

Oblique Knowledge :

The Clandestine Work of Organizations

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 ABSTRACT

Scholars easily assume that organizations identify and solve problems, given their bounded rationality (Cyert, March, 1963), their belief in the "analyzability" of the environment and the thoroughness of their intrusions (Daft, Weick, 1984). Thus, the importance of organizational knowledge management in enhancing competitive advantage has been adequately exacerbated in the recent literature (Hedlund, Nonaka, 1991), and in particular the unsuspected role played by tacit knowledge in this matter (Spender, 1993). The purpose of this paper is to investigate organizational knowledge, questioning the purpose and the processes of its manipulation. The main interrogation lies in determining whether organizations try to "solve" problems or to "double-cross" them, by illuminating the unsuspected role of short-cuts and furtive, sagacious, deviant, — *oblique* — knowledge in the every day of organizations' life.

An investigation of the categories of knowledge serves the purpose of this paper, while we disinter from the Greek heritage the practical intelligence and the ruse of politicians, hunters, sophists, animals and heroes in handling successfully mutable, ambiguous and unpredictable situations (Detienne, Vernant, 1974). We bridge the gap between the knowledge of the Ancients and managers today, looking for this sagacious intelligence, and revisiting organizations and their management in a grounded-investigation into workplace with managers facing the ambiguous, the mutable and the unpredictable.

The Ambiguous and The Unpredictable

Organizations are sometimes rather mysterious for the genuine scholar trying to shed some light on their functioning, when they are not completely opaque to themselves. With most companies competing against competitors who pretty much "strategize" having access to the same information (Starbuck, 1992), what make organizations more or less successful facing the ambiguous and the unpredictable ?

Different schools provide different answers. The strategic choice view sees in the proactive role of managers the roots for enacting the environment, with people organized and socialized to serve an envisioned purpose. At the opposite end of this voluntaristic perception, population ecologists and economic historians attribute to the social and economic conditions surrounding the difficulty the extent and the capability of organizational response. Environmental selection dictate the rules for organizations to play with adjustments against adversity. The collective school, if more voluntaristic than the previous, sees in collective-action controlling, bargaining and negotiating, the roots of mutual adjustment. Managers are given an interactive role in adjusting collective imperatives and individual aspirations. Last but not least, the structural view gives the individual the determined choice to react and adapt if willing to contribute to a viable system. Functionalism, contingency theory and various systems theories dictate roles and positions that must be adequately arranged for the structure's sake.

With the risk of being iconoclastic, we would suggest that individuals or groups of individuals often face difficulty, ambiguity and unpredictability "by putting a sheep skin above their heads" (Montaigne, *Essays*, 1580) and meekly hiding away from the storm, as Montaigne did when he was Mayor of Bordeaux, his city being struck by plague. When they eventually decide to interfere, they are likely to consider alternatives that are more bound to circumspection and shelter, than to exposed heroism.

Neither systematically deterministic, nor spontaneously voluntaristic, organizations work under sets of *minima* (minimal consistency, minimal faith, minimal contentment, ...), “weathering the storm”, “unlearning yesterday” in order to continue to “fly without flying apart”, while “proliferating processes collide, contest, and interact with another to generate wisdom” (Hedberg, Nystrom, Starbuck, 1976).

The explicit and public part of these processes are likely to be the tip of the iceberg of the whole body of organizational ways to handle ongoing difficulties. Recent works unveiled the strategic role of executives’ clandestine networking in helping to deal with temporary crisis (Moulet, 1992). Thus, when dealing with sensitive information, organizations tend to favor informal and intimate circles rather than conventional procedures to make sense and circulate critical knowledge (Baumard, 1993). In true crises, the enchainment of hidden powerplays and tacit warnings are the real field of difficulties’ resolution : “Some people try to persuade colleagues that current behavior programs no longer work. Subordinates set out to overthrow leaders. Bankers and governmental and union officials try to exert influence” (Starbuck, 1983, p. 96).

Strategic theorists tend to see knowledge as a well-kept treasure of organizations. Competitive advantage flows from its uniqueness (Prahalad, Hamel, 1990), while strategies are based on its idiosyncrasy, rarity and sustainability (Barney, 1991). The above static perception ignores all the dynamics of knowledge, and in particular “the knowledge of handling knowledge”: navigating, manipulating, making sense and driving steadily in a mutable body of knowledge. The question we would like to raise is whether or not there can be an asymmetry in the “knowledge of handling knowledge” similar to the asymmetry of information from which firms are accruing their rents. Ancient Greeks believed so. They called this peculiar know-how of handling mutability and unpredictability “metis,” and thus identified it as a specific branch of knowledge itself.

A Fourth Dimension Of Knowledge

Tradition in social sciences distinguishes three forms of knowledge, as described and enhanced by Ancient Greece philosophers : *episteme* (abstract generalizations, basis and essence of sciences), *techne* (the technical know-how, being able to get things done) and *phronesis* (practical wisdom, drawn from social practice). The assumption that these three categories of knowledge cover all extents of knowledge is thus presumed universal. In 1974, however, two French researchers of ancient civilizations produced a major work that was almost unnoticed until the recent second edition of their complete works (Detienne, Vernant, 1974, 1992). In their ten years’ investigation of knowledge in Ancient Greece, Detienne and Vernant unveil a fourth dimension of knowledge, highly considered and intensively practiced in Ancient Greece mythology and social life. This fourth field of knowledge bears for more than one thousand years the name of *mètis*, and disappears both from the literature and the common language in any forms in the fifth century of our era. What is this “*mètis*” ? What role did it play in Ancient Greece? How could it enlighten organizations facing ambiguous and unpredictable situations today ?

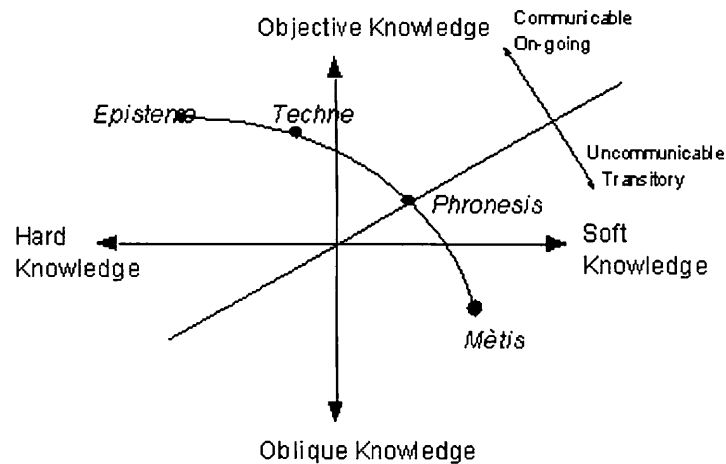
Mètis is both a Greek divinity and a mode of knowing. It helps Ulysses to be successful in his Odyssey, it permits Zeus to reign with serenity on the Pantheon, it helps the hunter to trick his prey, it leads the boat in a violent sea, when compass, radar and maps are not to be discovered until 18 centuries later. In this heterogeneous Greek world, a persistent model of knowing and perceiving emerges at all levels of society, from the fisherman and the hunter to the sophist and the politician. The *mètis* is that form of practical intelligence, using *conjectural and oblique* knowledge, which anticipates, modifies and influences the fate of events in adversity and ambiguity. When abstract generalizations (*episteme*) are unable to handle a changeable and unpredictable situation ; when know-how (*techne*) does not have any grip on a chancy and fluid reality; when practical wisdom, drawn from social practice (*phronesis*) does not come with any solution to a mutable and unsure event ; here comes the fourth dimension of knowledge, that no treaty could teach, that no words can fully contain, a knowledge of short-cuts, of sagacious envisioning, of perspicuous intervention, even more mutable that the situation it has to cope with, discreet, operative, conjectural : the *Mètis*.

To make this *mètis* more familiar to the social researcher, one would say that it is a form of *tacit knowledge*, learned from experience, that makes an individual a valuable asset for an organization or a political party, regardless of his technical know-how (*techne*), of his science (*episteme*) or of the depth of his social involvement and expertise (*phronesis*). It is what the flair, the knack and bent of the

successful politician is made of : a form of knowledge at the opposite end of metaphysics, with no quest of ideal, but a search for a practical end; an embodied, incarnate, substantial form of knowledge.

Positioning Metis in the Body of Knowledge

As Nonaka put it, “knowledge that can be expressed in words and numbers only represents the tip of the iceberg of the entire body of knowledge” (Nonaka, 1992). The following graph attempts to position *metis*, *phronesis*, *techne* and *episteme* :



While *episteme* is constructed from both *techne* and *phronesis*, the *metis* appears to be transitory and incommunicable. It stands apart from the conventional learning process, remaining unsaid and tacit, responding to its own logic of obliqueness. The most interesting characteristic of *metis* is undoubtedly its perception as an identifiable branch of knowledge by the Ancient Greeks : a knowledge of the mutable, the furtive, the transitory, and one which is identified as a quality in people or groups of people. Similar to the role of organizational slack, the role of *metis* is one of clandestine — action-generated — regulation. It operates by a shift of game board when usual rules and learning show incapability to determine a way out. Thus, the *metis* is always present in the background of the problem-solving process engaged by organizations. It could be defined as the “boundary-spanning” branch of knowledge, and positioned among the categories of knowledge as follows:

| | <i>Episteme</i> | <i>Techne</i> | <i>Phronesis</i> | <i>Mètis</i> |
|---------------------|---|--|---|---|
| Definition | Abstract generalization | Being able to get things done know-how | Practical wisdom, driven from social practice | Oblique and conjectural knowledge |
| Articulation | Hierarchical | Embodied | Organic | Mutable |
| Time range | Undetermined | Perennial | Life | Goal-driven /ephemera |
| Scope | Universality | Systems | Persons | Situation |
| Structure | Hard | Hard and soft | Soft | Furtive |
| Nature | Abstract, Objective | Abstract & practical | Abstract & practical | Practical, Oblique |
| Goal | Truth-Science | Structure | Wisdom | Result |
| Emergence | Maturation | Experience | Social interaction | Unpredictability |
| Process | Sequential | Hybrid | Hybrid | Simultaneous |
| Elaboration | Constructive | Hybrid | Hybrid | Deconstructive |
| Means | Abstraction, Deduction, Idealization. | Observation, Study, Recipes | Implicit learning, Personal experience, Socialization | Combination, Regeneration, Ruse, Flair, Short-cuts. |
| Preservation | Laws, Principles, Representation | Manuals, Community of practice | Clans, ethnic groups, Culture, Personality | Discreet, Intimate, Clandestine |
| Status | Substance | Accumulation | Learning | Transitory |
| Explicitness | Analyzable, Easy to communicate, Standard | Hybrid with a trend to Explicitness | Hybrid with a trend to Tacitness | Complex, tacit, Difficult to communicate, Specifics |

Table 1.: Typology of knowledge categories

Obliquity

How can we define “obliquity” ? Plato illustrates the concept with an enigma of intertwining contradictory interpretations : “A man who was not a man, seeing and not seeing a bird who was not a bird, perched on a wood that was not a wood, did and didn’t throw a stone that was not a stone” (Plato, 430-347 B.C.). Such was the puerile riddle of the eunuch (“a man who was not a man”), aiming without reaching (“did and didn’t throw”) because of darkness (“seeing and not seeing”) with a pumice-stone (“a stone that was not a stone”) a bat (“a bird who was not a bird”), perched on a reed (“a wood that was not a wood”).

Plato uses this enigma to enlighten the field of opinion — *dóxa* — where events have double meaning, “where truth and its contrary interlace tightly” (Detienne, 1967, pp. 114-115). Obliquity is the path that leads us toward a tolerable solution to Plato’s enigma. Straight rationality fails to provide an answer to such paradox as “a man who was not a man”, or “a wood that was not a wood.” Only through abductive thinking (Eco, 1992, p. 253) can we invent a “representation” that would fit the “multiple sensemaking frameworks that are themselves complex and simple, ambiguous and clear, contradictory and logical, and stable and changing” (Starbuck, 1988) suggested by the ambiguous enigma. Most of the famous “deductions” of Sir Arthur Conan Doyle’s Sherlock Holmes are in fact similar creative inductions (Eco, 1992, p. 275) and proceed from obliquity. In *The sign of four* (Doyle, 1890), Sherlock Holmes observes

traces of red mud on Watson's shoes along with stamps and a pack of postcards on Watson's desk. He suddenly turns to Watson and asks him why he went to Wigmore Street that morning to send a telegram. Holmes could not have possibly deduced from the two available weak signals the proposed solution. He proceeded from oblique knowledge, deriving a sagacious envision of events from abductive construction (ab- signifies the absence or the weakness of tangible evidence or stimuli to derive a formal interpretation: imaginative induction).

Bridging The Gap With Managers Today

Our purpose in this paper is to introduce the social scientist to the role and processes of oblique knowledge in organizations today. To achieve this task, we will look at the implicit rules of a mode of knowledge that, not surprisingly, disappeared to the advantage of metaphysics and rigorous logic. We adopt a double-edge approach:

- To test the construct of metis as practiced in Ancient Greece and unveiled by Detienne and Vernant: "a type of intelligence and thought, a way of knowing (that) implies a complex but very coherent body of mental attitudes and intellectual behavior which combine flair, wisdom, forethought, subtlety of mind, (...), resourcefulness, vigilance, opportunism, various skills, and experience acquired over years (Detienne, Vernant, 1978, p. 3).
- To retain from the above construct the criteria for initiating metis : "It is applied to situations which are transient, shifting, disconcerting and ambiguous, situations which do not lend themselves to precise measurement, exact calculation or rigorous logic" (Detienne, Vernant, 1978, p. 4) and to aim at the construction of a grounded theory (Glaser, Strauss, 1967) of oblique and conjectural knowledge (as a broad definition of metis) in organizations today.

We will present three case studies, conducted in 1992 and 1993 in three organizations facing mutability and unpredictability :

- Indigo Publishing Co., a publisher of confidential letters, facing a mutable enigma,
- Banque Indosuez, New York, where we studied the works of traders and executive staff facing major financial loss, internal disputes, and attacks against the French franc, with unpredictable ways out.
- Pechiney, in three different events : facing speculators' rumors during the financial crisis of 1931-1932, trying to get insights on a technology — the flowing process 3C3 — developed by their competitor (1950s) and dealing with the decolonization in Guinea (1955-1960), .

Research Question

In these three cases, we will see how "metisitic" processes are used in organizations today, and how they articulate with other familiar modes of representation and action. Detienne and Vernant works (1974, 1978) unveil both criteria for engagement in "metistic" processes and various descriptions of these processes. The objective of our empirical research is to identify in the workplace the existence of this specific mode of knowing in "ambiguous, mutable and unpredictable" situations ; and thus to answer the following questions :

- "Can we identify a specific scheme of acquisition and manipulation of knowledge different from those known from the literature ?" (when, why, how)
- "Can this mode of knowing be generalized to all types of organizations ?"
- "Can organizations derive competitive advantage from this specific mode of knowing and how can it be enhanced, developed or protected ?"

Research Method

We used multiple case study research to investigate the phenomenon within its real-life context. The rationale between the choice of multiple case study research is “producing evidence that the three cases did indeed involve the same syndrome (Yin, 1984). Each case had to be carefully selected to be certain that the organization is really facing an “ambiguous, unpredictable and mutable situation” (Detienne, Vernant, 1974) in order to determine why other modes of knowing cannot or will not be used. For convenience, we named “metistic processes” the specific processes of oblique and conjectural knowledge engaged in these situations, as to recall the Greek *metis* they are based on.

Revelatory situations. Organizations were selected on the peculiarity of situations they were to cope with (unexpected rupture in the course of events, such as sudden political turbulence). However, we were opposed to the idea of studying situations that would be explicitly described as “crisis” by the studied organizations. The purpose was to describe and understand the role of oblique knowledge within its articulation with other forms of knowing in the normal and on-going work of organizations. In all our cases, organizations never qualified themselves as “being in crisis” or “facing a crisis”. Along the same lines, we preferred the study of “situations” as opposed to “environments”. In all our cases, global status of the environment (degree of stability, mutability, velocity, fragmentation, etc.) was not affected by the critical situation that was to be faced. The purpose of this constraint is here again to identify the articulation of oblique and conjectural knowledge with other on-going forms of knowledge.

Data sources. Multiple sources of evidence were gathered as to obtain a triangulation of observation methods and to maintain a chain of evidence (Yin, 1984). Letters, memoranda, communiqués, agendas, announcements, administrative documents (proposal, mission reports), news clippings, articles appearing in the mass media were major sources of secondary data. In the Pechiney case — the studied events having occurred in the late 1920s and 1950s — complementary archival records were used (organizational records, organization notes, CEOs diaries). Direct observation in sites was intensively used with an average visit of six months in studied organizations. The purpose was to measure and to integrate in the study of “metistic processes” the incidence of certain types of behaviors during the times of unpredictability, mutability and ambiguity. Direct observations were made throughout the field visit, “including those occasions during which other evidence, such as that of interviews, is being collected” (Yin, 1984, p. 91). In-depth interviews were used to ask key-respondents “for the facts of a matter as well as for the respondents’ opinions about the events” (Yin, 1984, p. 89). Interviews were of open-end nature, with several recurrence and feed-backs with respondents. Respondents’ population was including people involved and not involved in the studied processes, as to measure the awareness of these processes in the organization (tacitness, discretionary, clandestine networks) and to understand the articulation of “metistic processes” with other forms of knowing and interacting with the environment.

Data Analysis. Reliability of theory construction relies on a “process that must be designed to highlight relationships, connections, and interdependencies in the phenomenon of interest” because “researchers cannot make deductions from concepts alone” (Weick, 1989, p. 517). Unlike positivistic research, inductive research “lacks of generally accepted model for its central creative process” (Eisenhardt and Bourgeois, 1988). In absence of model, data analysis has been focused on a chronological study of agendas and events, trying to identify for each phase what kind of knowledge plays what exact role (hard/soft, explicit/tacit, straightforward/oblique, varied/embodied, etc.), based on a categorization partly inspired from previous findings (Hedlund, Nonaka, 1991). The purpose is finally to identify and to test the validity of a peculiar knowledge process that handles mutability and unpredictability. When eventually such a process is identified, it is to be compared with the “*metis*” construct proposed in detail by Detienne and Vernant (1974).

Case descriptions were developed by combining the accounts of each respondent and direct observation of events whenever possible (all cases apart Pechiney). Motives and opinions for actions and events that were not observable were include in data sets as to be preserved for further investigation. That search was complemented by cross-case analysis, and continuous feed-back to respondents as to improve both construct validity and adjustments (Eisenhardt, 1989). What emerged were propositions shedding light on the conditions surrounding the initialization of “metistic” processes and their development. Our efforts concerning the tracking of various forms of knowledge (hard/soft, explicit/tacit, etc.) during these processes helped to illuminate interaction and articulation between oblique knowledge and traditional forms of knowledge. Results follow.

How Oblique Knowledge Initiates: Challenging the Construct

Founded in 1981, Indigo Inc. is a small publishing company specialized in the production and edition of confidential letters. Publications include The Intelligence Newsletter (focusing on defense intelligence, proliferation, extremism), Africa Energy and Mining, The Indian Ocean Newsletter, East Asian Affairs, Maghreb Confidential. Access to publications is exclusively through confidential and direct subscriptions. Clients include governments and multinationals on five continents. Indigo knows a rapid growth of its activities and its publications are highly regarded by executives and government officials. Indigo case was selected on the assumption that accessing sensitive information requires peculiar abilities to handle disconcerting and ambiguous situations as to make sense and unveiling hidden realities to readers. Attention was given to the work of the small staff of twelve involved in producing the letters and getting access to valuable insights.

Indigo current mode of operations is constantly moving from “an exhaustive and rational approach of events and a more intuitive approach” (CEO, interview). A first phase — made the shortest — consists in reading what is publicly known on the event : “It gives us directions to search for the unpublished. We know the editorial habits, ideologies, and policies of the press we scan. For example, in certain African countries, ethnical issues are never addressed directly. Instead, to suggest the role played by an ethnical group, journalists are mentioning the villages involved in the event. The African reader is aware of which ethnical group is involved”. Indigo redactors never handle facts directly: “Results are lying in wait”, Editor says, confirming a main characteristic of metis: “a state of vigilant premeditation, of continuous concentration on activity that is in progress, is expressed by the Greeks in images of watchfulness, of lying in wait, when a man who is on the alert keeps watch on his adversary in order to strike at the chosen moment” (Detienne, Vernant, 1978, p. 14). As Indigo founder put it: “Our job is to read the implicit like an open book, to navigate in the unsaid, eventually preparing the ground for the unsaid to be unveiled”. Unfortunately, the implicit is never revealed in any objective forms. As the CEO continues: “We maneuver in a tacit field, eventually reaching steadily a grip that we won’t release until the situation makes sense”. All redactors are boundary-spanners (Daft, Weick, 1984). Problems are tackled at their source, involving intense traveling: “We constantly navigate backward and forward from the background to the foreground of knowledge” (Founder, interview). When a French Deputy is said on official visit in Africa (foreground), redactors search for informal and tacit links of this Deputy with a corporation that might be involved in a contract negotiation in the area (background). “We imagine a rationale that would fit the events, and keep the succession of events in memory. And we wait for the illumination, helping it out by accessing informed sources”. Thus, knowledge is never exhaustively formalized until final publication: “We incubate”, as the CEO put it. That was Indigo’s routine until the very day events did not turned out as expected.

Role of Scenario Planning - Set up the watching.

That day, one of the redactors discover the picture of a new ambassador of Malte in Seychelles: “I found the whole thing awkward. Why do there is a Malte Order in Seychelles?”. Then starts the process of navigating between the implicit and the explicit: “We avoid to be too straightforward in our understanding of events”. The first search is disconcerting. Apparent ambiguity unveils nothing else than more ambiguity. Nothing sounds neither rational nor sustainable for publication. The enigma unfolded as follows: “An ambassador who was not an ambassador, did and didn’t own hotels, had and hadn’t a questionable past, ...”. Creative induction and obliqueness were finally the way out. Accurate meaning was soon given to the disperse and ambiguous events. Redactors deliberately made their search highly mutable, letting their investigation be even more twisted that the reality it had to handle. “There were no awaited immediate returns. The only thing awaited was the precise moment when an interesting line to pull would show up”, the redactor recalls.

Chronology of events, and emergence of oblique knowledge unfolded as follows :

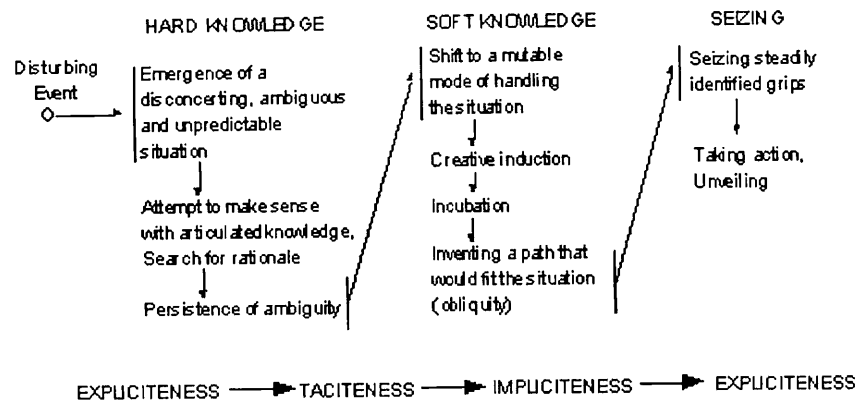


Fig. 1: Individual Metistic Process

The respondent's conclusion on the Seychelles case is the following: "We are dependent on tight resources. With artisanal means, and at our individual scale, we managed to achieve numerous tasks that foster envy in larger and more organized institutions. I believe that we are consequently dependent on our ability to foresee the advent of such situations, and to be aware that we only stand at the premises of what would be the outcome".

Metistic Processes at the Organizational Level

Indigo case answers, on the individual level, the "why", "when" and "how" questions of the engagement in *metis*. Greek literature present few examples of communal *metis* (Detienne, Vernant, 1974). Thus, our purpose is not unveil obliquity as a characteristic of the "organizational mentality" or "organization mind" (Sandelands, Stablein, 1987) but to search for ground evidence of organizational processes of oblique knowledge.

In the late 1980s, Compagnie de Suez embarked "on a wild and opportunistic buying spree that caused the company to nearly triple in size (...) Since then, Suez's management has had difficulty digesting its acquisitions and managing its vast, disparate operations" (Liebowitz, 1993, p. 20). The decision resulted in Ffr. 1.87 billion loss in 1992, downgrading the banking division from a AA to a A+ Standard & Poor's rating, thanks to crushing losses from real estate loans in Paris. In this uncertain and mutable situation, Indosuez relied upon two major pillars: trading and merchant banking. In a bureaucratic and Cartesian environment (the French predilection to strategize first and execute later), the bank hastily acquired in February 1990 a team of "action-generators" (Starbuck, 1983) from Drexel Burnham Lambert to lead its structured finance operations. The ex-Drexelites made soon many of their own rules, and were frustrated by Parisian bureaucracy. A "transient, shifting, disconcerting and ambiguous situation" (Detienne, Vernant, Op. Cit.) arose rapidly. Indosuez management was "bewildered by the whole thing because decisions were being made in real time, and they were not used to that" (Liebowitz, 1993, p. 21). Problems were invented to justify the Drexel team acquisition. Jean Claude Gruffat, head of Indosuez US thus stated: "We really recruited them to achieve globalization". But it was clear that Indosuez "hired a crack trading team that wanted little to do with the bank's system, its politics, or its bureaucracy" (Liebowitz, Op. Cit.). Matters grew worse when Marc Schmitt, a 18-year veteran of Dresdner Bank was recruited as head of international treasury operations in Paris, with oversight of the swaps group worldwide, including the small Drexelites team in New York. At bottom, rationale behind this new layer of management was that the president of the bank in Paris didn't want to be called any more to settle New York's problems. Schmitt had his own ideas about how to organize derivatives on a global scale and didn't go along at all with the Drexelites. Moreover, the idea of having the US swaps group managed directly by Paris was angrily challenged by the Drexelites. First *metistic processes* arose when Gruffat decided to maintain an informal "matrix" relationship with the Drexelites, approving increased credit lines, without being responsible for global trading, responsibility of which was still held in Paris. This "clandestine management" (Moulet, 1992) was the first learning experience of Gruffat with *metistic processes*.

Other *metistic processes* arose when DeMonchaux, the head of the Drexelites, finally landed at Bear, Stearns & Co, promptly raiding her former firm, Indosuez, and taking with her, seven professionals. All

of them took a week off to mull their options. On his own initiative, Gruffat decided to gamble on bidding back some of the groups on their term, “a politically risky move because it might have looked like he was challenging Schmitt and de Korsak”, heads of the derivatives on a global scale in Paris: “My objective was to keep these people, and if there was a reporting problem, we had to find a way to keep them on board and provide them with a different environment” (Liebowitz, 1993, p. 25). Gruffat was more successful this time. He had learned to handle the mutability of the situation, without urging for *straightforward* or conventional solutions. Indosuez US kept key-elements of the Drexelites, who show satisfaction with the tacit environment that has been provided to them. Outsiders were left with the impression that — in the beginning of events — the bank *overmanaged* the situation (Liebowitz, 1993, p. 26).

Further empirical research in Indosuez US showed traces of this learning in processes that were implemented by Gruffat in the bank after the events. When the French Franc is vigorously attacked on the world markets in October 1993, Gruffat facing a mutable and unpredictable situation, quickly started a “clandestine management” (Moulet, 1992) with key-decision makers in Paris and New York to cope successfully with the adversity. Permanent open phone lines were maintained during the shifting and disconcerting events between key-influencers on the course of events. Similar oblique processes exist in the New York offices, between Gruffat and key-elements of the trading room, ready to be activated in case of major mutation on the markets.

Evidence from our data unveils *communal metistic* processes as follows :

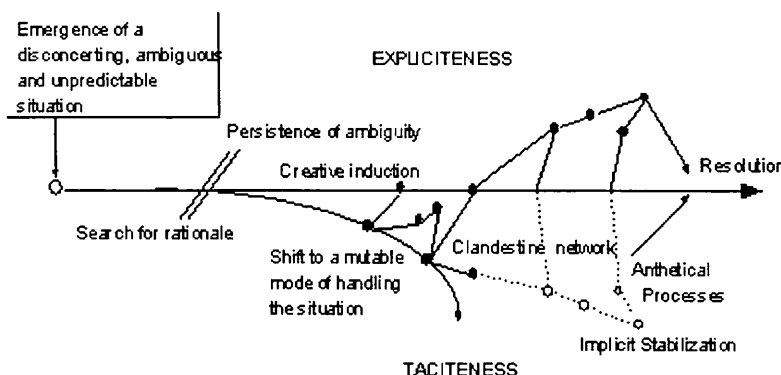


Fig. 2: Communal Metistic Processes

Permanence and Historical Role of Oblique Knowledge

It is now widely accepted that organizations simultaneously generate processes that tend to change their characteristics and antithetical processes that affect these characteristics oppositely (Starbuck, 1988). Indosuez case shows how, when and why communal oblique knowledge may play that role in organizations. Moreover, experience of metistic processes remains as a learning gain for the organization. Indosuez executives did maintain furtive and tacit procedures in their operational background. Complementary longitudinal research in Pechiney gives us the opportunity to test the permanence of these *metistic processes*. Three major “disconcerting and ambiguous” situations, respectively in 1931, in the beginning 1950s, and in the period 1955-1960, were investigated on the basis of archival data (letters, internal memos, general and specialized press, agendas) and in-depth interviews with key-witnesses (former CEOs and managers).

Persistent rumors (1931-1932)

In a letter of Gabriel Cordier to the president, on November 24, 1931, events unfold as follows: “Dear President, since yesterday, events precipitate: we have been hastily attacked on Lyon stock exchange.

Attacks were based on following facts: 1°- We lost 600 millions in Russia, 2°- We lost 100 millions with the B.N.C., 3°- We still have considerable amounts held in Italy, 4°- To pay the succession rights (due on April 15, 1932), the Gillet family, completely drained of ready money, sells all its shares, 5°- We harass our subsidiaries to such an extent that we appear as a disordered cavalry" (Pechiney, Historical Archives). Speculators spread rumors on the possibility of a bankruptcy. Content of these rumors state that two administrators of the company were silent because of their recent suicide, and four others were said to have resigned. None of this being true, Pechiney filed a complaint against X at the Justice of Lyon. Executives are in deep disarray. In an internal memo, a Senior Executive acknowledges: "We didn't deny and didn't publicly refute any rumors. (...) Such a communiqué would probably give consistence to noises". Ambiguity thus remained, and the share lost 25% in 10 days. A second conventional attempt to run down rumors is made. The President of the Executive Board write a letter to shareholders to reassure them on the company treasury. The mutable situation is finally jugulated by mutable means: executives build up clandestine and informal networks as to counter rumors on a local basis (Stock exchange traders, bankers, key-share holders, influent personalities of the business community). Adopting the same mutable form than the disturbing rumors, they act as antithetical processes.

The 3C3 process (1950s)

In the beginning of the 1950s, Vachet and Lamourdedieu visited Saint-Gobain glass factory, and came to the following conclusion: "Why don't we flow our aluminum like Saint Gobain is flowing its glass ?" (Lamourdedieu, 1990, p. 60). Easier said than done. Under the name of flowing process 3C3, a first sketch was drawn. Unsatisfying. There was, however, an inventor under the name of Hazelett who did develop successfully a similar process in Cleveland. The factory was soon visited by Lamourdedieu, but not much was learnt from unsuccessful trials that were presented that day. No viable technical answer was foreseen by Lamourdedieu. The choice was now to come back to Paris empty-handed, or to find an oblique way through the enigma. A dinner followed the visit at Lamourdedieu's hotel. Hazelett and four engineers were invited. "Reserving a seat for myself near the flower pot, I profited from the opportunity of getting rid of my whisky as my colleagues' attention was becoming more and more fuzzy" (Lamourdedieu, 1990, p. 83). The day after, Lamourdedieu was welcome as the hero who resisted this memorable washed-down meal. The distrustful atmosphere had faded away, and Lamourdedieu came back with valuable insight on the 3C3 process-to-be cooling system. With few improvements, the insights were adopted in the final flowing process. As Lamourdedieu later noticed (Lamourdedieu, 1990), official and organizational memory retained another rationale for the discovery of the 3C3 process (Barrand, Gadeau, 1964).

The Guinean Revolution (1955-1960)

Pechiney's presence in Guinea followed the discovery, at 200 miles from Konakry, of important bauxite lies. "The latter has a mediocre quality and has to be transformed on site, which is feasible thanks to the Koukouré river, that would provide energy" (Gignoux, 1955, p. 226). Such restricted geological conditions would later play a critical role, as there is no other technical solution that transform the bauxite on site. The Koukouré river, however, is quite unpredictable, and can run at 1000 cubic meters in the rain season, to 10 cubic meters in the dry season. There are no maps of Guinea, and Pechiney geologists are assigned to that task from 1942 to 1945. Pechiney is trapped in a technical escalade of commitments, and the engineers' agenda will remain in the background of events until its final resolution. The geological and technical study is completed in 1951, and Pechiney management is "seduced by the outcome" (Marchandise, 1990, p. 84). In 1957, the aluminum production site is almost operational. The Company of Fria is founded. In September 1958, the government of Guinea declares its independence. A "transient, shifting, disconcerting and ambiguous situation" (Detienne, Vernant, Op. Cit.) follows. "All happened just as if the whole operation would have escaped the hands of its initiators, leaving people 'on the ground' with the difficult task of conciliating the imperative of a balance exploitation, with the unpredictability of a Guinea administration and society in permanent revolution" (Larrue, 1990, p. 37). A clandestine and subtle handling of the situation is initiated by Pierre Jouven, representing Paris management, Raoul de Vitry, President of the Company of Fria on site, and a few others. Raoul de Vitry obtains a tacit agreement from the new "Revolutionary" government of Guinea on the pursuit of the technical agenda. Pierre Jouven's role is critical. By comparing all memos and internal letters of the company during the period, Jouven's redaction style really stands apart. He carefully

describes every relationships and connections of people he met, using a rich, vivid, and detailed style. Every single personality is analyzed: “This person was obliging, but I noticed an embarrassed meddling”, “The two Parliamentarians were most active in our discussions. They congratulated our position and our project...”. The gap between Jouven’s soft knowledge and technical reports regarding the industrial agenda is tremendous. Pechiney avoided the worse in the Guinea case, and kept the aluminum production running.

Oblique Learners

Reality is often “hidden by its measures” (Berry, 1983, p. 22). In Pechiney, Indigo and Indosuez cases, “managers become aware of significant problems through informal sensing techniques” (Lyles, Mitroff, 1980, p. 116). Through oblique means and paths, they “convert meager experience into interpretations of history by experiencing infrequent events richly” (March, Sproull, Tamuz, 1991, p. 1). What they eventually achieve is a “valid learning”, “one by which an organization is able to understand, predict and control its environment”. Similar to the “learning from samples of one or fewer”, managers in our cases identify idiosyncratic and furtive details and “allow interpretations to emerge from them. As a result, openness to a variety of (possibly irrelevant) dimensions of experience and preference is often more valuable than a clear prior model and unambiguous objectives” (March, Sproull, Tamuz, 1991, p. 6-8), leaving little doubt “that an intelligent organization will sometimes sacrifice conventional notions of validity in order to achieve or sustain reliability in interpretation” (March, Sproull, Tamuz, 1991, p. 11). *Oblique learners* move one step forward, purposefully shifting from the conventional to the unconventional, from the stable to a *modus operandi* even more mutable than the situations they have to cope with, to impose a result to a disconcerting set of events. *Oblique learning* stands out as the third alternative between learning and unlearning. *Oblique learners* generate a tacit “game board” where they can search for result — rather than for reason — without challenging neither their beliefs or their on-going learning-unlearning process. Thus, problems can be remodeled, not only “to justify intended actions” (Starbuck, 1983, p. 91), but to hide a *metistic process*, — a clandestine “chess board” — where the difficulty is being obliquely resolved. Explicit justifications serve the purpose of a shelter, avoiding a reaction of the organization that may “punish dissent and deviance” or, like in the Indosuez case, “silencing new arrivals who have disparate ideologies or low-level personnel whose ideologies are more complex and less logical than their superiors (Starbuck, 1983, p. 97; Dunbar et al, 1982). Oblique processes permit to keep the belief system unaffected by the ambiguity of events, and to avoid the corrosion of morale and trust in the organization.

While politics arise in conflictual situations (Baldrige, 1971; March, 1962; Pfeffer, 1981) or in case of power imbalance (Eisenhardt, Bourgeois, 1988), *metistic processes* appears as a permanent, though furtive and intangible, resource of organizations.

Questionable Knowledge At The Top

We witnessed in the mid-80s the emergence of formal structures developing an intelligence function at the top of organizations to serve the needs of executives in their search for sensitive and strategic insights on their environment. Labeled under different names — environmental scanning depts., competitive intelligence units —, such structures implement systematic gathering and interpretation of environmental stimuli to produce the valuable intelligence requested by top executives. Research findings show that executives prefer clandestine networks rather than explicit and systematic gathering of information when dealing with precarious, ambiguous and unpredictable situations. Failure of conventional modes of knowing in handling ambiguity (e.g.: Indosuez), along with higher performance of tacit knowledge in handling mutable and uncertain events (e.g.: Indigo, Pechiney) call for *metistic processes* into handling of critical situations rather than a formal and structure-oriented approaches, producing formal reports filled with misrepresentations (Johnson and Altheide, 1980; Baumard, 1993).

Results corroborate previous findings showing that organizations’ profitability correlates very weakly with the formality of their planning (Grinyer, Norburn, 1975), that organizations are rather informal and unsystematic in their interpretation of the environment (Fahey, King, 1977).

Conclusion

In this paper we explore the unsuspected role of oblique and conjectural knowledge in organizations and its strategic implications in the management of organizational knowledge. Through empirical research into workplace activity, we show how unpredictable, mutable and ambiguous situations were dealt successfully using sagacious short-cuts to drive the events in the favor of the organization.

The paper suggests revisiting organizational theory to include oblique processes in its whole understanding. Research findings corroborate recent works on clandestine management in organizations (Moulet, 1992) and question the purpose and the success of formal processes that attempt to support organizations in their understanding of the environment, such as environmental scanning.

At a time when interest to unveil the role of tacit knowledge in organizational success fosters in many ways (Hedlund, Nonaka, 1991 ; Nonaka, 1992 ; Spender, 1993), the re-discovery of *mètis* deserves attention and discussions. As social researchers, we are all working under the assumption that our efforts for generalization, explanation and rationalization of management is an urgent need for organizations. What the *mètis* tells us is not to forget the unsaid, the unreadable, the erratic and the mutable in our genuine assumptions. It seems that we blind ourselves from conjectural knowledge and forms of intelligence that proceed obliquely. As Detienne and Vernant put it, "there has been a prolonged silence on the subject of the intelligence of cunning" and the powerful reason behind that silence may well be a "concept of Platonic Truth, which has overshadowed a whole area of intelligence with its own kind of understandings", and "has never really ceased to haunt Western metaphysical thought" (Detienne, Vernant, 1978, p. 318). As researchers, we walk along avenues whose directions have been drawn — in search of Truth and Reason — in the confine discussions of two Greek philosophers of the four century B.C. Strategic implications of research findings could thus be summed up as follows: "Do not crush the organizational *metis* and explore the side alleys ! "

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