

# Forecasting Against the Odds

## Editorial

On a clear summer's day, a Volkswagen Beetle was navigating – *honk! honk!* – the serpentines of the San Bernardino Pass. Coming all the way from Hamburg and descending through the Mesolcina Valley of Southern Switzerland into the rising heat of the Italian peninsula, the driver was heading toward the beaches of Rimini, from which she had great expectations in terms of sunshine, amore, and tiramisù. Nearby, around the year of grace 1480, the Milanese condottiere, Gian Giacomo Trivulzio, was inspecting the finishing touches to his fortress – bought and expanded on a glacial promontory, to defend against incursions from Grisons and further north. Little did he foresee his own soon about-face alliance with the ancestors of the modern Swiss citizens, and their strategic decision to demolish the fortifications a few decades later. The reader may observe all this in the picture opposite, which, with a pinch of imagination, can turn into a historical wimmelbook. Somewhat hidden by foliage, is a group of laborers gathering hay for wintering cows, now high on juicy grass and flowers, up on the mountain pastures – statistically speaking, twelve people make two hay bales per day that feed thirty-six cows for just a single day (if the information is correct). Cutting grass releases whiffs of scent for instant olfactory pleasure, and improves the biotope of the local chestnut groves, some of whose trees are six hundred years old – the motions of the humans who tend to them being less than mere blinks in their lifespan. Yet, one affects the other – such as the mushrooms of this valley, forbidden to be collected due to their radioactivity, a fallout of the wind patterns over Western Europe after the Chernobyl nuclear accident of 1986 (beyond the picture's borders). Or the unpredictable landslide – despite hi-tech surveillance – that destroyed part of the highway not long before these lines were written, creating a non-negligible disturbance in the flux of goods and people across the continent, and threatening the biological salmon factory close-by, which obtains its fish eggs from Iceland, a realm that nobody in the Neolithic encampment discovered at the foot of Trivulzio's fortress was even dreaming of. In the meantime, the estival cumulonimbi are pursuing their pareidolic metamorphosis games, and the Alps their slow tectonic creasing and creaking, for the foreseeable future.

Our exegesis of this picturesque Swiss snapshot serves as a metaphorical introduction to the theme of this book – forecasting – by

highlighting the important phenomenon of interferences between temporal and spatial scales of various natural, biological, social, cultural, and technological domains. Taken individually, one may make confident predictions about them – it becomes much harder when considering the interactions between scales. Nevertheless, prediction is unrelenting – as when during reading saccades we predict the next letters and words – and necessary, as the basis for the survival of living beings, as the above examples illustrate.

\*

8

This book comprises, in an elaborate written form, selected topics presented at the “Shaping the Future? Forecasting and Historical Sciences” conference that was held in Bern, on November 4th, 2022. It was organized by infoclio.ch, a national research infrastructure for the historical sciences in Switzerland, dedicated to strengthening the visibility of Swiss historical research on the Web, developing transversal forms of scientific communication, and to function as a competence center to experiment and support innovations related to digitization in the historical sciences.<sup>1</sup>

A certain panoramic view emerges from the juxtaposition of articles, as two focus on Switzerland, one on Germany and the United States respectively, and one on the Soviet Union, with the remainder touching on global history. The domains range from economy to urbanism to governance to revolutions to climate change, and the approaches from historical analysis to quantitative modelling to round table discussion.

This diversity is precisely what makes the collection a coherent and interesting book, as, on the one hand, recurrent features of forecasting emerge, in particular the clash of intentions and realities, and the utopian drive to systematically apply forecasting to every conceivable activity. On the other hand, juxtaposition highlights differences between disciplines, theoreticians and practitioners, terminologies, and other epistemic fault lines.

All in all, we hope that the reader will appreciate this eclectic selection on the individual merits of each article, as well as for what they reveal collectively.

\*

Some aspects of the articles are particularly attractive to us as editors, and we would like to point them out here.

---

<sup>1</sup> The conference was video-recorded and may be watched at [www.infoclio.ch/en/infoclio-ch-tagung-2022-die-zukunft-gestalten-zukunftsforschung-und-geschichtswissenschaften-1](http://www.infoclio.ch/en/infoclio-ch-tagung-2022-die-zukunft-gestalten-zukunftsforschung-und-geschichtswissenschaften-1).

In her investigation of transatlantic economic prognosis endeavors during the twentieth century, Laetizia Lenel identifies the dichotomy between expectations and subsequent disappointment as a defining feature of forecasting. However, far from demoralization in its usefulness, the lesson proposed is that forecasters should be conscious of the expectations / disappointment phenomenon and integrate it into the forecasting process. Moreover, even unreliable forecasts may be better under circumstances than no forecasts at all – at least they are a basis for discussing for and against specific options.

A different type of disparity in forecasting was discovered by Marion Ronca while examining the demand and supply in political forecasts and governance of the Swiss state during the postwar period. While the academics and industrialists tasked by the state with elaborating forecasts were interested in anticipation, politicians were keener to resolve current crises and clear the air from cumbersome political ghosts of the past rather than facing an elusive future. Forecasting has many uses and has different meanings to different people.

The most explicit case of an all-encompassing use of forecasting in this book is documented by Peter Keller, Georges T. Roos, and Cla Semadeni in their historical overview of the Swiss Association for Future Research / swissfutures and its unsuccessful effort to establish a university department of future studies in Switzerland. From a socio-psychological point of view, it is interesting to note the type of interest driving the organization's efforts in its initial phase during the 1970s: to catch up with the present that took shape outside of Switzerland, more than to imagine what is possible for "a Switzerland that looked confidently toward the past".

Very forward-looking was the Soviet Union, born out of a progressivist revolution and bearing on its flag a distant star toward which it was reaching. Cybernetics became a conceptual and mathematical tool of predilection in economy, governance, and urbanism – a rational planning and forecasting method from which much was expected. Unfortunately, argues Eglė Rindzevičiūtė, it suffered paradoxically from a cybernetic failure: the feedback loop of data acquisition and processing defining a cybernetic system could not take place in real-time as required due to the inherent slowness of this complex social and scientific process, coupled with systematic inefficiencies in the socio-political "metabolism" of the Soviet Union. The mirage of cybernetic forecasting trapping the mid-century Soviets, from Stalin to Brezhnev, may be fruitfully compared to the early and the wanning years of the Soviet Union. These are characterized by imagination and effective action, instead of fruitless and insipid planification, although of a very different entropic nature. The long decade after the Russian Revolution of 1917 was a period notably remembered for its artistic

fermenting, while the late 1980s and early 1900s, as an era of mostly decay and violence, integral elements of the entrepreneurial energy unleashed by Gorbachev's *glasnost* ("openness") and *perestroika* ("reform") policies.

The link to the next article is biographical and thematic. It is written by Peter Turchin, son of Valentin Turchin (1931–2010), a pioneer of Soviet cybernetics and artificial intelligence, as well as a Soviet political dissident, author of the cybernetically titled pamphlet, *The Inertia of Fear* (1968). Few would have foreseen that the inertia of the Soviet colossus would cease around 1989, with the fall of the Iron Curtain, quickly followed by the dissolution of the Soviet Union in 1991, but such surprising historical events are precisely what Peter Turchin is studying. His contribution to this book is a *vade mecum* to cliodynamics, the statistical modeling of history with the double aim of explaining the past and predicting the future. The inclusion of this article complements discursive historical analyses with methodological and practical contents. It also serves to instill dissension among historians regarding the epistemological basis of historical modelling and the very possibility of historical forecasting.

Dressed as the devil's advocate, Sacha Zala, president of the Swiss Society for History, is casting such approaches as "heresy" against historical orthodoxy in his defense of history as a non-"prophetic science" during the conference round table, a memorable intellectual fencing with the event participants, recorded in the last part of this book. Academic tribalism notwithstanding, a careful read will reveal, we believe, divergences not so much of substance, but to start with, simply terminological confusions (what humanists call "forecast" may be the "probability" of scientists) and (more difficult to solve) ignorance of respective concepts, assumptions, methods, goals, and scientific cultures between various disciplines. Heresy or not, Trivulzio's fortress in the Mesolcina Valley was the result of his banking on the future – even if modern Switzerland and the Beetle car rushing to Rimini on the autobahn skirting medieval ruins is probably not how he imagined his legacy. Conversely, would the readers feel trapped in destinies not of their own making, such as Trivulzio's dreams of castles in thin mountain air, they always have the choice to imagine "alternative histories," a historical genre no less anathemized forecasting, and, perhaps, the sulphureous topic of a future volume in this book series.

**Vlad Atanasiu**

History & Computing board member

**Enrico Natale**

History & Computing secretary, infoclio.ch director