Propositions

accompanying the dissertation

Behaviour and Stability of Interconnected Systems From Biological Applications to Opinion Dynamics

by

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- 1. The field of opinion formation modelling will never be able to thoroughly explain or predict the behaviour of large-scale human populations. This is because the opinion formation and decision-making mechanisms are extremely complex and unpredictable already in a single individual and, even if we were able to completely characterise them, the rigorous analysis of a large-scale population model would be out of reach. (This proposition pertains to this dissertation.)
- 2. Unless terminology and definitions are standardised, the field of opinion formation models will not be able to produce breakthroughs. Currently, words such as polarisation, conformism, consensus, and radicalism are used with so many different meanings and interpretations that comparing and building upon results in the literature requires a significant amount of effort, and, even then, the resulting achievements are likely to have low impact in the research field.
 - (This proposition pertains to this dissertation.)
- 3. The use of artificial intelligence for artistic purposes, such as producing images or writing poems, will provoke a need for humans to redefine which art piece can be considered human-made. It will also spark new artistic movements, comparable to how the invention of photography incentivised the rise of impressionism and abstract art.
- 4. The actions required to seriously protect the environment are so impactful on the modern way of living and detrimental to our economy that they will never be proposed by politicians or widely supported by the general population.
- 5. The purpose of life is like a mirage: you think it exists, but when you look for it, it vanishes.
- 6. Every situation can be improved with either humour, laughter, or chocolate.
- 7. The value of board games and video games as means to teach and learn fundamental skills, such as logic, math, strategy, cooperation, persistence, resilience, and discipline, is underrated by society.
- 8. Social-media technologies are causing irreversible societal changes. They are seen as beneficial on the grounds that they help people keep in touch and provide open platforms to spread ideas and drive positive collective behaviour. However, they cause more harm than good in society because of the unrealistic expectations of life they create, and the escalation of extreme ideas they allow.
- 9. The ultimate freedom humans have is understanding and owning that we all can choose what is important to us. That gives us the power to decide what has the potential of harming us and what does not.

These propositions are regarded as opposable and defendable, and have been approved as such by the promotors Prof. dr. ir. T. Keviczky and Prof. dr. ir. G. Giordano.