Chapter Eleven

Privacy and EO: An Overview of Legal Issues

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I. Introduction

Vignette 1
In the state of New South Wales, Australia, authorities successfully prosecuted and fined a company for clearing land illegally after analyzing satellite imagery. The company had cleared land for a golf course without permission. The company claimed that it did not know that permission was needed. After an eight day trial, the company was convicted, fined and ordered to pay costs.¹

Vignette 2
The intervention of the Rajasthan High Court was unable to save protected water bodies from encroachment. Court orders preventing the construction around lakes in Udaipur had been violated. These violations have shown up on satellite images obtained by the State Remote Sensing Application Centre, Jodhpur.²

Vignette 3
The presenter of the television series Mythbusters, Adam Savage, took a photograph of his vehicle using a smart-phone and posted the image on a Twitter account with the phrase “Off to work”. The image contained

metadata which reveals the exact geographic location of the photograph, the make of the vehicle and the time he leaves for work.3

These three vignettes serve to provide the backcloth to a discussion of images and privacy issues. It appears that this is Jeremy Bentham’s panopticon of an invisible omniscience revisited; much like some of the predictions from George Orwell’s novel “Nineteen Eighty-Four” and the fictional character “Big Brother.” In Bentham’s panopticon, prisons were designed so that individual prisoners could be under observation at any point in time, although individual prisoners would not know whether or not this was in fact the case.4 In the Orwellian scenario, everyone is under complete surveillance by the authorities with the reminder that Big Brother is constantly on the watch.

Earth observation (EO) satellite cameras and sensors capture everything in its wake as the vehicle circles the globe. Advertent or otherwise, all activities on the ground are captured on a regular and cyclical basis. When analysed and coupled with other spatial and thematic information, the images assume a whole new aura and richness. In future, the technology may become so sophisticated that facial recognition may become possible. In all these instances, the constant reminder at the back of many people’s minds is the loss of ‘privacy,’ however one conceives of it. Whereas in the past, invasion of privacy required the physical crossing of social and property boundaries, with the advent of Outer Space technology, there may be no such need. This raises the question: at what point does the aggregation of spatially enabled data encroach on our privacy interests, and who decides this?

This paper presents an overview of the legal issues pertaining to privacy and high resolution imaging obtained from EO platforms. There is a great deal of uncertainty about the parameters and boundaries of privacy law generated by images from EO satellites. Until there is more certainty regarding their use as evidence, lawyers and custodians (that is, those who exert proprietary rights over the satellite images) could stifle the market for EO products. Developments in EO technologies as tools for both monitoring and enforcement might not proceed as rapidly as expected.

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3 See New York Times report at http://nyti.ms/917hRh. Metadata is data about data.