science, there is no reference to the social construction of gender or race. The reflections presented here are in fact mainly theoretical. One of the most surprising things about the volume is that, despite the criticism of modernity and its self-referential analysis, the book does not take account of the precarious employees' perspectives, even if the authors point out the risk of continuing to misunderstand the other. By trying to get a better understanding through the contribution of the now universal sciences, it is probably possible to achieve a merely topological turn, instead of a radical one, as it would be necessary. Nonetheless, the authors, with their proposals, are certainly providing a good starting point to approach realities and problems of our contemporary societies.

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Gabriele Balbi

Le origini del telefono in Italia. Politica, economia, tecnologia, società

(The Origins of the Telephone in Italy. Politics, economics, technology, society)

Milano, Bruno Mondadori, 2011, 226 pp.

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Telecommunications are considered as the most representative infrastructure of contemporary society: they play in fact a crucial role not only in our economic system, which is characterized by an intense and continuous exchange of material and immaterial goods, but also in cultural activities and interpersonal relationships. Even if the word telecommunication can refer to a wide range of different activities that can be dated back to the first attempts to transmit information over significant

distances, the origin of modern telecommunication systems is conventionally traced back to the diffusion of the electric telegraph at the beginning of the 19th century.

Based on the results of a PhD research, the book by Gabriele Balbi deals with one of the modern and most popular telecommunication systems: the telephone network. In particular, the author focuses the analysis on the development of this medium in a specific time and in a particular geographical area, i.e. he studies the history of the telephone in Italy between the end of the 19th and the beginning of the 20th century. Balbi's historical research focuses on two major interests: on the one hand, the study tries to understand the dialectical relationship among the different social groups that had a great influence on the debate about what role the telephone should have in the process of modernisation that Italy, as the other European countries, was going through. On the other hand, the analysis helps identify some characteristics of the Italian telephone history that configure a kind of Italian style in telecommunications: the relevance of old media (electric telegraph in particular) for the new one, political uncertainties, foreign investments, difficulties in interconnecting different systems, a lively and overlooked demand.

The book is a historical reconstruction of the development of the telephone network in Italy and it has a chronological structure that starts with the first experiments of voice transmission by the new medium during the 1870s till the beginning of the First World War in 1915. Each chapter takes into consideration a small lapse of time between 1877 and 1915, which is precisely subdivided into four periods: the urban networks building during the 1880s; the nationalization attempt, the concentration process and failed building of the long-distance network during the 1890s; the nationalization process between 1903 and 1907; and the failure of public management and return to private operation between 1907 and the First World War. In the course of narration, as announced in the subtitle of the book, the author collects the different "voices" that were involved in the debate about the construction of the meaning of the new medium. Political debates, private companies interests, technical expertises and early subscribers' needs emerge clearly from the historical background Balbi reconstructs in order to contextualize the history of the telephone. The result is an original work based on an unusual methodology: in fact the author chooses three theoretical and methodological approaches. Apart from a more traditional historiographical analysis, Balbi combines the multifocal approach (Richeri, 2006), the Social Construction of Technology (SCOT) approach and studies on Large Technical Systems /Macro Système Technique. The idea of making use of concepts deriving from different theoretical perspectives could be very useful in studying

the history of telecommunication because it allows us to explore a phenomenon from different points of view and reconstruct a multifaceted history. *Le origini del telefono in Italia* is not only a political, technical or economic history of the telephone, but it gives a many-sided viewpoint of how Italian society welcomed the new medium between the eighteenth and nineteenth century.

The constructivist approach provides the author with the concept of relevant social group (Pinch, Bijker, 1984), which he uses in order to analyze relationships and conflicts between the main groups. Politicians, private companies, technicians such as electrical and telegraphic engineers and users are the four relevant social groups Balbi takes into account. They were involved in the debate about the telephone and tried to impose their own vision of the new medium. In order to show the different points of view and improve the frame of reference that creates the background of the process of co-construction of this technology, the author also uses less considered sources and some grey literature. Parliamentary debates prove to be very interesting documents not only to understand political interests, but because they show the degree of comprehension (sometimes very low!) politicians had of the medium, and to what extent the political decisions they took were often motivated by economic interests, since many politicians were also shareholders of some telephone companies. As a consequence of this

connivance between politics and economy and of a political short-sightedness, the development of the telephone network in Italy was characterized by a sort of "natural uncertainty" between public management and private operation.

Moreover, the technicians' point of view emerges principally from technical manuals and journals that show how they were the only ones who had a long-term view of the development of the telephone network and were aware of the technical gap existing between the Italian telephone infrastructure and those of the other European countries.

With regard to the early subscribers, the main sources the author utilizes to understand how they oriented the meaning of the telephone at that time were telephone books and some literature that describes common uses of the medium in everyday life situations. Telephone books turn out to be a sort of symbolic space where discussion between subscribers and telephone companies took place: on one side private companies tried to give instructions on the "correct" way to use the medium (a kind of a program of action in the terms of actor-network theory) and criticized "incorrect" utilizations; on the other side companies tried to make subscribers assume a responsibility asking them to report malfunctions of the network in order to improve it. Completely dedicated to users practices, the last chapter of the book deals with the role of subscribers in the technical and social construction

of the telephone: the author describes, indeed, how subscribers imposed many ways of use that forced changes in telephonic administration. An interesting example is the social practice called "parasitism": for a long time Italian telephones were managed with flat rates and subscribers often borrowed their telephones, sometimes in exchange for money and sometimes for free. This social practice forced major changes in rate's policies.

Balbi's research is very interesting because it shows a telecommunication system, which nowadays is considered as a taken- for-granted infrastructure, in its early phase of diffusion. He in fact highlights some steps in the process of stabilization of the telephone, emphasizing the heterogeneous pushes and pressures that contribute to the co-construction of the medium and demonstrate, with a series of examples, how often "creating an infrastructure is as much social, political, and economic work as it is theoretical" (Bowker, Star, 1999: 109). Moreover, the study here presented underlines a recent rediscovery of the origins of telecommunication systems as a new and promising area of research in media and telecommunication, and it can be an interesting reading also for those who are involved in studies on New Media.

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Mauro Turrini (ed)

Biocapitale. Vita e corpi nell'era del controllo biologico

(Biocapital. Life and bodies in the age of biological control)

2011, Ombre Corte, 175 pp.

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As Mauro Turrini notices in his introduction to this edited volume, the concept of biocapitalism has been imported only recently in the Italian debate and it has been received in its broadest sense. According to Codeluppi (2008, p. 2), for instance, "the biocapital is the most advanced evolution of the capitalist economic