

## Deliberate Strategy Deconstructing Event for the Arising of the Emergent Strategy

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**Abstract:** The objective of this study is to explain the deconstructing event in the decision-moment concept, understood from the perspective of deliberate and emergent strategies. Review of intended literature in search of contributions focused on discontinuities within the organizational context. In addition, we develop the biological metaphor of prey and predator to understand the concept from a simulation based on agents in the NetLogo Software. We assume the deconstructive event present at the decision-moment explained from the deliberate and emergent strategies is composed of variables such as origin, surprise, the agent's perception of the situation, the triggering event and effects. The main findings of the biological metaphor simulation were that on average 34.8% of the time the origin is exogenous in 32.7% it is endogenous and in 32.5% it is simultaneous. In turn in 74.3% of cases the surprise is abrupt and in 25.7% it is gradual. It is important to go beyond the biological metaphor proposed in this study in order to be able to contrast these variables in the organizational context. This study addresses the concept of the deconstructive event present at the time of strategic decision-making, explained mainly through discontinuity in organizations using biological metaphors and agent-based simulation.

**Key words:** Discontinuity, deliberate strategy, emergent strategy, deconstructing event, decision-moment, organizations

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### INTRODUCTION

The concept of strategy arises in the organizational context from the business policy courses at Harvard which question the reasons for the success of some organizations over others immersed in the same context (Rivera and Malaver, 2011). One of the most accepted ways of understanding this concept at the business level is that of Professor Henry Mintzberg. He proposes the vision of strategy as a training process where it is defined as "a pattern in a flow of decisions" and decisions as "commitments for action" (Mintzberg, 1972).

The researcher delves into this previous conception and derives the idea of deliberate and emergent strategies where he has "intended strategies" (understood as strategies that have a preconception on the part of the agent) and "carried-out strategies" (understood as strategies that finally have an effect on the reality of the agent and its environment). When a strategy was intended and also carried out, it is called a "deliberate strategy" that is to say that there was an anticipation of the agent, so, the strategy could be brought about. On the

other hand there are strategies that are carried out without having any anticipation or premeditation on the part of the agent these are called "emergent strategies" (Mintzberg, 1978, 1987; Mintzberg and McHugh, 1985; Mintzberg and Waters, 1985; Mintzberg and Jorgensen, 1987).

In addition, Mintzberg (1972) suggests a cyclical relationship between these conceptions, thought this was expanded by Montoya (2010) and Montoya and Montoya (2013). They describe the functioning of this cyclical idea as the local search for the agent who makes autonomous decisions based on the recycling of experiences granted by the generation of deliberate strategies which may be useful as emergent strategies in the future and denote an evolution of the agent (Montoya, 2010; Montoya and Montoya, 2013).

Taking into account the progress that the notion of deliberate and emergent strategies (Montoya, 2010) has had the fundamental meaning of the decision within the definition of strategy (Mintzberg, 1972) and the fact that management researchers have relatively abandoned the concept of the decision-moment, evidencing the

importance it has on the decision-making process, itself considered as a decision, Hernandez-Betancur *et al.* (2017) and Hernandez-Betancur *et al.* (2015) propose understanding the phenomenon of the decision-moment from the perspective of the process of strategy formation, that is to understand it within the framework of the emergence of deliberate and emergent strategies.

The conception of the decision-moment begins when the agent see the strategy proposed to face the phenomena of the environment in which it is unfolding deconstructed (Understanding and adapting the concept of deconstruction as the demonstration that the constructions and hierarchies of the most important concepts of metaphysics can be put into consideration and disorganize the structure of their identity which calls into question their absolute characteristics (Narvaez, 2013). Taking into account the above what is intended with the use of the concept of deconstruction on the deliberate strategy is to denote the absence of the particularity of being absolute that is to say that it gives the possibility of the occurrence of events that converts these types of strategies into being unusable and demands the generation of solutions in terms of emergent strategies).

This generates the rupture of the link between the agent and their deliberate strategy (plan) which implies that the agent goes through a psychological mourning process (Kubler-Ross, 1969; Hernandez *et al.*, 2015) because the link with the plan is broken (Bowlby, 1969). In order to continue being viable that is having the possibility of being successful in the system and being able to continue making decisions in the future, the agent must take advantage of emergent strategies, starting from the synchronization of the problematic situation (in which it remains after the deconstruction of the deliberate strategy) with possible solutions (Hernandez, 2015; Hernandez *et al.*, 2017).

That deconstructing event, mentioned above, starts when the temporal symmetry of events planned in advance by the agent hinders and breaks in other words when there is a discontinuity. These ruptures of symmetry within the organizational context have been addressed in different ways in light of different conceptions. One of them is discontinuity and its link with the generation of future scenarios (Van Notten *et al.*, 2005), another is Shapero and Sokol's model of the entrepreneurial event in 1982 (Acosta-Veliz *et al.*, 2017). There is also, the conception of surprise in the organizational context (Cunha *et al.*, 2006). In addition, there are the decision-moments that are determined by environmental conditions the precipitating events within the logical incrementalism proposed by Quinn (1978) and finally, there are the works on discontinuity (Ghezzi, 2013). The present document explains the concept of a deconstructive event (understood as the event that breaks the temporal

symmetry or generates discontinuity) of the deliberate strategy and its effects on the decision-moment from these different perspectives. To start, we explain the deconstruction of continuity conceptions inside an organization, then we elaborate on the methodology used to face the proposed problem based on NetLogo using a biological metaphor. Next the results are revealed followed by a discussion and finally, the conclusions are exposed.

**Conceptions of continuity deconstruction:** The key contributions that are going to be presented next arise from a literature review of the decision-moment from which we identified those researchers who have studied discontinuity in organizations. First, we assume that these researcher perform an ex ante, ex post or mixed evaluation of the actions that make the phenomenon of discontinuity evident, exposing aspects that are likely to be associated before the discontinuity event (ex ante) after the event (ex post) or researchers who address aspects before and after the discontinuity (mixed).

**Ex ante discontinuity:** The ex ante evidence of discontinuity begins with the contributions of Van Notten, Slegers and van Asselt (Van Notten *et al.*, 2005) who proposed the conception of possible scenarios established from information of the past, present and future as a mechanism of control over discontinuities. Shapero and Sokole cited by Acosta-Veliz *et al.* (2017) Tarrats-Pons, proposed the trigger event in the entrepreneurial event, based on the perceptions of the agent willing to be an entrepreneur and their closest circle.

**Discontinuity and future scenarios for van Notten, Slegers and van Asselt:** The research of Van Notten *et al.* (2005) finds meaning in the use of scenario generation. For the understanding of future discontinuities, based on the preparation of agents to respond to abrupt changes that may surprise them. The creation of these feasible scenarios is based on relevant aspects identified in retrospective, current and expectant analyses (Van Notten *et al.*, 2005). For example, it is evident for the Accounting Management Systems, studied by Puspitawati *et al.* (2018) which affirm that this system must change in response to changes in the environment, in order to guarantee effective support in making management decisions.

For the understanding of the concept of discontinuity, Van Notten *et al.* (2005) base their research on the contributions of Drucker (1968) where it is stated that discontinuities are the modifications of current states and that they are part of the collective consciousness that are produced by unexpected events and that mark future trends (Drucker, 1968; Van Notten *et al.*, 2005). Likewise, Van Notten *et al.* (2005) take the ideas of Ayres (2000) who states that discontinuity is often associated with

scalar perceptions of time and agent interpretation. As for the time factor, the meaning of a situation from a short term point of view can be seen as a discontinuity but in long-term magnitudes it can be a continuous situation. On the other hand, the agent's interpretation will depend on their formation and world view: for some, certain situations will be progressive changes and for others, discontinuities (Ayres, 2000; Van Notten *et al.*, 2005).

In turn, Van Notten *et al.* (2005) delve into their review of the concept of surprise where they find different definitions that present the common element of the unexpected for example remote expectations of reality (Glantz *et al.*, 1998), consequences communal events that are not known or expected but have incidence and a degree of relevance to the problem (Schneider *et al.*, 1998). In this context, the surprise will depend on the interpretation given by the agent to the situation that is it marks the surprise as a subjective aspect that will stand out when it is outside the particular world view of the agent, in this sense an agent is surprised with situations outside his or her world view. For their research exercise and the unification of the concept, Van Notten *et al.* (2005), propose a general definition of the concept of discontinuity, understood as "a temporary or permanent, sometimes unexpected, rupture in a dominant condition of society".

This discontinuity has two types: the first is the abrupt one which is considered instantaneous and of great impact, likewise, it can be associated with momentary conditions which allow it to return to its original state (Van Notten *et al.*, 2005). Abrupt discontinuity will usually be associated with a particular event but with knowledge of the processes associated with the situation. These are events that lead to the modification of the current state but are not the fundamental reason which is based on processes with greater forcefulness (Van Notten *et al.*, 2005). To clarify this aspect, the researcher use the First World War as an example of an abrupt discontinuity which was detonated in 1914 after the assassination of Archduke Franz Ferdinand but with causes associated with processes of nationalism, military processes and strategic alliances which resulted in immense death tolls (Van Notten *et al.*, 2005). The second type of discontinuity is the gradual one which is defined based on the concept of transition, seen as a gradual process of continuous change that generates transformation. It is long term and seeks to impact over extended periods of time. This is composed of four stages (Van Notten *et al.*, 2005):

- A phase of previous development of dynamic equilibrium in which the status quo does not visibly change
- A take-off phase in which the change process starts because the state of the system begins to change

- An advance phase where visible structural changes take place
- A stabilization phase where the speed of social change decreases and a new dynamic equilibrium is reached

What Van Notten *et al.* (2005) postulate is likely to be associated with the contributions of Prigogine's research where he states that a fundamental factor in generating the evolution (or growth) of a system is that, it must move away from equilibrium, that is a system "re-emerges" in a superior configuration from renouncing its current configuration (Montoya and Montoya, 2009).

**Shapero's Model of an entrepreneurial event:** The entrepreneurial event model is composed of three aspects to guarantee the initiative of an individual to start a company. The first corresponds to the perception of desirability which refers to the idea that family members and people close to the individual have about the interest in building a new company. The second element is the perception of viability which is associated with the individual's own confidence in their abilities to achieve the start-up of a new business, this also corresponds to the availability and attainment of resources, identification of own ecosystems for the generation of ventures, the value system of the entrepreneur, the effect of the context of academic training and professional development (Tarrats-Pons *et al.*, 2015; Acosta-Veliz *et al.*, 2017). Finally, the third element is the propensity to act, this refers to the situation or precipitating element that leads the individual to create an enterprise. This may have a negative connotation for the individual such as loss of employment or a positive one such as the delivery of an inheritance or winning the lottery. This phenomenon is referred to as a trigger event (Tarrats-Pons *et al.*, 2015; Acosta-Veliz *et al.*, 2017).

This triggering event breaks the units of paradigmatic facts that surround the individual and makes him or her consider different alternatives to continue with their viability, human behaviour is guided by a symmetry until it is fractured by triggering events that lead to or force action (Diez, 2016; Echeverri-Sanchez *et al.*, 2018).

**Ex post aspects of discontinuity:** For the case of the ex post analysis of discontinuity we have the contributions of Cunha *et al.* (2006) regarding organizational surprise, based on events that occurred unexpectedly in the organization which become evident when they have passed. On the other hand, we have the contributions of Smida on the approach of typologies of the decision-moment, highlighting those imposed by the environment which tend to be beyond the reach of the decision-making agent and its resources.

**Surprise in the organization:** Surprises within the organizational context are defined as the events of a company's own activities which happen unexpectedly or events that are expected but that have changes that are not expected (Cunha *et al.*, 2006). In fact, it is important to clarify that surprise is different from uncertainty. Uncertainty responds to the insecurity that an agent has in the behaviour of a phenomenon while surprise corresponds to the lack of consideration of an event or phenomenon (Cunha *et al.*, 2006).

Surprises can be generated by the organization towards the environment. For instance when an organization makes a development that generates unexpected phenomena on its competitors. Another form of expression of surprise is generated by the environment towards the interior of the organization, this belongs to phenomena produced by the organizational environment which were not considered by the company (Cunha *et al.*, 2006).

There are several types of surprises in the organizational context. One of them is insignificant surprises which can be described as problems that had not been considered but are resolved successfully. Another type is the surprises that generate alerts about an unexpected event and another is sudden surprises which do not give any kind of prior warning. Some are inevitable as there are others that could have been avoided. Some surprises can be processed quickly others require more elaborate work to avoid significant problems in the organization (Cunha *et al.*, 2006).

In a sense, surprises can have a negative connotation due to the lack of control regarding the unexpected but they can also have favourable characteristics as described by Cunha *et al.* (2006). Sometimes an inventive development does not go as expected but in the end it becomes a celebrated innovation, as was the case for the 3M company with its small self-adhesive sheets for desk notes. The surprise from the perspective of the lack of knowledge or problems in the interpretation of the phenomena within contexts with reciprocal relationship and influence (expectations, dispositions and local particularities), presents an emergent indication. In it the agents are incapable of synchronizing representation and collective action. This usually guarantees the presence of surprise in organizational contexts characterized by incomplete knowledge and high uncertainty and ambiguity (Cunha *et al.*, 2006).

**Decision-moments imposed by the environment:** Smida, starting from the premise of abandoning the concept of the decision-moment, makes a contextualization regarding

the strategic decision for the subsequent modelling of the decision-moment. In this effort to standardize concepts, the researcher settles the debate between the conception of strategic decision as a process or as an action, concluding that strategic decisions correspond to a process that is a chain of decisions that are linked conditionally to the freedoms and restrictions of the decision-maker.

Based on this analysis by Smida it could be said that an organization that focuses on a particular segment of the market is restricting itself from other segments it has left aside but obtains future freedoms in terms of the knowledge acquired from specialization in a specific segment.

The researcher warns that the neoclassical hypothesis about decisions, associated with the freedom and rationality of the decision-maker are short and decontextualized when analyzing the reality of the strategic decisions in the organizational scope. Something that is resolved thanks to the contextualization of the decision-maker with the environment, typical of systemic theory, restricting the freedom of the decision-maker and recognizing limited rationality. In this sense, there is no exclusiveness of the decision-maker as to when to make decisions, freedom is reduced by the context that the system provides. Based on these premises, Smida models the decision-moment, stating that there is a typology (Fig. 1) that is framed in situations imposed by the environment. This precipitates the decision-moment and in general terms organizations lack the skills or tools to deal with the change instantly which in turn forces it to develop them quickly to guarantee subsistence.

Similarly, there are typologies of the decision-moment that arise from the subsets. The first corresponds to decision-moments imposed by the environment and thanks to the resources of the decision-maker. This is because the organization prepares its resources for possible situations or movements proposed by the competitors within the market that they share which is to say that it proposes possible scenarios with strategic moves that the competitors may generate and with the respective appropriate response by the organization. The second is associated with decision-moments imposed by the environment and proposed by the decision-maker. In this case the organization ventures with a decision of its own initiative but sticks to uncontrolled situations generated by possible reactions issued by competitors before the new scenario brought about by that decision.

Finally, the third is related to the interception of the three types in a moment imposed by the environment because of the resources and initiative of the

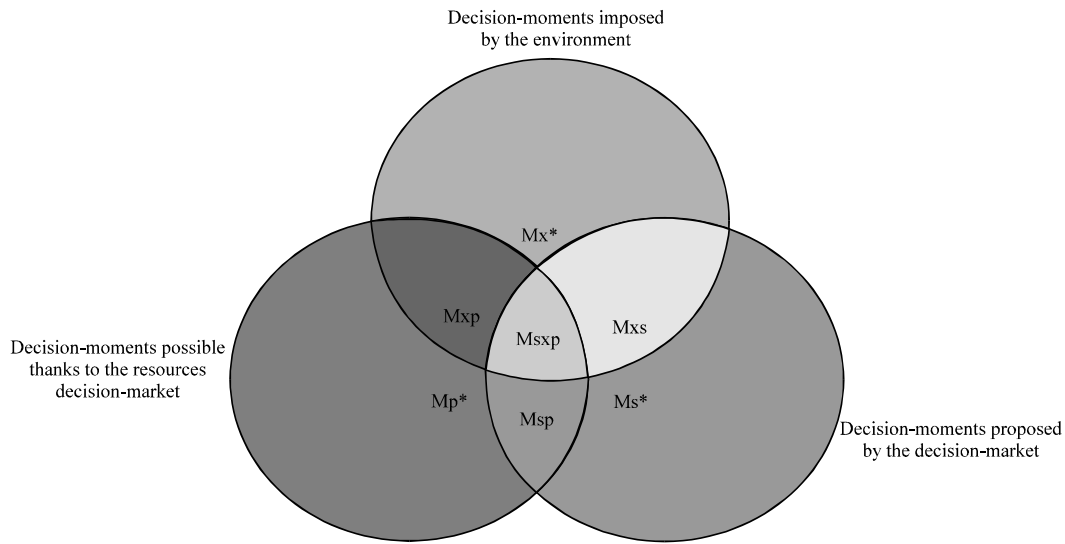


Fig. 1: Typology of the decision-moment (Taken from Smida, 2006)

decision-maker. In this context it refers to an ideal decision-moment because the decision-maker wants to make the decision he or she has the resources and the environment allows it.

**Mixed aspects of discontinuity:** Finally with regard to the mixed aspects, we find that two contributions that combine visions of the phenomenon from *ex ante* and *ex post* aspects are evident. First there is Quinn (1978) who makes an evolutionary proposal of the strategic concept which responds more to evolutionary and learning processes than to analytical processes which are usually accompanied by precipitating events that lead to decisions. Regarding this, Ghezzi (2013) argues that the successful management of endogenous and exogenous discontinuities by the organization guarantees its relative success, a fundamental task of the strategy in responding to previous processes such as strategic planning but also to the flexibility of the organization to adapt to situations that are already considered a fact.

**Quinn precipitating events:** Quinn (1978) proposes the theory of logical incrementalism where he develops a particular perspective regarding the formation of the strategy, based on a vision of learning. He builds this theory gradually, centralized mainly in the vision and in the mind of the managers who are also responsible for the approval of the strategy by the organization.

This theory is part of the change in strategic processes which according to the researcher will rarely be close to analytical process or derivations of strategic decisions based on results matrices because there are

cognitive and process limitations in the search for optimal solutions. On the contrary, the strategic change process will respond more accurately to evolutionary aspects in terms of internal decisions and the interactions with external events (Quinn, 1978).

Within the aspects of this vision strategy formation, Quinn (1978), defines the precipitating events which he describes as internal or external uncontrolled events that generate a decision on the part of the organization in response to the fact which is then going to be a fundamental part in later strategic approaches of the company.

In spite of all the planning processes and rigorous visions of the future as well as the rationality and judgment that it requires it does not give an organization the possibility of knowing all precipitating events their intensity and temporality. Similarly, in the face of a precipitating event, a rigorous process of formal planning in response to the situation is not conceivable, given the haste but it is worth noting the usefulness of these decisions in extreme situations for subsequent strategic developments (Quinn, 1978). The best way to face these precipitating events is gradually, sustaining the responsibilities of the organization with constantly revised actions that respond to gradual increments in search of keeping the change process more appropriate (Quinn, 1978).

**Discontinuity for Ghezzi:** In the context of discontinuity, the changes inside and outside the organization will challenge the superiority of a company over the competition which will ultimately relate to commercial

Table 1: Types of discontinuity

Types	Characteristics	Examples
Exogenous discontinuity	Influence of external factors which can be simple or complex depending on the speed with which changes occur and the amount of information available to make decisions	The emergence of a new technology that generates uncertainty in the environment and modifies the industrial structure Design and production of products in terms of resources needed context of competition Physical changes in production Changes in prices and returns Changes in client preferences Changes in client necessities Changes in client willingness to pay Price wars Alternative offers Shortening of the product life cycle Characteristic prevision difficulties in some industries
Endogenous discontinuity	Emergent phenomena that occur internally and that have the possibility of occurring involuntarily, due to the natural risks associated with the planning processes as an effect of the limitations of rationality	Changes in processes Changes in practice Changes in routines Changes in products due to innovation

Own elaboration based on Ghezzi (2013) and other cited researchers own elaboration based on Ghezzi (2013) and other cited researchers

strategy. These changes are sketched as marked discontinuities (Ghezzi, 2013) that is as temporary symmetry breaks that are evident. For the discontinuity analysis, Ghezzi (2013), bases his hypothesis on the primary mission of the strategy in terms of resolving questions regarding the different results of organizations immersed in the same context (Rivera and Malaver, 2011) from this perspective, Ghezzi (2013) sees a natural association with the sustainable competitive advantage, making a difference to the competitor. The researcher states that the framework for the organization to guarantee that sustainability starts from the strategic planning process but at the same time from its flexibility and adaptability when responding to changes and even to a certain extent when proposing them. These changes are not incremental on some occasions but rather are typified in mostly radical discontinuities, completely deforming the initial phases.

Ghezzi (2013) states that there are two undeniable types of discontinuities in the organizational context: the first one is endogenous and the second is exogenous, referring specifically to the origin of the cause of the discontinuity. In particular, the endogenous ones will correspond to those produced by the organization and the exogenous will derive from the environment or context that surrounds it (Table 1). In this regard, it is clear that the discontinuities have two nodes of origin which can be proposed by the organization or can arise from the elements that make up the environment. These discontinuities force the organization to give answers from emerging resources, the use of skills that were in strategic development or improvised innovations (Ghezzi, 2013).

## MATERIALS AND METHODS

The methodology with which we address the deconstructing event of the deliberate strategy for the

emergence of the emergent strategy is based on a biological metaphor which is subjected to a simulation based on agents in the NetLogo Software.

**Biological metaphor:** Metaphors which correspond etymologically to go beyond thinking, help to generate new knowledge from a relationship of approximation between two elements where one explains the other. At the same time they enable conceptual models for the compression of phenomena to be carried out in a timely manner in order to get a notion of reality from all sciences that is broader than the basic structure (Montoya and Montoya, 2012). Various metaphors have been used in the context of organizations, one of the first being the mechanistic which starts from the vision of the laws of mathematics and physics. Later on, there are rhetorical figures concentrated on the biological which surpass by their integration and complexity (Montoya and Montoya, 2012). Some examples are organizations such as the human body (Morgan, 1986), cybernetics and fluid mechanics (Beer, 1967) and insects with regard to societal behavior (Tinaut and Ruano, 1999). The basis for the use of metaphors including biological ones is the possibility of understanding the interaction process which can explain phenomena that have arisen within the organization. These interactions can be beneficial, neutral or harmful (Martinez *et al.*, 2016, 2017, 2018; Montoya and Montoya, 2012). Specifically, the biological metaphor proposed in this document can be classified as a harmful interaction, given that it corresponds to the relationship between a prey and a predator which is explained in the following section.

**Prey-predator concept:** In this study, we use as a biological metaphor the prey-predator interaction, viewing the relationship in terms of the food chain in which two animal agents share a particular ecosystem. One group of agents will be referred to as “prey” and the other as “predators”. This interaction can have two connotations,

one of a beneficial type in that predators benefit from the food they obtain from the prey but at the same time there is a harmful relationship in terms of the group of prey that are hunted for food.

**Particular situation:** We will denote the following elements and assumptions within the interaction between prey and predator in order to understand the functioning of the relationship between the deliberate and emergent strategy, particularly from the point of view of the prey.

**Deliberate strategy:** Basic strategy of survival on the part of the prey. The prey moves within the environment avoiding crossing with the predator.

**Deconstructing event of the deliberate strategy:** Crossing the prey with a predator. This is a deconstructive event for the prey, since, it frustrates the deliberate strategy of survival by moving around its surroundings without crossing a predator.

**Emergent strategy:** During the crossing of the prey with the predator the emergent strategy becomes the possibility of finding another nearby prey which stops the attack of the predator due to the amount of available prey that is the predator does not attack the prey, if it is in a herd. This becomes an emergent strategy, since, it is an alternative for the prey to continue with the basic survival strategy.

**NetLogo agent-based simulation:** The simulation based on agents is relatively new for the application of social systems, especially, when compared with its use in sciences such as physics and natural sciences (Kazda and Stekerova, 2018; Mahdi and Hasson, 2018; Kadir and Selamat, 2018; Handayani *et al.*, 2017; Aris *et al.*, 2017). This method helps to easily identify the effects that individual actions have on social structures while at the same time enabling the identification of how these social structures modify the beliefs, desires and opportunities of the individual (Garcia-Valdecasas, 2011, 2016).

For Gilbert cited in Garcia-Valdecasas (2011) the simulation of agents is defined as: “a computer method that allows the development of computational models constituted by agents that interact with each other within an environment with the objective to perform virtual experiments. These virtual experiments can be understood as the possibility of observing what happens with fragments of reality (virtual reflections of social phenomena) when they are subjected to a particular treatment. This generates conclusions about the social phenomenon as long as the model represents it satisfactorily. This constitutes the possibility of carrying out experiments in the social field, overcoming the obstacles of the isolation of phenomena which in reality tend to be difficult or impossible and are usually accompanied by ethical problems (Garcia-Valdecasas, 2011, 2016).

We use the NetLogo tool for the simulation of the situation posed within the relationship of the prey with the predator, programming an environment that is easy to learn and use (Garcia-Valdecasas, 2011). This allows us to model complex systems from the creation and execution of agent-based models (Garcia-Valdecasas, 2016), inspired by the situation outlined in the Wolf Sheep Prediction Model published in the library of software models but with revisions and modifications which helps to generate a new code adjusted to the needs of the particular situation to be analysed.

We define two families within the software, the first for the prey denoted by sheep and the second for the predators represented by wolves. Technically, it is programmed that when a prey crosses with a predator the first one is eaten by the second but this situation can be avoided, if in the surroundings (neighbouring patches where there is a crossing between the prey and the predator) there are some prey that can give the sense of herd. In turn, we take into account the process of reproduction, both for prey and predators. When a prey or a predator crosses with an agent of the same species, a reproduction situation occurs where a new agent is born, either of prey or predator (Fig. 2).



Fig. 2: Prey-predator world (NetLogo screenshot)

## RESULTS AND DISCUSSION

**Theoretical discussion:** Within the theoretical discussion taking into account the contributions of the researchers explained in section three, we identify several relevant elements associated with the deconstructing event of deliberate strategy. The first one is the origin where the contributions of Quinn (1978), Smida and Ghezzi (2013) are combined. The three researcher agree that events that affect continuity within organizations can start from an exogenous aspect that is from external aspects of the organization and that they can also start from an internal context of the organization with an endogenous connotation. According to Smida's theory, we can use a more in-depth classification for the origin of situations that break the temporal symmetry of the organization where the exogenous ones can be understood as decision-moments imposed by the environment and the endogenous ones are classified by the situations proposed by the decision or that arise thanks to the resources of the decision-maker.

In turn within this context, the path appears (understood as the direction of discontinuity from the organization to the environment and from the environment to the organization), based on Cunha *et al.* (2006) where they states that the surprise in the organizational context can have two directions: it can be from the organization to the environment where the organization is the one that generates the discontinuity of the symmetry or it can be from the environment towards the organization where the agents that belong to the environment are those that generate the discontinuity of the symmetry.

The second element is the unexpected or the surprise, supported by the works of Van Notten *et al.* (2005) and Cunha *et al.* (2006), respectively which respond to the rupture of the dominant conditions of society where deconstructive events can be characterized as abrupt, distinguished by steep slopes within the space-time continuity of organizations. Gradual variations may also occur which have a more successive and progressive condition without the presence of particularly significant changes.

The third element is the agent's perception of the situation that generates change or that breaks the symmetry. According to Van Notten *et al.* (2005) there are two types: the first is temporary and the second is interpretation. It is possible that, temporarily in the short term the perception of the agent in front of an event breaks the symmetry whether or not it has much incidence in the long term. At the same time, depending on their

vision of the world and formation, some understand situations as progressive changes and others as discontinuities.

The fourth element is the trigger, based on the proposal of Shapero and Sokol published in 1982 and cited by Acosta-Veliz *et al.* (2017) and Tarrats-Pons (2015) for the emergence of entrepreneurship in people. They consider this arises from a trigger event with two types of connotations: positive when they come from an event that is favourable for the agent and negative when they generate a disadvantage concerning the conditions of the agent.

The fifth element is the effects which according to the proposal of Cunha *et al.* (2006), may be characterized by deconstructive events that are significant or insignificant with alerts or sudden, inevitable or avoidable and with the need for simple or elaborate solutions. These five elements allow us to understand the different dimensions of the emergence of a deconstructive event that affects the necessary symmetry in the ecosystem for the application of a deliberate strategy. These perceptions are born of the concepts of decision-making temporality, discontinuity, logical incrementalism, organizational changes, the surprise and the triggering events of the enterprise (Fig. 3).

**Results of the prey-predator experiment on NetLogo:** The model experiment in NetLogo was programmed with 11, 000 iterations with variations of the sheep from 1-100 in intervals of 10 individuals and the wolves from 1-10 with intervals of 1, each of the combinations between sheep and wolves was executed 100 times. In some combinations, the number of sheep and wolves does not stop the process of simulation which is determined by when the wolves have no more sheep to eat for this case we set 5000 steps as a limit.

Descriptively, on average they had 2120.9 steps of movement in the simulation where the maximum is lodged where there are more sheep and fewer wolves with a figure of 5000 in several interactions. There was also a minimum when the number of sheep was drastically lower than the number of wolves. On average, the simulations end with 2239.1 sheep and 40.2 wolves. There were 2302.6 sheep births and 126, 110.3 encounters, 113.5 of which were effective, ending with the death of the sheep. Regarding the variables described above as theoretical results, we obtained the following (Fig. 4).

**Regarding the origin:** It was determined that for the context of the prey-predator metaphor, the origin will be



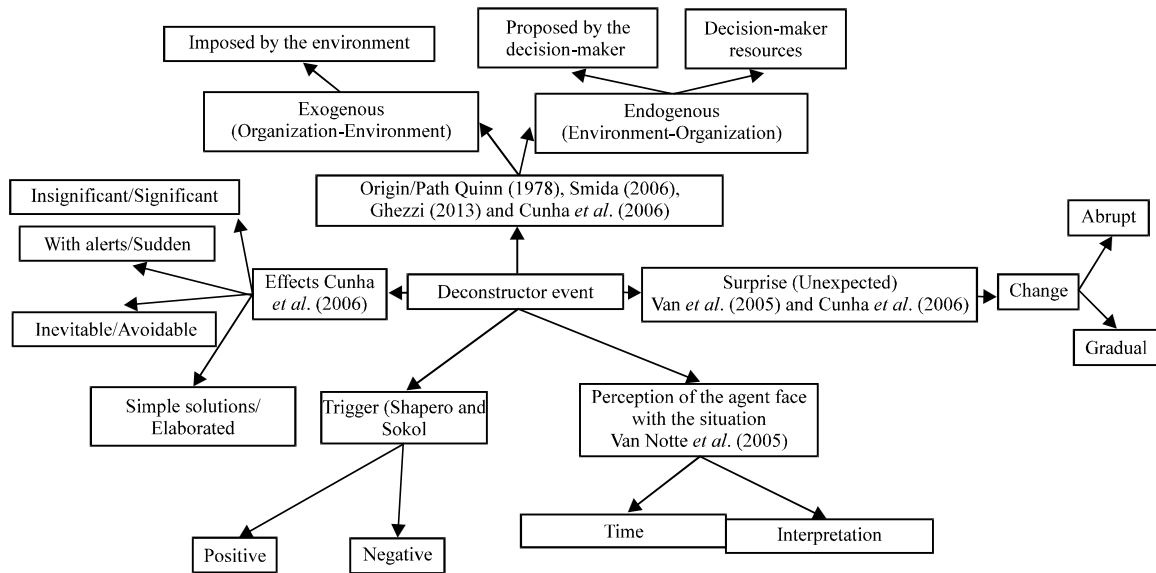


Fig. 3: Components of the deconstructing event (own elaboration)

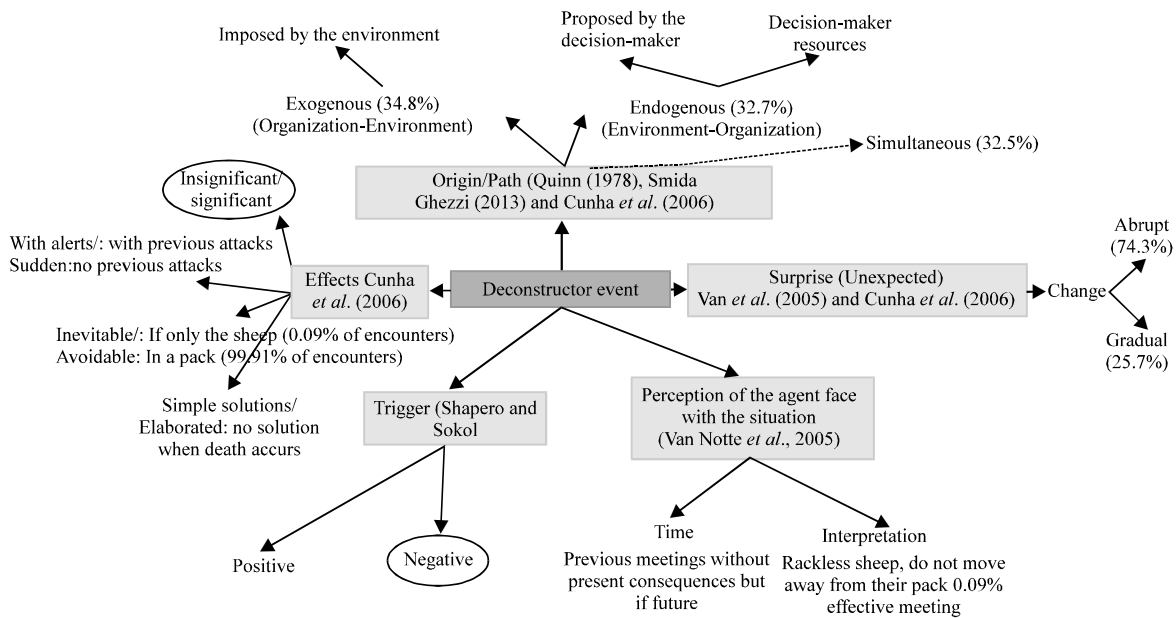


Fig. 4: Deconstructing event components according to the experiment results (own elaboration)

denominated by the order of arrival to the space where the possible death of the sheep occurs. If the sheep arrive first at the spot where death occurs an exogenous origin is given to the deconstructing event, given that it is the wolf that looks for the sheep, otherwise, if the wolf arrives first at the spot then the event becomes endogenous where the sheep arrives at the space dominated by the wolf. On average there were 113.5 effective encounters per run between prey and

predator, 34.8% of which had exogenous origins, 32.7% were endogenous and 32.5% were simultaneous.

**Regarding the surprise (abrupt or gradual change):** This variable for the situation posed between a prey and a predator established two types of death for the sheep: the first is characterized by being a sudden death where the deconstructive event that puts an end to the sheep is

Table 2: Origin-surprise relation

Variables	Abrupt	Gradual
Endogenous	Proposed by the agent and generated without prior notice (wolf arrives first and death is sudden)	Proposed by the agent and generated with gradual changes and generating alerts (wolf arrives first and death has previous encounters)
Exogenous	Proposed by the environment and generated without warning (sheep arrives first and death is sudden)	Proposed by the environment and generated with gradual changes and generating alerts (sheep arrives first and death has previous encounters)
Simultaneous	Proposed by the environment and the agent in a synchronized manner without any previous warning (wolf and sheep arrive simultaneously and death is sudden)	Proposed by the environment and the agent in a synchronized way with gradual changes and generating alerts (wolf and sheep arrive simultaneously and death has previous encounters)

Own elaboration

sudden and without any warning in terms of Van Notten *et al.* (2005) there is a rupture of abrupt symmetry. On the other hand, the second corresponds to a death with previous warnings, called a “late death” within the simulation where the prey has had previous encounters with its predator but because it is in a herd that is with animals of the same species in the neighbourhood it has had the chance to save itself, however, it is still killed by the predator. This kind of death corresponds to a gradual surprise. Specifically within the experiment, 74.3% of the fatal events of the prey were classified as sudden deaths and the remaining 25.7% as late deaths.

**Combining origin and surprise:** You can have the case where these two variables are mixed, meaning that the deconstructive event can present four possible scenarios as determined in Table 2. Specifically, in the experiment, 24.2% were endogenous abrupt, 8.5% were gradually endogenous, 25.9% were exogenous abrupt, 8.9% exogenous gradually, 24.2% were abrupt simultaneously and finally 8.3% were gradual at the same time.

**Agent perception towards the situation:** This variable is very influenced by the results obtained in the previous variable. It is not possible to know the perception of the participating agents within the simulation experiment but in terms of time it can be assumed that when a gradual surprise occurs or when the prey has had short-term situations without incidence it can be considered as a warning that in the future the predator can attack, since, it is hunting in the neighbourhood which can have fatal consequences in the long term. In turn, the interpretation variable is understood according to how foolish the sheep is and what it considers convenient in the face of its movements being near or far from its herd. In this regard there were 126,110.3 encounters between sheep and wolves on average, 113.5 of which correspond to the average of effective encounters, 0.09% of the total which accounts for a conservation by the sheep from being in a herd.

**Trigger:** The triggering event that breaks the symmetry can have a negative or positive connotation as stated by Shapero and Sokol cited by Acosta-Veliz *et al.* and

Tarrats-Pons *et al.* In the particular case of the prey and predator, it has two connotations, depending on the point of view of the analysis. For the prey, the trigger event has a negative perspective, given that it corresponds to putting an end to its life, conversely for the predator it represents a positive trigger because it will obtain the food that keeps it alive. In view of the fact that there are more average attempts of failed attacks than actual ones, the loss-of-life trigger over the sheep is more powerful than the wolf’s trigger to preserve life.

**Effects:** As for the effects within the experiment, it can be said that the effect of the deconstructing event is significant, given that it is talking about life loss or life preservation on the part of the agents. They are events that can contain alerts when there are previous unsuccessful attacks but in turn it can have a sudden effect when the attacks are effective. Being in a pack makes this an avoidable deconstructive event when avoiding the attack; however, this event has no solution, given that it represents the death of the sheep.

## CONCLUSION

In this document, we want to highlight the importance of deconstructive events of deliberate strategy, to explain how emergent strategies come to be. We do this within the context of understanding the “decision-moment” concept where you can affirm that this moment is intimately linked in the emergence of deconstructing events. The deconstructing event is an event that generates discontinuity in the symmetry of situations established within a context of space and time, as can be seen in the contributions of researcher who talk about the deconstructing event from a discontinuity point of view. This is associated with the uncertainties that the agent can handle on each of the decisions made in the past and the present but it can also change the paradigm from which future ones are viewed.

The literature also helped to determine the variables around the deconstructing event. The first is the origin which can be endogenous or exogenous; the second is the surprise which can have gradual or abrupt changes, the third is the perception of the agent in relation to the situation which is associated with time and interpretation

(based on the world view), the fourth is the trigger which can be negative or positive for the agent and the fifth is the effect. Regarding the simulation, the biological metaphor of prey and predator leaves us with very even results about the origin of deconstructive events where 34.8% are exogenous, 32.7% are endogenous and 32.5% are simultaneous. For its part, the surprise is mostly abrupt in 74.3% of situations while the remaining 25.7% has a gradual surprise. We suggest future research, both quantitatively and qualitatively, to better comprehend the deconstructing event and its relation to the organizational context, for example with the simulation of business situations where the variables revealed in this document are evident and contrast the results.

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