Two Point Nil

Suddenly it was there: the term 2.0. Since GIM December 2007 you may have frequently encountered it in this journal, usually preceded by some prefix: Web 2.0, GeoWeb 2.0, Navigation 2.0, Geomatics 2.0 or Disaster Mapping 2.0. 'Two' in 2.0 presumes the existence of one. The early web was predominantly one-directional, enabling many to access the contents of sites the monolithic content of which were solely determined and maintained by the owner. Web 2.0 allows everybody to contribute to web content, extending the way of communication from one- to two-directional. For example, there exist numerous free online diaries where travellers may post blogs, or web-based journals, as many and as often they want. One can join for free, and setting up a site takes a few minutes, while the only requirement is having an email address. Web 2.0 enables collaboration as never before; one can instantaneously collect, disseminate and share information. People in need of geo-information can choose from a plethora of sources: Google Earth, OpenStreetMap and Bing Maps being the most obvious examples. But individuals can also add information themselves, such as GPS tracks and georeferenced photographs.

Web 2.0 and GeoWeb 2.0 make real the dream of a new era of mapmaking. In particular, GNSS in combination with GIS, wireless communication and internet has revolutionised the way geo-information is collected and used. New media technologies may change laymen into voluntary collaborators. In the aftermath of a disaster, various stakeholders can collaborate with each other and interact with those affected to improve rescue and relief activities. In the urban environment, infrastructure planners and maintenance crews can benefit instantaneously and en route from geo-data delivered by civilians via the web. The new technologies also enable augmentation of Location Based Services in the ever increasing need for navigational assistance in urban conglomerates. People may add their navigational experience to help others find their path to, for example, an Italian restaurant, and provide appraisal of location and food. In such applications it is not algorithms running on computers that guide individuals and groups from point A to point B, but the real-life experience of flesh-and-blood beings.

The latter immediately demonstrates one of the snags of bi-directional communication with low thresholds: the introduction of an uncontrolled level of subjectivity and unreliability. More information is needed and can be produced by exploitation of potentially over six billions sensors: the number of people living on this planet. But expert knowledge and procedures are required to guarantee a minimum level of quality. How to avoid hard disks filled with trash, how purge them of nonsense and blunders, how warrant the same standards as those provided by professionals? The stumbling blocks to this are presented not by technology but, as usual, by the data; and more specifically by its inherently erroneous nature, a feature common to any product of human activity.

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