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The Next Surveying Take-Over

Holger Magel, in the December 2004 issue, suggests that surveyors would make good urban planners if they only took a year's worth of courses in that subject. He suggests this because, he argues, "their (the surveyors') traditional market has long disintegrated". This came to me as what I would like to call "the second shock".

Back in the early seventies, a surveyor told me that surveying as an academic discipline was in trouble because all surveying issues had been thoroughly and completely researched. I had difficulties believing this and wondered what surveyors would do to maintain their discipline. I was soon to find out: In the middle of the seventies, surveying departments actively incorporated GIS into their teaching and research agenda. They also delivered official definitions of GIS at a national and international level. Think about it: he who first defines an idea owns the idea. Could come from the Patent Office. Surveyors went even further and gave the field a new name. And in many countries, having the more potent connections to government offices, they controlled who could be hired as GIS expert. Geographers, for example, have to prove what they know about GIS, the surveyors don't, because they are professionals. And now this: surveyors want to get into planning. Here is what Magel says about this (GeoInformatics, Dec. 2004, p 11): "What I want to say is this: the new tool GIS offers many surveyors the chance, on the basis of an acquired and reliable competence in spatial planning, to develop from being (only) a provider of data and information to becoming a shaper of decision making and development processes in the field of town and country planning. The current depression in the surveyors' traditional work market calls for urgent action." So he suggests to study a little bit of planning (the Germans have a term for this: "narrow gauge planner"), then use a tool from another discipline (GIS) and voila - they are ready to push aside another discipline. Is that fair? Why not downsizing surveying at the universities and suggest to applicants to study planning? But I have another idea: Surveyors are the guardians of accuracy, one of the most misunderstood concepts in the spatial sciences. Yet, they have not made an effort to make themselves understood by the general public or at least the rest of the spatial sciences. Why not grow beyond "being (only) a provider of data" to becoming "the arbitrator of data", "the judge of accurate data"? That would give the professors something

to research and the students something to work. A warning is in order, though: It isn't that easy to teach others what you have practiced for decades because you have to explain it much better than is necessary for your own people. There are concepts necessary that the surveyors aren't that familiar with, I believe. Accuracy as a relative term, the relationship of accuracy to scale, conceptual accuracy versus instrumental accuracy, these are all things that have to be understood first. Furthermore, accuracy is not just a technical issue but it reaches into philosophical and social spheres. I am sure few surveyors could offer an elevator definition of accuracy, where everything becomes clear in less than a minute. These issues have to be researched before you can write the books "Foundations of Accuracy", but also "Accuracy for Dummies." Back in the late fifties of the last century, I studied at the Technical University of Munich, Magel's university. The surveyors always looked down on us because we weren't engineers, only geographers. I should have asked them to define accuracy and then relish in their stunned faces.