

Curriculum vitae of Emanuela Casti

Since 2001 I have been Full Professor Chair of Geography at the University of Bergamo (Department of Foreign Languages, Literatures and Cultures), where I am director of Centro Studi sul Territorio and chief of DiathesisLab (www.unibg.it/diathesis).

Biography

Having graduated at the University of Padua with a thesis on the historical evolution of cartography in Mantua, professor Casti started her academic research in 1983, when she was appointed researcher at the same university. Casti became an associate professor at the University of Bergamo in 1992 and full professor in 2001. She also taught courses, lectures and seminars at other academic institutions both in Italy (University of Turin) and abroad (EPFL - École Polytechnique Fédérale de Lausanne, Parigi VII - Paris- Diderot).

Since the date of its foundation until it was officially terminated in 2012, professor Casti was a member of the Academic Board (Collegio dei Docenti) for the PhD program on “Geografia dello sviluppo e delle dinamiche urbano-regionali” (Geography of development and of urban-regional dynamics). She has been involved in research groups both at the national level (with active links to the Italian journal *Terra d’Africa*) and internationally (within the Eidolon network). Casti is also a member of many leading Italian societies (AGeI, SGI, RGI, AIIGI) and international workgroups (UGI, ICA).

After starting her career as a specialist on Venetian historical cartography, Casti has widened the scope of her research to embrace various historical periods. She has extensively analyzed the role of maps in the Italian region of Lombardy in the Renaissance and Early Modern times; addressed key issues in Italian and French colonial cartography and investigated prehistoric examples of rock-engraved mapping in Valcamonica (Camonica Valley, Italy). Far from being regarded as mere historical artifacts, these cartographic examples provided a solid background for empirical and applied analysis. On the basis of such maps, professor Casti developed her theory of cartographic semiosis. Casti has also used the same theory to shed more light on the products and the communicative and pragmatic potential of digital mapping, GIS and WebGIS, with a focus on participatory mapping in support of local governance.

Africa has long been the privileged object of professor Casti’s numerous on-site surveys, well over thirty since 1992. In this context, she conducted applied research regarding environmental protection and cooperation with countries in the developing world, working within the framework of EU programs, of the International Union for Conservation of Nature (IUCN) and of UNESCO. In particular, Casti participated in projects for the management of the buffer zones of protected areas in West Africa: i.e. the 2002-2005 collaborative project with the French CIRAD research center of Montpellier involving the W Transboundary Biosphere Reserve of Niger, Benin and Burkina Faso; and the 2006-2009 collaboration with the excellence university center 2iE- Institut International d’Ingénierie de l’Eau et de l’Environnement de Ouagadougou - Arly Protection and Conservation Unit in Burkina Faso.

Prof. Casti currently pursues her line of theoretical and applied research in the field of cartography, while also devoting herself to urban planning and territorial valorization and development. Through the creation of participatory mapping systems between 2012 and 2013, Casti led the participatory process for the application of the Italian city of Bergamo as 2019 European Capital of Culture (Bergamo Open Mapping) and, in the years 2014 to 2015, the participatory process for the revitalization of public spaces in Bergamo (BG Public Space).

In 2012, with the aim to kickstart the regeneration of territories via a tourism-based approach, Casti promoted and implemented a European network of cluster cities (comprising Bergamo, Beauvais, Cambridge, Charleroi, Girona, Lübeck, Santander); all medium-sized cities, located in urban areas, with a university and an airport served by low-cost airlines (Project entitled: Centrality of Territories, towards the regeneration of Bergamo in a European network).

Main theoretical achievements

- *The Theory of Cartographic Semiosis*

Professor Casti elaborated the theory of cartographic semiosis in 1998, when she also published her first theoretical book *L'ordine del mondo e la sua rappresentazione*, translated into English in 2000 under the title *Reality as Representation. The semiotics of cartography and the generation of meaning*. Casti's theory lies within the fold of the research area called "postmodern cartography" inaugurated by John B. Harley in 1989 and developed in the first decade of the 21st century with contributions by Emanuela Casti, Jeremy Crampton, Martin Dodge, Rob Kitchin, John Pickles, Denis Wood.

This theoretical approach provides not only the platform for an interpretation of cartographic documents, but also for actual experimenting with maps, now tailored to the changing needs of society; maps that are designed to envisage a topological space, as Casti's second theoretical book makes clear (*Cartografia critica*, translated in English as: *Reflexive Cartography*, 2015). Professor Casti explores the transition from a topographic mapping, created by government agencies, to open cartography, collaboratively produced by the people. Specifically, Casti argues that, by virtue of its highly interactive features, new digital mapping (specifically WebGIS) opens up new scenarios, and poses cybercartography as a privileged discipline for recovering and promoting the social significance of territory in all its forms (landscape and environment).

- *The SIGAP strategy and participatory mapping*

The SIGAP strategy (Geographic Information Systems for Protected Areas /Participatory Action) is a research methodology that adopts cartographic semiosis and tests its actual range of application. It takes up concepts presented by international agencies - such as "sustainability", "conservation" participation" - and turns them into operational tools for territorial and environmental planning. Tested in various national and international contexts with regard to a variety of issues (migration, environmental protection, landscape planning, tourism systems, urban regeneration, etc.), the SIGAP methodology deploys the typical range of geography-based competences in the field of applied research. As such it involves all stages of analysis: the adoption of a theory informing land methodology; interaction with local inhabitants for the reading of data; construction of interpretative models and their cartographic visualization. In each of these stages, cartography takes on different capacities depending on the goal to be pursued. In this context, it is central to use *participatory cartographic systems* able to understand the role local communities. Based on WebGIS technology, fall within the realm of "cybercartography" or "open" digital mapping systems that allow users to interact, by promoting social projects and processes (*Geomatics and Cartographic Research Centre*).

- *S-Low Tourism*

Casti uses the phrase "s-Low Tourism" to underline the absence of a clear conceptual break between the notion of *slowness* and the notion of *speed*. In fact, her acronym refers both to "slow" as a prerequisite for a mindful experience of territory, and to low-cost airlines that have revolutionized the way we think about air travel, as something different from a journey, something based on speed and safety. On the one hand, air travel has increased, is more intense, and usually covers a shorter period of time: it underlies a current lifestyle, whereby tourist destinations are no longer analyzed on the basis of conventional indicators. At the same time, though, the notion of sustainability applied to territorial planning has amply shown that tourism is a driving force for local communities, which conceive and present their own space not only as a holiday destination but as a place to be experienced in its social, cultural and environmental features. In a leap of perspective, tourism ceases to be a mere driving force for economic development and becomes an opportunity for regional regeneration, with a view to producing social development through the recovery of a sense of place, that is to say of the key value of territory.

▪ *Il metodo RIFO*

Proveniente da uno studio di monitoraggio delle aree dismesse e obsolete (edifici di edilizia pubblica costruiti tra il 1950 e il 1980) in Lombardia, il metodo poggia su tre presupposti: assume la simbiosi restituzione di suolo-rigenerazione urbana; sposta il focus della «città» da struttura territoriale a luogo di espressione dell'abitare ecologicamente; prospetta di rigenerare le aree obsolete e dismesse circolarmente, prevedendo la partecipazione degli abitanti.

Esso è rivolto operativamente, alla sostituzione delle costruzioni superate (in termini di sicurezza, risparmio energetico, nuove forme dell'abitare, servizi igienici) con nuovi edifici che soddisfino le esigenze abitative contemporanee e che nello stesso tempo restituiscano suolo consumato. RIFO prospetta lo spostamento degli abitanti che vivono negli edifici popolari obsoleti all'interno dello stesso quartiere. Tale spostamento a breve raggio mira a una *rigenerazione inclusiva* attuando una partecipazione nelle fasi della progettualità e nell'includere la presenza dell'abitante all'interno dell'intero processo di demolizione/costruzione.

The method comes from a monitoring study on disused and obsolete areas (buildings erected between 1950 and 1980) in Lombardy. It relies on three assumptions: the symbiosis between land-regeneration and urban restructuring; a shift of focus involving “cities” no longer seen as territorial structures but as sites that embody an ecological lifestyle; the prospect of circular restructuring of disused and discontinued areas, with the active participation of local inhabitants.

Operationally, this method aims at replacing outdated buildings (in terms of safety, energy saving, new forms of living, and sanitation) with new buildings that meet current living needs and at the same time reclaim wasted space. RIFO envisages a circular process of demolition and reconstruction for obsolete and disused areas, and so entails the relocation of inhabitants who live in old tenement buildings within the same district. Such short-range relocation aims at inclusive restructuring by implementing participatory strategies in the stages of planning, ensuring an active role for local inhabitants the whole process of demolition and construction.

Projects that she coordinates:

On Environmental Procetcion:

- Multimap RBT W – Réserve de la Biosphère Transfrontalière W
- Parc National d'Arly (E. Casti, S. Yonkeu, *Le Parc National d'Arly et la falaise du Gobnangou - Burkina Faso*, L'Harmattan, Parigi, 2009)
- Orobiemap

On Participatory Mapping:

- BG Open Mapping
- BG Public Space

On Urban Regeneration and land use:

- RIFO/it
- Area ex-GRES, Bergamo

On s-Low tourism:

- Centrality of territories: Towards a regeneration of Bergamo in a European network