

Military Sciences and the configuration of the Defense Studies as a field of scientific knowledge

Las ciencias militares y la configuración de los estudios de defensa como campo de conocimiento científico

Abstract: It is a research associated with the Defense Studies, as an area of scientific knowledge, as far as the scientific sciences perspective is concerned, in the Post-Graduation Programs of the Specialized Studies Schools of the Armed Forces in Brazil. The qualitative methodology was used, from the documental analysis technique, observing primary sources (legislation) and secondary sources. The taxonomy, theoretical and conceptual milestones of the Military Sciences and correlates, inserted in the process of evolution of the Defense Studies in the Country, with emphasis to the role of the School of Command and General Staff of the Army.

Keywords: National Defense. Post-graduation studies. Armed forces. Army (Brazil). ECEME (Brazilian Army Command and General Staff School).

Resumen: Se trata de una investigación asociada a los Estudios de Defensa, como área del conocimiento científico, en lo que concierne a la perspectiva de cientificidad de las Ciencias Militares, en particular en los Programas de Posgrado de las Escuelas de Estudios Especializados de las Fuerzas Armadas en Brasil. Se utilizó la metodología cualitativa, a partir de la técnica de análisis documental, observadas fuentes primarias (legislación) y secundarias. Se abordan la taxonomía, marcos teóricos y conceptuales de las Ciencias Militares y correlatas, que se inserta en el proceso de evolución de los Estudios de Defensa en el país, con énfasis en el papel de la Escuela de Comando y Estado Mayor del Ejército.

Palabras clave: Defensa Nacional. Posgraduación. Fuerzas Armadas. Ejército (Brasil). ECEME.

Rafael Soares Pinheiro da Cunha

Exército Brasileiro, Military Sports Council.
Bruxelles, Belgique.
rafapinheiro@gmail.com

Eduardo Xavier Ferreira Glaser Migon

Exército Brasileiro, Comando da 2ª Divisão de Exército.
São Paulo, SP, Brasil.
eduardomigon@gmail.com

Received: Jan. 10, 2017

Accepted: Jun. 28, 2018

COLEÇÃO MEIRA MATTOS

ISSN on-line 2316-4891 / ISSN print 2316-4833

<http://ebrevistas.eb.mil.br/index.php/RMM/index>



Creative Commons
Attribution Licence

1 Introduction^{1 2}

The concept of the area of knowledge, as well as any taxonomy used to systematize it, is imperfect. In Brazil, the topic has been developed by the National Council for Scientific and Technological Development (CNPq), which consolidates research by editing the TAC. A currently in force had consolidated in 1984, but despite a strong review effort conducted in 2005, it had noted that the proposed update had widely rejected by the universe of researchers, which is why the intention had discontinued. Since a more substantial revision was not possible, the TAC 1984 still exists and is subject to insertions and refinements, such as the insertion of the “Military Career Area” in the “Great Area: Others” (BRASIL, 1984). The unapproved version presented new areas, such as Sociology of National Defense, Military Sociology, History of Military Strategies, History of Military Institutions and Military History (BRASIL, 2005).

The maturation and the affirmation of an area of scientific knowledge, for Domingos Neto *et al.* (2012), is due to the demands and pressures of professionals, besides governmental measures. In the Country, he understands that the establishment of the Defense area occurs with the absence of a joint work of professionals to exert such pressure.

Complementarily, Saint-Pierre *et al.* (2012) postulates that the consignment of the theme and the area is a political construction. He understands that Defense only makes sense if viewed from a perspective that glimpses the position of the countries in the world, composing a theme of profound relevance and promoting object analysis in epistemic construction.

It, for the establishment of a scientific concept associated with the term Defense, is convenient to reflect on the difference between scientific area and field of studies. In summary, by scientific area, we have the set of researchers who share perspectives (ontology), content (epistemology) and methods. It is, therefore, a homogeneous set of knowledge and theories, applied to different objects. On the other hand, and also in synthesis, the field of studies is the denomination of the opposite pole, that is, the set of researchers who, having similar or different perspectives, as well as same or different contents and methods, devote to investigate a common object of reflection.

The perceptions of such concepts in defense studies are not homogeneous so that there are researchers who tend to highlight the relevance of the area, while managing to deny their scientific, suggesting that it is a field of study rather than a field of study. Scientific area. Within the focus, Raza (2004), as the opening words of his publication, postulates that “there is a lot of rhetoric in defense studies, many experiential narratives and little conceptual ballast.”

1 This present communication of results is part of the authors' efforts in the framework of the project: “Rede Nacional de Estudos Estratégicos” (“National Network for Strategic Studies”) (Pro-Strategy / CAPES - Coordination for the Improvement of University Personnel). Also, for the second author, it is a consequence of actions developed in the context of the projects “The conduct of defense policy in Brazil and in comparative perspective” (Pro-Strategy / CAPES) and “Research in Military University Education: from Policies to Practices” (CAPES - Coordination for the Improvement of University Personnel / PNPd - (National Program of Post-doctorate).

2 The contents of this article were initially developed in support of the participation of the second author in the Seminar “Post-graduate Teaching in Security & Defense”, organized by the Coordination of Improvement of Higher Education Personnel (CAPES), and in the working group “Defense as an area of knowledge” organized by the Ministry of Defense the following year.

Domingos Neto (2013) clarifies what would be the studies of Defense, positioning them as “scientific investigations targeting the armed forces and defense policies,” exploring issues such as war and peace, international security, defense industry, scientific and technological development policies, and geopolitical formulations, as well as other topics of interest.

The taxonomies proposed by CNPq and by the Coordination for the Improvement of Higher Education Personnel (CAPES) adopt, predominantly, the perspective of scientific fields. It’s why the word science precedes the denomination of the Colleges of many great areas and some of the fields and, as a relevant example, the Great Area of Human Sciences, which includes the fields of Political Science and International Relations, of the College of Humanities (BRASIL, 2016a).

However, this debate is old, not consensual and practically inexhaustible. Also, specific class associations are constituted around the theoretical, conceptual unit, like the Brazilian Association of Political Science (ABCP) and the Brazilian Association of International Relations (ABRI), among others. Differently, there are cases in which they had constituted due to adherence to the same object of study, such as the Brazilian Association of Defense Studies (ABED). However, it is essential to refer to the absolute preponderance of the views associated with the scientific areas, to the detriment of the miniature approaches of fields of study.

On the subject of adherence, the Ministry of Defense (MD) has already positioned itself on the issue, highlighting in Defense Studies, Military Sciences, the constituent of the three Forces Singular, as a scientific area, with autonomy to military thinking in Defense. It should have noted that the current conception is consistent with the international scenario, such as the taxonomy model adopted in the military in Portugal (2009), where there is military science, naval military science, and military aeronautical science.

Within this scope, it is observed, therefore, that both the Military Sciences and the Defense Studies have configured thematic of growing relevance in the national and international academic community. This phenomenon encourages this increase of discussions about its forms of study, visions, scientific and epistemological approaches, as well as the understanding of aspects related to its multidisciplinary character.

Thus, this discussion aims to shed light on the elements associated with the scientific perspective of the studies of the Military Sciences in the Brazilian Armed Forces (FA), more in particular in the Brazilian Army (EB), and of the Defense studies, as knowledge area scientific. To deal with the problem, in terms of technical-methodological procedures, documentary research was used, from primary sources.

2 Conceptual frameworks

According to the European Commission’s Community Research and Development Information Service (CORDIS), the general scientific areas encompass Health Sciences, Humanities, Natural Sciences, Physical Sciences, Social Sciences, Educational Sciences, and Technological Sciences, which have several subdivisions.

The taxonomy explicitly referring to Military Science integrates it, into the general scientific area of Social Sciences (in a broad sense), through the specific scientific area of Political Sciences (in a narrow sense) and of the particular scientific sub-area of Policy Studies Analogously, Defense Studies are situated within the same level, embedded in the same structural subordination (CORDIS, 2007).

Chart 1 - Classification of Scientific Areas.

Level	Scientific Areas	Code
1º	Social Sciences (General Scientific Area)	05
2º	Political Science (Specific Scientific Area)	05.11
3º	Policy Studies (Specific Scientific Subarea)	05.11.02
4º	Defense Studies	05.11.02.01
	Development Policies	05.11.02.02
	Policies of the European Union	05.11.02.03
	International Policy	05.11.02.04
	International relations	05.11.02.05
	International Studies	05.11.02.06
	Military Science	05.11.02.07
	Transportation Policy	05.11.02.08
2º	Technology	06.03
3º	Military Technology	06.03.25

Source: CORDIS (2007), adapted by the authors

The terms Security and Defense are customarily confused in the national vocabulary. Definitions, interpretations and approaches presented in the academic context, a national defense policy of the PND (BRASIL, 2012a) define security as “a condition that allows the country to preserve its sovereignty and territorial, to print its national interests, free of pressures”. and networks, and use the rights of the constitutional rights and constitutional duties, is such as the freedom of freedom of State, of the rights of interest, boundary rights, boundary rights In turn, it states that “National Defense is the set of measures and actions of the State, with an emphasis on the military field, for the defense of territory, sovereignty, and national interests against preponderantly external, potential or manifest threats”, which already transcends for effective action in order to obtain or maintain a certain degree of safety.

Within this line, another perspective of insertion in areas and subareas is the proposal presented by the MD to CAPES and CNPq. It is possibly an approach where organizational vision prevailed, to the detriment of a greater epistemological reflection, so that, despite being included in the National Postgraduate Plan (PNPG) 2011-2020, as detailed in the table below, it obtained little, or no, acceptance with the scientific community.

Chart 2 - Composition of the National Defense and Security Area.

Area	Sub-areas
National Defense and Security	National Defense Policies and Strategies
	Defense Technologies
	Joint Military Sciences
	Marine Military Sciences
	Military Land Sciences
	Aerospace Military Sciences
	Public security

Source: CAPES (BRASIL, 2010c, p. 336), adapted by the authors

3 Military Sciences – initial theoretical milestones

The studies of the war, of the military history, and consequently of the Military Sciences, do not date back to this century. As an example, at the same time, Strachan (1983, p. 6 apud SMITH, 2004, p. 56) points out that in eighteenth-century Germany, sixteen new military-related journals appeared between 1766 and 1790.

In century XIX, other compendiums that came to be diffused were the military dictionaries, like the one of Fernandez Mancheño, that dates from 1822 constituting, a source of portable consultation or alphabetical compilation of all terms proper to the military sciences, explaining the work of the military and their obligations and different types of troops, different types of ancient and modern weapons, and war machines of the time (JOVER, 2008).

However, the first dictionary: *Diccionario de Ciencias Militares*, specifically, it was published in 1895, by Don Mariano Rubió y Bellvé in Barcelona, consisting of three volumes of 986, 1015 and 963 pages, respectively. Includes items related to history, military biography and bibliography, military training, special tactics, creation and organization of armies, administration, health, military health, law, military justice, military virtues, offensive weapons (portable, artillery, gunpowder, explosives, etc.), defense weapons, topography, military geography, geology, fortification, mines, campaign of various studies, means of communication and transport, military navy, mobilization of armies, concentration, strategy, general tactics, the laws and customs of war. In that document, the Military Sciences were defined as

[...] all disciplines, whose knowledge directly interests the conduct of the War. Military Science analyzes, examines, compares, and deduces, while the Military Art carries out [...] being Sociology the domain of knowledge concerning the existence of human societies, the Military Sciences are an integral part of Sociology (BELLVÉ, 1895, our translation).

Raleiras (2012, p. 190) infers that the definition presented could already be concluded that Science and Military Art were already considered inseparable aspects in the conduct of the War.

In addition, Mello (1849, p. 9 apud RALEIRAS, 2012, p. 190, our translation) highlighted that “Among all the arts and sciences known, the art of war is undoubtedly the oldest. [...] The military sciences and those who are ancillary to it are at present undergoing appalling development.”

4 Military Sciences - recent theoretical milestones

Bogdanov (2004, p. 182, our translation) places war as one of the most complex phenomena of human life, whereas the aims of war and its art [...] constitute the theoretical basis of the military sciences.

Also, Domingos Neto (2006, p. 144, our translation) thought that from a national perspective, “this new area of knowledge would comprise the following sub-areas: Strategic Thinking, Defense and Security Policies, Military Studies and Defense Institutions.”

Saint-Pierre (2012, p. 159, our translation) postulates that “there is a medium field in which academics and military meet to reflect and discuss war, strategy and defense, enriching the pragmatic reflection of the military and sharpening up the epistemic thinking of academics”.

It had thus realized in a conclusive way that the Clausewitzian theory must be considered a scientific method because it meets the rigorous demands of contemporary epistemology (DINIZ, 2010, 82). Also, considering the various concepts analyzed and endorsed by Raleiras (2012, p. 192), it is inferred that the Military Sciences are an organized and systematized body of knowledge, in addition to having their principles, methods, techniques, and technologies, whose purpose is the employment of armed forces. It adds that the experience gives substance to the doctrine of work of the troops, where the principles of war and military operations abound. The methodology that is carried out to approach and solve problems is specific and is translated into military decision-making (situation analysis) at the tactical level and in the operational art at the practical level of the war. The purpose is unique and relates to the organization, preparation, and employment of FAs for the conduct of war and the attainment of peace. It had also deduced that “the Military Sciences are an autonomous scientific domain characterized by a system of knowledge related to the study of the war phenomenon, the application of military coercion and the use of armed force.”

5 Military Sciences and correlates in the Brazilian Armed Force

The current Brazilian system of higher education counts for about two decades, whose current conception had regulated in the Law of Directives and Bases of National Education (LDB) - Law 9,394 / 96 (BRASIL, 1996).

In the scope of the Military Sciences, it is fundamental to emphasize its Art. 83, which deals with military education, classifying it as “regulated by a specific law, admitted to an equivalence of studies, according to the norms fixed by the educational systems.” It is therefore autonomous, reproducing the tradition of more than two hundred years of the Country, while also repeating the content of the first LDB – Law 4.024 / 61 (BRASIL, 1961), in which it had in the single paragraph of Art. Military education shall have regulated by special law.

EB was the first FA to issue its legislation. It is therefore also relevant to observe Law No. 9786, of February 8, 1999 (BRASIL, 1999a), known as the Law on Teaching in the Army (LEEx), from which it is extracted that “courses held in educational establishments military training by holders of posts at the higher level constitute, for university purposes, postgraduate courses, provided that the relevant legislation had complied with, “as well as that” the training courses for officers of the Agulhas Negras Military Academy are of university degree, giving its graduates a Bachelor’s Degree in Military Science.

With the support of Decree, number: 3,182, of September 23, 1999 (BRASIL, 1999b, our translation), which regulates LEEx, the establishment of masters and doctorates is verified, as can be seen from its article: 15, with the wording: “Postgraduate programs complementing undergraduate and university education have masters and doctorate programs and curricula for further education, specialization, and other courses.” Thus, the School of Command and Army Staff (ECEME) started to have the efforts channeled, in the scope of Military Sciences and Politics, Strategy and High Military Administration, to doctoral and master’s degree courses in Military Sciences. To the School of Improvement of Officers (GAO) the professional depths covered late and strict sense levels in Military Operations.

Also, the crucial milestone for the Military Sciences is dated March 22, 2002 (BRASIL, 2002), when the Minister of State for Education approved, in the Official Gazette of the Union, Opinion no. 1,295/2001, of the National Council of Education (BRASIL, 2001), which established the rules regarding admission of equivalence of studies and inclusion of Military Sciences in the role of the sciences studied in the country.

In the Brazilian Navy, the regulatory framework is Law No. 11,279 of February 9, 2006, which provides for the teaching of the Force (BRASIL, 2006). From this, the educational establishments responsible for higher education courses were defined. Naval Sciences: the Naval School, for the graduation and the Naval War School (EGN), in the postgraduate. In addition, Decree No. 6.883, dated June 25, 2009, which regulates the Law on Teaching in the Navy, establishes that, at the *district sensu* level, the General Officers Course for Senior Officials (C-EMOS) confers the master’s degree in Naval Sciences; and the Maritime Policy and Strategy Course (C-PEM) or the Ph.D. course (BRASIL, 2009a). Also, linked to the Center of Political-Strategic Studies of EGN there is the Professional Master in Maritime Studies, recommended by CAPES. It presents as a concentration area the Security, Defense, and Maritime Strategy and has, as of research lines, the Maritime Policy and Strategy; Regulation of the use of the sea and *Cenarización*; and Science, Technology, Innovation, and Maritime Power.

In turn, the Brazilian Air Force, through Law Nº. 12,464, of August 12, 2011, which provides for its teaching, gives the training courses of Airmen, Intendants and Infantry officers of the Air Force Academy the baccalaureate in Aeronautical Sciences, Logistics Sciences and Military Sciences, respectively, in addition to a degree in administration. ROCA 21-6, Regulations of the University of the Air Force (UNIFA), approved by Concierge nº 335 / GC3, of April 27, 2009, of the Commander of Aeronautics, establishes that UNIFA is responsible for “developing Postgraduate Programs in Aerospace Sciences and other areas of interest of COMAER, including master’s and doctorate” (BRASIL, 2009b). It, in addition to the military courses, conducts the Professional Master’s Degree in Aerospace Sciences, whose area of concentration is Aerospace Power and Contemporary Strategic Political Thinking and which presents as a research line

the Brazilian Aerospace, Security and Defense Power; and the Relationship between States, Contemporary Strategic Thinking and Aerospace Power.

6 Military Sciences – ECEME Postgraduate Program

The ECEME, the highest level of education of the Brazilian Army and whose mission is to prepare senior officers for the exercise of General Staff roles, Command, Command, Direction and Advice to the highest levels of the Land Force, cooperates with the General and Sectorial Directorate in the development of the Military Doctrine for the preparation and the employment of the Land Force.

Once the national legal frameworks and the Brazilian Army were established, the organizational structure was adopted, and the regular courses were started. By directive of the Army Staff (EME) in 2000, the Center for Strategic Studies of ECEME was created. Nunes (2012) recalls that ECEME's Postgraduate Program (PPG) was established in 2001, under the responsibility of the newly organized Postgraduate Section (SPG), being the first specialization in Military Sciences. At that moment the Master's course was started, made effective in 2003, to which had added, as of 2005, the Ph.D. course in Military Sciences. At the time, the PPG had a full identity with the Command, and Staff Course (CCEM), which is due to an internal competition in the EB, absorbing about 20% of each class of officers graduated in Military Sciences by the Military Academy of *Agulhas Negras* (AMAN). His academic credits were equivalent to those offered to the CCEM, and the difference in degree would have associated with the depth of the researcher's job and the presentation of the thesis in three years or dissertation in two.

In 2005, CAPES, in partnership with the MD, started the Program of Support for Teaching and Scientific and Technological Research in National Defense (Pro-Defense). In collaboration with *Fluminense Federal University*, ECEME developed the "*Rede Brasil Defesa*" initiative, in which vacancies were made available for the training of instructors with the PPG in Political Science of that university. In 2008, the CAPES-MD initiative had reissued, at which time an association had established between *Fundação Getúlio Vargas* (FGV) and ECEME, which succeeded in approving the project "Strategic Defense Management," contributing to the qualification of School under the PPG in Administration.

It observed that, in little more than a decade, the legal bases and the organizational structures that led to the reformulation of the research and the postgraduate in the ECEME had established. A model based on scientific research was conceived and implemented, having as main scope the study of the Military Sciences and Military Policy, Strategy, and Administration. Under this approach, we seek to serve both the purpose of research production and to increase the knowledge available in EB and to support a more comprehensive and consistent training of the General Staff Officer and High-Level Advisor (MIGON, 2015).

It was in this spirit that the Meira Mattos Institute (IMM) was created, through Ordinance No. 724, dated September 6, 2012, of the Army Commander (BRASIL, 2012). Its denomination is homage and reference that recognize the importance and the contribution of the past, but that define an organizational structure and functional design as a response to current and future challenges.

IMM's implementation efforts go back to 2011, with the reorganization of the Strategy and Administration Section, the Postgraduate Section and the Center for Strategic Studies. It

is also intended to coordinate, guide, develop and disseminate scientific research, postgraduate studies, and studies in Military Sciences and Security & Defense; create Postgraduate opportunities for military and civilians in these areas; Contribute to the improvement of regular school courses; collaborate in the development of the training of the postgraduate professors of the EB and to promote the academic exchange with institutions of the superior education (IES) civil and military. Also, it guides and supervises the publication of the scientific journal – Meira Mattos Collection - the magazine of the Military Sciences.

Consequently, IMIM was instrumental in the creation of a new structure subordinated to ECEME which, at the same time, allowed all necessary support for academic activities, as well as took charge of the guidelines and coordination of actions related to teaching, teaching, research, production, dissemination, cataloging, bibliographic collection, academic events, exchanges and partnerships. It thus brings ECEME closer to its vision of the future and also contributes to the desirable synergy with the civilian educational environment, addressed in the White Paper on National Defense - BRBIL, 2012b concerning the Education and Culture System, since it allows the School to count on the local segment in its teaching and student bodies, as well as improving its research and postgraduate programs.

Within the context of the National System of Higher Education, especially the *strict sensu* postgraduate course, the alignment of the ECEME Postgraduate Program in Military Sciences (PPGCM) meets the requirements of the PNPG 2011-2020 (BRASIL, 2010c), both in the area of knowledge, as well as in the subarea and lines of research proposed in the aforementioned Plan for National Defense and Security.

In the area of National Defense, two lines of research structure the PPGCM, namely: Defense Management, which investigates the set of administrative activities related to military power, aiming at planning, organizing, coordinating and controlling personnel of the resources and installations of the Armed Forces; and Studies on Peace and War, which inquiries into the phenomenon of war, peace and conflict.

Table 3 - Area of Concentration and Lines of Research of the PPGCM.

Area	Research lines	Priority issues
National Defense	Defense Management	<ol style="list-style-type: none"> 1. Management in Military Environments (management of Military Organizations, Human Resources, Facilities, Health, Teaching, etc.) 2. Public Management (budgetary and financial management, patrimonial, etc.). 3. Strategic and Military Leadership 4. Process Management 5. Project Management 6. Defense Economics 7. Defense Industry 8. Defense Logistics 9. Military Mobilization 10. Science, Technology, and Innovation in Defense 11. Techniques and Methods of Research

continue

Table 3 - Continuation

Area	Research lines	Priority issues
National Defense	Peace and War Studies	<ol style="list-style-type: none"> 1. Theory of War and Epistemology of Military Sciences 2. Defense Policy and Strategy 3. Military Strategy and Politics 4. Security and Defense 5. Geopolitics 6. Prospective Studies 7. International Relations 8. Organizational and Military History 9. Doctrine (Comparative Doctrine, Efficiency & Effectiveness, Preparation & Employment, Combat Functions & Operating Systems, etc.) 10. Military Operations (Combined, Joint, Pacification, Peace, GLO - law and order enforcement, etc.)

Source: Brazil (2016b).

7 Military Sciences – new institutional milestones in EB

Over the past five years, conceptual developments have accelerated, with new institutional frameworks had established. At the end of 2010, the Army Transformation Process began, which has as one of its structuring pillars the Education and Culture vector, from which it intended to implant and strengthen the capacity for innovation, a critical requirement for military performance in the 21st century (BRASIL, 2010a).

In the same year, the Army Commander established his guidelines for the period 2011-2014 (BRASIL, 2010b). In the same year, the Army Commander established his guidelines for the period 2011-2014 (BRASIL, 2010b). Among those of interest to the Education and Culture system is the determination, among others, to “encourage the study of strategy, military history, leadership, management, international humanitarian law, international relations, and war trends” and “create courses for civilians (potential opinion formers) in ECEME.” Specifically, in the case of postgraduate studies, there is a determination to “seek alignment between research and doctrinal development” and “to expand the exchange with the civil academic environment in the areas of scientific research, education and culture, in order to our intellectual capital and ensure greater dissemination of the values and competence of EB in the educational field.”

Relevant role in the process of responding to the new challenges is the one performed by the Coordinating Office for Evaluation and Development of Military Higher Education in the Army (CADES), which advises the Department of Education and Culture of the Army (DECEX) in “formulating policies that support autonomy of military higher education “, as well as guides, supervises and provides normative conditions for the operation of postgraduate and scientific research (BRASIL, 2011b).

The Military Higher Education System in the Army (SESME) conducted within the scope of DECEX is based on LEEEx and the Decree regulatory, by which the credits of the disciplines of the regular courses of the career (courses of specialization, and military studies) are taken advantage of by postgraduate programs, allowing the equivalence of studies.

Thus, specialization courses confer the postgraduate degrees of specialization in Military Sciences, whose equivalence to other classes, defined in Resolution No. 001/2001, was ratified by Interministerial Normative Ordinance No. 18 of November 13, 2008 (BRASIL, 2008). The course of improvement of the EsAO can confer the degrees of specialist or professional master in Military Operations and the Courses of High Military Studies (CAEM), composed by the courses of Command and General Staff (CCEM), Head and Staff for Officers Doctors (CCEM / Med), Command and Staff for Officers of Nations (CCEM / ONA) and Direction for Military Engineers (CDEM), may confer the degrees of specialist, academic master or doctorate in Military Sciences.

In addition, the Policy, Strategy and Senior Administration Course of the Army (CPEAEx), which aims to increase knowledge for officers already possessing the CAEM (Courses of Specialized Military Studies) and to enable officers who don't have this course, graduates the students with specialization in Military Sciences, with emphasis on Politics, Strategy and High Administration of the Army or with the post-doctorate degree in National Defense, for officers who already hold the title of doctor. In turn, more recently, the International Strategic Studies Course (CIEE) was established, with the purpose of promoting the exchange of knowledge and experiences between senior officers of the Brazilian Army and friendly nations, as well as to know the most relevant aspects of the country in the political, military, social, economic and scientific-technological fields, being equivalent to the *lato sensu* post-graduation in Strategic Studies.

Within this scope, given the transformation conception and the Commander's guideline, the established objectives and goals within the range of the Army's strategic planning are being fulfilled, among which:

- To implement a new and effective Education and Culture System: Permanent updating of the Education and Culture System; Education focused on the Age of Knowledge; and Adequacy of Education and Culture infrastructure.
- To expand the integration of the Army to society: greater integration with the academic environment; and the realization of agreements and partnerships.
- To develop the essential competencies of the military professional: Development of basic skills, such as interpersonal skills, reflection, critical analysis, and critical thinking, as well as other skills needed by the military professional;
- To contribute to the development in the areas of Doctrine and Personnel: Increase the production of scientific research applicable to the Army (BRASIL, 2010b, our translation).

8 Military Sciences – Academic Advances

In order to meet the higher demands, ECEME has updated its strategic planning, from which the intention is “to be recognized, by 2020, nationally and internationally, in the field of military sciences, as a center of excellence in the areas of teaching, research, and doctrine, “and some of the organizational strategic objectives are” to keep ECEME's teaching in constant evolution, contributing to the implementation of a new and effective Military Higher Education System “and to” improve the

production and dissemination of knowledge in the area of the Military Sciences, contributing to the integration of the Army with society”.

Santos (2015) recalls that the PPGCM has an interdisciplinary character, prioritizing the study of Military Sciences and its interlocution with other areas of knowledge, especially in the Humanities and Applied Social Sciences. As a result of the maturation and better structuring of the PPG, ECEME had its *strict sensu* course of Academic Master's Degree in Military Sciences recommended by CAPES on November 23, 2012 and recognized by the Ministry of Education (MEC), through Ministerial Ordinance No. 009, from October 10, 2013, reaching note three. It then became the only academic course with dual certification, being recognized in the military education system (SESME) and the national education system (CAPES), unrestrictedly with military and civilian students, who, in the first group, in 2014, there were four.

The reinforcement of the PPGCM and the scientific of the Military Sciences have been strengthened by the establishment of research agreements with other higher education institutions, based on the Pro-Defense Program (CAPES partnership with the MD) and the Pro-strategy Program CAPES with the Strategic Affairs Secretariat of the Presidency of the Republic). The strengthening of the PPGCM (Post-graduation Program in Military Sciences) and the scientific of the Military Sciences have been strengthened by the establishment of research agreements with other university education institutions, based on the Pro-Defense Program (CAPES partnership with the Ministry of Defense) and in the Program: Pro-strategy (Pro-strategy program), (CAPES partnership with the Secretariat for Strategic Affairs of the Presidency of the Republic). In this aspect, PPGCM professors are part of research teams within the scope of cooperation established with the University of São Paulo (USP) and the interinstitutional program of the São Paulo Universities - San Tiago Dantas Program, a partnership of the State University of São Paulo (UNESP), State University of Campinas (UNICAMP) and Pontifical Catholic University (PUC-SP), both under the Pro-Defense program. At the same time, research partnerships are in progress, linked to the Pro-Strategy program, with the Brazilian School of Public Administration and Business (EBAPE / FGV), Federal University of Pernambuco (UFPE), *Federal University of Rio Grande do Sul* (UFRGS), UNIFA and with the program San Tiago Dantas.

In 2013, at the head of a new process, ECEME began to participate in the National Postdoctoral Plan (PNPD), launching a call for candidates to be selected for an original post available for postdoctoral training in Military Sciences. The selected researcher received a CAPES scholarship to conduct theoretical and empirical research in an integrated manner with one of the faculty/researchers of the permanent body of the PPGCM. (Postgraduate Program in Military Sciences). Despite the efforts of the Military Sciences in ECEME, in the post-graduation area.

Despite the efforts of the Military Sciences in ECEME, in the postgraduate area, to focus, at the moment, on the necessary adjustments to meet the requirements and requirements established by CAPES, so that the academic master's course is perfectly aligned with MEC guidelines and achieved the desired prestige in the national academic setting, in August 2015, the Department of Research and Postgraduate Studies (DPPG) sought to take a higher flight. With the expertise acquired with this course and the fruit of the moment of new academic and professional qualification, there was the presentation of a new course proposal (APCN), in operation, for evaluation in CAPES - the Ph.D. in Military Sciences. After a visit to the Political Sciences and International Relations Evaluation Area, held at ECEME, on March 15, 2016, on the occasion of the 164th Meeting of the Scientific

Technical Council of Higher Education (CTC-ES) of CAPES, held in the May 30 to June 3 of the same year, the course was recommended to the recognition of the National Education Council (BRASIL, 2016a), registering as date of beginning of operation on June 6, 2016, and the subsequent possibility of universal offer to the society, reinforcing the area of concentration of National Defense.

9 Scientific Insertion of Defense Studies

Nunes (2012) affirms that the scenario of changes in the post-Cold War world scenario would have been boosted in Brazil by the initiatives resulting from the first edition of the National Defense Policy – PDN (BRASIL, 1996) and the creation of the MD, in 1999. It also adds that the national agenda has incorporated the theme of security and defense, increasing the involvement of society, with increasing relevance.

Raza (2004) highlights the two factors that give specificity to Defense science, to distinguish it from other disciplines. These would be the nature of the object of its study (the Defense) and its conceptual system associated with a set of norms and practices that assure the requirements of causality, empiricism, and systematic. It is a proper theoretical construction, but it diverges, insofar as the Defense Studies seem to consolidate much more a community gathered by those interested in the same object of study, using different scientific perspectives, than a unit of aspect focusing on distinct objects of reflection.

Another approach is related to the ontology of the term Defense, as a taxonomic (scientific classification) of words and contents inherent to the Military Sciences. Also, another approach to an epistemology of the same name would be that of an extremely complex study, where one seeks to obtain knowledge of science beyond its practical applicability. Their philosophical foundations, their historical bases, their evolution in time and space, are raised, trying to position the professional that uses the content, in the context of the contemporary world.

As contribution, we present an adaptation of Accounting Theory (SÁ, 2010), about relevant requirements that allow the Defense to be comprehended as a Science.

Table 4 - Scientific Requirements Fulfilled by Defense Studies.

Logical Requirements Needed for a Science	Requirements met by Defense Studies
To have an OBJECT or specific subject of studies	The use of the field of Military Power in maintaining the integrity of the national territory, supporting government actions and maintaining law and order in the various operational environments is the subject of specific studies.
To analyze the object under a peculiar aspect	Analysis of the Field of Military Power under the aspect of strategic or tactical military operations.
To possess basic METHODS of object study	Situation examination of the tactical commander is one of the basic methods of studying the object.
To raise valid assumptions	Hypotheses about the Principles of War, such as economy of means, employment of mass, etc., for example, are frequent.
To study the phenomena with ANALYTICAL rigor	Analysis of the opposite lines of action is an example of a study of the phenomenon with analytical rigor.

continue

Table 4 - Continuation

Logical Requirements Needed for a Science	Requirements met by Defense Studies
To enunciate TRUTHS of universal value	For example, in defense of passive regions, means for employment on more significant fronts will be able to be saved.
To allow FORECASTS	The Operations Orders, which are defined after the Commander's Situation Survey, allow for the prediction of the conduct of the military operation.
To welcome DOCTRINAL CHAINS	Particularly in this respect, the study of defense does not admit the reception of doctrinal chains. The doctrine is adopted after studies and applied in a single version, which may evolve as a result of new studies and lessons learned,
To have OWN THEORIES	The Principles of War are examples of proper theories of Defense
To be based on knowledge gained, of a TRADITIONAL nature	Millennial is the accumulation of knowledge in Defense.
To provide usefulness	National Sovereignty

Source: Sá (2010), adapted by the authors.

Therefore, the definitions of the epistemology and the ontology of the term Defense, in addition to its object, due to its complexities, require an in-depth study in a multidisciplinary team, composed of the military of the three forces, pedagogues, philosophers, psychologists, among other specialists.

It is understood that research in defense aims to contribute to the advancement of knowledge in the area, to enable scientific production in Defense at levels compatible with the requirements for the creation of an area of expertise, to form critical mass in researchers, recognized nationally and internationally in Defense; and increase the exchange of HEIs and military and civil research centers.

Regarding the approach between the teachings of Defense and the Military, one has that this one is autonomous and independent, regulated by own law. The regular courses of the three singular forces, at the levels of training, improvement and high studies, should be conducted in a differentiated way from the national education system, which allows those focused on training for functional career performance not to undergo system evaluation MEC/CAPES.

Regardless of the option of insertion, it is understood that Military education, differently, is specific context, de facto and right. The scientific of the Military Sciences is an indication of the specificity, just as the structure and education system of the Armed Forces also corroborate the perspective. With the same meaning, the current legal frameworks reinforce the assertion, such as the Law on Guidelines and Bases of National Education (Art. 83) and the Law on Teaching the Army, among others.

It is understood, therefore, that the definitions of Defense and Military education can have different and complementary conceptualizations. The first one seems to have as objective the formation of a critical mass of masters and doctors, at national level, for teaching and research, mainly aiming at advancing knowledge in Defense while the Military had focused on the qualification of the military professional who will occupy positions and perform functions strictly linked to the employment of the Armed Forces.

Complementarily, Nunes (2012) comments that the academic environment has occupied important space in this agenda and that the inclusion of the Military Sciences in the

list of sciences studied by the National Education Council, as well as the insertion, in PNPB (National Post-graduation Plan) 2011-2020, of an area of National Defense and Security, with the forecast of resources of fomentation and scholarships inside and outside the Country, would be milestones of a new context for the studies of security and defense in Brazil. As a theoretical potential of the Defense Studies model, in perspective, of this integrated academic model, among the Military, Defense and related sciences, the following table is presented:

Table 5 - Theoretical potential of the Defense Studies model.

Post-graduation program	Universities	Areas of Concentration
Aerospace Sciences (PPGCA)	UNIFA	Aerospace Sciences and Political-Strategic Thinking
Military Sciences (PPGCM)	ECEME	National Defense
International Strategic Studies (PPGEEI)	UFRGS	Security, Integration and Development
Maritime Studies (PPGEM)	EGN	Security, Defense, and Maritime Strategy
Strategic, Defense and Security Studies (PPGEST)	Universidade Federal Fluminense (UFF)	National defense and political power Theory and analysis of international relations and international security
San Tiago Dantas (PPG-STD)	UNESP	Peace, Defense, and International Security

Source: authors

10 Final considerations

This paper discusses the elements associated with the scientific perspective of the studies of the Military Sciences in the Brazilian FA, with a deepening in the BS, and of the Defense studies, as an area of scientific knowledge.

It had verified that the teaching and research within the scope of the ECEME, especially in what concerns the Military Sciences, has undergone an intense process of transformation. Under new regulatory frameworks, as well as taking into account the vision and strategic objectives of the superior bodies and of the School itself, a new organizational structure had conceived and organized, from which the supply of disciplines was expanded, as well as the rigor and quality of the scientific production.

DECEx, through the Research in Military Sciences and Consolidation of Research and Development in Military Sciences projects, led by the Trompowsky Foundation, enabled the expansion of the insertion of the Military Sciences in the national and international academic segments. Ongoing innovations have a potential for overflowing throughout the EB, armies of friendly nations, MD and for society at large. In the medium and long term, as a consequence of the formation of civilians, reflections are expected in the scope of the Federal Administration (MD, Secretariat for Strategic Affairs, etc.) and the companies of the Industrial Defense Base. Due to the capillarity of the teaching and research actions of the PPGCM and other Programs, reflections had visualized along with an extensive academic, civil and military segment: CNPq, CAPES and all the institutions that interact with the teaching and research agenda in Defense.

Also, it had reached the understanding that the existence of a scientific approach proper to the Military Sciences does not deny the presence of an epistemic community agglutinated in function of the object of studies, that is to say, the Defense. Some researchers, as commented, still perceive the Defense as a dependent of a multidisciplinary theoretical breviary to affect its expression or even again observe it with complexity, concerning the conceptualization of its object of study and the identification of the specificity of the delimitation of its field of action.

It had understood that the Defense Studies still present structural deficiencies, absent in sciences in the process of consolidation. Consequently, there is room for debate on issues, which make them more understandable together with other disciplines, being, instead, more than a science, but the expression of a set of demands that involve the terminology itself.

However, for the sake of clarity, it is essential to highlight the fact that, within CAPES, that is to say, postgraduate level *strict sensu*, efforts should be made to strengthen the insertion of both perspectives – the scientific area of the study of Military Sciences and the inclusion of the Field of Studies of Defense –, assuring legitimacy and strengthening the efforts already underway in the systems of education of the Forces Singulars. Meanwhile, at CNPq, where research is being carried out - from studies in progress, there is a greater possibility of insertion of the topic Defense or Defense Studies. While within the scope of the CNPq (National Council for Scientific and Technological Development), where the research – object of studies – is being systematized, there is a greater possibility of insertion of the topic Defense or Defense Studies.

In both contexts, it should also be noted that, as a consequence of the perspectives (ontology) and contents (epistemology), it is important to differentiate the insertion, in CAPES and CNPq, of proposals related to Defense, in substantive terms, in relation to those related to Defense, in adjective terms. The convenience of differentiating Defense in a central nucleus - the study of war and conflicts – and complementary core do not denote greater or lesser relevance to any of the nuclei, but rather the differentiation of perspectives and contents. The theme was widely debated by the MD and Singular Forces together with CAPES and the National Research Agenda Commission during 2014.

Finally, it is only from the publicity of the theme, from the extension of the numbers of specialized scholars and from reflections, that it is possible to perceive, in spite of the path to be followed, that the scope of scientific, as well as the establishment of the area of knowledge, may advance of this construct, surpassing taxonomic peculiarities, amplifying the epistemological foundations and reaching the construction of the synergistic scientific maturation, in a broad spectrum.

References

BELLVÉ, Mariano Rubió. **Diccionario de ciencias militares**. Barcelona: Revista científico-militar y Biblioteca Militar, 1895.

BOGDANOVE, S. A. Military Science, its structure and content as the present stage in the development of military thought. **Military Thought**, v. 13, n. 2, p. 135-150, 2004.

BRASIL. **Lei nº 4.024, de 20 de dezembro de 1961**. Fixa as Diretrizes e Bases da Educação Nacional. Brasília, DF, 1961. Available at: <http://www2.camara.leg.br/legin/fed/lei/1960-1969/lei-4024-20-dezembro-1961-353722-publicacaooriginal-1-pl.html> . Accessed on: 6 feb. 2016.

_____. Conselho Nacional de Desenvolvimento Científico e Tecnológico. **Tabela de áreas do conhecimento**. Brasília, DF, 1984. Available at: <http://www.cnpq.br/documents/10157/186158/TabeladeAreasdoConhecimento.pdf>. Accessed on: 6 feb. 2016.

_____. **Lei nº 9.394, de 20 de dezembro de 1996**. Estabelece as diretrizes e bases da educação nacional. Brasília, DF, 1996. Available at: http://www.planalto.gov.br/ccivil_03/LEIS/L9394.htm . Accessed on: 6 feb. 2016.

_____. **Lei nº 9.786, de 8 de fevereiro de 1999**. Dispõe sobre o Ensino no Exército Brasileiro e dá outras providências. Brasília, DF, 8 feb. 1999a. Available at: http://www.planalto.gov.br/ccivil_03/Leis/L9786.htm . Accessed on: 6 feb. 2016.

_____. **Decreto nº 3.182, de 23 de setembro de 1999**. Regulamenta a Lei nº 9.786, de 8 de fevereiro de 1999, que dispõe sobre o ensino no Exército Brasileiro e dá outras providências. Brasília, DF, 1999b. Available at: http://www.planalto.gov.br/ccivil_03/decreto/D3182.htm . Accessed on: 6 feb. 2016.

_____. Ministério da Educação. Conselho Nacional de Educação. **Parecer nº 1.295/2001, da Câmara de Educação Superior do Conselho Nacional de Educação**. Brasília, DF, 6 nov. 2001. Available at: http://portal.mec.gov.br/cne/arquivos/pdf/2001/pces1295_01.pdf . Accessed on: 6 feb. 2016.

_____. Despachos do Ministro. **Diário Oficial da União**: seção 1, Brasília, DF, n. 58, p. 12, 26 mar. 2002.

_____. Conselho Nacional de Desenvolvimento Científico e Tecnológico. **Nova tabela das áreas do conhecimento**. Brasília, DF, 2005. Available at: http://www.ppg.uema.br/uploads/files/cee-areas_do_conhecimento.pdf. Accessed on: 6 feb. 2016.

_____. **Lei nº 11.279, de 9 de fevereiro de 2006.** Dispõe sobre o ensino na Marinha. **Lex**, Brasília, DF, 2006. Available at: http://www.planalto.gov.br/ccivil_03/_Ato2004-2006/2006/L11279.htm . Accessed on: 6 feb. 2016.

_____. Portaria Interministerial nº 18, 13 de novembro de 2008. Dispõe sobre a equivalência de cursos nas instituições militares de ensino em nível de pós-graduação lato sensu. **Diário Oficial da União**: seção 1, Brasília, DF, n. 222, n. 44, 14 nov. 2008.

_____. **Decreto nº 6.883, de 25 de junho de 2009.** Regulamenta a Lei nº 11.279, de 9 de fevereiro de 2006, que dispõe sobre o ensino na Marinha. Brasília, DF, 2009a. Available at: http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2009/Decreto/D6883.htm . Accessed on: 6 feb. 2016.

_____. Ministério da Defesa. Força Aérea Brasileira. ROCA 21-6 – Regulamento da Universidade da Força Aérea (UNIFA), aprovado pela Portaria nº 335/GC3, de 27 de abril de 2009. **Diário Oficial da União**: seção 1, Brasília, DF, n. 79, p. 15, 28 abr. 2009b.

_____. Exército Brasileiro. Estado-Maior do Exército. **O processo de transformação do Exército.** Brasília, DF: EME, 2010a.

_____. Ministério da Defesa. Exército Brasileiro. **Diretriz Geral do Comandante do Exército para o período de 2011-2014.** Brasília, DF: MD, 2010b.

_____. Ministério da Educação. Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. **Plano Nacional de Pós-Graduação (PNPG) 2011-2020**: documentos setoriais. Brasília, DF: Capes, 2010c. 2 v.

_____. **Lei nº 12.464, de 12 de agosto de 2011.** Dispõe sobre o ensino na Aeronáutica; e revoga o Decreto-Lei no 8.437, de 24 de dezembro de 1945, e as Leis nos 1.601, de 12 de maio de 1952, e 7.549, de 11 de dezembro de 1986. Brasília, DF, 2011a. Available at: http://www.planalto.gov.br/CCIVIL_03/_Ato2011-2014/2011/Lei/L12464.htm . Accessed on: 6 fev. 2016.

_____. Ministério da Defesa. Exército Brasileiro. Departamento de Educação e Cultura do Exército. **Portaria nº 389/DECEX, de 4 de julho de 2011.** Cria a Coordenadoria de Avaliação e Desenvolvimento da Educação Superior Militar no Exército (**CADESM**). Rio de Janeiro, RJ, 2011b. Available at: http://www.decex.eb.mil.br/port/_leg_ensino/2_educacao_eb-decex/35_port_389_CmtEB_04Jul2011_CriaCADESM.pdf . Accessed on: 6 fev. 2016.

_____. Ministério da Defesa. **Política Nacional de Defesa.** Brasília, DF: MD, 2012a.

_____. Ministério da Defesa. **Livro Branco de Defesa Nacional.** Brasília, DF: MD, 2012b.

_____. Ministério da Defesa. Exército Brasileiro. **Portaria nº 724, de 6 de setembro de 2012.** Cria o Instituto Meira Mattos, extingue o Centro de Estudos Estratégicos e altera dispositivos do Regulamento da Escola de Comando e Estado-Maior do Exército. **Boletim do Exército**, Brasília, DF, n. 37, 14 de setembro de 2012. Available at: <http://www.epex.eb.mil.br/images/pdf/doc/be37-12.pdf>. Accessed on: 10 fev. 2016.

_____. Ministério da Educação. Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. Portaria Ministerial nº 1.009, de 10 outubro de 2013. Brasília, DF, 2013. Accessed on: 6 fev. 2016.

_____. Ministério da Educação. Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. **Sobre as áreas de avaliação.** Brasília, DF, 2014. Available at: <http://www.capes.gov.br/avaliacao/sobre-as-areas-de-avaliacao>. Accessed on: 10 fev. 2016.

_____. Ministério da Educação. Coordenação de Aperfeiçoamento de Pessoal de Nível Superior. **Sai resultado de propostas de cursos novos de pós-graduação.** Brasília, DF, 2016a. Available at: www.capes.gov.br/component/content/article/36-salaimprensa/noticias/7941-sai-resultado-de-propostas-de-cursos-novos-de-pos-graduacao-7. Accessed on: 10 jun. 2016.

_____. Ministério da Defesa. Exército Brasileiro. Escola de Comando e Estado-Maior do Exército. **Edital de Seleção para o Programa de Pós-graduação em Ciências Militares da ECEME, nível stricto sensu – ingresso 2017.** Rio de Janeiro, RJ, 2016b. Available at: http://www.eb.mil.br/documents/10138/7278234/Edital_Processo_Seletivo_PPGCM_2017.pdf/09fe755e-3e30-4b72-a63b-d070e42adff6. Accessed on: 3 dez. 2018.

CORDIS. **Classificação das áreas científicas Cordis:** versão portuguesa. 2007. Available at: https://sigarra.up.pt/up/pt/conteudos_service.conteudos_cont?pct_id=639&pv_cod=41FamadSH78a. Accessed on: 10 fev. 2016.

DINIZ, Eugenio. Epistemologia, História e Estudos Estratégicos: Clausewitz versus Keegan. **Contexto Internacional**, Rio de Janeiro, v. 31, n. 1, p. 39-90, jan./jun. 2010.

DOMINGOS NETO, Manuel. Defesa e segurança como área do conhecimento científico. **Tensões Mundiais**, Fortaleza, v. 2, n. 3, p. 136-149, jul./dez. 2006.

_____. *et al.* **Seminário sobre a configuração dos Estudos da Defesa como área do conhecimento científico:** reunião conjunta ABED-CPDOC/FGV. Rio de Janeiro: Fundação Getúlio Vargas, 2012.

_____. A necessidade dos estudos da defesa. In: ENCONTRO NACIONAL DA ASSOCIAÇÃO BRASILEIRA DE ESTUDOS DE DEFESA, 6., 2013, Aracaju. **Livro...** Aracaju: UFS, 2013. p. 47-65.

JOVER, Francisco Gago. **Glosarios y diccionarios militares del siglo XIX**. Alicante: Biblioteca Virtual Miguel de Cervantes, 2008.

MIGON, Eduardo Xavier Ferreira Glaser. O que vai pelas Forças: o Instituto Meira Mattos. **Revista do Clube Militar**, Rio de Janeiro, n. 456, p. 34-37, 2015.

NUNES, Richard Fernandes. O Instituto Meira Mattos da ECEME e o processo de transformação do Exército Brasileiro. Coleção Meira Mattos, Rio de Janeiro, 2. quad., n. 2, [p.1-11], 2012. Available at: <http://ebrevistas.eb.mil.br/index.php/RMM/article/view/232/205> . Accessed on: 10 fev. 2016.

PORTUGAL. Portaria n.º 1.099, de 24 de setembro de 2009. Ministérios da Defesa Nacional e da Administração Interna. **Diário da República Portuguesa**, Lisboa, série 1, n. 186, p. 6812-6814, 24 set. 2009.

RALEIRAS, Maurício Simão Tendeiro. O doutoramento em ciências militares: um fim ou uma fase do processo educativo das Forças Armadas? **Boletim Ensino/Investigação**, Lisboa, n. 12, p. 185-220, maio 2012.

RAZA, Salvador Ghelfi. A questão da cientificidade nos estudos de defesa. **Política Externa**, São Paulo, v. 12, n. 3, 21 fev. 2004. Available at: <http://politicaexterna.com.br/2200/questao-da-cientificidade-nos-estudos-de-defesa/>. Accessed on: 10 fev. 2016.

SÁ, Antônio Lopes. **Teoria da contabilidade**. Rio de Janeiro: Atlas, 2010.

SAINT-PIERRE, Hector Luis *et al.* **Seminário sobre a configuração dos estudos da defesa como área do conhecimento científico**: reunião conjunta ABED-CPDOC/FGV. Rio de Janeiro: Fundação Getúlio Vargas, 2012.

SANTOS, Agnaldo Oliveira. **A ECEME fortalece seu Programa de Pós-Graduação em Ciências Militares e dá avanços significativos na consolidação de seus cursos de mestrado e doutorado**. 2015. Available at: <http://eblog.eb.mil.br/index.php/noticias/4099-a-eceme-fortalece-o-seu-programa-de-pos-graduacao-em-ciencias-militares-e-da-avancos-significativos-na-consolidacao-de-seus-cursos-de-mestrado-e-doutorado>. Accessed on: 8 fev. 2016.

SMITH, Hugh. **On Clausewitz**: a study of military and political ideas. New York: Palgrave Macmillan, 2004.