GEOINFORMATION: A SOCIAL ISSUE

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Considering the professional experiences of the authors in the field of cartography, remote sensing, GIS and spatial analysis, this article intended to raise a discussion and to highlight some significant applications on the relations between geoinformation, citizenship and social participation in educational processes and urban and regional planning. From a theoretical standpoint, it starts with the understanding that the geographical space is information and its representations, by means of maps and GIS, are extremely useful for spatial analysis and as an important support of educational and planned actions. It is also considered that the advancements of scientific knowledge and technological developments on cartography, GIS, and in the informational networks systems are on the basis of the intense diffusion process of acquaintance in Brazil, occurred mainly in the years 1990 and 2000. But digital inclusion issue is not dissociated from the possibility of a more conscious appropriation of technological and informational resources available today. We still go through the first steps towards the path of awareness about the place where one lives and about the more favorable social interactions that lead to a full citizenship exercise. In this context, education and planned actions for social development are closely related to the conscious use of geoinformation modern technology. The introduction of GIS in education and in other social interaction processes can enrich the knowledge of the world and contribute to effective political participation and social transformation. In reference to Brazilian social and spatial reality, another objective of this paper is to point out theoretical considerations that are on the way of distinguishing between some methodological applications and significant projects that are being developed, to illustrate the general relationship between the use of new technologies and education, and also between socialization of information, citizenship and social participation.

Among these, the educational projects GEODEN (Digital Geotechnology in Education) and GEOIDEA (Geotechnology as a tool for Environmental Education and Digital Inclusion), in digital medias, are highlighted with approaches for primary and secondary schools and teacher training, and also other projects and applications, developed at the National Institute for Space Research (INPE), one of the pioneering institutions in the generation and use of geotechnology and geoinformation in Brazil. From this brief overview, some emphasis was placed on social cartography research line. It is important to note that if there are serious limitations to the widespread use of geotechnology, there is a consensus on its strategic potential for knowledge and territorial control, the policy-making and management processes and social participation.

If in the '90s these technological resources for organization, production and information transmission were helpful to a few social workers, today they are potentially powerful tools for resizing the social and political spheres in the perspective of constructing a more egalitarian and humane society. The information mobilization enabled by the use of these resources can encourage new ways of knowledge and action, consolidate interactive practices and generate political power and, thus, become a key ingredient to social distance reduction, yet so large in our society. Also in the field of geotechnologies, some innovations for data distribution and visualization, products generation and presentation, such as free and open source softwares, represent, for example, a major advantage in the development of applications for a large part of society, since they allow the reduction of final cost and wider dissemination of spatial information.

The interferences caused by these and other technological innovations go beyond the processes of information transmission and acquisition, they can disseminate new concepts and support the exploration of new ideas, enhance interdisciplinarity and new knowledge integration (community organizations, for example), help in the process of social interaction, positioning and decision for citizen action, that is, they can provide another cartography, the social cartography.