

CONTESTED PRACTICES IN ROUTINES

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ABSTRACT

Routine activities are often contrasted with flexible, creative, unpredictable, improvised actions. However, can flexible and innovative responses to new challenges be born entirely outside of routines? *Flexibility within routines* has recently attracted the attention of researchers in organizational theory. An overview of the various theories how to build flexibility into routines demonstrates new developments and a long overdue revision of theoretical frameworks. It is then argued that these insights build on a dichotomy in routines. The dichotomy consists of a “split” between an operational level and a formal rule-like level. It is argued that numerous problems are connected with this distinction. We propose that the view on routines should be narrowed down to a definition of a routine as a pattern. In a comparison between routines and scripts we are able to identify the necessary preconditions for flexibility. We assume that a routine defined as a pattern puts an actor always in an ambiguous position. He or she has to choose between inconsistent positions and incommensurable values, which can only be solved by situated, local, concrete human practice involving improvisation. There can be no general covering law with deductive rules resulting in an algorithm, which could be frozen into internalized guide to actions. A practice-based view of action within an incompletely “closed” routine can explain both – flexibility and stability in the pattern of a routine. We illustrate this practice-based view with a preliminary case study of a budgeting routine in a public organization.

1 INTRODUCTION

Routine activities are often contrasted with flexible, creative, unpredictable, improvised actions. However, creative novelties often freeze into new routines. Can the reverse also be true? Can routines generate flexible, creative, innovative responses to new challenges?

Flexibility within routines has recently attracted the attention of researchers in organizational theory (Feldman, 2000; Feldman and Pentland, 2003). For instance, Feldman suggests that routines should not only be viewed from the point of their ostensive aspects alone. One should trace human agency’s interventions and adjustments (thus accounting for the performative aspect of routines) in order to explain flexibility of actual

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actions, even if they had originated as routines. For explaining flexibility two ontological levels in routines are distinguished (Lazaric, 2000, Lazaric and Raybaut, 2004): the level of formal rules as abstract representation and the level of a behavioral routine as displayed by individuals in their actual material operations. Both ontological levels are considered as complementary to each other as two sides of the same coin. Routines in action are considered the source of flexibility and assume the status of a ‘locus’ in which an improvising, adjusting agent accomplishes his or her task but simultaneously triggers an endogenous change of the entire routine. Concrete operations in a routine enable both: flexibility in a routine and change of a routine (cf. for instance, Collins, 2004, 297-345 for an analysis of the changes in social rituals and routines accompanying cigarette smoking in public from WWI to the early years of the 21st century).

Thus, an underlying level for explaining change in and of routines is identified as the one including the dynamic interrelatedness between the operational level of a routine and the abstract rule-based level (we can imagine its empirical emergence in hearts, minds and guts of human agents). How are these processes of interrelatedness perceived? Several options are articulated and discussed (see Becker et al., 2005):

A first concept for explaining the interrelatedness between action and principle is the description of a routine as a repository of organizational capability (Nelson and Winter, 1982). Routines as an organizational repository have the capability to retain both individual, tacit knowledge and collective knowledge. In the function as a repository, routines form the backbone on which deliberate change can occur (Zollo and Winter, 2002). Another source of change in this view is identified as the individual’s tacit knowledge when performing the routine (Lazaric and Raybout, 2004). Deliberateness in change is replaced here by tacit knowledge. Change in a routine then is always linked with changes in power relationships, which shake the tacit knowledge and reshuffle (re-position) their ‘holders’, thus necessitating an explicit revision of a heretofore tacit knowledge.

A second approach is suggested by Pentland and Rueter (1994). They describe the abstract principle of a routine as a grammar for concrete actions. An abstract principle thus defines (more or less) the bandwidth within which an action (which is legitimized by it) can be undertaken. A conscious individual is being compared to a native speaker. A native speaker speaks faultlessly in his or her language, because of the internalized grammar rules – he or she can produce perfectly correct sentences, which had never been heard and perhaps even spoken before. A conscious individual human agent can perform approved and legitimate actions, which he or she had never undertaken before, because of internalized rules of “the grammar of available actions” (some of these actions might never been undertaken before, but the respective agent has solid grounds for predicting that they will, indeed, be approved of as they emerge). A routine as a grammar offers a ‘set of possible patterns that need not be fixed or automatic’ (Pentland and Rueter, 1994: 485) but allow for effortful accomplishment within the rules.

Third, according to Feldman (Feldman, 2003) the ostensive, abstract aspect of a routine is intertwined with the performative aspect (the routine does not exist outside of its manifestations, although blueprints for potential routines can float in virtual spaces available to actual performers) and the past history of those “intertwined encounters” does matter in the present and future choices by creating the path-dependence (Howard-Grenville, 2005). Feldman assumes that it is human agency that brings in variation in the

performative aspect of a routine. A theatre drama can be used as an analogy: All actors speak the same lines when performing a well known theatre drama (“To be or not to be...”), but all of them put a different sense and exploit different interpretations of these lines. Empirical studies of the influence of human agency - individual intentions – upon routines (Howard-Grenville, 2005) offer interesting insights. Individual and group intentions (“input” of human agency) may contribute to flexible and careful, self-conscious performance in a routine. Such performance is based on ‘the accumulation and adjustment of practice’. The result is that the action a company ultimately takes on a strategic issue, such as – for instance - environmental management, reflects a history of micro encounters (Johnson et al., 2003), which had preceded it. This implies that practice must be seen as accumulative, accounting for the historical interactions of individuals and groups as well as the larger context in which these interactions are embedded. (Howard-Grenville, 2006)

However, introducing the notion of agency does not explain how the abstract rule and the coordinating nature of a routine are maintained in spite of empirical deviations from the rule and in spite of uncoordinated improvisations, which occur all the time. To the contrary, one is often led to expect that human agency might drive out the abstract rule in a routine. When introducing human agency as a source of variation in a routine, an endogenous change of the latter might be explained, but a new problem arises. It becomes unclear where the collective nature of the routine is localized. How is the coordinating and collective function of a routine realized and maintained despite – or because of – continuously changing and often contradictory individual and group intentions manifested by local actors? How is the routine safeguarded and maintained in spite of continuous deviations and exceptions?

The above overview reveals a structural weakness when explaining change in routines: either the abstract presentation of a routine gets out of sight as is the case when introducing human agency, or the concrete operational processes are ‘overruled’ and ‘pressed’ into the formal rules of a routine, as was the case in the more classical definition (March and Simon, 1958). The distinction of two ontological levels in an explanation of routines seems to create more problems than it solves. The dichotomy of two ontological levels creates its own problem – it is namely not clear how to combine the two levels again. This question goes back to the ‘old’ structure-agency problem (Archer, 2003; Giddens, 1984). Another problematic issue in this dichotomy is the assumption that actors in a routine have a complete overview of the pattern and intention of a routine (‘the abstract rule’). Theorists of distributed cognition, however, emphasize that people do not have a complete overview of a routine, which, by their very definition, remains “distributed”. Nevertheless, they are able to cooperate and contribute (Hutchins, 1999). The concept of an ascribed property of a routine as an instrument for cognitive efficiency also acknowledges this aspect of a routine. In fact, a routine provides just that to the individual actor: not having a complete overview of a routine and yet knowing how to act is one of the important characteristics of a routine in an organization. It is well-known as the distributed property of a routine and it helps an individual assume that his or her actions make sense – even though he or she cannot have a complete overview of all components needed to make a given routine effective (Becker, 2001; Cohen et al., 1996)

In this paper, we depart from this dichotomy and concentrate on the aspect of a routine as *coordinating* device. An organizational routine is (routinely, one is tempted to say) defined as ‘a recurrent interaction pattern’: “that is, collective recurrent activity patterns” (Becker,

2004: 645). A routine is a coordinating device which generally gets its shape/pattern through repetition. The most essential property of a routine is its pattern. This definition is void of the ontological distinction of a routine as abstract representation and a routine in operation. The pattern of a routine as a coordinating device is determined exclusively by the sequence and scheduling of activities (Hoppes and Postrel, 1999), as the latter are enacted and performed by actors. This view of a routine, thus, empties a routine from any content or intention. If there is any intention in a routine at all, the definition suggests that it is distributed among interdependent actors and in the pattern as such. As we are interested in the ways how a collective pattern is maintained that nevertheless allows for local flexibility (without threatening the broader coherence of a routine), we focus on the *pattern* within a routine.

In the next chapter we compare the pattern of a routine with the notion of a script, which is usually conceptualized in such a way as to reflect its function in providing the repertoire of actions and words for a patterned role playing in organizational settings and in other, not always predictable interactions. This comparison reveals several insights about the role, the task and the links of an actor with neighbors in a script/routine. Based on this comparison, we argue that every actor in a routine is embedded in neighboring links. These links pose diverse and even inconsistent expectations on the (connecting/mediating) actor and thus leave the single actor with ‘room for deliberatedness’ (usually meant as a deliberate choice of clashing or at least of incompatible expectations arising from the same role’s repertoire or from a simultaneous access to different roles). As this room for deliberation is simultaneously embedded in concrete neighboring links the activity of ‘aligning’ to the (diverse) neighbors is equated with “adjusting” practice. What exactly this “adjustment” requires will always depend on the nature of the task at hand. We will demonstrate the practice-based activity in a routine by applying it to a financial budgeting procedure in a public organization as empirical case. The analysis of this budgetary routine allows us to see the universe of practice in a single grain of a selected routine and to trace the red thread: to reveal how practice contributes to both. Flexibility within the routine drives change of the routine – perceived as an (recurrent) interaction pattern, while formal adherence to the routine legitimizes actor’s choices as compatible with embedded expectations.

2 ROUTINE AS A RECURRENT INTERACTION PATTERN AND ITS COMPARISON WITH A SCRIPT

Defining a routine as a pattern of interaction makes the comparison between a routine and a script possible (Bogenrieder and Nooteboom, 2004; Pentland and Feldman, 2005). First, we provide an outline of what a script is and compare it to a routine. Then we discuss the consequences of this comparison for the conceptualization of a routine as a pattern. The notion of a script is originally applied to the individual cognitive level (Abelson, 1976). Abelson (1976) develops a script for a visit in a restaurant. When entering a restaurant (at least in Europe) the visitor is looking for a place, then takes a seat, the waiter takes up the orders, then the waiter forwards the orders to the kitchen, where the dinner is prepared. Then the dinner is served, consumed and the bill paid. In a script there are direct connections between nodes, e.g. between the client and the waiter and the waiter with the cook. When carrying over the script to a routine, the node might be compared to an individual actor and a connection is one link in the coordination pattern. The connections an individual node has with neighboring nodes define the ‘role’ of this individual/node in the script/routine, e.g. the role of client, waiter. The individual has a repository of

knowledge available. The neighboring links also put constraints on the individual, which subsequently defines the task of the individual, e.g. the waiter who informs the client after contacting the cook that a particular meal is not available puts constraints on the client’s task to find a meal. This example shows that nodes with direct connections of dependence exert demands on each other, which yield constraints on their connections. These constraints define boundaries of the ‘task’ of a node (Bogenrieder and Nootboom, 2004). Note that the task of a node is constrained by both previous and following connections. The individual’s task and role is always placed in the context of (in space and time) neighboring links. The boundaries of the individual’s task and role are constrained and embedded by its neighbors. This is a first insight drawn from the comparison with scripts: there is no need for an abstract representation of a routine as a rule to comprehend the constraints on the individual’s task. Putting the individual in a pattern of interactions with neighboring links already describes *how* constraints on the individual are formed. There is also no need to be informed about the abstract rule as a guideline for defining an actor’s task. In fact, an actor’s role together with the neighboring links determine the (constraints on the) individual’s task. These constraints are not always explicit. They can also be learned by the recurrence of the interaction pattern. Through repetition constraints on the individual actor are realized by forming expectations about the neighbor’s actions. This might be learned from the past. A neighboring link might have given feed-back on a focal actor’s action which leads to the formation of expectations by the focal actor. Stressing a routine as a pattern thus allows us to identify the consequences of the pattern on the focal node’s action. Feed-back mechanisms contribute to the development of expectations about the neighbor’s actions. The focal node develops stable expectations about the neighboring node’s behavior. When a client takes a seat in a restaurant there is a reasonable expectation that a waiter will come to take up the client’s orders. This stabilization of expectations is one of the main advantages of an organizational routine not only for cognitive efficiency but also for dealing with uncertainty (Becker, 2004). As in a script expectations are stabilized. Note, that this stabilizing effect has its source in the pattern of the routine.

The comparison between a script and a routine reveals yet another issue. The notion of a script makes clear that changes or deviations in (stable) expectations are possible without changing the pattern of interactions as such. Imagine that a particular meal is sold out. The waiter will inform the client about running out of a particular dish and about available alternatives. The client can choose another dish. This example demonstrates that there is stability in the sense that the original pattern is maintained. However, there is also a feed-back mechanism between the linkages which brings in flexibility to a certain degree. The notion of a script thus provides insight that although the roles in a pattern are maintained, nevertheless, changes can take place on the (boundaries) of a node’s task. Here, we identify a first type of change in a routine which brings us to our first proposition: One source of change in a routine is the change in a focal actor’s task initiated by feed-back from neighboring actors. In this type of change only the task but not the role of the focal actor changes. This change is initiated by feed-back mechanisms within the stable pattern of a script/routine. We summarize this form of change by labeling it expectational change.

The most important condition for this mechanism is that the individual accepts his role, i.e. its place in the pattern. However, the notion of a script also reveals that sometimes also an actor’s role can change. When the waiter who has heard from the cook subsequently informs the client about the unavailability of a particular dish, the client can also decide to leave the restaurant. In this case, the client changes his role in the script entirely. He or she

quits the role of a customer altogether. The source for this change is again the linkage of an actor with neighboring links. The recognition that a link puts unreasonable constraints on the actor’s task (e.g. the unavailability of a dish) may trigger further breakdown of the routine; an actor may stop playing his or her role, thus aggravating the departure from the routine triggered by a single link’s failure. In this case we see a change of the routine – the pattern as such changes. This comparison with the notion of a script reveals a second type of change: the pattern of a routine is changed by changing the role of an actor. Within this type of change the actor changes his/her role-position in the overall pattern. In this case we speak of a change *of* the routine not only change *within* the routine. A change in the position of an actor is associated with the political power-aspect in routine changes (Howard-Grenville, 2005). This is consistent with research findings by Lazaric (Lazaric and Raybout, 2004). In a similar vein, sometimes, a new actor gets involved by a focal actor in order to supply support. This is another example of the same type of change of a routine. Summarizing: when the roles and thus the positions of actors in a routine change, the overall pattern of a routine changes. This type of change of a routine is summarized here as ‘re-patterning’ (in a similar way as we talk about re-engineering).

3 THE NEED FOR A PRACTICE-BASED VIEW IN A ROUTINE

Both types of change are identified by putting the individual/node in direct linkages with others. An important assumption in this configuration is that the neighboring links exercise their influence not only in a sequential way. The constraints on the focal actor are also exercised by simultaneous influences of all linkages. The influence of following linkages takes place through the formation of expectations which originates on prior experience. This leads to a view of coordination in a routine as dealing with expectations. The pattern of a routine determines to whom the expectations are directed, on whom they crystallize in socially regulated negotiation and action. We assume that all direct linkages of a node put constraints on the individual task. These constraints lead to either changes in the task or to changes in the pattern. Accordingly, we state that every individual in a routine functions as a linking pin between neighboring links. In this way every focal actor (except the first and the last one) is put in a ‘sandwich’ position between – at least – two direct linkages which influence the role and the task of the individual. Previous and later connections do not necessarily put consistent constraints on the individual node as they have their own role, which is again connected to other nodes e.g. the waiter in his connection to the cook determines the constraints on the client. Instead of dealing with consistent constraints on a “sandwiching” individual and freezing him or her in the routine, an individual must deal with two – sometimes contradictory, incompatible, incommensurable constraints. What does it mean that an individual in this confusing position *must deal with inconsistent and sometimes even with incompatible demands?*

Nelson and Winter (1982) ascribe to a routine the property of a truce: the idea that a routine is a solution to a hidden conflict by determining the pattern. From our analysis of a script-like routine we can partly confirm the appearance of this property and partly reject the hypothesis that it appears and does so in order to function as a truce between conflicting parties. The view of a routine as a truce is confirmed when looking at the pattern of a routine. Direct contact between inconsistent tasks /nodes is avoided, hence the function of a truce. However, a possible conflict is now narrowed down to one actor. The individual actor must deal and wheal with the constraints. In this situation, a conflict is indeed avoided, however, the inconsistency is now located at the individual actor.

The view that the focal actor is exposed to inconsistent constraints closes the possibility that the inconsistency can be solved by rules, because application of the rules demands a high degree of clarity and coherence. The question would arise whose rule (from which of the multiple, but at least two neighbors) has to be applied in any particular situation? Rule application in such a configuration is then strongly connected to power. Rationality alone cannot contribute enough input to enable an individual to find a solution in this situation. As Rescher and Brandom (1980) argue it is not possible to combine worlds which are inconsistent with each other. This would lead to strong contradictions (a is true and a is not true in one and the same world) which would lead to a situation without any obligations according to the principle ‘ex falso quodlibet’ (Rescher and Brandom, 1980: 22). Nevertheless, the authors stress the point that inconsistency is not a problem as such. It is only the attempt to combine inconsistent demands within a single “instruction” that leads to a problem which cannot be solved by logical means alone.

We therefore suggest that one should select *practice* as the only relevant and viable notion, which allows us to predict how to deal with inconsistent demands. As a result, we assert that practice explains flexibility in and of a routine by taking into account the linkages of a focal actor. This is supported by Becker (2005) who also pleads for the recognition of practice, as practice takes into account the concrete social context and situatedness of action in a recurrent interaction pattern.

4 A CASE STUDY OF A BUDGETING ROUTINE – SOME EMPIRICAL SITUATIONS

We take a financial routine for admission for expenditures (e.g. conference visits, research visits, other research costs) in a faculty department as case. This case study is still in a preliminary phase and will be thoroughly explored in a later stage with interviews as our method of choice. For our present purposes, only part of the routine is described. The basic pattern of the routine is like this: an applicant who wants to spend money fills out a form with some information (paper presentation in a conference, type of research collaboration, type of research costs) about the planned expenditures and an estimation of the expenses. In case of research expenditures this form is forwarded to a special research department, which co-finances research related expenditures. Then this form is forwarded to the treasurer of the department who has to sign the application for approval and also decides from which budget the expenses will be funded. The treasurer then formally evaluates the suitability of the expenditure (relevance). There exists a maximum for the expenditures per person. If a request is higher than a certain amount, the request must be signed by the chair of the department. The form is subsequently forwarded to the financial department which controls the budget numbers on exhaustion and lawfulness (legitimacy). The financial department is controlled by the central financial department. This is a description of the basic pattern of a routine comparable to a script: nodes, links and the sequence of links are fixed. The nodes (e.g. an applicant, the treasurer, the financial faculty department etc.) are well-known. In this description, the sequence is quite logical and does not contain inconsistencies.

In the following analyses we take the treasurer as focal node. His/her task is constrained by the link with the applicant, who wants to spend money (preferably as much as possible), and the task of the financial department which takes account of the legitimacy of the

expenditures, which also implies control of and the possible warning against the exhaustion of the available budget. At that point, possible inconsistencies may come up. The treasurer him/herself has his/her own role and task: judging the relevance of an individual (request for) expenditure in the context of the overall financial situation in the department. This also implies the consequences of a concrete financial decision for other (future) applicants. The treasurer is in a situation, in which he or she must deal with at least two inconsistent demands at the same time. The treasurer's task is constrained by the control of the financial department which does not allow any unit to exceed the budget on the one side and it is also constrained by the necessity and/or wishes of applicants to spend as much money as needed (and there is always more money needed than available). Although the control of the financial department takes place later than the approval of an expenditure (later in the sequence of a routine), it nevertheless puts constraints on the treasurer's task by forming expectations. The treasurer has experienced some situations, in which some of the requests were refused in the past, when sent over to the financial department. In other cases, the treasurer was held responsible for acceptance of arguments about the necessity of an expenditure and had to defend the expenditure against the financial department. These incidents with their feed-back lead to the formation of expectations within the treasurer's memory.

The first proposition states that flexibility in a routine is realized by changes in the focal node's task. This is initiated by feedback from neighboring links. The fact that a routine contributes to flexibility can be demonstrated in the following case: When the treasurer turns down a request because the maximum of allowances is already reached but the applicant nevertheless wants to visit a conference, a feedback mechanism together with negotiations starts. The applicant stresses the importance of visiting a particular conference in personal communication to the treasurer. In these negotiations options are developed how to allow for this expenditure and nevertheless satisfy the financial department's requirements meeting their limits (the next link from the treasurer's point of view). Possible solutions which were chosen in the past are, for instance: also after negotiation the request is just turned down; an applicant borrows money from a colleague's budget and pays it back in the next budget year; when by chance the request is at the end of the budget year, the bookings of the expenditures are delayed so that the booking (not the actual expenditure) falls into the new budget year; the expenditure is paid personally and is refunded when there is budget to be drawn upon again; a request is split into parts which are booked on different budget numbers. All these options are ways to deal with the inconsistent constraints on the treasurer. The inconsistency lies between the wishes of the applicant and the requirements of the financial department concerning the safeguarding of the budget. Another option which is sometimes chosen is just giving the admission even under the condition that the budget is exceeded. In this case the inconsistent constraints are 'solved' by just refusing one constraint (in this case the constraint from the financial department). This last option is often followed by an explanation to the financial department of the importance of the request in personal communication. In cases that an applicant does not accept a rejection, another mechanism starts: The applicant changes the pattern of the routine itself.

Again some examples first: an applicant whose request was rejected circumvents the treasurer and goes straight to the chair of the department who is also allowed to sign the request and forward it to the financial department. In such a case the role of the treasurer is circumvented. Another way to change the pattern in the routine is the addition of a new

role. This happens when an applicant succeeds to get the permission of a person, who is placed in a higher level of a bureaucratic hierarchy, e.g. when an applicant succeeds in securing the dean’s permission. His decision goes straightforward to the financial department. In such a case the treasurer’s original decision is just overruled. The role of the treasurer is temporarily suspended and put aside. The overall pattern of the routine has changed. Another way of twisting the pattern of the routine in order to change it can also be initiated by the applicant. In order to succeed, he or she brings in the trump card: a strong recommendation of another influential person outside of the original routine, e.g. the applicant forwards his form to his supervising professor who then hands in the request in the applicant’s name with his strong recommendations. In this case, different from the other two cases mentioned above, the treasurer’s role still remains safely tucked in the routine pattern. However, another role is added in the overall pattern which again puts constraints on the task of the treasurer. This form of re-patterning thus is slightly different from the two pattern changes which had been mentioned above. The two examples shown above demonstrate how a new pattern is installed which excludes the role of the treasurer and suspends it or puts it aside. Whereas in the last example the role of the treasurer is still intact, but another role is added, the suspension puts different constraints on the treasurer. Summing up: two forms of re-patterning can be distinguished. One form is eliminating a role completely and installing a different route or pattern. Another form is installing a detour in the overall pattern and adding a role. The addition of a role is only effective when putting new or further constraints on the focal node – in this case on the treasurer’s task. All examples are forms of re-patterning. They demonstrate flexibility of the routine, which confirms our second proposition. Sometimes, it might seem that flexibility is nothing more than undermining the treasurer’s decision. However, from an organizational point of view, this guarantees flexibility relative to the treasurer’s role, whether these decisions are right or wrong is not the issue.

These examples of expectational change and re-patterning demonstrate that routines are performed in a flexible way. The two propositions can be confirmed by quoting the above examples from a large university’s department. There are, of course, many more different ways of flexing a routine. Furthermore, the description of a routine as a pattern – similar to a script – seems to be sufficient for describing the mechanism how changes occur.

At least in the current stage of analyses the options and alternatives invented and applied in a routine cannot be explained through coherent cause-effect relations. The alternatives are seemingly arbitrary in their application. In the next paragraph we want to push the discussion further into a conceptualization of these flexible performances.

5 ANALYSES: PRACTICE IN A ROUTINE

We discussed the current dichotomy in conceptualizing routines as formal rule and as a concrete operation. As is demonstrated in the case, there are formal rules e.g. about the amount of money to spend, the information provided in the request-form and the necessary signatures needed for refunding. The pattern of actions is formalized. However, this formal rule can neither be conceptualized as a grammar nor as an ostensive aspect which interacts with a performative aspect. The conceptualization of a routine as a grammar would suggest that the formal rules determine the bandwidth of possible alternatives (Pentland and Rueter, 1994). Our case examples, however, show that the formal rules are silent about options and bandwidth how to deal with the rules. There are no organizational hints what a treasurer is

allowed to do when dealing with the rules. The conceptualization of the formal rules an ostensive aspect of a routine must also be refused. First, every actor makes an own interpretation of what the formal rule implies. The applicants, for instance, often refer to the view that the financial department or the treasurer should not hinder their research but support it by allowing for expenditures. Second, in the concrete operations interplay between the ostensive and the performative aspect cannot be identified. Interplay would suggest that the ostensive aspect – the rule - is an independent entity of its own. As our case demonstrates, the rule about the meaning of the routine are distributed and diverse. On top of that, there does not exist an organization-wide description of the routine’s purpose, which would guide behavior. What exists in the organization is just the pattern of the routine together with roles. Summing up: conceptualizations of a routine that assume the existence of an abstract rule in the routine attribute too much weight to the abstract representation. What we see in the case is that people negotiate on their interests. The routine delivers a template of the sequence of steps and the actors’ role and task. Thus the abstract representation, as far as actors know it, is better described as an ‘anchor point’ or a ‘baseline’ upon which a lot of variation takes place. In our case, we see a lot of deviations from the formal rule even in the sequence of actions. The pattern of a routine is hereby a groundwork on which basis the ‘deviations’ can be recognized as such and get their meaning. The pattern of a routine is the device on which meaning is created. Meaning creation by negotiating alternatives is grounded in the pattern of a routine but the pattern does not prescribe the construction of meaning. Meaning construction and behavior in the routine is initiated by the (constraining) links and roles. If we want to use a metaphor - a piece of music (not only in jazz, where improvisation is – *nomen est omen* – a routine occurrence) would be appropriate. There is a theme and variations on the theme. The variations go so far that it is disputable what the ‘real’ or the ‘original’ theme is. The conceptualization of a routine as a script which only defines the pattern consisting of nodes and links seems therefore a more appropriate description as it is the most minimal description of a theme without already assuming some rule as content.

If there is no interplay between formal and informal aspect of a routine but a background-foreground relation, what then makes the actor in the pattern being (in-)flexible? In other words: how does the individual actor deal with inconsistent demands? It is suggested that we should assume an actor as an agent with intentions (Feldman, 2003). We cannot confirm this suggestion based on our case: our focal agent – the treasurer – indeed has a role and a task and may also have personal intentions. However, the notion of a script in the case makes clear that the agent is always embedded in at least two links, which makes his personal intentions relative. He or she has to negotiate with the other links. There is no isolated, individual agent in a routine. If there are intentions they do not stand alone. They are always linked with the neighboring links. The neighbors constrain the individual’s intention. However, as Archer (2003) makes clear, constraints (and enablers) do not have the status of a cause-effect relation, just the status of a tendential influence. Archer (2003) therefore proclaims that the individual always makes ‘reflexive deliberations’ on how to act. Archer (2003) also assumes human agency with intention, but this intention is not blind. Agency is redefined as ‘reflexive deliberation’ or ‘internal conversation’. Wrapping up, the notion of human agency as an explanation for variable action in a routine seems too shortsighted. Human intention is a conscious deliberation which takes into account the specific circumstances as materialized in the links in the pattern. As Archer says, the human being “must meet the occasion with an unscripted performance.”(Archer, 2003: 42). In the end, human beings look for a *modus vivendi* through reflexive deliberation of how to deal

with specific contingencies. Archer (2003) assumes a certain stability in human reflexive deliberation as this is part of our identity. She speaks of a ‘first-person ontology’. This line of reasoning, however, does not explain the astonishing amount of variations in actual solutions. How then can we conceptualize dealing with inconsistent demands and coming up with a wide range of options?

Tsoukas (1996, 2005) suggests that reliance on actual “living” practice is the only way out. He suggests that such a situation can only be dealt with by adopting a practice-view of human action. A practice-view takes into account the specific situation (in the pattern of a routine) and – as part of it - also the specific social relationships. He relies on Bourdieu and his notion of habits – especially on the concept of habitus. We have decided not to apply Bourdieu’s analysis of habitus to the problem of routines as a matrix for innovation. In doing so, we had been prompted by the fact that Bourdieu does not take into account the built-in inconsistencies in any actor’s task, which, in turn, is the result of his structuralist theoretical background. This structuralist background makes him define the concept of “habitus” in an objectivist way, which leaves too little leeway for individual improvisation (except for those improvisations which generate actions conforming to the range of actions perceived as “reinforcing” the existing social structures):

“Habitus can be understood as, on the one hand, the historical and cultural production of individual practices – since contexts, laws, rules and ideologies all speak through individuals, who are never entirely aware that this is happening – and, on the other hand, the individual production of practices – since the individual always acts from self-interest.” (Webb, Shirato, Danaher, 2002: 15). Bourdieu himself stressed the importance of complementing his subjectivist interpretations of human practice with objectivist ones, since they allowed him to decode: “the unwritten musical score according to which the actions of agents, each of whom believes she is improvising her own melody, are organized” (Bourdieu, 1998: 8)[‡]

Human practice based on habitus alone does not help us to explain the numerous alternatives in behavior. Therefore, Tsoukas (1996) adds two other dimensions in order to explain the numerous alternatives in human behavior: the role position of an actor with role-related expectations and the interactive-situational dimension. He then concludes: “this is because there is something elusive about social practices, no matter how replete with regularities they may be: at any point in time, one cannot offer a comprehensive description of a social practice, since to do so presupposes first that one is able to foresee all future events that may occur in a practice, and secondly, that one possesses an unambiguous language which can faithfully reflect what is going on. Both of these presuppositions do not apply.” (Tsoukas, 1996: 18).

Accepting the practice-based view of organizational routines we can better explain numerous deviations, bypasses, circumventing operations, improvised solutions, and other alternatives to a simple repetitive execution that are developed when performing a routine. But we cannot really explain and predict which form any given practice will take in a concrete, empirically describable situation. However, relying on practice proves 1. that

[‡] It is quite clear that this points in the structuralist direction, as practiced, for instance, by de Saussure and Jakobson in linguistics, by Levy-Strauss in anthropology, by Roland Barthes in semiology and by Lacan in psychoanalysis, to mention but a few representatives of this influential theoretical school.

people are able to produce numerous alternatives in a routine, 2. that no generic rules can be formulated which guide this invention of alternative solutions and 3. that the pattern of a routine is the necessary ground for producing meaningful practice but does not determine the construction of meaning.

Inconsistencies in a routine are not only a treasurer’s dilemma. They always emerge in negotiations with others – although these negotiations with others do not always take place in a literal sense (they can be tacit, intuitive, imagined, or they may even be performed by proxy).

6 CONCLUSION

We do not have a ready-made prescription for explaining how a routine, far from being a rigid mold, from which exact carbon copies of the same original behavior emerge, actually can play the role of a fertile soil, from which inventive, intuitive, original and creative new practices and actions spring up. We do not have a complete theoretical explanation of the fact that organizational routines, far from being blindly led by invisible scripts leaving no room for individual improvisation and creative input, are actually frames for facilitating and breeding grounds for the actions that are new, unexpected, inventive, surprising, paradoxical and evolving, for the anti-routine actions of human agents. In fact, most of us in some of our greatest social roles face the dilemmas, which had been brilliantly conceptualized by Machiavelli in the domain of political philosophy. Having asked himself the question if “all our moral dilemmas can be stated in such a way as to make them commensurable?”, he answered in the negative: “by making his readers aware of the incommensurability of our moral ideals – in his case the incommensurability of Christian ethics and the pagan morality from which the acceptance of historical prudence originated. We live in a world, in which one moral good may be the mortal enemy of another moral good.” (Ankersmit, 2002, 7)

In our times, the dilemmas, which Machiavelli thought were only experienced by the princes, are doomed to trouble even the mid-level bureaucrats (as the example of a treasurer in an academic bureaucracy mentioned above clearly indicates) and most of us, simple operatives, who have to “become themselves” even if they had originally hoped to find a safe heaven in a routine or two.

REFERENCES:

- Abelson, R.P. 1976. Script processing in attitude formation and decision making. In: J.S. Carroll and J.W. Payne (eds), *Cognition and Social Behavior*. Hillsdale, NJ: Lawrence Erlbaum, pp. 33-45
- Ankersmit, F.R., 2002, *Political Representation*, Stanford, Stanford University Press
- Archer, M.S. 2003. *Structure, Agency and the Internal Conversation*. Cambridge: Cambridge University Press
- Becker, M.C. 2004. Organizational routines: a review of the literature. *Industrial and Corporate Change*. Vol., 13, iss. 4, 643-677
- Becker, M.C. 2005. A framework for applying organizational routines in empirical research: linking antecedents, characteristics and performance outcomes of

- recurrent interaction patterns. *Industrial and Corporate Change*. vol. 14. no.5, 817-846
- Becker, M.C., Lazaric, N., Nelson, R.R., Winter, S.G. 2005. Applying organizational routines in understanding organizational change. *Industrial and Corporate Change*, Vol. 14, no. 5, 775-791
- Bogenrieder, I., Nooteboom, B. 2004. The Emergence of Learning Communities: A Theoretical Analysis, in: H. Tsoukas, N. Mylonopoulos (ed.) *Organizations as Knowledge Systems. Knowledge, Learning and Dynamic Capabilities*. New York: Palgrave Macmillan, 46-66
- Bourdieu, P., *Practical reason: On the Theory of Action*. Cambridge, Polity Press, 1998
- Cohen, M.D., R. Burkhart, G.Dosi, M. Egidi, L.Marengo, M. Warglien, S.Winter 1996. Routines and other recurring action patterns of organizations: contemporary research issues. *Industrial and Corporate Change*, 5, 653-698
- Collins, R. 2004. *Interaction Ritual Chains*. Princeton, Princeton University Press
- Feldman, M. 2000. Organizational Routines as a Source of Continuous Change. *Organization Science*, vol. 11, no.6, 611-629
- Feldman, M.S. 2003. A performative perspective on stability and change in organizational routines. *Industrial and Corporate Change*, vol. 12, 727-752
- Feldman, M.S., Pentland, B.T. 2003. Reconceptualizing Organizational Routines as a Source of Flexibility and Change. *Administrative Science Quarterly*, vol. 48, 94-118
- Giddens, A 1984. *The Constitution of Society*. Berkely, CA: University of California Press
- Hoppes, D.G., Postrel, S. 1999. Shared Knowledge, “Glitches,” and Product Development Performance. *Strategic Management Journal*. vol.20, 837-865
- Howard-Grenville, J. 2005. The persistence of organizational routines: the role of agency and organizational context. *Organization Science*, 16, 618-636
- Hutchins, E. 1999. *Cognition in the Wild*. Cambridge, Mass.: The MIT Press
- Lazaric, N. 2000. The role of routines, rules and habits in collective learning: Some epistemological and ontological considerations. *European Journal of Economic and Social Systems*, 14, no. 2, 157-171
- Lazaric, N., Raybout, A., 2004. Knowledge Creation Facing Hierarchy: the Dynamics of Groups Inside the Firm. *Journal of Artificial Societies and Social Simulation*, No.7(2)
- March, J.G., Simon, H.A. 1958. *Organizations*. New York: Wiley
- Nelson, R.R., Winter, S.G. 1982. *An Evolutionary Theory of Economic Change*. Cambridge: The Belknap Press of Harvard University Press
- Pentland, B.T., Rueter, H.H. 1994. Organizational Routines as Grammars of Action. *Administrative Science Quarterly*, 39, 484-510
- Pentland, B.T., Feldman, M.S. 2005. Organizational routines as a unit of analysis. *Industrial and Corporate Change*, vol. 14, no.5, 793-815
- Rescher, N., Bandom, R. 1980. *The Logic of Inconsistency*. Oxford: Basil Blackwell
- Tsoukas, H. 1996. The firm as a distributed knowledge system; a constructionist approach. *Strategic Management Journal*, vol.17 (special winter issue), 11-25
- Tsoukas, H. 2005. *Complex Knowledge. Studies in Organizational Epistemology*. Oxford, Oxford University Press
- Webb, Jen, Shirato, Tony, Danaher, Geoff, *Understanding Bourdieu*, London, Sage, 2002
- Weick, K.E., Westley, F. 1996. Organizational Learning: Affirming an Oxymoron. In: S.R. Clegg , C. Hardy, W.R. Nord (eds) *Handbook of Organization Studies*. London: Sage, 440-458

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Zollo, M., Winter, S.G. 2002. Deliberate Learning and the Evolution of Dynamic Capabilities. *Organization Science*, vol. 13, no. 3, May-June, 339-351