

# UAVs in irregular conflicts: analysis of utilization dynamics

*VANTs en los conflictos irregulares: análisis de las dinámicas de utilización*

*VANTs nos conflitos irregulares: análise das dinâmicas de utilização*

Diogo Calazans Corrêa

Federal University of Rio de Janeiro - UFRJ  
Rio de Janeiro/RJ - Brazil  
diogoccorrea@hotmail.com

Jessika Cardoso de Medeiros

Federal University of Rio de Janeiro - UFRJ  
Rio de Janeiro/RJ - Brazil  
jessika\_medeiross@hotmail.com

## ABSTRACT

The present article is intended to study the use of unmanned aerial vehicles (UAVs) in the context of an irregular war. With a theoretical foundation based on the recent concepts and definitions concerning asymmetric conflicts, practical experiences of drones utilization and data and information associated to the results obtained during and after the conflicts, the study seeks to understand the dynamics of applicability of the equipment, considering, chiefly, its psychological impact on the different spheres of societies involved, and assesses specifically the conflicts in Afghanistan. This text does not aim to find exact answers, but rather to elucidate the scenario involving these two themes which, though being discussed a lot, count on few national literature and deep difficulties of conceptualization and regulation, due to the contemporaneity of the themes.

**Keywords:** UAV. Irregular war. Contemporary conflicts. Afghanistan.

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## RESUMEN

*El presente artículo tiene como objetivo estudiar el empleo de vehículos aéreos no tripulados (VANTs) en el contexto de una guerra irregular. A través de una fundamentación teórica pautada en los recientes conceptos y definiciones acerca de los conflictos asimétricos, de las experiencias prácticas de utilización de los drones y de los datos e informaciones relativos a los resultados obtenidos durante y después de los conflictos, se busca entender la dinámica de aplicabilidad del equipamiento en cuestión, tomando en consideración principalmente su impacto psicológico en las diversas esferas de las sociedades involucradas, haciendo una evaluación en específico de los conflictos en Afganistán. Este texto no quiere encontrar respuestas exactas, sino elucidar el escenario involucrando estos dos temas que, aunque sean muy debatidos, presentan poca literatura nacional y profundas dificultades de conceptualización y regulación, debido a la contemporaneidad de los temas.*

**Palabras-clave:** VANT. Guerra irregular. Conflictos contemporáneos. Afganistán.

## RESUMO

*O presente artigo tem como objetivo estudar o emprego de veículos aéreos não tripulados (VANTs) no contexto de uma guerra irregular. Através de uma fundamentação teórica pautada nos recentes conceitos e definições acerca dos conflitos assimétricos, das experiências práticas de utilização dos **drones** e dos dados e informações relativos aos resultados obtidos durante e após os conflitos, busca-se o entendimento da dinâmica de aplicabilidade do equipamento em questão, levando-se em consideração principalmente seu impacto psicológico nas diversas esferas das sociedades envolvidas, fazendo-se uma avaliação em específico dos conflitos no Afeganistão. Este texto não visa encontrar respostas exatas, mas sim elucidar o cenário envolvendo estes dois temas que, apesar de muito debatidos, possuem pouca literatura nacional e profundas dificuldades de conceituação e regulamentação, devido à contemporaneidade dos temas.*

**Palavras-chave:** VANT. Guerra irregular. Conflitos contemporâneos. Afeganistão.

## 1 INTRODUCTION

Technology has always transformed the world, both with regard to the material world and in human relations (social and politics). According to Clausewitz (1976, p. 87), “war is not merely a political act, but a true political instrument, the continuation of the political relationship, taken ahead by other means”. Clausewitz in his work, “On War” states that it is inherent the fact that the war has also changed with the arrival of new technologies. However, this is not a relation with one-dimensional characteristics. Technology not only changes the war, but the war changes the technology, in a complex dialectic relation.

Nowadays, asymmetric conflicts have been one of the chief forms of combat, with a trend to become even more frequent in the coming years, due to their efficacy. The challenge that involves them is that, for being a relatively recent form of conflict, there is few information and theorization about them. Therefore, the issue to be approached in this paper is: how does this new technology fits in today irregular war scenario, and how does this new relation occur?

A result from this inquiry, this work is intended to answer some questions (and make others). For a didactic and organization purpose, it was broken down into 03 (three) parts. The theoretical foundation aims to address irregular conflicts paradigms, the

psychological component in asymmetric wars and the trend that they are “softening” conflicts. Starting from this last topic, UAVs acquire more strength, because they can be employed in a offensive and precise way, so as to reduce the impact for who is operating them. This theme will be addressed with more details along the paper.

The second part is an analysis of the use of these aircrafts in Afghanistan War, approaching the growing number of air patrols between 2007 and 2011, the issue of civilians in areas of attack, analyzing the number of deaths, and tracing parallels with Humanitarian International Law, and the psychological impact that the use of a UAV causes on the civil world.

The third part analyzes, within what was worked in the theoretical and practical development, how these two types of knowledge contribute to the reflection around the possibilities of UAVs utilization in asymmetric wars in general.

### 1.1 Theoretical foundation and paradigms of irregular conflicts

The irregular war (or asymmetric war) is a type of somehow peculiar conflict, because it presents many

characteristics that are different from the conventional regular war, contradicting the traditional way of making war of the army and militaries in general. The absence of a rigid standard, the dynamics and flexibility of this type of war has rendered difficult an appropriate academic production on the theme, also due to the complexity involved in inserting it integrally in historic contexts, which results in different types of denominations, besides those previously mentioned (VISACRO, 2009).

There is no wide, clear and universal definition of asymmetric wars (the expression “asymmetric war” itself is controversial and divides opinions), so, the most didactic way of understanding it is by tracing similarities and some standards. In general, this type of conflicts is constituted of smaller action groups (contradicting the large military effective of conventional wars). Also structurally differing from traditional conflicts throughout history, marked by few and large battles, the irregular war is conceived by countless activities associated to combat, which include direct battles, among others, and different types of actions exist.

Among the many characteristics of irregular conflicts, we can include: ephemeral tactic actions, lack of linearity, hard to be detected, combat actions in order to obtain psychological results, lack of planning and execution standards, insubordination to legal restrictions, relevance of population support, less importance of military aspects, lack of definition between internal safety and public safety, subordination of military objectives to political objectives and more proximity of political, strategic and tactic levels. (VISACRO, 2009).

## 1.2 The psychological component in asymmetric war

As well defines Von der Heydte,

The irregular war action only gain meaning with the psychological relation that they extract from the opponent [...] A large part of the irregular war conduction is the psychological war, psychological attack, as well as psychological defense and psychological armament. (HEYDTE, 1990, p. 247).

A strong component in irregular war is the psychological factor. The value of military victories in itself loses relevance if they are not followed by political and psychological gains. In this sense, a means that showed to be very efficacious in obtaining desired psychological results was terrorism, mainly after the fatidic event of September 11, 2001. The impact on the

psyche of a nation ( and on those who form it, and that includes the army, political leaders and the population), of this type of non conventional action, yet more when it is widely divulged by medias, is immensurable. The psychological impact is higher or smaller depending on the target, the location, the time factor, through which it occurs and on who makes the attack.

Militaries, still today, are conducted by ideas of “destruction of enemy forces”, the conquest of land, maintenance of strategic areas, approaches that work in regular wars but are inefficient in irregular wars. The true gravity center in asymmetric wars is the support of the population. Inhabitants of regions under conflict can help irregular forces, both directly and indirectly, which means support at tactical and operational levels. Similarly, the population is responsible for the continuation or end of a conflict, because it exerts pressures on politics and influences public opinion (VISACRO, 2009).

Thus, the influence on society, its psychic impact, appears as determinant element in the agenda of those who deal with asymmetric conflicts. The population became an essential piece in the modern war chess, and to be able to handle and control such piece can drastically change the succession of events and result, consequently, in victory or defeat.

## 1.3 Following war “mitigation” trend

In the last years, the military technology (and consequently, the war itself) suffered an inflection point. Initially, the efforts to improve weapons were always in terms of increasing its destruction power. However, with the arrival of nuclear energy and, later, of nuclear bombs, lethality has reached a critical point that overcome the needs for military power.

According to Liang and Xiangsui,

[...] Even in the post modern age, or post industrial age, war will not cease to exist. It will just permeate human society, in a more complex way, more penetrating, disguised and subtle. (LIANG; XIANGSUI, 1991. p. 6).

It is observed, then, that the employment of military equipment with high destruction power gets more restrict, leaving room to the so called “neo-conceptual weapons”, widely used in contemporary asymmetric combats and which make conflict systematic more complex in its approach, in this context.

“Neo-conceptual weapon” is considered anything that can be transformed into weapon, but that was not necessarily conceived with this purpose (thus transcending the military environment). One pen, originally created to write, can become violence and lethality instrument when used to punch a person. Contemporary asymmetric wars use such conception widely, and, due to that, the traditional concept of weapon must be interrupted so that the scope of the means used to make war in irregular conflicts can be seen.

From the reflections previously proposed, the vulnerability situation in which the individuals directly or indirectly involved in asymmetric conflicts is clear. The contemporary combat incorporates and permeates all environments and spheres of human action (political, economic, cultural, diplomatic, among others), which, in the past, were embedded only in the material, military battle field, where basically only those who know the techniques of direct use of violence and force “fought”. In this sense, the evolution of “precision weapons” (or yet, “soft weapons”), is increasingly more valued. Thus, the present conflict environment is propitious for the employment and utilization of Unmanned Aerial Vehicles (UAVs).

The UAVs (also known as drones) have a wide advantage in the context of present asymmetric wars. Even though many people argue that the loss of certain equipment may result in high expenses, due to its high technological value added, still, in most cases, the amounts spent with preparation of pilots throughout their careers are superior to the cost of a drone. Even when the monetary value is not the greatest concern, UAVs provide something that is priceless: reduction of psychological impact (of the one who uses it), which is determinant for victory or defeat in a conflict. The physical absence of pilots in combat avoids human losses, which represents less psychological impact and fewer expenses with training of new pilots. Therefore, it is about economy of lives, intellectual and financial economy.

## 2 OVERFLYING AFGHANISTAN: AN EMPIRICAL DIAGNOSIS

After a theoretical analysis of the theme, focused on the psychology of use, a more direct approach will be carried out with facts and numbers from Afghanistan War, which will provide some illustration of the events contemplated by the theoretical basis.

Afghanistan War started in October 2001, as reply to the attack to the World Trade Center (September 11,

2001) promoted by *Al Qaeda*. North-American troops invaded the country and declared war, though not being authorized by the United Nations. The offensive was intended to find Osama Bin Laden and other *Al Qaeda* leaders, organizations that has assumed the authorship of the September 11 attacks, dismount the mentioned organization and remove Taliban regime from power, which openly supported Bin Laden.

The use of UAV in Afghanistan and Pakistan frontier is constant and has been increasing since the beginning of the conflict. Some are used only for monitoring and collection of data for intelligence, others are user to attack and eliminate terrorists. Those used for this latter objective are Predator and Reaper. To provide an idea with numbers, in 2007, there were 21 combat patrols conduct by UAV, and in the mid 2009, this number reached 38, while in 2011 there were already 54 patrols, that is, in a period of four years, the number of patrols increased more than twice. In addition to these regular Army aircrafts, according to the United Press International, the aircrafts, UAV model Mirsad-1, were used to overfly Israel. The aircrafts were under control of the non state player *Hezbollah*. Though not being capable of carrying guns, the use of this type of arsenal by non state players could yield an uncontrolled increase in the number of attacks and deaths, because these groups are not committed to state laws or law conventions, such as Geneva Conventions.

Drawing a parallel between the number of patrols and the number of attacks, we can observe the significance of this use. In 2007 there were 74 attacks in Afghanistan, and in the same year, there were 5 attacks in Pakistan, while in 2012 there were, in average, 33 attacks per month (which results in an average of 396 attacks a year) in Afghanistan. With this excessive number of attacks, a question remains: how do civilians place themselves in the middle of this cross-fire?

Civilians are one of the greatest concerns in an attack, since the death of innocents, in addition to negatively reflect in public opinion, disrespects the International Humanitarian Law (IHL) or Law of Armed Conflicts. In every Aerospace Operations Center in Middle East, including Afghanistan, there is a legal military advisor to assist in guidance related to IHL, besides international treaties that forbid attacks against civilians and demand that the Army minimize risks to them. There is also one NATO protocol, supported by the Air Force, in which it is indicated that, to perform an attack when the presence of civilians in areas linked to *Al Qaeda* is known, it must

be authorized by the high command, and also requires the suspension of attacks in presence of civilians. In other words, the higher the probability of civilian deaths in attacks, the higher the command step to which the decision is transferred, to be authorized or not, and can reach even the President. It's worth remarking that, in all levels, there is the assistance of lawyers so that all measures are compliant with IHL and with Geneva Conventions.

In Humanitarian Law norms, any type of attack in localities characterized as historical, cultural or religious heritage, means of civilian subsistence, sanitary units (such as hospitals and locations used and duly signed with the Red Cross), in addition to schools and nurseries, is forbidden. However, terrorists are aware of the procedures mentioned above and the prohibitions to which state forces are subject, and use it as advantage, like, for example, when they use mosques as shelter for combatants and/or storage of war arsenal, that is, they transform these places into locations with dual use characteristics.

In this issue of not attacking civilian localities with double use (since it will generate more civilian deaths than combatant deaths) is where the discussion on the use of UAVs is significant. So, in case it is really necessary the elimination of individuals, the UAVs would be the best means for such purpose, since, in addition to reduce the number of deaths for those who are using the aircraft, their attack are more precise. Such precision was acknowledged in 2011, in the 34th Panel Discussion on Present Themes of the International Humanitarian Law, by ICRC President, Jakob Kellenberger:

One of the chief arguments to invest in such new technologies is that they save soldiers' lives. Another argument is that UAV, in particular, increase the possibilities of air vigilance in real time, thus allowing the belligerents to execute their attacks more precisely against military objects, and thus, reduce civilian deaths and damages to civilian patrimony. In other words, they permit more caution in attacks. (KELLENBERG, 2011).

However, despite this precision, the prohibitions of attacks, the protocols to be followed before an attack decision is made, and the legal assistance involved, many civilian deaths occur. As we can observe from the analysis of data from the Organization Pakistan Body Count, it is possible to have a panorama of the number of civilian deaths caused by UAVs. Between 2010 and 2013, there was a total of 255 UAVs, and 2070 civilians died and 741 civilians were injured.

However, this information may not be totally real, because, as the operations are confidential, there are no official data. Such data are extracted from local media and reproduced worldwide, but the way this information will be disseminated will depend on the media agency and on the interest, chiefly political, of the person in charge.

All these factors together generate uncertainty with regard to the use of UAV in the population. The psychological factor, already mentioned in this paper, is inherent to civilian population, and, as the Afghanistan War and the use of these aircrafts advanced, such "culture of fear to look to the sky" was being disseminated among adults and children, making this North-American intervention be increasingly more criticized. This because one question remains, from the panorama shown on Pakistan Body Count website: if this type of armament is so precise and so efficient, why are there so many civilian deaths?

### 3 POSSIBILITIES AND APPLICATIONS

Giulio Douhet seemed to foresee the future when he placed as real war objective the lack of motivation of the opponent to remain in battle, assigning to the air force the chief role in this perspective. Though not contemplating the whole spectrum of possibilities, his understanding that to reach the population moral was more effectively important than the military battles themselves (and the use of air operations in this context) was visionary.

#### 3.1 Intelligence

As was observed, the irregular war, different from traditional regular wars, is more associated to the society and to the means to psychologically impact it, changing the motivation to continue the conflict, in the sense that

[...] The occurrence of victims can eliminate the capacity for combat of the enemy, leading him to panic and loss of will to fight, and that can be considered as an extremely valid means of reaching victory. (LIANG and XIANGSUI, 1999, p. 36).

Even in regular conflicts, intelligence is directly linked to the success of a campaign, and this is not different from irregular wars, where information and its handling have become determinant (some call it "war of information" and "media war"), because they directly affect the population, the big focus of



asymmetric war. Since war occurs mostly in the society itself, the actions of the players present in asymmetric conflicts are still more unpredictable. So, intelligence becomes one of the best tools to avoid assaults by non state players, and, consequently, to avoid more psychological impact.

In this scenario, one of the most relevant applications concerning UAVs takes place, in contemporary wars context, spying. The UAV, as seen in Afghanistan, was used to spy, obtain information, map and capture images (of meetings, headquarters, armament reserves, among others). The human factor is much more adequate to acquire information in certain cases (due to the direct contact among persons, which transmits more transparency and intention), but, in high risk and higher danger areas, UAVs have become the best option.

### 3.2 The appropriate combination of variables in face of new limits

The idea behind exceeding limits (or yet, “go beyond limits”) reflects the new concept of present wars, which transcend the military environment and the traditional war ideology and practice. Traditional rules must be broken, because they are no longer appropriate to the 21st Century conflicts. There is no longer an explicit separation of what is a battle field and what is not a battle field, between what is a weapon and what is not a weapon, between a military and a non-military, between the State and the non-state, or supra-national (LIANG and XIANGSUI, 1999).

The combination of resources is the key to obtain victory. The success of great leaders throughout history has always been tied to it. We are living in a time where resources are quite unlimited, chiefly due to the uncontrolled and constant advances of technology, which seems to have no limits. In addition to these conventional resources (as regards the military field), the war transcendence to other areas make the range of possibilities infinite.

The concept of “war in supra-national combination” as proposed by Liang and Xiangsui (1999, p. 205), is present. In a world where the amount of resources has become vast and so the ways of making war, it is not enough just to retain resources, but the way they are combined. The possibilities of combinations have become equally wide, which makes the issue of finding the “adequate combination” much more complex. In this sense, a challenge remains of how or which is the best way to combine or fit

UAVs in this context. Some forms were promising, as previously mentioned regarding intelligence, other not so much, as we could observe in Afghanistan, with uncontrolled offensive of drones (followed by many deaths, mainly civilians).

### 4 OVERESTIMATION OF TECHNOLOGY AND THE ‘ZERO LEVEL OF LOSSES’

We should bear in mind the in wars, inevitably, people will die. It seems an obvious statement, but contemporary conflicts are increasingly more “distant” and “robotized”. In countries with great technological development, people are increasingly less physically present in the conflict, and are many times replaced by remotely controlled equipment, which conducts to an increase in dehumanization and, at the same time, to an increase of barbarity in war. Yet, some soldiers are required in battle fields and, whether we want it or not, there will be victims in certain cases.

Resulting from the previously mentioned fact, some States tend to place excessive and blind confidence in new technologies. This extravagance results in exorbitant expenses with war and in the false belief that technology is the key to obtain victory and to minimize human losses. More powerful missiles, fast airplanes, more equipped ships, more resistant tanks. However, as was discussed along the paper, the military power has lost relevance in the present context of asymmetric conflicts. And though such behavior is per se, a mistake, (with political, strategic, operational and tactic implications), it causes “susceptibilities to psychological impacts”.

Policies that express life characterization as something nonnegotiable, as something essential (as we can observe, particularly, in the case of the United States), reflect the incorporation of a national feeling, utopian, of absence of losses in wars, in what Chinese colonels, authors of “Unrestricted Warfare” call “zero level of losses”. Such perspective was already observed by many non-state players (as is noticed, for example, through the September 11 attack), who used it in order to cause greater psychological impact, because

[...] Most of the times the weaker side selects as its main battle axis those areas or lines where the opponent does not expect to be attacked. The gravity center of the attack is always a location that will cause a huge psychological impact on the opponent. (LIANG e XIANGSUI, 1999, p. 242).

We can infer, basically, that the overestimation of technology (in this case the drones) leads to a

super valorization of human life. Thus, losses of lives throughout the conflict are more felt, that is, they cause higher psychological impact.

## 5 CONCLUSION

The truth is that we don't count on many certainties concerning the use of UAVs in asymmetric conflicts (not yet). However, with the recent practical experiences, it is already possible to discuss something on the theme, be it what went right or what did not. There are advantages and disadvantages, as we could observe, depending on the way the equipment is used.

In this sense, in case this paper becomes responsible for more questions on the theme, and later, for new works and debates on UAVs, asymmetric wars, psychological impact and/or any other associated theme, we can say that our goal was reached.

As was very well expressed by Liang and Xiangsui, "Nowadays, it is still hard to devise whether this new age will cause the unemployment of large military contingents, or whether it will abolish war from the Earth. All that is still undetermined. The only certain conclusion is that, from now on, war will no longer be as it always was" (LIANG, XIANGSUI, 1999, p.5).

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