

## Guest Editorial

# Professor McNoleg's A—to—Z of Useful GIScience Terms (A Refreshingly Non-glossy and Inexpensive Glossary)

The technical terms and acronyms used in GIS can be very confusing to the lay-person or young researcher (see McNoleg 1996 for more details as to why). Knowledge is power, as they say, so with the aim of adding yet more confusion into this arena (McNoleg 1998), the following definitions are cheerfully offered. Try them out on your significant other, parents, colleagues, dean; you will find they greatly increase your credibility and mystique.

**A is for Agent Based Models:** Bafflingly multifarious simulation environments to help justify your favourite ideas regarding how dynamic systems behave. Guaranteed non-repeatability makes it impossible for others to challenge your findings.

**B is for Buffering while Blustering:** A useful strategy in public participation GIS to ensure that nobody tries to site a toxic waste dump or highway close to your house. Similar territory protection behaviour can often be observed in research meetings too!

**C is for Cartography\*:** Advanced colouring in<sup>1</sup>.

**D is for Digitizing:** Rather like the acts of physical asceticism performed by some religious orders, digitizing illustrates one's zeal and commitment to a particular geographical problem or region. However, it rarely seems to result in enlightenment. The practice of using digitizing as a punishment for poor academic performance is now outlawed by international treaty.

**E is for Economic Geography:** Dean-speak for geography departments which stay within budget and teach a lot of first year, general education courses.

**F is for Fuzzy Maps:** A kind of folk-art cartography, making charts from pieces of felt. This provides a centring, tactile dimension that soothes the overwrought map-reader.

**G is for Geocomputation:** The application of impossibly sophisticated methods to fiendishly complex datasets by hopelessly optimistic researchers (see McNoleg 2004 for more details).

**H is for Human Geographers:** Some animals can navigate with precision over a range of thousands of miles, whereas many humans lose their car in a small parking lot.

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Strange then, that humans try so hard to be geographers; non-humans might do a better job.

**I is for Image Analysis:** Are you cool? Do people like you? We can help you find out!

**J is for Journals (Geographic):** Historically, journals are containers for ideas considered too unfathomable or inconsequential to be of practical use, so they are collected up and removed as far as possible from the general public. That GIScientists take this responsibility seriously shows that – common opinion notwithstanding – their first concern truly is with the well-being of society.

**K is for Kriging:** A spatial interpolation method, akin to estimating the colour of somebody's underwear by spying on their neighbour's washing line<sup>2</sup>.

**L is for Location-Aware Technology:** A secret government conspiracy to replace geographers with cell-phones and PDAs.

**M is for Monte-Carlo Simulation:** The city of Monte-Carlo (being in a principality of less than 2 km<sup>2</sup> but with a high population density) was the first to place all of its demographic and boundary data into the public domain, so that scientists could help predict future population growth. Simulation experiments of this region became popular amongst geographers with little money for purchasing datasets, and have since become a *de facto* standard.

**N is for NCGIA:** In terms of the U.S. National Science Foundation's budget for GIScience research, the National Center that Got It All.

**O is for Overlay Analysis:** The study of that which is on top of the carpet.

**P is for Physical Geographers:** The ones that like to shake hands and hug when you meet them at conferences.

**Q is for Qualitative Spatial Reasoning:** A seemingly infinite set of very complex logics and algebras for never knowing precisely where you are.

**R is for Remote Sensing:** Astronomy in the wrong direction\*.

**S is for Spatial Statistics:** True alchemy that turns ordinary data into elegant spatial patterns. Its practitioners belong to a secret society with only seven members at any given time who actually understand its mysteries (the 'Priory of Semi-Varion'), and have sworn to carry them to their grave. The articles they write are therefore designed to obfuscate, not elucidate. (Explains a lot, doesn't it?)

**T is for Topology** (from the Greek: *Topol-ogy*): The study of a famous Middle-Eastern actor.

**U is for UCGIS:** In the USA, the University Consortium for Getting In Step or, when bemoaning a collective lack of GIScience research funding, the University Consortium for Grouching In Symphony.

**V is for (Geo-)Visualization:** The recycling of surplus numbers into abstract art.

**W is for World, the:** A large, overly-complex, multi-scale, 4-dimensional system, believed to exist only by some crackpot field geographers.

**X is for x-Coordinate:** Half of knowing where you are, which is about as much as many of us ever know.

**Y is for y-Coordinate:** The other half of knowing where you are. Alas, X', Y' is where you are meant to be.

**Z is for Z-ordering:** The temporal arrangement of different types of brain activity during sleep.

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### Author's Note:

Many of these definitions were inspired by interactions within the GIScience community and experiences in the classroom. The Kriging definition is not original, but I cannot for the life of me remember who I heard it from. The starred definitions come from participants at the Sixth Australasian Remote Sensing Conference. The visualization definition is from an idea by a colleague that seems to have developed some traction recently (see some stunning examples at: <http://www.visualcomplexity.com/vc/>).

### Notes

- 1 This quote was originally applied to remote sensing, and indeed it describes it well. But I needed a definition for 'C'.
- 2 I have heard this said, but do not know who first coined the phrase. If any reader can attribute this worthy insight, please let me know . . . see contact details above.

### References

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