

## From the editors

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This edition of *Scientia Militaria*, South African Journal of Military Studies, brings three very particular themes together: history, contemporary military operations, and military technology. From a historical perspective, the focus is on the Anglo-Boer War. The two articles on the contemporary use of force places the emphasis on Iraq and Somalia. The 2003 Iraqi War is used as a case study in the analysis of ‘civil war’ as a concept. The article on Somalia addresses the need for military intervention. The underlying argument is that military intervention can be successful in bringing about the change that is required in that war-torn region of the world. The technology related articles highlight the role of information warfare and weapons assignment in air defence.

The articles by André Wessels and Johan Wassermann really complement one another. The article by André Wessels provides a broad overview of the insurgency strategy of the Boers and the counterinsurgency strategy of the British in the Anglo-Boer War of 1899 to 1902. Wassermann’s article, in contrast, is an interesting case study of how those strategies play itself out in the borderlands of the Transvaal and Zululand. His article is an interesting analysis of the role of local factors such as geography and demography in the implementation of the Boer insurgency and British counterinsurgency strategy in a particular region. In the process, Wassermann provides an interesting ‘bottom-up’ view of the war in the borderlands of the Transvaal and Zululand with an outline of how the war centred, for the bigger part, on issues such as the raiding of livestock as well as attacks and raids on homesteads, farms, isolated shops and outlying military and government posts.

The article by Wessels, though, not only outlines the nature of the guerrilla warfare that was waged by the Boers. It also offers some interesting insights into the role and thinking of prominent Boer strategists such as De Wet, De la Rey and Botha. From a British perspective, the article examines the typical counterinsurgency measures that were implemented during the war and, which, eventually, became well-known in the many counterinsurgency wars of the 20<sup>th</sup> century. More than a century later, many of these countermeasures, though in a very refined format, were once again implemented in the counterinsurgencies in Afghanistan and Iraq.

Craig Bailie uses a social constructivist explanation to examine the Iraqi War as a so-called “civil war”. He specifically challenged the idea that “civil wars” have increased in frequency and intensity. Bailie emphasized that the same term (i.e. civil war) has come to be used to classify intra-state conflicts that are understood to be different from each other by their nature. Thus, the perception has been created that “civil wars” have been on the increase while also changing their nature, when in fact, it is the conceptual understanding of “civil war” that has changed. He pointed out that “... it is because [civil war] is in fact a migratory term that there was not only conflict in Iraq, but also a contest over how that conflict was to be classified.” The author concludes that “civil war” as a concept that is conceived outside of the realist paradigm and within the constructivist mindset does not articulate clearly defined criteria to the extent found in the realist definition. Whereas in the realist tradition the classification of a conflict as a “civil war” would have been based on clearly articulated and definitive realist criteria, the term now seems to have become more open-ended and less restrictive in its classification to the degree that “Quite often what constitutes civil war is in the eye of the beholder.”

In his article on the war in Somalia, John Stupart argues that the opinion of military intervention may be just, feasible and legitimate if it is employed through the right channels and within the right strategic framework. He specifically points out that such an intervention need not necessarily result in another Blackhawk Down syndrome. The author is convinced that military intervention in Somalia can be achieved. Such intervention, the author argues is completely within the bounds of moral justification for the deployment of forces; enables the kind of humanitarian assistance so crucial for securing the failed state; provides a framework for eventual elections processes; de-escalates tensions with neighbouring states such as Ethiopia and Eritrea; and solves the piracy problem in the Gulf of Aden.

In their article on the application of reinforced learning to solve the weapon assignment problem in the air defence domain, Hildegarde Mouton, Jan Roodt, and Herman le Roux used two methods from the machine-learning subfield of reinforcement learning (RL), namely a Monte Carlo (MC) control algorithm with exploring (MCES), and an off-policy temporal-difference (TD) learning-control algorithm, *Q*-learning to search for an optimal shooting order. Though a greedy approach was taken in the *Q*-learning algorithm, experimentation showed that the MCES-control algorithm still performed significantly better than the *Q*-learning algorithm, even though it was slower. They conclude that RL, especially the MCES algorithm, is a promising field to consider in the solving of the weapon assignment problem. It is argued that combining these techniques with other techniques in AI

and modern computational techniques may hold the key to solving some of the problems now faced in warfare.

Brett van Niekerk and Manoj Maharaj chart the relevance of information warfare models to critical infrastructure protection in their article. The authors argue that most information warfare concepts may be used to attack all critical infrastructure sectors by various methods, and that these concepts do not necessarily rely on the conventional cyber attacks. It is also pointed out that the concepts of information security may be applied to all critical infrastructure sectors in order to protect them and, thus, to assure the availability and integrity of the infrastructure. The primary concern, though, is the reliance of society on information networks and the possible effects of a cyber-based attack.

The editors

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