Objective meaning fixation: organizational cognitive processes under uncertainty and conflict

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Abstract

This essay concerns the fixation of objective meaning in high-discretion decisions and actions under uncertainty and conflict. It collects and develops arguments in the literature, to show how this fixation happens. The approach to concept development was a pragmatic and integrative literature review on strategic decision-making. There are two kinds of objective meanings. The general objective meaning of strategic action consists of the mission and systemic objectives set by the organization's dominant coalition. Under conflict and uncertainty, guided by the general objective meaning, organizational cognitive processes identify and analyze uncertainties, manage conflict, and set the specific objective meaning. Such processes are immanent in the development of and choice among alternatives. These concepts – organizational cognitive processes, necessary social relationships to organization, and specific objective meaning – and their causal articulation are the main contribution of this piece. Organizational pragmatism prevails as well as an interpretation that fixates objective meanings.

Keywords: Objectivity in management. Behavioral strategy. Organizational pragmatism. Cognitive management.

Fixação do sentido objetivo: processos cognitivos organizacionais na incerteza e conflito

Resumo

Este ensaio teoriza sobre a fixação do sentido objetivo em decisões e ações de alta discricionariedade sob conflito e incerteza. O objetivo é reunir argumentos na literatura e articulá-los para mostrar como essa fixação acontece. A abordagem de desenvolvimento conceitual foi uma revisão pragmática e integrava da literatura sobre tomada de decisões estratégicas. Emergem dois tipos de sentidos objetivos. O sentido objetivo geral da ação estratégica consiste na missão e objetivos sistêmicos fixados pela coalizão dominante. Sob incerteza e conflito, guiados pelo sentido objetivo geral, processos cognitivos organizacionais identificam e analisam incertezas, diagnosticam situações, selecionam oportunidades, elaboram alternativas, gerenciam conflitos e fixam o sentido objetivo específico. Tais processos são imanentes ao desenvolvimento de alternativas e à escolha dentre elas. Três conceitos – processos cognitivos organizacionais, relações sociais necessárias à organização e sentido objetivo específico – e sua articulação causal são a principal contribuição deste trabalho. O pragmatismo organizacional prevalece, assim como uma interpretação que fixa sentidos objetivos.

Palavras-chave: Objetividade na administração. Estratégia comportamental. Pragmatismo organizacional. Administração cognitiva.

Fijación del sentido objetivo: procesos cognitivos organizacionales en la incertidumbre y conflicto

Resumen

Este ensayo teoriza sobre la fijación del sentido objetivo en las decisiones y acciones de alta discrecionalidad, bajo conflicto e incertidumbre. El objetivo es colectar y desarrollar argumentos en la literatura y articularlos para mostrar cómo ocurre esa fijación. El enfoque de desarrollo conceptual fue una revisión pragmática e integrativa de literatura sobre toma de decisiones estratégicas. Emergen dos tipos de sentido objetivo. El sentido objetivo general de la acción estratégica consiste en la misión y objetivos sistémicos definidos por la coalición dominante. Bajo incertidumbre y conflicto, guiados por el sentido objetivo general, procesos cognitivos organizacionales identifican y analizan incertidumbres, diagnostican situaciones, seleccionan oportunidades, elaboran alternativas, gestionan conflictos y fijan el sentido objetivo específico. Dichos procesos son inmanentes al desarrollo y a la elección de alternativas. Tres conceptos – procesos cognitivos organizacionales, relaciones sociales necesarias a la organización, y el sentido objetivo específico – y su articulación causal son la principal contribución de este trabajo. Prevalece el pragmatismo organizacional, así como una interpretación que fija sentidos objetivos.

Palabras clave: Objetividad en la administración. Estrategia comportamental. Pragmatismo organizacional. Administración cognitiva.

INTRODUCTION: THE OBJECTIVE MEANING OF STRATEGIC ACTION

In operational and tactical management, little matters the manager's intimate thinking. The meaning of their decisions and actions is objective, due to the demand for results and institutionalized processes. As stated in Nascimento (2008), in a piece concerning "The objective meaning of management practice",

> [subjective meaning of management practices] [...] refers to whatever is in the mind of an administrator [...] objective meaning refers to the conditions set by the objective situation. Among these conditions are [...] the system of management practices, [...] the organization´s concerns and purposes, [...] standards and principles, [...] hierarchy [...] (Nascimento, 2018, p. 13).

These conditions create a "logic of the situation" (Popper, 1978), and thus "instrumental rationality prevails in administrative practice and becomes routine" (Nascimento, 2008, p. 13).

In this article, Nascimento identified the organization mission and systemic objectives as the main source of the objective meanings of management practices. Bellow, these have been called the general objective meaning. The author did not make a clear distinction between low and high discretion decisions and actions. Nor did he separate operational from decision-making routines and practices. Which means that the article's main subject becomes the operational decisions and actions: the routines. What about meaning fixation in highly uncertain and conflictive situations where high discretion obtains for decision makers?

As decisions and actions move to the strategic level, decision makers gain increasing discretion over what they will do (Quinn, 1980; Thompson, 2003). This point will be further examined bellow in the subsection concerning uncertainty and discretion. How to find the objective meaning of these high discretion actions and decisions? One approach is to think about them as subjective. However, this is incompatible with the reality within and around organizations that must comply with resources' needs, necessary social relations, and conflicts among stakeholders.

The purpose of this essay is to show how the **objective meaning** of decisions and actions is built and established in these situations.

Figure 1 below summarizes how the fixation of the objective meaning is conceived in this paper. The first step is to establish the foundations of the paper's theorization about objective meaning: pragmatic objectivity, cognitive functionalism, and necessary social relationships. This allows the exploration of the strategic decision-making literature to extract the general objective meaning of decision-making: mission and systemic objectives set by the dominant coalition. But under conflict and uncertainty this general meaning is not enough. A specific meaning is required. This meaning is created and elaborated by organizational cognitive processes that are guided by the general objective meanings. These cognitive processes go along with the development of decision-making alternatives and arrive at the specific meaning associated with the finally chosen course of action: the third box in Figure 1.

Figure 1
The fixation of objective meaning

- **FIXATION OF OBJECTIVE MEANING UNDER CONFLICT AND UNCERTAINTY**
- based on pragmatic objectivity, cognitive functionalism and necessary social relationships

- **GENERAL OBJECTIVE MEANING**
- systemic mission and objectives
- set by the dominant coalition

- **SPECIFIC OBJECTIVE MEANING**
- based on general meaning and
- set by organizational cognitive processes
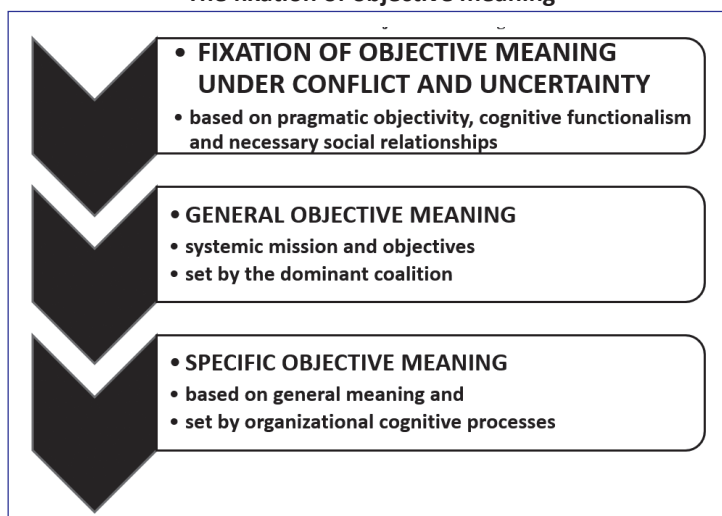
Source: Elaborated by the author.

MEANING FIXATION AND OBJECTIVITY

Meaning, pragmatism, and objectivity

The reality of organizations is not the same as that of things. It is a reality of activities, processes, and relationships. For a while, it may be a latent network. But, without action, even that latent network dissolves (Giddens, 1984; Mingers, 2000). Hence, the pragmatic "Organizations in Action" perspective adopted here (Thompson, 2003). Nascimento (2009) provides such an objective and critical concept of organization.

This work departs from a pragmatic concept of "meaning". It is based on action, as in Marx and Engels (1976), Peirce (1878), and Vico (1999).

For fruitful intersubjective dialogue, "clear and distinct" ideas (Descartes, 1979, p. 37) are mandatory (Peirce, 1878). However, Peirce thinks they are insufficient to realism, to bridge the mutual inaccessibility of minds and the cartesian dualistic abyss between mind and reality. To make ideas realistic, Peirce's pragmatism extends the modern science method - prediction and experimentation - to the whole elaboration of ideas and concepts.

It does not matter how human senses capture reality, because the same perception apparatus is the common means of observing the action itself, its antecedents, and its consequences. It is the means of apprehending and modeling reality, but also of observing prescribed actions and their results. The agent himself can verify the reality of his own and others' statements. The insufficiency to anchor realism dissolves if the subject considers the sensory effects of his action on himself. Here, Peirce agrees with the II Thesis of Marx and Engels critique on Feuerbach:

> The question whether objective truth can be attributed to human thinking is not a question of theory but is a *practical* question. Man must prove the truth, i.e., the reality and power, the this-worldliness of his thinking in practice. The dispute over the reality or non-reality of thinking which is isolated from practice is a purely *scholastic* question (Marx & Engels, 2002)

Realistic pragmatism is the philosophical perspective here: to live, a person depends on deeds in the real, independent, world around him or her. This real world affects his senses about phenomena, his actions, and their results. This multiple dependency imposes the intersubjective consensus about reality because others must deal with the very same independent world.

Take a trivial illustration. I am hungry. Somebody tells me that apples feed hunger. Then he or she gives or point apples to me. Just eating one is enough to verify what I have been told. Irrelevant are the *quaglia*, the famous subjective senses, unknowable by other parties. As in the tirade attributed to Deng Xiaoping, "it doesn't matter if a cat is black or white, so long as it catches mice". Only the apple's perceptible hunger satisfaction properties are relevant. In practice, each person checks these properties by herself.

In fact, this realistic pragmatism is necessary for communication among agents. Without it, there is no way to establish a shared understanding of symbols. Anyone could associate anything to any symbol. Mutual understanding becomes impossible without shared reference and action in the world.

Clarity and distinctiveness are not enough. In pragmatism, objectivity is born from intersubjectivity. Each subject, in action, test the reality of the received ideas in everyday life. In society, experts contest and check each other ideas on scientific and technical subjects. At first, the layman adheres by third parties' authority, but reserves the final judgment until tangible and noticeable results become available. This is pragmatic realism on meaning. Ultimately referred to verification or falsification by the subject in her own practice.

The fixation of meaning

For Peirce (1877), the problem of pragmatic knowledge is the method of belief fixation: tenacity, authority, *a priori*, and scientific realism. There is a clear evolution among these methods concerning publicity and verifiability.

The individual tenacity method is just a reminder that anyone can hold fast on their own opinion. This method does not recognize the public (intersubjective) character of beliefs and serves only to set personal convictions.

The authority method refers one's own opinion to the acceptance of third parties' ideas. This method has the great advantage of producing intersubjective beliefs. It manages to generate broad and lasting consensus. However, it opens the way for the institutional imposition of the opinions of a political or religious elite. For Peirce (1877, p. 9),

> Wherever there is an aristocracy, or a guild, or any association of a class of men whose interests depend or are supposed to depend on certain propositions, there will be inevitably found some traces of this natural product of social feeling.

In today's scientific and technological society, everyone must rely on specialists (Giddens, 2004, pp. 83-92), the new knowledge elite, as often people cannot, on their own, verify these specialists' opinions, unless practical results make them reconsider their thrust.

In contemporary reality, the method of authority is continually challenged and overtaken by the *a priori* method. The variety of human experience does not easily accommodate the presumptions and impositions of third parties. The consequence is critical reflection on the foundations of received beliefs and the fixation of belief systems based on personally chosen assumptions. For Peirce (1877), this is a rational-speculative method, and its advantage is to recognize that beliefs are public and debatable. However, the a *priori* method provides no means to solve disagreement about the personally chosen assumptions, since their truth is *a priori* given!

Peirce highlights the impotence of these methods to solve disagreement and divergence. They lack the means to support their assumptions, their foundation. He points out that it is crucial to add another rule to give clarity and precision of ideas. It is to consider

> [...] what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object (Peirce, 1878).

That is scientific realism applied to the fixation of meaning. Hence, pragmatism and objective meaning. It may be intersubjectively communicated and independently verified by each interlocutor. Subjective meaning, on the other hand, may be vaguely communicated but not independently verified.

METHOD

Integrative concepts

As we know since Barnard (1942) and Simon (1997), the organization's rationality is broader than the individuals. The sharing of information and knowledge and the building and implementing of alternatives results in a shared cognition process. The challenge for management is not to study individual cognition, but the organization's, instead. This requires integration among different theoretical perspectives and requires the creation of bridge concepts between the various disciplines. Thus appears an ontological task of conceptual reconstruction of the subject under study.

Thomas (1992, p. 265), for instance, defines himself as an "integrative theorist" because he is "uncomfortable without conceptual models that reconcile facts and perspectives into some larger framework". There are two possible paths concerning decision-making theorization. One follows the classical normative decision-making literature. This piece will follow the alternative one. The descriptive approach. This leads to the Hambrick and Crossland (2018) broad approach, which here implies an integrative theorization that joins philosophical, cognitive, political, process, and practice perspectives.

This also leads to the main integrative theoretical concept in this essay: the idea of organizational cognitive process. Because there is no such a thing as an organizational brain, or mind, this cognitive process needs another integrative construct – necessary social relationships – to be set within organized action.

The analytical approach

The purpose of this theoretical essay is to show how the **objective meaning** of decisions and actions is built and established under conflict and uncertainty. This requires an analytical approach. The approach here is quite clear. The "meaning" in the title is made objective because it is anchored in actual practices and processes. The task here becomes to reveal which and where are those practices and processes that confer objectivity to "meaning" in decision processes. Particularly, those in which decision makers have higher liberty to formulate problems and alternatives, the so-called high discretion decisions!

The above practices and processes concern decision-making in its efforts to develop feasible and acceptable alternatives. Feasible because the organization has or can acquire the necessary means and execute the required processes. Acceptable because the cogitated alternatives must avoid strong opposition from a decisive collection of stakeholders.

So, the fixation of meaning, an idea burrowed from Peirce, must be found in organizational practices and processes, here christened organizational cognitive processes, that accompany, surround, and infuse with meaning the organization's decision-making and action.

As we want maximum latitude of open meaning, the best way to proceed is to examine the strategic decision-making literature and then look for what could anchor the fixation of meaning in the real world. Apart from physical reality, always a constraint in decision-making, there are very strong social constraints, here found in the social relationships necessary to organization.

So, the "where" above mentioned are the necessary social relationships in and around organizations, an idea clearly burrowed from Marx.

To achieve the purpose of this theoretical essay, then, it is enough to delve into the strategic decisions and actions literature, which refers objective meaning fixation to the vast pertinent scientific body of knowledge. In fact, the literature already shows a lot about how to establish objective meaning. It just is not aware that this is part of what it is about: to create and fixate meaning highly grounded in reality.

This theoretical essay uses the method of reviewing the literature on strategic decision in the light of pragmatism (Peirce), necessary production relationships (Marx), and the cognitivist approach to management. Then it proceeds to formulate the integrative constructs "organizational cognitive process", "necessary social relations in and around organizations", and "specific objective meaning" and to elaborate its implications.

The remainder of this essay then looks for these organizational cognitive processes and their anchoring in necessary social relationships. And do that in an integrative and pragmatic way (Peirce again): reading the literature in search of practices and processes and to show what makes them hard to avoid by any stakeholder.

THE FIXATION OF STRATEGIC ACTION'S GENERAL OBJECTIVE MEANING

Objectivity, necessary social relationships, and dependence on resources

The idea of "social relationship necessary for the organization" is here derived from the idea of necessary production relationships (Marx & Engels, 1976, p. 41). They are necessary and inescapable socio-economic relationships, which come from the division of the labor in society and organizations. They are polar relations, of latent conflict, which set a system of reciprocal, continuous and systematic, demand and delivery relationships among subordinates/chiefs, suppliers/customers, lenders and borrowers, owners and shareholders, employers and employees, etc.

Labor relations are necessary and impose inescapable obligations on individuals and organizations. The organization needs human resources. The individual needs a source of subsistence means. One is free to take on an employment contract, but not free at work. If one does not fulfill the contracted obligations, he or she is punished or replaced, but someone must fulfil the organization's job requirements.

Likewise, the organization deals with customers, shareholders, suppliers, etc., which also require retribution and payment. Customers (or sponsors) set the mission to the organization. Costumers want adequate and cheap goods and services and, in return, provide necessary and sufficient resources to pay employees, suppliers and other stakeholders.

For Thompson (2003) this network of transactions defines the "domain of organized action", its operating environment (Dill, 1958 as cited in Thompson, 2003): suppliers; personnel; capital; competitors; regulatory settings, etc. This domain defines the nature and form of the relationships and obligations charged within and around the organization. Pfeffer and Salancik (2003) emphasized how dependence on resources dominates organizational actions and explains the stakeholders' influence and power.

Transactions have an objective meaning, especially when repeated. Satisfying customers, suppliers, bankers, employees, regulators, media, and other interested parties is not subjective. The products and results offered need to convince them. These are exchanges! It works if the interested parties agree to provide the resources for cooperation. Thus, an agreement on the exact (objective) meaning of the activities and exchanges is soon established. In the absence of an intersubjective understanding, the transactions do not happen, and the organization decays and even dies.

Strengthening this objectivity, multiple agents make the same transactions in different places and occasions. Aggregate demand is relevant, not the individual's. These transactions only happen if there is a broad understanding about what is exchanged. And competitors dispute markets. In this environment of conflict, legitimized and regulated by society and government, the demands of the interested parties have an objective meaning that is transmitted to the missions and objectives of the organizations that take their livelihood from these exchanges.

This explains the general objective meaning of the organizational action. It is serving the customers (or sponsors), the ultimate source of funds, and ensuring other stakeholder supply the necessary means for its operations. Hence the emphasis on results. Even in voluntary organizations. Churches, for example, require tithing to support the priests who give spiritual comfort to the congregation. Without results, the organization is unable to maintain the social relationships necessary to its continued existence.

Dominant coalition, mission, and systemic objectives

According to Barnard (1942), organizations have strategic goals. Hence, the meaning of organizational actions shall refer to them. How would these goals be defined?

Mintzberg (1983) makes it clear that goals need not be common to all stakeholders. He sought to clarify how power relations among them generate and sustain organizational goals. Goals would be set by a coalition of stakeholders that becomes dominant. Other parties are hired or otherwise attended to.

The author (Mintzberg, 1983, pp. 246-247) concludes that there are four non-exclusive ways in which organizational objectives emerge from the dominant coalition:

- A dominant influencer enforces his goals, gaining the others' cooperation;
- A group creates or controls an organization:
  - To achieve shared personal goals;
  - Or to promote shared beliefs;
- Or the organization`s mere existence benefits its members, promoting systemic goals: survival, minimum viable efficiency, independence, and, hopefully, growth.

The first constraint in setting goals is the cooperation system's survival. Thus, the first systemic goal. Survival does not come from subjective intentions. It comes from enough results to meet the demands of customers, employees, and other stakeholders. This is the Barnard's (1942) and March and Simon's (1958) theory of organizational balance.

Thus, an organization need to pursue results: the primary objective in which it persists and to which it always returns (Mintzberg, 1983). This is what ensures covering costs and having surpluses. Covering cost is easier with efficiency. To face competition and uncertainty require surplus. Growth is then an attractive option, whenever possible.

The need for results constrains objectives and strategic alternatives. They must be feasible, attractive, and have adequate uncertainty levels. Whatever its choices, the organization will have to fit its production and commercial processes to its domain of organized action (Thompson, 2003), to meet the requirements of its markets and supply chain. It also needs to develop the capabilities to face competition. Such options are not arbitrary. Hence, the subjective inclinations of the leaders are constrained to objective alternatives by competition and stakeholders with the required resources in and around the organization. There is little room for fanciful subjectivity.

The dominant coalition usually prefers to reinvest in efficiency and growth because it is difficult to get enough customers or sponsors and these benefits internal and external stakeholders. Systemic objectives – survival, growth, efficiency, and independence – tend to benefit and be preferred by members. Outside influencers tend to support them too. Sometimes, shareholders prefer higher dividends. Sometimes, costs increase will be defended by employees and empire builders.

The dominant coalition also stresses the organization mission – who to serve, what with, and how to do it. It may become an ideology and reinforce commitment (Mintzberg, 1983). Ideology may also oppose emerging ideas necessary for survival and growth, when it turns dysfunctional, and hinders adaptation to new realities.

In the opposite direction of ideology, systemic goals tend to displace the mission in large, diversified corporations (Mintzberg, 1983). The mission, however, continues as an abstract idea of customer satisfaction, to be operationalized in each business.

The dispute over objectives is common and may lead to no stable primary objectives, to standstill, or to inconsistent and ineffective action. It is Mintzberg's political arena (1983) or Cyert and March (1963)'s "garbage-can" model. Unstable situations may harm results, facilitating the birth of new dominant coalitions or the organization's decay.

The constitution or maintenance of a dominant coalition is a complex matter. Results are a crucial element in the preservation of power. Results depend on dynamic management skills, especially cognitive ones (Eggers & Kaplan, 2013), highlighting the role of leaders, astute investors, and highly qualified personnel in the dominant coalition. With projects and new organizational arrangements (Van de Ven & Hargreaves, 2017), such stakeholders may take advantage of providers of static resources.

In short, organizations have objective goals established by the dominant coalition. They come from choices about mission (or effectiveness), survival, efficiency, growth, and independence. Every strategic action or decision is thereby justified and oriented. The general objective meaning of strategic actions is then given by the search for results, as expressed in the mission and systemic objectives. This general meaning is never subjective! It is, by definition, a viable market and operational agreement on a high-level set of goals. Otherwise, the organization withers and dies.

THE FIXATION OF THE STRATEGIC ACTION'S OBJECTIVE AND SPECIFIC MEANING

In volatile, complex, and ambiguous situations, there are conflicts and uncertainties about objectives and their causal relationship with means. There always are differences among the stakeholder's views of objectives. Differing means can also have a differential impact on stakeholders. Thus, initially, decisions and their objective meanings are open.

Specific objectives are then part of alternatives' generation, choice, and implementation. Differing organization coalitions may support different specific objectives. Many stakeholders may not prefer any alternative. Even leaders may be unsure. Strategic management processes, riddled with conflict, are required to reach definition. Intertwined with them, organizational cognitive processes set the specific and objective meanings.

To explain the specific meanings generation, bellow the text will clarify its view on uncertainty and discretion in decision-making, which explains the sources of conflict. Now, conflicts must be managed lest they impede solution development or opportunity exploration and exploitation. In turn, this leads to the examination wether and how the mission and systemic objectives relate to differing decision-making processes. Finally, the path to the specific meaning fixation emerges from the organization cognitive processes inside the strategic decision processes.

Uncertainty and discretion in decision-making

To manage routine (Nelson & Winter, 1982), institutionalized practices are demanded, recommended, and tested. Such practices are action programs (March & Simon, 1958). The programmed action includes routine and more. In non-frequent actions, it is common for the organization to implement proven professional practices, socially legitimized, some even mandatory. What about uncertain situations?

In classic normative decision theory, a strategic problem is clearly formulated, specific objectives are established, alternatives are generated, their costs examined, results and risks estimated, and a rational choice is made, based on explicit criteria and objectives.

Despite its contributions, research on the actual decision process does not corroborate this conception. Mintzberg, Raisinghani, and Théorêt (1976) examined 25 individual strategic decisions that did not follow the classical path. Problem formulation evolved; in many cases, only one alternative was considered; and choices often gave rise to conflicts over objectives, alternatives, and criteria. Thus, the process was interrupted many times, iterated to previous stages, protracted, and suffered long delays.

Uncertainty is a key factor constraining the agents' discretion, leading to Box 1. There is always uncertainty over outcomes and beliefs about cause/effect relationships in the flows of organizational inputs, operations, and outputs. In this paper, cause/effect relationships were replaced by appliable methods and technologies, the "how to", because different means can have different results for different stakeholders.

Thompson (2003) calls computational the decision strategy based on certainty about results and tools. The computational strategy lends itself to a close control by leaders, even if complex and lacking in data, and refers to the programmed decisions of Simon (1960).

When objectives are clear, but methods and technologies are uncertain, the "judgment" strategy applies. Thompson (2003) does not mention that when methods and technologies have differential impacts on stakeholders, the problem becomes political. Conflicts must be solved. "Judgment" is Thompson's decision strategy in such situations.

Box 1
Decision strategies under uncertainty

		Preferences regarding results	
		Certainty	Uncertainty
Appliable methods and technologies (tools, how to)	Certainty	Computational strategy	Strategy through commitment
	Uncertainty	Strategy through judgment	Inspirational strategy (mixed)

Source: Adapted from Thompson (2003, p. 134).

Decisions become openly political when there is doubt about desirable results and certainty about the means. Doubt may be due to uncertainty or disagreement. It is the "strategy through commitment" in Box 1. "Inspirational strategy" concerns decisions with uncertainty and/or divergence of interests in results and means. It is a mixed strategy that can contain the others as part of the overall decision strategy.

Under uncertainty, the agent's discretion impacts the content of decisions and actions. Thus, their meaning is fixed with the stakeholders' involvement, often in conflict, which enhances uncertainty. Is this content not subordinated to these agents' subjective understanding? Why? What gives them objective meaning?

The management of organizational conflicts

Since Machiavelli (1469-1527) (Maquiavel, 1532), social science recognized the role of conflict. Conflicts are not subjective. They are real, inevitable, and about values and resources. However, they appear as stakeholder`s mental representations, as intentions (Thomas, 1992). As Weber (1904, p. 83) says "[...] *purpose* is the conception of an effect that causes an action".

Pondy (1967, p. 300) sees three types of organizational conflict: competition for scarce resources, impulses for greater autonomy, and divergence of goals among subunits. To him (Pondy, 1967, p. 319), conflict is "[...] best understood as a dynamic process underlying a wide variety of behaviors". Each conflict would have stable patterns in a sequence of chained episodes, each with stages: latency, perception, feeling, demonstration, and results (Pondy, 1967, p. 300).

Thomas (1992) highlights the structure of conflict. It contains individual styles; motivation structures, with incentives for collaboration, including trust and emotional support environment; and standards and values, including viability and normative reinforcement for collaboration. Such conflict structure comes from the necessary social relationships in and around the organization, and their polar features. Each stakeholder has its own social situation with its own logic (Popper, 1978). A stakeholder's perspective on a decision is based on his functional role and professional background (Thompson, 2003).

Internal conflict also has antecedents in values (Jehn, Chadwick, & Thatcher, 1997) and career ambitions (Thompson, 2003). Values and ambitions are not imaginary. They come from the social reality constituting the organization (Giddens, 1984). Viewing them objectively may lead to more conflict! Resolution requires real resource commitments. Changing narratives is not enough for real conflicts!

There are functional and dysfunctional conflicts (Amason, 1996; Pondy, 1967). In teams, Jehn (1995) sees constructive (functional) or destructive (dysfunctional) conflicts. To Amason and Sapienza (1997), conflicts can be cognitive (tend to be functional) or affective (tend to be dysfunctional).

Burrel and Morgan (2005), in their literature review on the "sociology of conflict", show the strong link between conflict and endogenous change. Cronin and Bezrukova (2019) emphasize the role of this endogenous dynamics in changing the nature and intensity of organizational conflicts. Cognitive conflicts provoke affective commitment, reinforcing individual confrontation and antipathies, entailing more conflict.

Usually, conflicts demand resolution. However, with enough compensation, the organization may even tolerate chronic conflicts (White, 1961).

Pondy (1967) saw three conflict management models: bargaining, bureaucratic and systemic. Bargaining deals with conflict over resources. Their resolution tends to involve increasing resources or reducing demands. Adversaries seek moral superiority appealing to third parties. Labor negotiations are open bargains. Budgetary ones not so much, with parties trying to conceal bargains under a rational appearance.

The bureaucratic model (Pondy, 1967) deals with vertical conflicts in the hierarchy by setting new behavior rules. Management aims to reduce the subordinates' autonomy, reducing the ambiguity in the authority relations. As an unanticipated consequence, they react with more conflict because they lack trust in management. Ironically, bureaucracy helps in stable environments, but hinders adaptation.

The systemic model (Pondy, 1967) aims at the coordination problems between subunits with functional interdependence but distinct objectives. The systemic solution involves altering the incentive system or reducing interdependence to improve

productivity, stability, and adaptability. To provide incentives, training procedures, employee selection, and functions assignment are changed. To reduce interdependence, the dependency on common resources is reduced, deadlines are extended, the pressure for consensus is reduced, and stocks, contingency funds, or other mediations, are created.

Mason (1969) adds the dialectical confrontation of thesis and antithesis, generating a synthesis, a confrontational type of constructive conflict resolution not mentioned by Pondy (1967).

Thomas (1992) sees three possible conflict solutions: (1) to abide by the concerns of one of the parties, (2) to build a position that pleases the parties or (3) to promote a systemic solution for the organization. Thomas (1992) embraces the systemic solution as a better normative option. However, it may depend on structural changes, sometimes unfeasible in the short term, which recommends a pragmatic posture to the manager. In the long run, she must aim the systemic solution. The author sees this as "pragmatic idealism".

Thomas (1992) broadens Pondy's trichotomy of conflict resolution suggesting: avoidance, accommodation, commitment, competition, and collaboration. Avoidance and accommodating other parties' interests are new categories. The compromise solution is close to the bargaining model and to Pondy's bureaucratic model, although the latter also partly contemplates accommodation.

Finally, when the conflict openly manifests itself in the organization, it rarely becomes aggressive, due to the strong social pressure and norms banning such behavior. To Pondy (1967), only major conflicts would dissolve organizational relationships. The most common response is some bargaining process typical of adversarial relationships. In place of solving the problem, rationing and distortion of information; rigid, formal, and distant relationships; and suspicion, hostility, and dissociation (Pondy, 1967).

In summary, the stakeholders' conflicts of interest are real and appear in differing stakeholder's intentions! Conflict shapes and constrains the very objectives, scope and means of cogitated alternatives, guiding the decision process to feasible options that accommodate powerful interests and veto other alternatives. Conflict is a key source of volatility, uncertainty, complexity, and ambiguity. The greater the influence of uncontrollable external interests, the more difficult is to find compromise or systemic solutions and the narrower the basis for common objectives.

Resolving conflicts of interest is thus at the core of disciplines like law, negotiation, governance, stakeholder management, and decision making. Controlling, diffusing, and directing conflict is a major management activity and leads to the fixation of objective meaning.

Cognitive processes in the organization

Cognitive functionalism seeks to model human thinking. Its key hypothesis is the independence between cognitive processing and its material substrate - brain or computer. It uses computational algorithms acting directly on internal representations at the symbolic level (Churchland, 2013; Gardner, 1985). It is the model of representations and rules (Horgan & Tienson, 1989).

Horgan and Tienson (1996) formulated an alternative functionalist conception of human thinking. It is connectionist and called "non-computable dynamic cognition". This model is based on the mathematics of dynamic systems, more powerful than that of algorithms. They keep representations. However, transitions between them are below the cognitive level, meaning below the symbolic perception of the agent itself, in an analogy with the hierarchical levels of computation: programming language, assembler, zeros and ones. And, at the cognitive level, they do not follow rule-controlled symbols manipulation. Even if they do at the sub-cognitive one.

Neurologists and artificial intelligence experts have long questioned functionalism. It would not explain human creativity and flexibility (Cicurel & Nicolelis, 2015; Ford, 2018; Greenfield, 2017; Mitchell, 2019). Thought would be irreducible to formal logic and algorithms. To the neurological perspective of Cicurel and Nicolelis (2015), cognitive processes would exceed the limits of the explicit programs of a Turing machine – which only runs algorithms and heuristics. Neurological information processing is not just digital processing, having simultaneous analogic processing as well. It is non algorithmic, with transitions between representations bellow the cognitive level of processing. Mathematically, this nonlinear "hypercomputation" is proved to overcome the limitations of Göedel's Incompleteness Theorems (Chaitin, Costa, & Doria, 2011).

The modeling of human mind is a complex and controversial subject beyond this essay's scope. Here, it is enough to assume that the limitations of cognitive functionalism do not harm the organizational cognitive processes' power and scope, because people execute them, making them intrinsically more powerful than algorithms.

Organizations have nothing like personal subjectivity. But they need results. In situations of high discretion, the cogitation, development, and approval of feasible and attractive alternatives is the center of the decision processes. From a management point of view, cognitive functionalism presents itself as shared mental models and institutionalized practices carried out by multiple agents and partially controlled by leaders. These are shared functional processes of environmental mapping, weaknesses and capabilities assessment, search and exploration of opportunities and technologies; alternatives' search, diagnosis, risk assessment, and solution generation; and action development. Everything happens as if the strategic decision-making processes contained organizational cognitive processes (Eggers & Kaplan, 2013).

Clearly, the strategic process is not reducible to algorithms. Algorithms do not solve unstructured problems, nor complex and political situations. Institutionalized practices are not algorithms. They are organizational processes and procedures. Sometimes simple rules (Sull & Eisenhardt, 2015). Organizational heuristics and methodologies can be formal or practices and do not guarantee a single or even a right solution. They are robust, allowing variation in their application, exchange of agents, improvement, and replacement (Nascimento, 2008).

Organizational cognitive processes may be dysfunctional, when obsolete or poorly designed or executed, transmuting from advantage into rigidity (Leonard-Barton, 1992). Rationality has limits too (Simon, 1997). Reasoning biases can be persistent and challenging to control (Tversky & Kahneman, 1974). They suffer from human variability. They are also intrinsically superior to algorithms and benefit from human creativity.

Hickson, Butler, Gray, Mallory, and Wilson (1986) investigated five strategic decisions in 30 different organizations and highlighted two processes woven together in decision making: conflict resolution and the cognitive process of problem diagnosis and solution. Hence, their dual typology of strategic problems-processes: vortex-sporadic, tractable-fluid, and familiar-restricted.

Restricted are fast processes, without interruptions or delays, tightly controlled by senior management. The fluid process has an orderly structure and control by management, with few interruptions, delays, and reformulations. In contrast, sporadic processes have many interruptions, delays and reformulations, and decreased management control.

Why three types of process? To explain, Hickson et al. (1986) resort to the complexity of strategic problems. The vortex problems would have relatively high-complexity and hard conflict, derived from powerful independent stakeholders. They tend to require specific treatment and end up resulting in decision-making processes interrupted by reformulation – the sporadic processes. When the complexity is lower and there is less external influence, the conflict is more manageable, the problems become more tractable, and the process is fluid and controlled. Familiar problems are the least complex, with little direct external influence, and tight leaders' control.

This trichotomy provides a useful tool for understanding the generation and fixation of objective meaning in the organization. Thus, thanks to management control, in familiar-constricted or tractable-fluid processes, the meaning of decisions and consequent action will closely follow the mission and systemic objectives. They tend to be institutionalized processes, with dedicated departments (Lawrence & Lorsch, 1967), such as corporate planning, product development, R&D, business intelligence, etc. The organization's leaders, that respond to demands for results, prefer the control that such processes give them.

The vortex-sporadic processes, riddled with conflict and uncertainty, remain the more difficult ones. In these situations, the expected results, required means, and the appropriate processes are called into question. Organizations do not control them. They face complex problems and strong external pressure. Sometimes such situations call into question the mission and the very existence of the organization. Such situations also highlight the complex resource dependencies among stakeholders (Pfeffer & Salancick, 2003). Furthermore, there is scope for legitimate differences of opinion about what is a rational solution (Costa, 1994, 1999; Simon, 1997; among others). Precisely because there is uncertainty and conflict regarding objectives, methods, and technologies (Thompson, 2003, p. 134), feasibility, and acceptable risk. These situations unsettle and may damage or even dissolve the dominant coalition!

Vortex situations provide highly political processes. Interests, motives, and values take center stage, stimulate the conflict of interests, and harm the agreement on feasible and attractive alternatives. The organization engages in exploratory behaviors to seek, adapt, or develop programs and action plans that solve the situation and conciliate opposing interests. Even so, it would be surprising if vortex-sporadic processes were to deviate completely from mission and systemic objectives. After all, these come from the powerful combination of interests of the dominant coalition and the very imperative of survival. Moreover, they are preferred by leaders.

Then, how organizational cognitive processes set the objective meaning?

The fixation of objective meaning under uncertainty and conflict

At the strategic level, the mission and systemic objectives of the organization guide the strategic processes in the search for information, knowledge, and alternatives. Even when contemplating a change of mission, systemic objectives still guide the organizational cognitive processes and even the redefinition of the dominant coalition. The fixation of the objective meaning comes embedded in complex processes, that may suffer constant interruptions, re-evaluations, and directions changes.

There is a vast literature on strategy, innovation and entrepreneurship that suggests how alternatives and the direction of action are defined. Three recommendations and their unfolding merit attention here: to prospect and characterize the known and unknown uncertainty (Loch, Solt, & Bailey, 2008); to manage in an ambidextrous way, with exploration and exploitation (March, 1991); and to convert conflicts of interest from destructive into functional ones (Hickson et al., 1986; Pondy, 1967; Thomas, 1992). The organizational cognitive processes, will then take care of:

1. Mapping the nature and cognitive complexity of the problem faced, via

    a. Monitoring and understanding the business environment.

    b. Identifying emerging technologies and exercising road mapping.

    c. Distinguishing incremental from disruptive innovation.

2. Examining the relationships and conflicts among stakeholders, in particular,

    a. The relations of dependence on resources and

    b. The consequences of alternative scenarios.

3. Devising constructive (or functional) approaches and alternatives to conflicts.

4. Building consensus and coalitions on opportunities, problems, goals, and alternatives.

The above steps can be intuitive, without method. To be sure, intuition is always present at the individual level, as we saw above.

Alternatively, the organization may teach and institutionalize methodologies. Among many, there are working groups, committees, and ad-hoc teams; recommended models for planning, project development, and other processes; independent reviews; simple strategic heuristics (Sull & Eisenhardt, 2015). Many of these methods are aimed at building consensus, based on data, facts, and agreed upon scenarios, by which idiosyncratic objections are deconstructed (Sharpe & Keelin, 1998). With them, the organization resolves or dissolves cognitive conflicts and expands the cognitive robustness of its decisions. Since they require time and resources, management restricts such methods to exacting situations. In the Hickson et al. (1986) typology, they appear in the tractable problems with fluid processes, but are indispensable in sporadic processes for vortex problems.

When defining and implementing a strategic action, the organization chooses a specific objective meaning, that of the chosen alternative, even when different stakeholders continue to dispute its exact meaning. Such disagreements may even change the objective meaning by affecting implementation. Still, a specific objective meaning remains. In short, there are organizational cognitive processes that fixate belief in the sense of Peirce (1877). Such processes seek technical solutions and, simultaneously, reconciliate conflicting interests. Leaders seek to control these processes based on the mission and systemic objectives. Recurrent negative results lead to processes' review and improvement, and replacement of ineffective leaders and experts. Moreover, the results metrics matter little. Any metric will do. Suffice that they satisfy the stakeholders! Paraphrasing Thomas (1992), pragmatic realism prevails.

CONCLUSIONS

Strategic actions and decisions are unprogrammed and typically high discretion. Under **uncertainty,** organizational cognition of physical and social reality seeks feasible, attractive, and risk modulated **alternatives**. The stakeholders' **conflicts of interests** shape and constrain the objectives, methods and means of the alternatives under consideration. Thus, decision processes tend to favor powerful stakeholders and constrain options contrary to their interests.

How to interpret the agents' intentions in such situations? Some agent's interpretations may be subjective, but what matters to organizational practice is the **objective meaning**. In this article, the approach was to show how the objective meaning is fixated.

The necessary social relations in and around organizations impose the need for resources. Both shape the **dominant coalition** and force it to make transactions with resource providers in ways consistent with its **organizational action domain**. Thus, the **general objective meaning** of managing practice is set as **mission** and **systemic objectives**.

The general objective meaning guides the **organizational cognitive processes** in the generation of alternatives to solve uncertainties and reconcile divergences. These processes are demanded by the dominant coalition and other stakeholders. Such processes, with interruptions, delays, and reformulations, are shaped by the complexity of the involved problems and interests. The absence of strong external interests gives leaders greater control, subordinating these processes firmly to the mission and systemic objectives. Complex situations with powerful conflicting interests are less malleable and often **escape managerial control**. Nevertheless, these organizational cognitive processes fixate the **specific objective meaning**.

Organizational cognitive processes are functionally independent from the people who execute and influence them. Yet, these participants allow them to exceed algorithms power, benefiting from **hypercomputation** and human **creativity**. But they pay the price of **openness**. As so vividly illustrated by deterministic chaos theory (Stewart, 1997), there probably would be new solutions and objective meanings whenever new iterations may be possible. The more conflictive and uncertain the decision situation, the less predictable will be the objective meaning the organization will finally settle into.

Our main management recommendation is to carefully examine the conflicts of interest in problem solving or opportunity exploration. The interpretation of intentions should seek the objective meaning behind the rhetoric and avoid being fooled by diversionist actions or narratives and public discourse. Finding and resolving interest conflicts is at the core of strategic decision making and action and, thus, at the core of objective meaning fixation and objective interpretation, as well.

In conclusion, a results-oriented organizational pragmatism emerges here as the foundation of the objective meaning under conflict and uncertainty. It is grounded on everyday objectivity, cognitive functionalism, and necessary social relationships because the organization needs to adapt its actions to its organized domain of action. Even and if there is a change in this domain because, after the change, there would continue to be an action domain. No matter the subjectivity and inclinations of the leaders. The narratives can assume any rhetoric. However, it cannot hinder the formulation and implementation of feasible alternatives! Reality dictates the fixation of the discretionary actions' objective meaning!

Open Questions and Implications

The typology of Hickson et al. (1986) is sufficient for the purposes of this article. However, as the organization grows and matures, it is necessary to verify whether there is a tendency to create fluid and restricted processes, which is to be expected, given the control logic preferred by managers and leaders. Also, very large and diversified organizations may suffer vortex-sporadic internal decision processes.

In vortex-sporadic problems, to satisfy powerful stakeholders, the dominant coalition may be forced to accept solutions that go beyond or even contradict their vision of mission and systemic objectives. This may be an episode or may signal a change of mission or the dominant coalition. Its general objective meaning is idiosyncratic and should be examined on a case-by-case basis, which suggests a theoretical gap.

It is crucial to realize that there is also a subjective meaning that matters to each player and manager. It does not define the organization decision making and even less its actions. Actions must deliver results, be feasible regarding means, and be compatible with the dominant coalition's mission and systemic objectives. These are enough constraints to guide the organizational cognitive processes and avoid fanciful subjectivity. By the time actions are successful, irrelevant subjectivity has been weeded out. Unsuccessful actions become learning opportunities. Even if not central, how exactly individual subjectivity impact organizational cognition? And how to control this impact? These are corollaries begging for answer.

Barret (2017) coined the idea of "affective realism". Each brain is complex, unique, and individual. No two are the same (Barret, 2017; Greenfield, 2011, 2017). The science of emotions (Barret, 2017; Damásio, 2018; Greenfield, 2017; Sapolsky, 2017) informs us that affectivity is important in creativity and commitment. Exceptional situations and unpredictable consequences can always arise (Merton, 1936) requiring them. It is worth examining the origins, impact and means of organizational affectivity control to promote creativity and commitment, avoid strategic irrationality, and verify its impact on objective meaning.

Younger organizations lack institutionalized processes, knowledge of sophisticated methods, and experience. Smaller organizations also lack resources. Leaders' subjectivity and inclinations may have much larger influence over objective meaning. Yet, results remain crucial, suggesting another research topic.

So, as a final remark, the recognition of objective meaning creates plenty of research opportunities for management scholars.

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