed instruments give an important role to customers, who express their own needs and contribute to produce adequate solutions. Site specificity is linked with customers’ specificity. RESP then makes sense in the context of a service rather than an industrial strategy. The context is not the industrial context imagined by RESP promoters (production, maintenance and optimal use of housing equipments), but a tertiary context (integrated service of housing, including urban environment aspects). The industrial efficiency vision which inspired the initial RESP matrix is questioned by actors in their operational practices; RESP matrix is transformed into HUP, *pointing at a service-oriented strategy*.

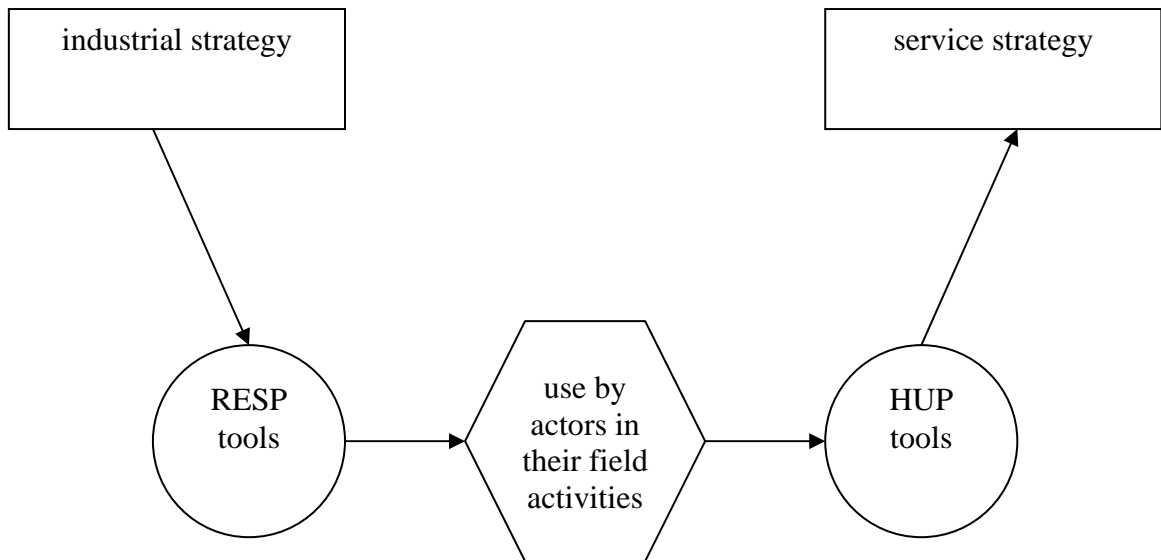


Figure 5: strategy transformation through instrument practical use

6. TOWARDS A METATHEORY OF THE RELATIONSHIP BETWEEN INSTRUMENTS AND ACTIVITY

6.1. Summarizing the odyssey of RESP

The following table summarizes the double odyssey of RESP:

	RESP odyssey in the housing sector	researchers’ odyssey in the theoretical frameworks	references
1 st phase	RESP is designed and imposed by national centers of power as the representation of rational strategic planning in an industrial activity; it is	rationalistic theories of management systems as specular representations of best practices; cognitivist theories of management systems as specular representations of satisficing	Taylor Simon Lawrence and Lorsch

	expected to determine new operating practices.	practices; “as true as possible” representation, bound to determine practices	
2 nd phase	RESP does not produce the expected results; in many cases it seems implemented in a formal and bureaucratic way, with hardly any impact on actual practices	new institutionalist theories of management system adoption as the ceremonial alignment on institutional standards and norms, bound to insure the organization legitimacy, decoupled from the actual efficiency-oriented practices	DiMaggio and Powell Carruthers
3 rd phase	actually, in several important cases, RESP significantly impacted practices, though in diverse ways, and mostly in ways which were not expected by RESP promoters	once launched, RESP seems to escape the control and will of its promoters and acquire an autonomous power of agency, becoming an actant “negotiating” activity transformations and stories of change with local actors and local contexts	Latour
4 th phase	in the case of Silene housing agency, field actors seize RESP and translate it into their own situated activity, transform it at the same time as they transform their own practices, and finally develop a new system (HUP).	“actant” theory does not provide precise clues for the analysis of RESP relationship with activity; RESP is involved in Silene as a semiotic mediator of activities, providing reflexivity (actor / activity) and dialogical capacity (actor / actor).	Vygotsky Leontiev, Engeström, Adler, Bakhtin.

Table 1: the four phases of RESP odyssey and their theoretical references

6.2. Activity semiotic mediation and dialogism

By mediating activity, instruments:

- link the singular activity, here and now, with generic types of activities, socially, culturally and organizationally defined; as a result, it relates the activity situated here and now with generic resources: collective experience, usual meanings, accumulated technical knowledge;
- abstract activity from the unique here and now situation and allow reflexivity: instruments make activity an object of thought, discourse, and discussion for actors, who move from being only direct actors of their activity to being actors of the reflexive redesign of their activity;
- provide actors with shared semiotic systems of signifiers (the instrumental objects) / signifieds (the schemes of meaning associated with the instruments) which allow them exchanging about their activity in “conversations” and dialogical meaning making practices.
- do not only open the way to the transformation of activity, but also to the transformation of the subjects themselves – by transforming activity through the instruments, the subjects transform themselves; e.g. a violin player builds him/herself as an artist through the use of the violin.

6.3. The double nature of instruments

Instruments involved in work – technical tools, software, management systems, languages – have a twofold nature (Rabardel, 1999). On one side, they are *objective artefacts*, with intrinsic structures which constrain and enable practical uses: shape, material, technical functionalities. As objective artefacts, they relate with other objects present in the situation, for example through their physical dimensions (e.g. is the size of the screwdriver adequate for the type of screws in the machine? are the accounting software and the budget software integrated?) On the other side, instruments carry categories of meaning, interpretive schemes, about what they mean and what can and should be *done* with them, given a specific purpose. The expression “interpretive scheme” should not be here understood in a psychological sense. Part of the interpretive schemes is cultural: in a given culture, in a given profession, some specific ways of using a given artefact prevail. Part of those interpretive schemes is organizational: in the context of a particular organization, it is commonly accepted that a given artefact can and should be used in a limited range of possibilities. Part of those interpretive schemes is subjective, proper to a precise individual and his/her “style” (Lorino, 2007), linked to his/her experience, history, body and emotions. Last, those interpretive schemes are situated: they take into account the perceived (better said: the enacted) characteristics of the situation and they evolve in the course of actors’ interactions.

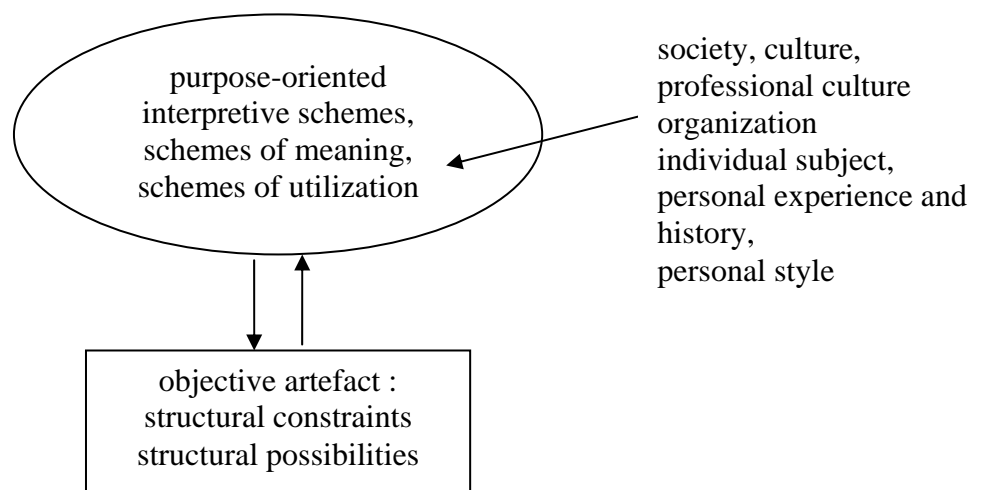


Figure 6: The instrumental dyad

Even the subjective part of interpretive schemes is not individual, but dialogical. When they make meaning of the instrument, its users – e.g. Silene employees who try to make use of RESP – address “others”, other actors and other activities: “what did the promoters of RESP expect from us? How can we show them that we fulfil their expectations?”, “how can I, the manager of housing unit X, make use of RESP in a way which is coherent with locative managers’ use?”, “is RESP usable to communicate with the dwellers of my unit?”, “can I use RESP to clearly express my rejection of those permanent bureaucratic decrees?”, “RESP will be a good and legitimate way to justify funding requirements”, “at last, I can show those commercial people what a rational planning is”... The “other” can be an “abstract other”, a universal “you”, when for example the actor tries to find a professional or an ethical way to use instruments; he/she is then watched by an imaginary representative of the professional or the social group: “would my activity be approved by my peers?”. Analyzing Bakhtin’s theory of dialogism, Todorov observes that “intersubjectivity is prior to subjectivity” (Todorov,

1984). Human actors are first the social intersubjects of collective activity, before being the subjects of individual activity.

The instrumental “dyad” (objective artefact + interpretive schemes) is involved in work situations and translated into concrete activity: the use of the instrument. Situated activity is the third element of an interpretive triad (Peirce, 1958): (i) instrumental artefact and other objects present in the situation, (ii) schemes of meaning associated with the instrument in the situation, (iii) situated activity (“instrument use”). Any of the three elements is generated by the other two, with no sequential structure and no antecedent.

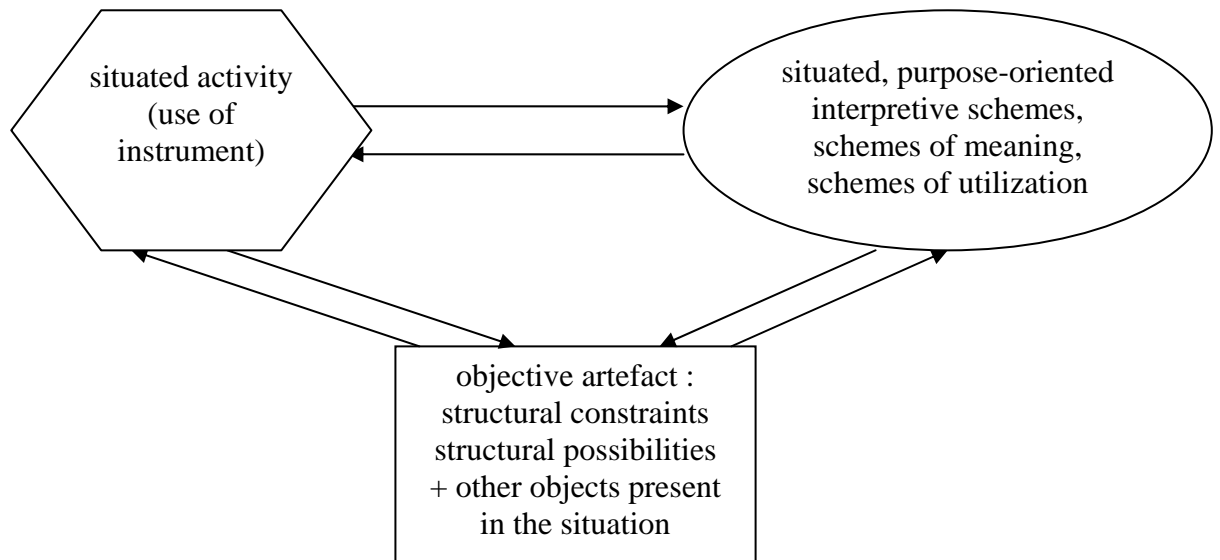


Figure 7: The instrumental triad

The relationship between schemes of meaning and artefacts is neither univoque nor static. The same artefact can be associated with different types of meaning – though within a certain range of possibilities. RESP is a good example of this “loose coupling”, since it was interpreted in different ways (financial planning, urban regeneration strategy, technical policy redefinition...) in different regional agencies. Reciprocally the same meaning can be carried by different artefacts: we can easily imagine that the top-down financial planning implemented by OPAC N under RESP “label” could have been achieved with classical financial planning systems.

The encounter between objective elements of context, including instrumental artefacts, and interpretive schemes is not individual. It involves a multiplicity of actors – physically present or not – acting together, conversing, negotiating, and making sense of the situation through dialogical interactions. All acts, words and thoughts are addressed and meaning is generated through dialogical exchanges.

The utilization schemes are not only ideas about how the instrument can be used, but also what desirable schemes of action are prevented by the instrument structure. As RESP example shows, the dialogical interaction about the instrument can trigger “normal” instrument use or its redesign, to widen the range of utilization.

6.4. From semiotic mediators to specular representations

If situations systematically belong to the same class of situations, due to a slow pace of change, the interpretive schemes can be considered as invariant. They can be seen then as intrinsically related with the objective artefacts. They are naturalized, as if they were part of the objective structure of the instrument. The relationship between artefact and activity appears as an automatic association: the artefact seems to determine activity. The triadic relationship becomes dyadic – reduced to artefact and activity, without any interpretive component. In that case, representational theories (the artefact “represents” the activity) such as Taylorism, cognitivism and contingency theory provide an acceptable explanation of experience.

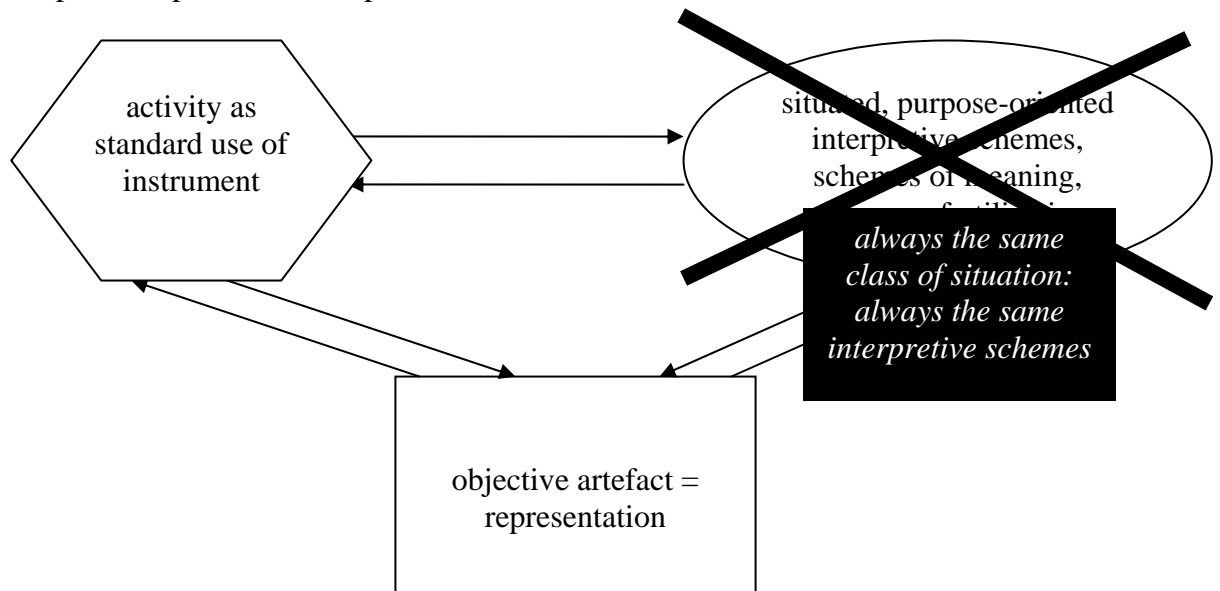


Figure 8: the instrumental triad « downgraded » to activity – representation dyad

6.5. From semiotic mediators to ceremonial symbols

If the objective artefact is interpreted as mainly symbolic and hardly connected with actual work operations, we have again a dyadic relationship, but in that case it is situated activity – and not interpretive schemes – which disappears from the triad. This can happen, for example, when the instrument is imposed in a bureaucratic way, with a low level of appropriation by actors. The relationship between artefact and interpretive scheme appears then as an automatic association: the artefact determines symbolic meaning and reading. In that case, new institutionalist theory (ceremonial adherence to legitimate norms) provides an acceptable account of experience.

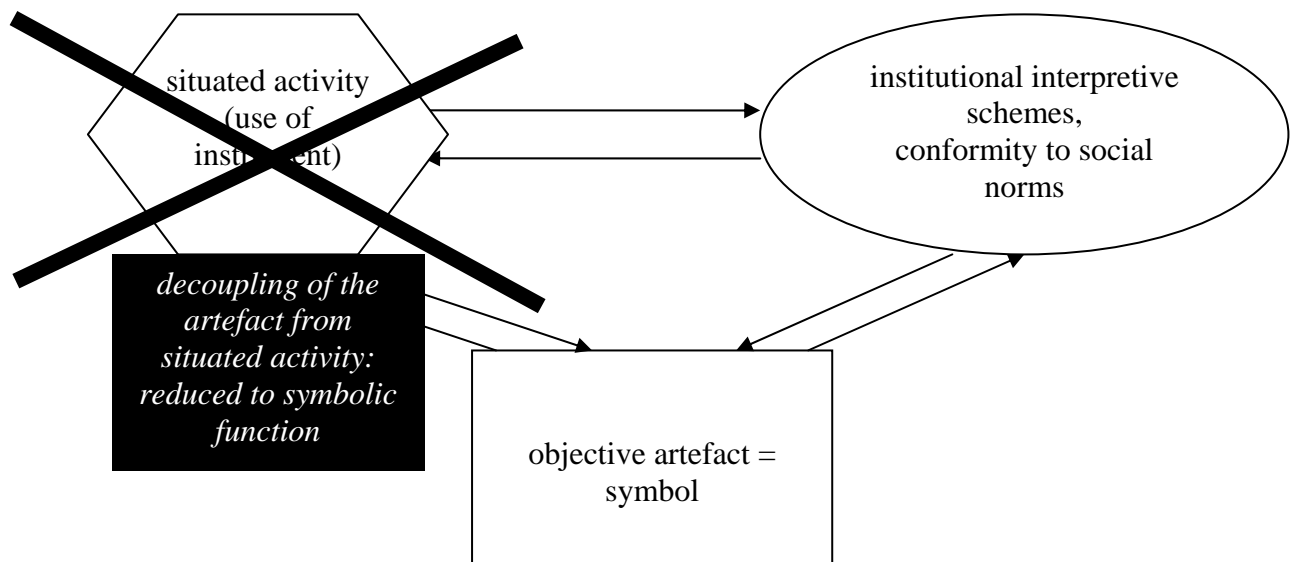


Figure 9: the instrumental triad «downgraded» to dyad symbolic object - meaning

Even if the artefact is decoupled from core operational activities, it generally generates new specific activities, e.g. to enter data, edit them, communicate, get certification or accreditation. For example, housing agencies which make a purely ceremonial use of RESP must dedicate some resources in a small bureaucratic structure to produce and present RESP documents.

6.6. Actant or semiotic mediator?

If none of the previous simplifying hypotheses is valid, the theoretical model can still be simplified by refusing to enter the analytical distinction between “interpretive schemes” and “objects”. In that case, situated activity results from hybrid “acting functions”, which mix objects and purpose-oriented meanings in hybrid “actants”.

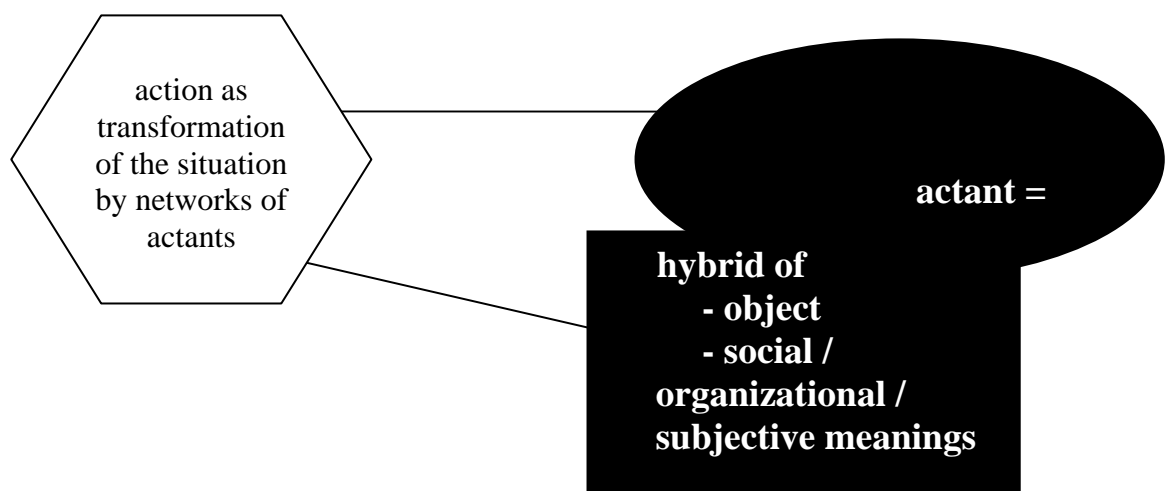


Figure 10: the instrumental triad “synthesized” in an actant – action dyad

Conclusion

By studying the role of a management system, RESP, in the redesign of activities in public housing agencies, we analyzed the relationship between management instruments and activity transformation: is the management system a true representation which determines activity, are activity and instrument decoupled, or is the instrument an autonomous actant which follows its own trajectory? After testing some theoretical frameworks – rationalism, cognitivism, new institutionalism, actant theory -, it appears that an artefact becomes an instrument when it is involved in actors' situated activity and interpreted by them, in dialogical interactions. Meanings, dialogical exchanges and instruments can only be analyzed in situation, in the continuous flow of experience.

The transformation of activity by the instrument goes hand in hand with the redesign of instrument (RESP impacts activity, but RESP at Silene migrates towards another type of instrument, HUP, designed by Silene operational actors), the redesign of organization (transformation of the respective roles of central offices and local branches at Silene) and the transformation of actors themselves. In the activity theory framework, there is a flexible coupling between instrument and practices, corresponding to the creativity and interpretive freedom of actors. The semiotic and dialogical mediation of activity by instruments provides a general theoretical framework, which appears to be compatible with rationalism, new institutionalism and actant theory in specific types of situations.

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APPENDIX 1

Grid for the wandering about diagnosis (example for an entrance hall)				
Design		Management		Uses
		Cleanness	Maintenance	
++	Spacious, functional, with good quality materials.	Very clean (ground, walls, equipments, smell...).	Very good state of maintenance.	Many signs of appropriation and respect.
+	Correct functionality with no conspicuous quality.	Clean (general impression of cleanness, even if there are some unsatisfactory places).	Minor problems of aging building..	Respected spaces (no deteriorations).
-	Badly designed space, low functionality with constraints for users and managers.	Insufficiently clean (spider webs, walls, windows...).	Poor condition, lack of maintenance.	Deteriorations and occasional vandalism
--	Design and materials unfit for users and managers.	Generally dirty (ground, walls, equipments...).	Major problems of maintenance, dangerous situation.	General deterioration, abnormal uses.

Table 1: grid for the wandering about diagnosis