

EDITORIAL

Much has been said and written about us living now in the Era of Knowledge, born from the Information Age. The Information Age – that followed the Industrial Age - was based on the treasure-trove of possibilities of new data collection enabled by the significant technological development in the field of computer science innovations. This advancement, on its turn, has been chain triggered by the drive resulting from the industrial efforts during World War II.

In each one of these concatenated periods of human history, as well as along those that preceded them, news ways of thinking appeared because the paradigms of thought were changing. This change started to take place at speeds corresponding to the increasing velocity of cultural changes. However, such changes were not consistently incorporated in a timely manner by the general public because of the increasing speed at which such innovations materialized. This is why, there was - and still there is - a delay in start thinking and interpreting reality according to the new models. This is fully applicable to the process of creating and interpreting a text that introduces new ideas.

The issues of the magazine published by Instituto Meira Mattos bring articles, which in view of the strategic nature of their subjects, require reader's full attention to be able engaged in an interactive participation in this two-way process. Well, the predominant characteristic of any strategy, be it, military, corporate or a personal strategy, is its intent to help organizations, systems or people on their journey into the future, starting from a known reality and proceeding to make the changes required to get there as better or more competitive human beings. Nowadays the speed of strategic procedures show an exponential increase; this is why authors must grasp that they are knowledge inducing agents based on highly transient data - and not simply information providers. Likewise, readers need to understand that they are co-authors of the instant leap from information into personal knowledge.

Maybe in this Knowledge Era the best stand readers can choose is to take ideas into a picture broader than environment delimited in the narrative, understand the current circumstances as the writer sees them, unlock their reasoning to the various possibilities that the subject opens for future applications, try to infer ways of increasing the likelihood of useful occurrence of the possibilities and, being creative, make them take place in their minds. The articles featured in this issue are perfectly suited to this exercise.

As an introduction to the articles of this issue here are some comments about them.

In the article Tactical Commander's Critical Thinking and Decision Making, Major Reis Matos brings us a text extremely useful to the improvement of the education of the officers graduated at Escola de Comando e Estado-Maior do Exército (ECEME). Objectively and evidencing a clear concern with field research he approaches the Basic proposal of the ECEME – how to think creatively about the solution to a problem. To this end he used the tactical level of military operations as an auxiliary tool to achieve the proposed goal.

We can see how careful the author was not to trespass into the realm of the specific knowledge of the military doctrine of Ground Forces, and to limit his work to the importance of critical thinking in the diagnostic phase of a specific situation that comes before Commander's decision, the critical grounds for tactical operation planning. His attention to the analysis of the situation – which is constantly evolving, even during the implementation of the plan of operations – tells us a lot about the significant freedom existing in it for the creativity of the minds of the chiefs of staff. This freedom may be put into practice in the Cartesian steps of the process and, above all, in the dialectical moment of the analysis of the response of our lines of action in face of the possibilities of the

adversary.

Reis Matos chose to follow that path because he was intent on keeping focused on suggesting measures to improve the teaching methods to facilitate the process of setting the minds free from the perverse trend of looking for alignment to the existing answer key - which is so often found among students attending courses where grades are assigned to the tests. This was an excellent idea as it provided inputs to the School on how to assist in the development of critical thinking among students and can be adapted to the teaching methods applicable to any subjects.

Notwithstanding the general applicability of the study, let's limit ourselves to the views on the use of critical thinking in the military field. Our career is essentially practical and involves collective implementation. The principles of war, strategy and tactics that have been codified along millenniums of recurring conflicts give it a scientific nature. Nonetheless, the ability to make them perfectly suited to each individual situation makes it an art. It is in these two practical domains - science and the art of war - that knowledge builds up. And if built with creativity, this knowledge will allow commanders of tactical or strategic operations and their chiefs of staff to carefully examine the threats and the opportunities, and enable commanders to make timely, appropriate and effective decisions.

All this was taken into account by major Reis Matos from the results of his researches that allowed him to conclude that "the current methodology of assessing doctrine application skills aiming at meritocracy fails to systematically and substantially encourage the development of Critical Thinking skills, and this, in the current scenarios of application of the art of war may cost dearly", because they require "Officers qualified to innovate and devise practices that have never been imagined". He adds that "this development is still an incipient process at the ECEME and part of this results from the "grade culture".

Last, the author takes into account the specific characteristics of the ECEME and of the military career itself, recommending that instructors should be qualified to foster the creativity of course participants for tactical decision making; that field exercises should provide opportunities for full freedom of discussion and for doctrine adaptation to the situations and, to this end, the necessary time must be allocated; and the adoption of "new parameters for group evaluation", breaking away from to the type of reasoning that is limited to the search for grades.

A team of one Brazilian and six Portuguese officers prepared the article named A Brief Analysis of Chilean Geopolitics based on extended research that goes way beyond the expectations generated by word "brief" used in the title.

The authors proposed to check the leading challenges faced by this important South American country and to pinpoint the drivers of Chilean foreign policy. In order to achieve this goal - always on the point of view of the specific geopolitics of this nation, its continental surroundings and the world reference - the authors present a historical summary of the border issues Chile has been dealing with since the fourth decade of the 19th century, and not always without a scenario of war.

Thus, they present us the status of the challenge posed by control over the port of Callao (1837), in Peru (associated to Bolivia), in order to ensure the superiority of the commercial routes on the Pacific Ocean. The article approaches the Pacific War (1879-1883), again against Peru and Bolivia that resulted in a significant increase of territory and of Chilean power projection in that Ocean. Reference is made to the dispute with Argentina over the Beagle Channel that was solved through papal mediation, in 1984; the article also mentions Chile's semi-neutrality during the Falklands War (1982), considering the concerns about the possibility of

seeing the Plata river basin countries psychologically, politically and militarily stronger in case they came out victorious, precisely at a time when the Beagle canal case was still active. And, as they could not fail to underline, the authors gave due significance to Chile's management of its interests in Antarctica.

In all cases, State orientation, in the light of geopolitics, in its search to achieve and maintain the national objectives is clearly evidenced. It is the confirmation of the Chilean strategic vision, independent from the successive administrations, that ensures the prominence of the national interests. This is only feasible because of a prevalent consolidated geopolitical awareness, from which permanently updated strategies and a consistent policy of foreign affairs are derived.

Let's consider, for example, how Chile has consolidated its position as a medium size Pacific region power now that the Pacific Basin is the scenario of a new axis of global economic power. This position has only been kept because the Chilean State considered the above mentioned enlargement of its coastline and of its territory in geopolitical terms as of the first half of the 19th century. Additionally, based on this strategic vision, Chile quickly realized the advantage of joining the international economic organisms involving the South American and Asian countries - especially China and the United States - instead of being driven by Latin rhetoric and the anachronistic ideology that now prevails in the MERCOSUR.

The article provides quality information of the geopolitical views of the Chilean State.

In the article Considerations about the use of Unmanned Aerial Vehicles in the Light of the International Law of Armed Conflict (LOAC), Majors Haryan Gonçalves Dias and Alexandre Augusto Rossa broaden the scope of the debate about the lawfulness of the use of drones. Despite the scope, the authors did not miss the opportunity to explore also an ethical issue, which certain experts have named "surgical precision" guaranteeing "a clean war". They do not shy away from approaching the moral issues built-into the alternative name of the LOAC - International Humanitarian Law (IHL) - which opposes those two technicist concepts to the number of alleged operational and equipment inaccuracy errors causing so many casualties among people who are not directly involved in the conflicts.

After a brief overview of the history of the UAVs as a weapon of war, the authors show us how, nowadays, the countries - with the United States on the lead - have been engaged in R&D and in the development of a use doctrine capable of ensuring superior relative combat power, remotely, without enforcing the classical rights of combatants on the battlefields on the ground and in space in the phases where, normally, the highest number of friendly casualties would be recorded. Once again, it can be seen that technological innovation walks ahead of doctrine updating; in this case, despite the huge international controversy about the lawfulness of UAV use as a tactical weapon.

The analysis carried out by the authors of this article allows readers to understand the previously mentioned ethical-moral conflict and to take a personal stand based on the principles the issue involves - and that feed and add to the discussion, once some are in direct conflict with each other - namely, Humanity, Limitation, Distinction, Proportionality and Military Need.

In the same area of humanitarian concern with the consequences of the use of weapons of war against persons who are not directly involved in the conflicts, the article Humanitarian Demining as a Political Instrument of Brazilian Diplomacy, by Major Marcelo Florentino Borlina, takes us to scenarios of the same conflict between moral and the operating procedures in armed conflicts. This time, the motto includes the political, integration and industrial military benefits

arising out of the participation of Brazilian Armed Forces in the demining activities in our surroundings of strategic value, encompassing South America, the Caribbean and Africa.

Once again, compelling arguments add weight the humanitarian demining obligation adopted by the United Nations Organization, in response to inconsequent random dissemination lacking control by means of the records that are mandated by the International Humanitarian Law, once at the source of the problem the (antipersonnel) Mine Ban Treaty was not complied with. As the author tells us, the issue has a worldwide scope once about 67 countries have already been recognized as affected by of suspected of facing this threat.

With the same general purpose of assessing the benefits to the international reputation of Brazil resulting from the external deployment of elements of the Armed Forces, the article Brazil's Projection of Power as a Peacekeeping Force of the United Nations in Africa, by colonel Márcio Bessa Campos, seeks to "prompt the discussion about the effects of the current Brazilian foreign policy of Brazil's participation in the international scenario by sending troops to join the United Nations (UN) peacekeeping force in Africa." With remarkable insight Major Bessa envisaged the significant likelihood of seeing the African continent continuing to present the highest number of theaters of peacekeeping operations and, thus, he chose it to develop his work in this scenario. This likelihood is increased by the fact that the African content - especially its Atlantic coast - is of significant strategic value to Brazil.

In face of the internationally recognized Brazilian willingness to send troops to engage in peacekeeping and even peace enforcement missions, the author had available several cases and testimonies to study the impacts on the image of Brazil and of our Armed Forces. Before reading the article I had anticipated the probable conclusion as I recalled the positive implications of Brazilian action in the Dominican Republic, in 1965/66, under guidance of the Organization of American States - OAS, on the point of view of the local population, the military of the nations working with the Brazilians and of foreign diplomats.

Colonel Bessa reached similar conclusions, by analyzing the cases of peacekeeping missions in Africa and our current participation in the United Nations Stabilization Mission in Haiti (UNSTAMIH) that not only corroborates the favorable expectations, but also represents a valuable source of knowledge about this type of mission.

In the article The Future of Southern Africa: Consequences of the Expansion of Regional Borders and Bipolarity, professor Dr. Igor Castellano da Silva and researcher Pedro Txai Leal Brancher ask "what are the possible trends of changes to or the continuity of the Southern Africa regional system in the light of the changes of the last decade". As a starting point, the authors state not to be in agreement with the generally accepted classification of the region as a politically unipolar region, centered on South Africa - and argue for a bipolarity shared by South Africa and Angola. It is on these grounds that the authors start to examine the theory of international change (revolutionary or incremental change) proposed by Robert Gilpin, and analyze the regional scene in order to create scenarios for a possible evolution of the regional system.

The methodological steps and the partial conclusions based on Gilpin's thesis are really interesting, especially with respect to the levels of possible conflicts and the establishment of lines of borders, in the light of the interests of both regional and world powers and their cost-benefit assumptions. Interests that end up by dictating the efforts towards keeping or changing the status quo. Likewise, the discussions about the controversy related to the delimitation of South Africa's regional security complex draw our attention in view of the security dynamics of the region - which is closely related to the Congo wars - with certain specialists including the central region of the Great Lakes and others failing rejecting this

approach.

The conclusions of the article are really consistent with the analysis and deserve follow-up, even as inputs to the design of the foreign policies of any countries with strategic interest in that region.

In the article The AEB and the Case of the Geostationary Satellite in the Light of the Space Strategic Sector, Professor Gills Vilar Lopes starts from the premise that despite the fact that agency was established as a civil body, "despite the end of the Cold War and as the security concept was broadened, the military sector did not lose the significant role to be played in the Brazilian space activities". He supports his thesis by providing the example of the civil-military construction of the Geostationary Defense and Strategic Communications Satellite, the core aspect of his work, and one of the ambitious projects of the Brazilian Space Program (PEB) "that has been contributing to strengthen the military-civil relations in the Country".

In his approach to the PEB, Vilar Lopes gives readers who are not specialists in the field of national security and defense a true abridged lesson on the links between Defense Strategy and the National Defense Policy, and discusses the space program in this political and strategic area and does not fail to mention the expression "defense mentality" - which, by the way, is the subject of one of the articles of this issue - which is so dear both to the military and to the civilians interested in the problem.

On the issue of the global satellite construction program he underlines the significance of national development of the satellite launching vehicle, which, unfortunately - we add - has been subject to normal delays and to the serious accident at the Alcântara Launching Center, in 2003.

For being essentially informative and didactical the article fully achieves this goal.

Lieutenant colonels Maurício Henrique Costa Dias and Felipe Drummond Moraes present a diagnostic of the Army doctrine about the use of communications in jungle operations, in their article Doctrinal Points of Interest Covering Antennas, Propagation of Radio Waves and High Frequency Radio Technology in the Employment of Communications During Jungle Operations in the Information Age, with the purpose of supporting "an update of doctrine publications related to the use of radio Communications during jungle operations".

In order to reach their conclusions the authors took an objective approach to the geopolitical aspects prevailing in the Amazon region, the national defense strategy and policy, the characteristics of the radio equipment used by the Army and the current doctrine. They also resorted to the opinion of ECEME students with experience in exercises in that area, which is praiseworthy, and certainly, with additional time available, the subject will be broadened to a more diversified universe.

To the Brazilian Armed Forces and equally to the armed forces of neighboring countries, and - can we doubt? - to some other nations, the Amazon gives us strong reasons to seek qualification to defend or to occupy it. If not, we, in the Amazon surroundings, and those who cover it, would be in error, given the potential wealth existing there for exploitation. Our legitimate historical, sovereign and legal interests require a national deterrence power, which in the military arena of necessarily decentralized operations of smaller units in such vast spaces, is absolutely subordinated to communications. And, this is why the article is so pertinent.

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