The University Consortium for Geographic Information Science

Research Priorities

GEOSLAVERY: A NEW ETHICAL DILEMMA FOR GEOGRAPHIC INFORMATION SCIENCE

THE PRIORITY

Geographic information systems (GIS) technologies, including Location Based Services (LBS) continuously fed by earth coordinate data streams derived from the Global Positioning System (GPS), have given rise to new consumer products advertised for tracking humans as well as animals and goods. As a result, society must contemplate a new form of human slavery characterized by location control.

DESCRIPTION OF RESEARCH CHALLENGE

Geoslavery is defined here as a practice in which one entity, the master, coercively or surreptitiously monitors and exerts control over the physical location of another individual, the slave. Inherent in this concept is the potential for a master to routinely control time, location, speed, and direction for each and every movement of the slave or, indeed, of many slaves simultaneously. Enhanced surveillance and control may be attained through complementary monitoring of functional indicators such as body temperature, heart rate, and perspiration.

Products currently for sale can be used to enforce almost any spatial or temporal constraint that the master is willing to impose on the slave. Similarly restrictive incarceration in a cell, cage, or shackle generally would require some type of legal and/or medical review, but similar protections have not yet developed for electronic forms of incarceration.

Geoslavery is an emerging human rights issue, especially a women's rights issue. LBS will support and amplify some of the more extreme tendencies of human nature. Parents who choose to protect their children through surveillance and location control now may do so in the extreme. Tyrants who choose to dominate their subjects, husbands and wives who choose to dominate their spouses, and employers who choose to dominate their employees now may do so in the extreme. Many of these choices will be considered legitimate in one culture and not in another.

The challenge is to develop culturally sensitive, cost effective, and technologically feasible safeguards that simultaneously permit legitimate uses

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while preventing misuses. The role of UCGIS, the American Geographical Society, and other interested scholarly organizations is to foster an informed societal debate on the benefits and risks of LBS technology, specifically addressing the prospects of geoslavery.

Importance of Research Challenge

The countless benefits of LBS are countered by social hazards unparalleled in human history. While geoslavery may be practiced by governments, the greater risk likely will be individuals controlling other individuals, much like the practice of slavery in previous centuries.

Eminent Research Questions

What are the likely uses and misuses of human tracking systems? How can LBS, GPS, and cellphone technologies be modified to ensure socially acceptable use? What new laws and international agreements are needed? What new institutions or enhancements to existing institutions are needed to constrain those who would be masters and protect those destined to become slaves? Who are the masters and slaves likely to be? What are the social and professional responsibilities of geographic information scientists, developers, marketers, and sellers of LBS technology?

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