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A Theory of Special Operations
The Origin, Qualities, and Use of SOF

Special operations are missions to accomplish strategic objectives where the use of conventional forces would create unacceptable risks due to Clausewitzian friction. Overcoming these risks requires special operations forces that directly address the ultimate sources of friction through qualities that are the result of the distribution of the attributes of SOF personnel.

Special Operations Forces (SOF) are small, specially organized units manned by carefully selected people using modified equipment and trained in unconventional applications of tactics against strategic and operational objectives. Further, the successful conduct of special operations relies on individual and small unit proficiency in specialised skills applied with adaptability, improvisation, and innovation against adversaries often unprepared to react.

It has often been stated that the unique capabilities of SOF complement those of conventional forces. What are "the unique capabilities of SOF?" They are almost never named. And why should SOF only "complement" the capabilities of conventional forces instead of having strategic roles of their own?

One expert defines special operations as follows: "Unconventional actions against enemy vulnerabilities in a sustained campaign, undertaken by specially designated units, to enable conventional operations and/or resolve economically politico-military problems at the operational or strategic level that are difficult or impossible to accomplish with conventional forces alone." Unfortunately, even this careful and thoughtful description is a definition by exception. If special operations are "unconventional," they are defined only relative to what is "conventional." As the capabilities of conventional forces improve, they may be able to perform missions that once were the responsibility of SOF. For example, fighting at night was once a characteristic of SOF, while the use of night vision is now widespread in conventional operations.

Therefore, special operations (and SOF) cannot theoretically be defined in terms of specific and unchanging missions, skills, or capabilities. In practice, special operations have been defined in the context of the contemporary war.

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During wartime, special men emerge who have the personal capability to overcome risk and the skills that allow them to perform strategically important tasks (when organised into special and small units) that conventional forces cannot.

A theory of special operations must therefore start with an understanding of what conventional forces cannot do and why. Conventional forces do have limitations, the most prominent of which is Clausewitzian friction; in fact, military forces have been shaped by these limitations. This is not to say that friction does not apply to SOF as well, but instead that the origin of SOF is due to the impact of friction on military forces. The purpose of the present paper is to generalise this idea to provide a theory of SOF based on the enduring limitations of conventional forces, based in turn on the immutable nature of war itself.

The Limitations of Military Forces

Military forces have evolved structurally and have developed the “principles of war” to accommodate the realities of war through lessons learned in blood. In the end, it is the enemy’s fear that once his material or moral resources are eroded, he will be subject to destruction in the arena of conflict that removes his will to continue. The enduring nature of war is that, within the strategic arena of conflict, we and our enemy are both striving to be able to destroy the other.

The requirements of military forces are determined by the need to place ourselves in position to destroy the enemy while at the same time avoiding too great a risk of deadly consequences to ourselves. These two fundamental needs are in direct conflict, and both elements will always be present. Technology can affect how we propose to visit destruction upon the enemy and as such will retain the potential to make the difference between success and failure. Friction is the reality that will continue to help determine the requirements and the limitations of military forces, due to the enduring nature of war: the need to place ourselves in position to destroy the enemy while at the same time avoiding too great a risk of deadly consequences to ourselves.

The Relationship between Conventional Forces and SOF

In general, military forces are large organisations to accomplish all of the requirements imposed by the nature and principles of war. One reason military forces are large is just the size of the overall task itself, threatening destruction against an enemy and guarding against catastrophe in the environment including friction. For both purposes, all else being equal, more is better. Although large forces are required, the characteristics of large forces are some of the very sources of friction that create fundamental limitations.

A large curve can represent, schematically, the distribution of some attribute of individual military personnel such as physical endurance, clarity of thought under stress, aptitude for language or culture, or performance of a specific task. The average ability would be represented by the peak of the curve, but many personnel score both above and below the average. The area under the curve would be the total number of personnel. If the total number of personnel is enlarged or reduced, the height of the distribution will change but not the average or the spread – if the military personnel are representative of the same recruiting pool of the general population and the same military organisation and training. A small curve can represent the distribution of the same attribute among members of SOF who are selected out of the larger military population for superior performance in this and many other attributes. The average performance is much higher and the spread is smaller because there is a minimum standard against which these personnel were selected. Also, since they were selected out of the general military population, the number that score at any given level are fewer than the number who score at that level in the overall population. This last factor limits the overall number of special operators to be a small fraction of the overall number of military personnel. In fact, in this schematic representation, the number of SOF is 3.8% of the total military personnel, which is the approximate percentage of US SOF compared with the overall number of active duty military personnel. The only ways to increase the area under the SOF curve are to increase the numbers of personnel recruited into SOF from the high end of the conventional distribution, recruit SOF from outside the conventional military, or lower the selection standards to widen the distribution.

Obviously not all of the high-performing individuals are recruited into SOF. There are still many “high performers” in the conventional distribution. In fact, the nature of the conventional military organisation and its capabilities are determined by the overall distribution of personnel. But there is a maximum fraction of the overall military personnel that can meet the standards and be recruited into SOF. This smaller and tighter distribution of personnel with greater average “attributes” is the source of the nature and capabilities of SOF. These distributions help explain how conventional forces perform missions that were once the responsibility of SOF and how this does not mean that they are becoming more “SOF-like.” This is often discussed in the context of the application of technology, although the same argument applies to other aspects of military operations such as operational concepts or organisation. One of the distinguishing
characteristics of SOF is the use of technology that is not widely available to conventional forces for a variety of reasons, including limited availability, security, cost, extensive or specialised training, and risk. The technology may later become more widely adopted in conventional forces for one of two reasons: the characteristics of the technology may change as it matures, (e.g., less expensive, easier to operate), allowing its use by the wider distribution of conventional personnel; or/and, the distribution of conventional personnel may, over time, be purposely moved to a greater capability to use this technology through widespread training or recruiting. In either case, the conventional personnel will still have a wide distribution of capability, and SOF will still have a smaller tighter distribution with a greater average. If there is then a perceived lack of distinction between SOF and conventional forces, it is likely due to the lack of adoption by SOF of further technology or capability beyond the conventional forces due to the institutionalisation of the missions in SOF that the technology (or other advances or changes) enabled. It is not the missions that define special operations but rather the personnel.

This is not to say that special operations are defined simply as “what SOF do”. Of course it is the existence of strategic objectives that are beyond the limitations of conventional forces that creates the need for SOF to overcome those limitations and perform missions to accomplish those objectives. But over time it is not specific missions that are designated as “special” or assigned to SOF that define special operations. The missions will change, but the ability to overcome the limitations of conventional forces is embodied in the SOF personnel. If the conventional forces can accomplish the mission, it is time for SOF to move on.

Defining SOF

The above is why a “special task” for conventional forces or a “special” capability or technology is not the same thing as special operations. By the same token, the selection of personnel with a smaller and tighter distribution with greater average “attributes” is necessary but not sufficient to explain the nature of SOF. After all, there are many military specialties requiring specific aptitudes, knowledge, and training that are not shared by military forces in general. What is the difference between SOF and the Judge Advocate General’s Corps? Or, for that matter, what is the difference between Navy SEALs and Navy divers? Elite forces may also be selected to have a different distribution of some attributes than conventional forces, and they may perform some tasks far better, but they are not organised into the right kind of units and the individuals may not have attributes that allow them to be creative or flexible.

The attributes of SOF themselves that matter, of course – and it is worth noting that the most important attributes may not be physical capabilities but mental and psychological attributes. These attributes create three fundamental qualities of SOF: SOF are warriors, they are creative, and they are flexible. These three qualities of SOF that arise from the distribution of attributes of personnel directly address the three ultimate sources of friction.

Elite Warriors

SOF directly address the “constraints imposed by human physical and cognitive limits” by the smaller and tighter distribution of personnel with greater abilities to deal with the intense stresses, pressures, and responses of combat. This is why SOF must be elite warriors, engaged directly in the fundamental nature of war and the implementation of strategy: destroying the enemy or creating his fear that he will be destroyed.

SOF are specially recruited, assessed, selected, trained, and equipped; have access to national-level intelligence and cutting-edge technology; and demonstrate boldness, intellect, and perseverance. These values are embodied in the SOF core values of integrity, courage, and creativity.

Colombian Special Forces show counter insertion tactics to participants of the 75th Joint Civilian Orientation Conference outside Bogota, Colombia, 22 April 2008. (Photo: USAF)

Creativity

SOF directly address the “structural nonlinearity of combat processes that can give rise to the long-term unpredictability of results and emergent phenomena” by immediately changing the combat process. As discussed, the requirements and limitations of conventional forces are determined in part by the need to place themselves in position to destroy the enemy while at the same time avoiding too great a risk of deadly consequences to themselves. SOF use all available means to accomplish mission objectives without unacceptable risk by using assets in unexpected and “creative” ways. Creativity means the ability to immediately change the combat process, altering the way in which the tension is accommodated between threatening or performing destruction and avoiding it.

At some level this may seem intuitively obvious. Sending SOF to hit a target that is beyond the reach of conventional forces does bring a threat to the enemy that the conventional forces cannot bear. But this is not about taking extra risks requiring only extra courage; in fact, it is not about taking risks at all, because objectively that would just result in more frequent failure.

Performance of a strategically important mission might justify greater risk, but the value of the creativity of SOF is that they can lower the risk associated with accomplishing strategic goals. At both the individual and organisational level, SOF overcome risks that conventional forces cannot by changing the combat process, which is made possible by greater attributes, training, and technology.

Conventional forces attempt to change the combat process as well. This is the reason for new military technologies, which may be more effective at destruction without exposing our forces to as great a risk. However, friction prevents conventional forces from changing the
SOF are organised differently, however, made possible by the different distribution of personnel. Ironically, flexibility means that a small SOF unit can have a much larger range of capabilities than even a large conventional unit as a result of the smaller range of more capable personnel. This is why modelling conventional forces on SOF will not work. But the lack of numbers is also why SOF cannot win the war by themselves, and why they cannot have the full range of overall capabilities represented by the sum of the diverse large units of the much larger conventional forces.

The range of capabilities does, however, make SOF more independent of other military forces in their operations. And flexibility is another reason why SOF have strategic value, since if the strategy changes, SOF (unlike conventional forces) can immediately be redirected.

**Operational Characteristics of SOF**

In an attempt to summarise the wide range of current and future capabilities in war and operations other than war, the individual attributes, SOF organisation and capabilities, and the fundamental qualities of SOF can be integrated as a few characteristics of SOF that distinguish them from conventional forces. The definitions of these characteristics are as follows:

- **Relative superiority:** The ability of small special operations units to gain a temporary decisive advantage, even over a larger or well-defended enemy force;
- **Certain access:** The ability to rapidly and securely transport, insert, and extract SOF, typically undetected, allowing operations in areas where or when conventional military operations are not possible;
- **Unconventional operations:** The ability to directly alter the way in which the tension between threatening and avoiding destruction is managed to conduct operations – for example, operating autonomously and independently, establishing and utilising the capabilities of foreign military and paramilitary forces, sabotage, and subversion;
- **Integrated operations:** The ability to address transnational and asymmetric threats by integrating elements of national power and operating with other military forces and non-military agencies;
- **Strategic initiative:** The ability to create and maintain initiative against an enemy at the strategic level by an orchestrated campaign of engaging carefully selected objectives unavailable to conventional forces.

**Strategic Applications of SOF**

Since SOF have fundamentally different limitations than conventional forces, due to the fundamental qualities of SOF that address the ultimate sources of friction, SOF are not merely complementary to conventional forces but can make strategic contributions of their own. What follows is an illustration of how these applications can be understood using the concepts developed.

To help understand the contribution of SOF to warfare and to national security in operations other than war, we will look at examples of the application of SOF to the principles of war when used to implement strategy. Once the war starts and we are executing strategy, plans, and tactics, the misuse of SOF can be avoided if we ask the question, How does this SOF mission contribute to applying the principles of war to implement the strategy in ways that conventional forces cannot?

**Objective**

When people think of special operations, they often think of direct action missions against high-value targets, especially targets that cannot be attacked by conventional forces. This is one of the sources of confusion about the use of SOF, because technophiles assume that all targets can (eventually) be attacked through appropriately advanced technology. Thinking about applying SOF to Objective, however, should start with the strategic objectives for which wars are fought. Conventional military forces may not provide the means to accomplish the political objectives. One of the greatest strategic contributions of SOF is that they provide unique or additional means to address these objectives. Indeed, there are some political objectives that may only be met by the use of SOF.

For example, since SOF have the characteristics of certain access, integrated operations, and relative superiority, they are capable of hostage rescue. Note that it is not hostage res-
cue, per se, that is the characteristic of SOF; whether rescuing hostages is strategically important depends on the political objectives.

As another example, the network concept is widely used in modern military thought. Enemies, including terrorists, are conceptualised as networks to provide a basis to discuss attacking them. There are at least four ways to attack a network: overwhelm the entire network; interdict critical nodes or links; establish operational superiority and interdict nodes or links when necessary or convenient; and, isolate and degrade a portion of the network to reduce its efficiency. SOF can play a strategic role in each of these potential objectives by e.g. creating strategic initiative in advance of overwhelming conventional forces; attacking critical nodes; using unconventional warfare to establish a kind of "SOF superiority" (e.g., analogous to air superiority); and, creating friction for the enemy through direct action and psychological operations.

With respect to the war on terrorism, terrorism could be viewed as an international problem to be fought through law enforcement, diplomacy, international cooperation, and foreign assistance. The role of the military is to support these activities, and SOF can contribute to most of these in operations other than war. However the fundamental purpose of the military is to support these activities, and SOF can contribute to most of these in operations other than war. However, the fundamental purpose of the military is to support these activities, and SOF can contribute to most of these in operations other than war.

Initiative is taking the fight to the enemy instead of passively waiting for the enemy to act, making the fight when and where we choose. Without the initiative, strategists can make no decisions of their own. Because of the time gap between strategic cause and effect, we must seize the initiative from the outset, forcing others to react. Seizing, retaining, and exploiting the initiative allows one to set the strategic agenda, shapes the strategic environment, forces the enemy to react to changing conditions, and provides freedom of action in formulating and adapting strategy to the evolving context. Successful special operations can seize and retain the initiative at the tactical level even when opposed by an enemy force superior in numbers.

With respect to the war on terrorism, SOF could be used to establish and maintain strategic initiative against specific terrorist enemies. For example, one of the strategic issues in the war on terrorism is that transnational terrorist organisations use ungoverned or denied areas to provide them with freedom to acquire...
resources, plan, and train. SOF can deny terrorists these sanctuaries and would force them to react to our actions, giving the US freedom to adjust operations as the situation demands. It would also interfere with the capabilities of the enemy to perform acts of terror by creating uncertainty and friction in the enemy as well as destroying or degrading terrorist capabilities and resources. Strategic initiative would also interfere with the timescale of potential terrorist attacks and divert terrorist resources away from planning and executing attacks to address their organisational security.

Mass
A critical part of succeeding at war is Mass. Being able to threaten or perform destruction against the enemy requires placing the appropriate mass of military forces (or effects, some would argue) in an effective position at the appropriate time. Since SOF are a small fraction of overall military forces, it may seem that they have no role to play in providing Mass to accomplish strategic objectives. However, the great strategic value of SOF in providing Mass is to provide somebody else’s Mass through enabling partner nations and unconventional warfare.

One of the strategic elements of the US "National Military Strategic Plan for the War on Terrorism" is to expand foreign partnerships and partnership capacity to counter terrorism. For example, in the Philippines, US special operations helped weaken the radical Islamist Abu Sayyaf Group through military training, road building, and medical aid that won popular support and led to the collection of useful new intelligence.

The use of unconventional warfare to provide Mass in defeat of an enemy in war is amply illustrated by Operation "Enduring Freedom" (OEF) in Afghanistan. In early November, 2001 Army Special Forces teams (often reinforced with Air Force Special Tactics Team members) infiltrated Afghanistan via SOF aircraft and linked up with anti-Taliban Afghan forces. These SOF teams immediately gained the confidence of the Afghans, and between the intelligence they received from the Afghans and what they were able to determine themselves, the arrival of the SOF teams produced an immediate and exponential increase in the number of Taliban targets that could be identified to conventional strike aircraft. In addition to radically increasing the effectiveness of US airpower, the unconventional warfare teams also improved the effectiveness of the Afghan anti-Taliban forces they joined.

Economy of Force
Applying the principle of economy of force may lead to the misuse of SOF, thinking that as more capable elite warriors they are just more economical conventional forces. But there are many cases where one of the strategic objectives is to minimise the presence of US forces. Then the use of SOF may make some military operations possible that otherwise would be counter-productive.

Economy of force can also refer to accomplishing strategic objectives without resorting to the use of force at all, preventing the commitment or use of large numbers of conventional forces to resolve a conflict. Many SOF activities in operations other than war fall into this category. However, recall that the value of SOF in "peacetime" is derived from their unique roles in war. And another way in which SOF can contribute to economy of force is operations against critical links or nodes, if they exist, in an enemy’s networked strategic capabilities.

Manoeuvre
SOF can contribute to Manoeuvre by strategic initiative to create the conditions that allow the movement of conventional forces to positions of advantage (e.g., by creating friction for the enemy) and by strategic reconnaissance (using certain access and unconventional operations) to reduce friction for own forces.

Unity of Command
Since SOF have the characteristics of integrated and unconventional operations, they can play a strategic role in Unity of Command of US, allied, and coalition forces. SOF can integrate the elements of national power with other US government agencies for both unilateral US and coalition operations. And for applications of the military element of national power when the US still prefers disbursement, but is willing to participate in multinational or coalition operations, SOF achieves strategic utility as a tool of US foreign policy. In this latter role, SOF contributes to keeping conflict at the low end of the spectrum.

A more visible role in achieving unity of command is in coalition operations where SOF can perform liaison functions because of their cultural and language capabilities. In Operation "Desert Storm", most of the US Special Forces personnel were assigned to the vital task of accompanying allied Arab units to ensure smooth coordination with other allied units (Arab and non-Arab).

Security
In some cases, SOF can contribute to security of the overall military effort by not putting the conventional forces at risk to accomplish a strategic objective. In other cases, SOF can perform operations specifically to provide strategic security for the overall force. Two examples of the latter are the elimination of Hitler’s atomic bomb project in WW2 and SCUD hunting in "Desert Storm".

Surprise
Another way in which SOF can make a strategic contribution is to contribute to surprise in the operations of the overall military campaign. A widely cited example of deception operations during "Desert Storm" was the potential amphibious landing in Kuwait to hold Iraqi forces in place while US and allied ground forces prepared for the "end run" to the west. The most suitable beach for an amphibious landing was apparently also heavily defended by the Iraqis. The night of the start of the overall ground offensive, 15 US Navy SEALs each placed 20 pounds of C-4 explosives along the beach to simulate demolition charges that would be used to clear obstacles for an amphibious landing, and also anchored two rows of blue-and-white buoys to simulate marking lanes for Marine landing craft. When the charges detonated, elements of two Iraqi divisions reacted and moved to face the perceived imminent landing.

Simplicity
The use of SOF may be the simplest way to accomplish a strategic objective. Thus for instance the case with combat search and rescue (CSAR) missions to recover downed pilots from enemy-held or hostile territory, which is increasingly regarded as a major political objective.

Synthesis
A theory of special operations can be stated concisely: special operations are missions to accomplish strategic objectives where the use of conventional forces would create unacceptable risks due to Clausewitzian friction. Overcoming these risks requires special operations forces that directly address the ultimate sources of friction through qualities that are the result of the distribution of the attributes of SOF personnel.