

Forecast: The popularity of geospatial information and hardware will usher-in a next generation of privacy concerns

Thu, 01/10/2008 - 2:33pm — Paul Torrens

# Description:

Bruce Sterling refers to the phenomenon of "spimes" [1], rebranding what geographers have studied for hundreds of years, chiefly the positioning and movement of things in space and time [2, 3]. His attention is not without merit; indeed, the whole-hearted commodification of positioning technologies (and a sudden and sharp drop in their cost to the consumer and hardware manufacturers), coupled with a surge in the volume of devices and data-streams that report or infer your position and the location of your things, has ushered in a new age for spatial analysis. And maybe it does warrant a new moniker.

Where you are, where you go, where you have been, where you should be expected and are, where you were expected but not found, what and who you are near, have all become newly valuable line-items for advertisers, market researchers, insurance companies, and many others. Increasingly, space has become a valuable tool with which people, things, and transactions can be tagged, sorted, classified, and processed, to the benefit of an ever-expanding array of tasks and business models.

## Automated place- and space-based profiling will create a next generation of redlining

Who controls access to these data and the uses to which they are put will be of significant concern in the near-future, particularly as locative technologies grow ever-more pervasive and succumb to function creep. While already in use for trucking commerce, parents may red-line their kids' mobility (and their cars) within fixed spatial limits, for example. Notification and tell-tale systems are easily configured based on GPS records. (See GPS Nanny and "Tracking the world", for example.)

#### Citizens will demand more safeguards on their geographic information

Perhaps tangentially, new cultures may emerge around safeguarding access to one's spatial information. The first shifts toward such a culture have already begun in the celebrity community, with many stars objecting to public dissemination of aerial photography of their properties, easily accessible through browser-based maps (and location details by means of geo-referencing of those images to base maps). As with other personal information, some people will always be willing to sell these data, or yield access to them in return for perks. Pay-as-you-drive insurance is just one example.

#### Critical or commercial territories will be managed and mediated as codes-spaces

New ontologies and heuristics will emerge to automate the tagging of people and things in space, sort them, query them, run queries and operations over them, authenticate access and legitimize position in space and time, and produce zonal geographies [4, 5, 6].

### Sensor networks and alternative positioning technologies will become increasingly prominent

Expect soft location technologies (Wi-Fi, cell towers and hand-sets, Bluetooth) to take on new roles as alternative positioning systems as they start to converge in space and ubiquity, with the potential to serve as impromptu sensor networks. Regulation of such devices, many of which are now relatively free from oversight, may follow suit.

#### References

- [1] Sterling, Bruce (2004). "When Blobjects Rule the Earth", SIGGRAPH, Los Angeles, August, 2004.
- [2] Sterling, Bruce (2005). Shaping Things. Cambridge, MA: MIT Press.
- [3] See Hägerstrand, T. (1982). "Diorama, path and project". Tijdschrift voor Economische en Sociale



1 of 2 12/28/2008 1:16 PM

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- [4] Dodge, M., and R. M. Kitchin (2004). "Codes of life: identification codes and the machine-readable world". Environment and Planning D 23 (6):851–881
- [5] Thrift, N., and S. French (2002). "The automatic production of space". Transactions of the Institute of British Geographers NS27: 309-335.
- [6] Graham, S. (2005). "Software-sorted geographies." Progress in Human Geography 29 (5):562-580.

## Signals:

Bruce Sterling SIGGRAPH 2004 speech "When Blobjects Rule the Earth" Codes of life: identification codes and the machine-readable world Software-sorted geographies

# How important is this? How much attention should we pay to it?:

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## Comments

## Shaping Things is also excellent

Sterling's short book on spimes and their implications, Shaping Things (MIT Press, 2005 or so?) is an excellent read.

Thu, 02/07/2008 - 11:32am — Alex Soojung-Ki..



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2 of 2 12/28/2008 1:16 PM