Human Geodesy – Shaping a New Science and Profession for the World of Tomorrow

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SUMMARY

This article defines the framework and the basic questions for a new science and profession, human geodesy. Similar to the ‘human’ counterparts of physical geography, physical ecology, cultural anthropology and technical informatics or information sciences, mathematical and physical geodesy needs a ‘human’ equivalent. The article advocates that there is a need for human geodesy in order to specifically formulate new concepts and basic paradigms on why and how people divide the earth, the land and the real estate. Society needs such a trans-discipline because current disciplines are fragmented and often contrasting, which in the professional practice results in counter-productive effects. Moreover, societies are changing in their priorities and views on land and real estate. The main aim is to derive principles of human geodesy. The starting assumption was that it should be possible to derive generic elements and a comprehensive framework with specific research goals based on personal experiences, stories and collected insights and perspectives over the past 25 years. A number of distinctive aspects of what could be human geodesy are first derived using a 3 vignettes describing personal experience where a distinctive science would have been useful. Then, the contours of the human geodesy science are specified using both a more pragmatic method of relying on Aristotle questions followed by a more rigorous description using basic descriptors of what a science is (using ontology, epistemology, axiology and methodology). The final conclusion section provides a definition of human geodesy and an outlook of how and where human geodesy could be utilized.