



# Translational Research

at the USMC Center for Advanced Operational Culture Learning

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## Geography and the Marine Corps at the Strategic, Operational and Tactical Levels

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In his 2010 planning guidance, the 35th Commandant sees a world in which the Marines are forward deployed and forward engaged in an increasingly complex security environment characterized by numerous inter-linked drivers of instability, including poverty, competition for resources, urbanization, overpopulation and a growing youthful demographic [1]. Accordingly, the Commandant recognizes the growing demand for irregular warfare capabilities and prioritizes better educating and training the Corps to succeed in distributed operations and increasingly complex environments [2]. In line with this priority, geographic approaches to understanding the changing security environment, as well as the people and places where Marines deploy, are of significant operational value.

Geography has a long disciplinary history of association with the military. For example, during the First World War European and U.S. geographic societies generated large amounts of new cartographic information for their national intelligence services. In addition, leading geographers were involved in drawing the post war map of Europe and in advising their respective governments on post war national policy [3]. More recently the sub discipline of military geography has developed to study the impact of geographic factors on the planning, conduct and outcomes of military operations at the tactical, operational and strategic levels. What then is geography and how is it relevant to the Marine Corps?

- **Geography is a holistic discipline that focuses on interaction between humans and the physical environment.** The term “humans” encompasses people and all the human factors that influence how a person or group of people acts in a particular situation, e.g. political, economic, social, cultural and historic factors.
- **This human-environment interaction is a two way process.**

### Research Notes

#### CAOCL Bids Farewell to Dr. Larissa Krex-Brinkmann

Dr. Larissa Krex-Brinkmann joined CAOCL in September 2010 as a German Armed Forces Research Fellow through the U.S. and German Militaries' Engineer and Scientist Exchange Program. Dr. Krex-Brinkmann, a trained psychologist, has many years of experience in Defense manpower, selection, and assessment. During her one year exchange, Dr. Krex-Brinkmann is conducting a literature review of German and English language resources on the trainability of general culture-related capabilities in military domains. CAOCL is partnering with the Army Research Institute (ARI) to host Dr. Krex-Brinkmann, and in January she transitions to ARI to continue her work.

#### CAOCL Disclaimer

The opinions and conclusions expressed herein are those of the individual author and do not necessarily represent the views of either CAOCL or any other governmental agency. Any references to this newsletter should include the foregoing statement.

- **Humans change the physical environment** in which they live by, for example, building houses and infrastructure and using resources to make a living;
- At the same time, **the environment provides opportunities for human activity** and places certain limits on what is and is not possible for a group of people.

**Geographers study the outcomes of human-environment interaction.** A geographic approach can be used to help analyze the current and future security environment faced by the Marine Corps at the strategic, operational and tactical levels:

1. **Strategic Level – Recognizing Significant Spatial Patterns:** Geographers analyze the way in which human-environment interaction produces spatial patterns in the arrangement of people, places and activities at different scales from the global to the local. Spatial analysis of the drivers of instability, such as resource scarcity, lack of jobs and particular belief systems, can help Marines better understand where conflicts are most likely to occur and how to most effectively focus resources. For example, in certain parts of Southeast Asia, livelihoods are threatened by human and environmental pressures on coastal resources including fish stocks and coral reefs [4]. Understanding where the pressures are greatest coupled with a spatial analysis of alternative job/resource prospects, demographic characteristics and the extent of support for anti-western or anti-government belief systems can provide an important indication of which geographic areas are most vulnerable to instability and conflict.

2. **Strategic/Operational Level - Understanding Regions:** A region is both a unit of analysis and a geographic area with distinctive combinations of human-environment features. Within a region, the people, activities and environment display certain regularities that result from a unique combination of social relationships and physical processes [5]. Understanding these similarities can help Marines better understand a large scale theater of operations as well as a smaller scale area of operations (AO).

Geographers identify three types of region: formal, functional and vernacular [6]. **A formal region** – such as Afghanistan or the Hindu Kush – has clear, officially accepted boundaries, and is an area with one or more common characteristics, such as climate type, vegetation, terrain, religion and/or dominant economic activity. Identifying and mapping formal regions can help Marines explain broad global or national scale spatial patterns including variations in belief systems, government types and levels of poverty.

**A functional region** is a geographic area organized around a nodal point. The characteristic chosen to define a functional region – such as the power of a local authority figure – dominates at a central node and diminishes in importance outward in relation to distance and the presence (or absence) of various social, cultural and environmental obstacles [7]. Marines can use functional regions to help understand spatial patterns in human behavior. For example, insurgent activity or the presence of certain pro- or anti-American propaganda in one community versus another can be explained through a geographic understanding of the distribution of power.

**A vernacular region** is a place people believe exists as part of their cultural identity. Vernacular regions typically do not have any mutually agreed upon boundaries, but emerge from people's sense of place [8]. A well-known example within the U.S. is 'The American South'. Others include 'The Middle East', 'Kurdistan' and 'Pashtunistan', and at a local scale, 'Federal Hill', the historic Italian immigrant neighborhood in Providence, RI, and the 'East End' of London. Geographers and Marines alike can use vernacular regions to better understand people's cultural identities as well as the spatial distribution of cultural characteristics.

**3. Tactical Level - Understanding Place:** A place is a unique local scale geographic area, such as an AO, or smaller, with a distinctive combination of human-environment features. To geographers, place is important as reality on the ground, as the context in which all human activity takes place, and as a part of a person's identity. In the past places were seen as discrete and isolated. However, in the wake of globalization, places have become intimately interlinked [9]. Human-environment interactions maybe distinct

in a particular place, but their origins are not purely local. For example, local place-based insurgent activity in Afghanistan must be understood in terms of the global war on terror, regional Taliban and al Qaida activity, and the local mix of ethnic groups, as well as local and regional economic, political, military, historical, cultural and environmental factors. Geographers and Marines can use place-based analyses to explain how local and non-local processes and events inter-twine at particular locations.

## Research December News

2 December 2010

Ms. Kristin Post presented "Reflections on the Human Terrain in Helmand Province" with Captain Arthur Karell from MCU-Middle East Studies at the Smalls War Discussion Group in Quantico, VA.

8 December 2010

Dr. Larissa Krex-Brinkmann presented an in-progress briefing, "Trainability of general culture-related capabilities in military domains," to a visiting German delegation of the Federal Republic of Germany Liaison Office for Defense Materiel USA / Canada here at CAOCL.

9 & 11 December 2010

Dr. Frank Tortorello and Ms. Kristin Post led audience discussions in Baltimore, MD, on the idea of PTSD as ethical conflict following the performance of "ReEntry," a play about post deployment challenges facing Marines and their families.

15 December 2010

Dr. Kerry Fosher presented "the past, present, and future of DoD interaction with the social scientists" at a meeting of the Army's Culture and Foreign Language Advisor Program in Pensacola, FL.

15 & 16 December 2010

Dr. Frank Tortorello was an invited scholar to participate in two discussions on ethical leadership at USMC Command and Staff College in Quantico, VA.

**4. Tactical Level - Understanding Culture(s):** Geographers see culture – Marine culture, Pashtun culture, Italian-American culture, any culture - as a product of humans living in particular places over time. From a geographic perspective, culture varies across space and includes 'what people care about', i.e. their ideas, beliefs and values; and 'what people take care of', i.e. the production of material wealth – the food, clothing and shelter people need in order to survive and thrive [10]. Contemplating how culture is created and maintained, the links between culture and the environment, and the way in which culture influences how people make sense of the world, can help Marines understand (deconstruct) their own culture as well as the cultures of the people and places where they deploy. Through this process, Marines can better understand what they and others consider normal and/or important in order to improve cross-cultural communication and enhance operational effectiveness.

**5. Tactical Level - Reading the Cultural Landscape:** The Cultural Landscape is created by the shaping of the physical environment by humans. Geographers study landscape through the accurate and systematic description and questioning of visible elements associated with human occupation and the utilization of land. A careful 'reading' (or decoding) of the landscape can provide a window on the people who create it, use it and live in it [11]. Marines can learn about power structures, ethnic relations and belief systems, as well as human activity more generally by reading the landscapes in which they operate. For example, the architectural styles of

houses, religious structures and outbuildings, as well as crop types and field patterns all may indicate the ethnic composition of a village, area or section of a city; declining attention to the images of local Sufi saints on exterior walls could represent pressure from extremists; the appearance of new religious symbols could suggest religious diffusion or the arrival of new immigrant groups.

Effective cultural landscape analysis is an art that requires skill and practice. Geographers can provide guidelines and training in the skill of cultural landscape interpretation. In addition, teaching the observation skills required for effective cultural landscape interpretation would reinforce Marine Corps Combat Hunter, Attack the Network, Combat Policing and Military Operations on Urban Terrain (MOUT) training.

**A geographic understanding of the outcomes of human environment interaction supports Center for Advanced Operational Culture Learning (CAOCL)'s mission** to ensure the Marine Corps is effective at navigating and influencing culturally complex 21st Century operating environments. Several Marine Corps and other DoD organizations, such as Marine Corps Intelligence Activity, have made strides in incorporating geographic perspectives, techniques, and data into their analytic products. Social science research to support the systematic integration of operationally relevant geographic perspectives and techniques into Marine Corps training and education is one example of the type of work currently being undertaken by CAOCL's Translational Research team. The team conducts social and behavioral research focused on the transfer of knowledge and abilities to Marines.

Notes:

[1] James F. Amos, General, U.S. Marine Corps, 35th Commandant of the Marine Corps Commandant's Planning Guidance, U.S. Marine Corps (2010), p. 3.

[2] Ibid, p.8.

[3] Mike Heffernan, "Histories of Geography," in Holloway, Rice and Valentine, Key Concepts in Geography, London: Sage Publications Ltd (2003), p. 16.

[4] Laretta Burke, Elizabeth Selig, and Mark Spalding, Reefs at Risk in Southeast Asia, World Resources Institute (2002).

[5] James M. Rubenstein, The Cultural Landscape: An Introduction to Human Geography, New Jersey: Prentice Hall (2003), p. 16.

[6] Ibid.

[7] Ibid, p. 17.

[8] Ibid, p. 18.

[9] Noel Castree, "Place Connections and Boundaries in an Interdependent World," in Holloway, Rice and Valentine, Key Concepts in Geography, London: Sage Publications Ltd. (2003), pp. 174-175.

[10] James M. Rubenstein, The Cultural Landscape: An Introduction to Human Geography, New Jersey: Prentice Hall (2003), p. 19.

[11] D.W. Meinig, Ed., The Interpretation of Ordinary Landscapes: Geographical Essays, Oxford: Oxford University Press (1979).

## Translational Research at USMC's Center for Advanced Operational Culture Learning

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