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Algorithmic Prediction: a Study of its Relationship to Probabilistic and Divinatory Forms

Building on recent research on algorithmic forecasting and on my ongoing empirical project on its social consequences, my work at the Wissenschaftskolleg will focus on a theory of prediction for contemporary society. Recent techniques of prediction are radically changing the relationship with the future and with uncertainty in many areas of our society. Since the beginning of modernity, we address the indeterminacy of the open future with probabilistic tools. The new digital techniques rely on statistics, but both conceptually and practically, algorithmic prediction is very different from the probabilistic attitude and the corresponding form of rationality. I want to focus my research on this breakthrough, which has not yet been investigated in detail.

My analysis will be guided by the observation that the new techniques of algorithmic prediction surprisingly show a fascinating parallelism with the techniques investigated by studies of divination. My purpose is not to disclose the irrationality of algorithms, but on the contrary to investigate a more extensive form of rationality.

I intend to analyze in particular the following characteristics of algorithmic prediction that differentiate it from probabilistic forms and instead recall the divinatory tradition that was supplanted by modern scientific rationality:

- algorithmic forecasting does not address averages and general trends, but wants to give precise indications about the future of a single event or individual;
- with their operations, algorithmic predictions act on the future they anticipate. Similarly, in ancient divination, the formulation of the response produced a condition of circularity leading to self-fulfilling tendencies (think of Oedipus);
- the prediction is obscure and requires an interpretation to make it useful;
- the indications are based on the discovery of patterns and correlations, not on the identification of causal relationships;
- predictive efficacy does not depend on explanation.

Recommended Reading

Esposito, Elena. *The Future of Futures: The Time of Money in Financing and Society*. Cheltenham: Edward Elgar, 2011. German: *Die Zukunft der Futures: Die Zeit des Geldes in Finanzwelt und Gesellschaft*. Heidelberg: Carl Auer, 2010.

- *Die Verbindlichkeit des Vorübergehenden: Paradoxien der Mode*. Frankfurt/Main: Suhrkamp, 2004.
- *Soziales Vergessen: Formen und Medien des Gedächtnisses der Gesellschaft*. Frankfurt/Main: Suhrkamp, 2002.

Systemic Integration and the Need for De-Integration in Pandemic Times

The present condition of social isolation makes most of us aware of the value of sociality - which we lack. But society is not only sociality, and in the Covid emergency we perceive it as global interconnectedness that makes the crisis spread from one geographical area to another and between different fields of society.

The common response to a global emergency is a call for harmonization - the idea that we should "tighten up." In sociology, this reference to unity and coordination is discussed as integration. I will argue, referring to systems theory, that the problem of our functionally differentiated society is not lack of integration, but rather an excess of integration. When there are difficulties in one area of society, all others are forced to make serious adjustments. In dealing with threats that come from the environment, the opportunities for rationality in society lie in the maintenance and exploitation of differences, not in their elimination.

I will discuss this hypotheses dealing with integration on three levels:

- 1) the consequences of the emergency on the relationships between different fields (or partial systems) of society: systemic integration;
- 2) the effects of the pandemic on the conditions of inclusion and exclusion of individuals in society: social integration;
- 3) the spread of the emergency in all regions of the world and the consequences for globalization: geographical integration.

PUBLICATIONS FROM THE FELLOW LIBRARY

Esposito, Elena (Brussels,2021)

Author's response : opacity and complexity of learning black boxes

<https://kxp.k10plus.de/DB=9.663/PPNSET?PPN=1770061266>

Esposito, Elena (Brussels,2021)

Systems theory and algorithmic futures : interview with Elena Esposito

<https://kxp.k10plus.de/DB=9.663/PPNSET?PPN=1770060669>

Esposito, Elena (Bologna,2020)

Systemic integration and the need for de-integration in pandemic times

<https://kxp.k10plus.de/DB=9.663/PPNSET?PPN=1726123251>

Esposito, Elena (Thousand Oaks, Calif.,2017)

Algorithmic memory and the right to be forgotten on the web

<https://kxp.k10plus.de/DB=9.663/PPNSET?PPN=1668690489>

Esposito, Elena (London [u.a.],2017)

Critique without crisis : systems theory as a critical sociology

<https://kxp.k10plus.de/DB=9.663/PPNSET?PPN=1668689448>

Esposito, Elena (Cheltenham, UK,2011)

The future of futures : the time of money in financing and society

<https://kxp.k10plus.de/DB=9.663/PPNSET?PPN=1626087377>

Esposito, Elena (Frankfurt am Main,2007)

Die Fiktion der wahrscheinlichen Realität

<https://kxp.k10plus.de/DB=9.663/PPNSET?PPN=512945578>

Edition Suhrkamp ; 2485

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