2041: DETERRENCE

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Introduction

Most nations in the democratic Western world have experienced significant changes in the post-internet social debate, especially after the consolidation of social networks as a forum for socializing, debating, and news. According to the authors, this adherence to social networks can be attributed to human nature itself.

Philosopher and psychiatrist Karl Jaspers considers that people no longer prefer mystery and silence to truth and transparency, that veracity is confused with human dignity, whose absence causes shame, and that truth can only be achieved in unison. German sociologist and philosopher Jürgen Habermas associates speech with equal opportunities, and argues for the cooperative search for truth, even if there is dissent at the end of the debate. Furthermore, French sociologist and criminologist Gabriel Tarde, in *Opinion and the Crowd*, explains the social evolution of man in three phases, which he calls imperatives (the imitator, the contender, and the conversationalist). He also argues that conversation reflects an elementary passion of men to achieve mutual knowledge in understanding the consciousness of the species and its destiny. Through their studies, these authors foresaw the modern use of social networks as we witness today.

Joseph Nye defines power as the "[...] ability to do things and socially affect others in terms of obtaining the desired results." That said, we can delve into the concept that the realm of deterrence power is dependent as much on perception as action, as postulated by Thomas Crombie Schelling.⁵

The aim of this article is to ascertain the relationship between deterrence in multi-domain hybrid warfare scenarios and discursive aspects related and linked to the Brazilian Air Force (FAB – for its acronym in Brazilian Portuguese). This article seeks to stimulate the incorporation of new routines of intelligence and operational analysis into the command and control (C2) chain of air operations.

The theoretical framework of this article corresponds to the multi-domain environment of unconventional warfare, not necessarily between States, as contemporary geopolitics delegates powers to connectivity and incorporates hybrid threats at the scale of the individual. This is explained by Nye as diffusion of power, which is transfered from States to non-State actors, due to the access of the masses to communication technologies. Thus, this study serves as a warning to the

FAB regarding the association of the linguistic aspect of deterrence with the psychosocial manifestation of national power, discussed within the framework of threat perception, and formulates a proposal for the identification of new centers of gravity.

South America prevails as an environment consisting, according to Miguel Angel Centeno, of unique conflicts between human beings and power disputes that can spill over to other countries and vice versa. Therefore, inspired by the dynamics of the asymmetric forces typical of the multi-domain environment, this article looks at practical applications for the FAB to address hybrid warfare based on deterrence against a rational opponent who can perceive threat, via a literature review of deterrence and the correlation between its phenomenon and semiolinguistics—as, when delving into the paradigm of deterrence, linguistics is used to explain the belligerence that occurs both within our minds and in recurrent power relations in society before a conflict can escalate to conventional levels.

At this point, we must highlight Brazil's "Strategic Concept – Air Force 100," which describes the doctrinal alignment of Brazil's National Defense Policy (NDP) and National Defense Strategy (NDS) as follows: "[...] employment of Air Force Means is much more than just launching certain weapons, or even firing missiles at an identified target, or just collecting intelligence, on the contrary, it is an essential action of the military expression of National Power."

Therefore, after reviewing the concept of deterrence, from the point of view of strategy and perception, this study pursues a coherent correlation between linguistics and centers of gravity with regards to FAB's vision of the future for 2041: "An Air Force with great deterrent capability, operationally modern and acting in an integrated manner to defend national interests."

Deterrence: Etymology and Strategy

This study begins with the analysis of Antônio Geraldo da Cunha's etymological dictionary, which describes that the verb deter is derived from the Latin *suadēre*, i.e., to advise, which roots from of the word *suad*, which means soft, in Latin. Its origin in the West, according to Cunha, dates back to the mid-14th century and carries the negation prefix des-, from the Latin *dis*-, to achieve the "[...] cessation of a primitive state or a previous situation [...]" or "[...] separation of one thing from another." Around three centuries later, the word gained the suffix -ão in Portuguese, from the Latin $-\bar{o}$ - $\bar{o}nis$ to form the noun "dissuasão" ("deterrence" in English), which brings the notion of a result to an action, that is, the effect of dissuasion. Additionally, according to Robert Jervis' work, the word deterrence has etymological roots in the Latin term for "terror," which implies strong emotions, beliefs and calculations. ¹⁰

In the field of semantics, it is necessary to remove the ambiguity of the meaning of the words "dissuasion," "deterrence," and "persuasion." According to Meireles Câmara, to persuade means to strive to get someone to do what we want them to do, while, to deter, we must first make them back down from what they were intending to do. 11 Câmara expands on the meaning of the words stating that "one should not want to achieve both things at the same time and that such an attitude can arouse the interlocutor's distrust and result in no achievements." With regard to the term "deterrence," it is used in the Brazilian Armed Forces and in this research with the same meaning as the word "dissuasion."

Regarding deterrence strategy, in turn, we are presented with the post-Cold War period, when Schelling wrote Arms and Influence. The award-winning economist teaches that deterrence means preventing or discouraging an action through fear, doubt or something similar, such as intimidation. For Schelling, the usefulness of deterrence lies in the bargaining power that military might grants to diplomacy, before it is necessary to persuade the opponent or, as geopolitics traditionally describes it, to impose one's will on the enemy. In Schelling's logic, diplomacy is the bargain, which entails threats or offers. It is the threat of damage or further damage that makes someone produce or carry something out. The author also proposes that, traditionally, military planning considers the enemy's capability, but not their intentions. ¹³ However, deterrence deals with intentions, not just assessing them, but influencing them. For Schelling, the success of deterrence lies in the imminent engagement and, consequently, the moment a certain threat is ready to be materialized. This requires that some type of punishment take place before the actual threat materializes. In other words, Schelling perceives that deterrence demands a dynamic phase and, therefore, does not pertain to a static or solely reactive strategy.¹⁴ Furthermore, successful deterrence must be temporally defined, exposing an escalation of crisis that forces your opponent to cease the unwanted act or intention.

With equal emphasis, Schelling teaches that "dialogue between adversaries is commonly restricted to the language of action and the dictionary of common and precedent perceptions." Another important distinction in his literature is that a crisis presupposes that the contenders do not have total control over events and that decisions in this context increase or decrease the danger in the field of uncertainty and risk. At the same time, he links deterrence with the credibility of the capability of the first attack. ¹⁶

In *Deterrence and Defense*, Glenn Snyder theorizes about two central values of national security, cited in the title.¹⁷ The analysis occurs in light of the question that the author himself raises regarding the "deterrence of," and "defense against." The author distinguishes the former as the ability to discourage the enemy from

military employment by imposing a cost and risk greater than the prospect of gain, and the latter as reducing the very prospect of cost and risk in case of failure of the deterrence. In other words, in terms of strategy, deterrence and defense are complementary and phased, but they do not co-exist under a relationship of sub-ordination. In another crucial distinction, the Snyder places deterrence as an objective in times of peace, and defense as a value in times of war, as indicated in the following excerpt:

We take advantage of the deterrent quality of our military forces before an aggressive move of the enemy occurs and we take advantage of the values of defense after the enemy has moved, although we take advantage of the defense capabilities in advance [...]¹⁹

The third theoretical underpinning of this study adds Robert Jervis' perspective, which defines deterrence fundamentally as a psychological theory. It is a fact that many of the political actions aimed at increasing deterrence can also have the effect of intensifying an adversary's perceptions of threat and, with it, their need to demonstrate greater resolve. This therefore opens a dimension of deterrence as a logical psychological phenomenon, in this case with regard to the behavior of the deterrer, that applies directly to the line of research.²⁰ At the same time, Patrick M. Morgan asserts that statesmen and academics must consider the following:

Deterrence is, without doubt, a psychological phenomenon, as it involves convincing an opponent not to attack, by threatening them with retaliation. 'To convince' is to enter into and manipulate the thought processes of the opponent leaders so that they make the 'adequate' conclusion regarding the usefulness of the attack. This gives the effectiveness of deterrence a psychological dimension that is only partially related to the deterrer's retaliatory capabilities, as it is the persuasive capability of the message over these capabilities, rather than the capabilities themselves, that determine success or failure.²¹

Jervis demonstrates that, as soon as a public decision-making authority conceives a threat to its interests, and it needs to be deterred, it distorts reality to bring it into line with its personal, institutional and/or political needs. According to the author, this obeys a natural decision-making process of human beings, from the moment in which two people set out to attack one another. The strategist also claims that the central concern of his theory is associated with the tendency of demotivation, which is inherent to the cognitive limitation of man. According to him, given the complexity of the decision-making environment, the protagonists of the decision, when trying to avoid ambiguity in order to conserve cognitive resources, incur a variety of errors in judgment or misperceptions.

How the Perception of Intentions has an Impact on Language Credibility

With regard to politics, Jervis proposes that, under the condition of inevitable or imminent war, a State prefers to challenge the *status quo* and attack first rather than receive the first blow, since defenders rarely understand their opponent's pressures and generally believe that, if their threats are adequate and credible, the other will be deterred.

In this vein, the theory of war and psychology confirms that human perception is strongly influenced by the belief regarding the way the world works. Thus, a decision maker who thinks the other side is likely hostile would see ambiguous information as confirming that view, while the same information about a country considered friendly would be considered more benign. For Jervis, the success of deterrence is associated with the interpretation of the adversary's intentions, and for this, a commander must combine threats with guarantees.

Morgan then explains that the perception of power and the image of strength are often more significant than material factors. This is because the thesis' relevance has to do with threats and promises of peace, which stem from deep-seated feelings and needs, ultimately leading to compulsions and fears on a public and global level. Therefore, deterrence places considerable emphasis on the image of credibility or reputation.

The issue of credibility is seen by Patrick Charaudeau in greater depth in the perceptual-sensory aspect of the act of language, as per his new interpretation of Aristotle.²² For the purposes of more in-depth linguistic endeavors, it is worth revisiting the concept of rhetoric, which can be defined as the capability of observing the forms of persuasion. According to Aristotle, persuasion depends on the interlocutor's ability to reason logically, to understand human nature and its immanent goodness, and to understand emotions, their causes and the way they occur.²³ Specifically, Aristotelian rhetoric is concerned with the way in which persuasion is constructed by the enunciator, through the word and, in view of this, three inseparable forms, provided by discourse, stand out: "The first depends on the moral character of the speaker; the second, on putting the listener in a certain state of mind and the third, on the speech itself, insofar as it proves or seems to prove."24 Lastly, persuasion can be treated as a kind of demonstration, since we are fully persuaded when we consider that something has been demonstrated. According to the author, persuasion is achieved when the discourse has truthful content that makes us think that the speaker transmits trust. Meanwhile, for Charaudeau, credibility is related to the perceived veracity of what is being said and, to possess it, it must be use it as a strategy to achieve the result of "being taken seriously." ²⁵

The rhetoric proposed by Chaïm Perelman and Lucie Olbrechts-Tyteca reinforces that the credibility of events can spur on the desired result or deterrent effect. Such understanding appears in the theory of argumentation with a critique of the idea of evidence as a characteristic of reason. According to Perelman and Olbrechts-Tyteca, reason is not enough to direct the enunciator's action and to influence others. Thus, as critics of evidence as a pivot of adherence between interlocutors, these authors argue that argumentation demands understanding of the situation as a whole, i.e., the context. Furthermore, they explain how promises and threats gain an eminent value:

On the other hand, any action that aims to obtain adherence falls outside the field of argumentation, as no use of language supports or interprets it: they who preach by example without saying anything and they who use affection or smooth-talking can achieve an appreciable result. We will only be interested in these procedures when, thanks to language, they are made evident, whether through promises or threats [author's emphasis].²⁷

Thus, from Perelman and Olbrechts-Tyteca's perspective, if, on the one hand, the example supports a rule during a discourse, it is the illustration that reinforces the subject's adherence to the rule.²⁸ This is the process of language that facilitates understanding of the interlocutor, while it makes it "more accessible to the arguments."²⁹ It should be stressed, in this point, that adherence to what is being said is central to the topic because deterrence binds itself to the linguistic processes outlined above. Simone Weil highlights:

Just as the only way to show respect for someone who is suffering from hunger is to give them something to eat, the only way to show respect for someone who has outlawed themselves is to reintegrate them into the law by subjecting them to the punishment it prescribes them.³⁰

Still in view of the phenomenon of deterrence, perception forms the link between that which is psychological and logical in the human cognitive process and that which must permeate argumentation during the process of deterrence. On this psychological plane, Merleau-Ponty describes:

The logician would have nothing to think about, not even an appearance of movement, if there were not a movement before the objective world, which was the source of all our statements about the movement, if before existing there were no phenomena that could be recognized, identified, and of which it could be said, in a word, that they had a meaning, although they were not yet themed.³¹

Merleau-Ponty believes that the relationships between the subject and the world are bilateral, and that the real does not belong to the order of judgment, as it occurs before this, and this adheres more to describing than analyzing or explaining, as seen in the points of emphasis above and below.

The real is a solid fabric, and it does not expect our judgments to attach the most aberrant phenomena to itself, nor to reject our most truthful imaginations. Perception is not an appearance of the world, and it is not even an act, a deliberate taking of a position; it is the background against which all acts stand out and it is presupposed by them.³²

Merleau-Ponty brings the notion of intentionality, interpreting Husserl: "[...] it is the function of language to make essences exist" and explaining that man's intentionality, in addition to characterizing the mental phenomena of consciousness, distinguishing them from physical phenomena, points out a subtle intention that exists in man when he aims for something.³³ It is this intentionality, according to Merleau-Ponty, that allows there to be the intuition of something through a thought that contains infallible properties, even if the object of that thought does not, in fact, exist outside the thinking mind.

In the silence of the original consciousness, we see the appearance not only of what words mean, but also of what things mean, the core of primary meaning around which acts of naming and expression are organized.³⁴

To Merleau-Ponty, the meaning defines the conscience, but, before this, the perceptive "something' is always amid the other thing. It is always part of a 'field,'³⁵ informing that this 'something' is not necessarily an identifiable object," although it assumes the possibility of there being, in the physiognomy of perception, an "anatomical path" that leads "from a *receptor*, determined by a defined *transmitter*, to a recording center, which is also determined."³⁶

According to Merleau-Ponty, perception is a communication or a communion, and it is in this unfolding of sensitive data, while living, that a language of its own teaches the subject about something that reveals itself from within to the outside.³⁷ For this reason, Merleau-Ponty calls perceiving, which can be an object or a unit of value, a "miracle of expression, opinion or original faith that connects us to a world like our homeland [...]"³⁸ "To perceive is to embrace in one fell swoop a whole future of experiences in a present that, strictly speaking, never guarantees it; it is to believe in a world."³⁹

Social Centers of Gravity: A Vector for Deterrence

To briefly summarize, the concept of Center of Gravity (CG) formalized by Archimedes concerns the point at which it can be considered that the entire extension of an object or system, whatever its size or shape, is concentrated in the representation of the entire the mass of an object, even if there is no evidence of mass at that point, such as a tire, for example.

The term was borrowed from the mechanics for military strategy by Carl von Clausewitz, who compares the pressure exerted against the CG, greatest amount of mass, of any inert object. According to Clausewitz, the CG is always situated where the greatest mass of matter can be collected and a clash at this point would produce the greatest effect.⁴⁰

In the military profession, according to the Brazilian Directive on Military Strategy in Aeronautics, the use of aerial means must "affect the centers of gravity of the opponent's systems, in the most asymmetrical way possible, with the least combat effort, in order to disable their recovery in the short term" and, in addition, also within the scope of strategic planning, "it will be conducted for parallel operations, with simultaneous attacks on targets that present a solution of greater damage to selected centers of gravity, to quickly obtain an advantage" [author's emphasis]. ⁴¹ In the field of structuring provisions for the use of Military Aerospace Power (MAP) at the strategic level, and considering the pursuit of improvement in the FAB, Brazilian Directive no. C-1/GC3 directs the FAB to:

[...] seek to obtain intelligence superiority over the enemy, which results in essential knowledge for decision-making, with the aim of reducing losses, exact application of weapons upon targets in enemy centers of gravity, and reducing the time to end the hostilities. Obtaining this level of intelligence is the activity that must be carried out from times of peace, [author's emphasis].⁴²

In any case, whether through Archimedes' concept, from the observation of *On War*, by Clausewitz, or the physiognomy of perception, by Merleau-Ponty, the CG describes more than just a physical position. Therefore, although the concept was appropriated to describe locations for the MAP, such appropriation, subsequently, will be immersed in man's perception and subject to his intentions, which, naturally, includes language.

With regard to Schelling's "language of action," the use of aircraft as a vector of warfare finds direct theoretical support. ⁴³ Murillo Santos compares the wing to the wheel or the lever to illustrate the changes it imposes on the conflict and agrees with General Giulio Douhet that the vocation of air power is inclined towards destruction and damaging the morale of the population. ⁴⁴ According to Douhet (*apud* Santos), "aviation must be capable of demolishing the moral and material

resistance of the enemy." Santos further emphasizes Douhet's thesis that air dominance has the capability to disorganize forces on land and at sea, and to reach the war-distant population and the opposing sources of production (such disorganization may also occur through economic or technological measures as well).

It should be noted that deterrence flourishes from the psychological phenomenon of perception and that the CG lends the notion an address for the construction of meaning designed by Charaudeau, which we will later call social centers of gravity. Given the unique set of circumstances, the Semiolinguistic Theory of Discourse was chosen to breakdown this type of CG, which is the result of social dialogue negotiations and aimed at decision-making.⁴⁵

Conclusively, our approach presupposes a language construction based on psychological and social phenomena, which adheres to the hybrid condition of the current conflict and the protagonism of the human factor. While we aim to establish a benchmark in the FAB's communicative act, for the purposes of an adequate deterrent effect, communicative staging is chosen as a theoretical basis, albeit subject to future adjustments.⁴⁶ The unique challenge of finding social centers of gravity is in the considerations of the *mise-en-scène* (staging), outlined below:

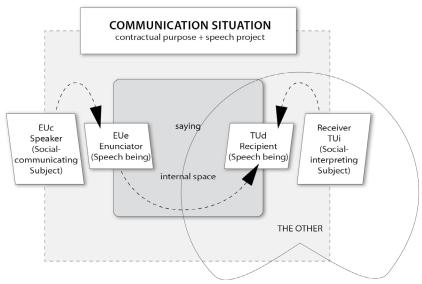


Figure 1. *Mise-en-scène*Source: Adapted from Charaudeau⁴⁷

In the above figure, the speaker and the receiver represent the physical world, that is, people of "flesh and blood," as they say colloquially, where these beings, overdetermined by reality, are found. The internal space of the figure represents the transaction process, in which the exchange of information through human language implies pragmatics and reaches its plenitude.⁴⁸ The approach allows us

to understand the intricacies of the production of effects of meaning, in accordance with the idea that communicating "is carrying out a staging action" between the enunciator and the recipient. ⁴⁹ Objectively, it is expected that the internal and not the external space will provide better choices to the military planner, because there the communicator's "intentions" of retaliation (or its cost) should be more easily identified. ⁵⁰ It is because this is the discursive aspect that increases the chance of the language event producing the required deterrent effect, since it reveals nuances of communication to the interlocutor and considers the existence of another, as Charaudeau points out. ⁵¹

In completing the reasoning, because the act of language unites the subject, with their intentions, to social and collective instances, according to Charaudeau, it [the language] will then be the natural entity emanating power that, together with the factors of capability and cost mentioned by Jervis, must permeate the argument to project deterrence, as we seek to characterize.⁵²

The point that deserves to be highlighted is the warning issued by Santos regarding the dependence of deterrent power on perceptiveness, even though this undermines the relationship between this type of power and the reactiveness or immediate responsiveness, also defended by the author. In our analysis, the FAB's quick responsiveness, in isolation, is not capable of resulting in deterrence. This, it is possible to attribute a motive to the historic failures of deterrence as a strategy: failure in the perception of the opponent.

For this reason, we proceeded to make a schematic delineation of the essence of the concept, ordered to capture the main nuances of deterrence planning, in order to mitigate such failure.

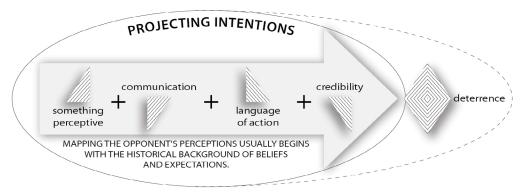


Figure 2. Projection of deterrence

Source: the author

The above figure illustrates that deterrence resides in the domain of the projection of intentions and that, to deter, one must first map the opponent's percep-

tions, which generally begins by studying historical antecedents, their beliefs and expectations. Furthermore, deterrence planning must appease the choosing of something perceptive, contemplate communicating the threat to the enemy and, lastly, plan to increase the credibility of what is being said, whether through public opinion or actions.

What is proposed in this article are modifications to the Command and Control (C2) structure applicable to air operations to include the perspective of language. It is expected that the undertaking of acts of speech will consolidate a model of discursive competence for the FAB that will contribute to the success of the deterrence strategy as a psychosocial expression of national power, in a multidomain environment of hybrid warfare. In order to not lose sight of the objective, we must remember that, in military understanding, deterrence concerns the ability to achieve a desired effect, in accordance with the Brazilian Aeronautics Command Instruction ICA 11-1 "Elaboration of Aerospace Scenarios," which considers capability as the "ability to achieve a desired effect, under specific conditions, through a set of Tasks." When this becomes reality, one certainty is that we will be closer to the result of deterrence anticipated through the future vision once written for 2041.

Final Considerations

In this research, deterrence divides the stage with the cognitive phenomenon of perception and cannot work without understanding linguistics. Despite its concept being widely known, even notably strong States have not always been able to deter weaker ones from going to war, such as the recent wars in Korea (1950), the Falklands Islands (1982), and the Gulf (1991).⁵⁴ This happens because deterrence depends on the adversary's perception of threat, which is not always understood by those who wish to achieve the deterrent effect.

That said, in the wake of theories about deterrence, especially the psychological aspect of the perception of threat which can change the adversary's will to act, then deterrence must no longer be one-way, especially in the mind of the military planner. Therefore, this article presupposes a language construction based on psychological and social phenomena, which adheres to the hybrid condition of current conflicts and the protagonism of the human factor in multi-domain environments. Furthermore, this work proposes that the effectiveness of deterrence does not come from the direct result of quick responsiveness or military capability, but instead from properly shaped perceptions so that the context of the threats are understood by those people or institutions it is directed at.

Based on the above, the power derived from the proximity of aerospace and psychosocial powers, and the characteristics of the multi-domain environment,

the authors advocate for innovation in the areas of analysis linked to air operations and the urgent need to include Political Sciences and Linguistics in a doctrinal framework that is still mainly focused on conventional warfare. It is imperative for the research enveloped by Charaudeau's Semiolinguistic Theory of Discourse, among other aspects of pragmatics and discourse, be incorporated into the communication directed at the opponent, which will then make it possible to generate centers of gravity that adhere to perception, i.e., social centers of gravity, and that are therefore socially directed. Language is core to deterrence in modern multi-domain environments. \square

Notes

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