

What Can *Social Complexity Science* Give to Indonesia Today?

a super-short resume

Social complexity science is a new order of epistemology that realizes the social life as being on the edge of chaos: the 'orderliness' lies between the *disorder* and *order*. On the other hand, *social complexity* is a social science with hands open wide accepting computational innovation as a background, sometimes, a backbone. Having warned by the fear of too much digitalized reduction, it has a spirit to fairly adjust the quantitative and qualitative approach, either as a frame of deduction or induction.

The front of *social complexity* engineering exists in agent-based modeling analysis, artificial society, social simulation, artificial neural network, genetic algorithm, memetics, system dynamics, etc. *Social complexity* is a new social science that is not only enduring courage and sharpness of conventional analyses, but is also the intellectual muscle that stands behind many contemporary natural and computational science enterprises – one that has become an inherent factor of the strength point of the *problem-based science*.

The world today has been the witness for the genesis of many scientific novelties, and *social complexity* is just one that crawls around the evolutionary scientific landscape along with its two spirits: the first is the *change*, that in this world, nothing is constant but the change itself. If conventional sciences take a picture to produce photographic image, *social complexity* presents a motion picture. Time and all changes in it are all inherent parts and there is no use to make them separated in seemingly-different frames, the fact that turn us to the second spirit: the notion of interdisciplinarity, that there is no advantage of squaring up sciences that brings nothing but self-arrogance to each other. Social phenomena become soundless if they are put into many different and isolated boxes of arrogant Cartesian inheritance of categorization. Tangling social phenomena means a bunch of holistic approaches, and so the wall that bounds sciences is overthrown, falls into single viewpoint: that a science must be brought to life under an urge to tackle any form of needs and problems in which science seems to be the only answer. *Social complexity* is the specter that haunts ones standing outside the open-mindedness, or more shortly, the *status quod*.

Indonesia today is a country with critical points appearing in all over the frame of its self-organization. Social phase transition occurs so clearly and perpetually, as it jolted out from repressiveness and abruptly moves toward democracy in which creativity is still a promise of infinite space of thoughts. Newspapers headlines still reflect anger that comes out of ill-definitions about state and statesmanship, freedom of press and information, democratization and democracy, ideology and its abuse, people and citizenship, etc. Is there still a hope given by linear and Newtonian social science looking-glass to observe such Indonesia ubiquitous non-linearity? Academically, *social complexity* might be the only existing alternative, as it is a science of the emergence of order bursting out of chaos.

BANDUNG FE INSTITUTE

BANDUNG FE INSTITUTE (BFI) is supposed to be a research university on complexity in Indonesia. Found in October 7th, 2002 in Bandung, Jawa Barat, by young fellows of Indonesia who are encouraged to give records in interdisciplinary social science field without depending too much on categorization and the scientific frigidly that often chains creativities and becomes spirit of scientific methodology. BFI motto is *incresunt animi, virescit, volnere virtus* or spirit grows, vigor grows through wounds. It is believed that what is carried out by BFI is a scientific revolution and the shift of science paradigm that today has become the symbol of stiffness and over-standardization that finally ends up in cosmetics that allows plagiarism, corruption, slick political interests, and other things in earlier times are the enemy of the science itself. The scientific truth is the matter we must seek, not a justificational cosmetic that even draws a line from the truth itself.

BFI is a place to create interdisciplinary space which will become a pilot project of how a research institute should become. The model chosen is a *research university* with the idea that BFI is an institution that appreciates scientific endeavor based on the spirit of science. All that matters can only be reached through researches, with the ground idea that science can only be gained from scientific research. BFI is a research institution that gives a space of interdisciplinarity that performs research-based educational efforts.

In BFI lies three functional institutions, they are:

1. **BOARD OF ADVISORY** is a non-structural institution in BFI, consists of public figures with a lot of concerns on social science development either in Indonesia or in foreign countries. This institution gives directions that able to trigger creativities of BFI generally, giving support, becomes the first source of constructive critics in BFI. In term of research, Board of Advisory is not responsible on the result of the research neither the general policy in BFI. The main function of this institution is to give advises and critics as a primary element of scientific institution. Number of Board of Advisory is not limited. The present members of *Board of Advisory BFI* are Prof. Saswinadi Sasmodjo, Prof. Yohanes Surya, and Utomo Danandjaja.
2. **BOARD OF SCIENCE** is the highest and the core institution in BFI deciding research theme and giving acceptance or rejection to the result from the research team carried out in BFI. This institution is the scientific locomotive inside BFI which gives directions that becomes guidelines for researches in BFI.

The structural institution of BFI giving their authority to the *Board of Science*. All members of *Board of Science* are equal, in terms that the board has a peer structure so every person has the same and equal rights for the sake of

Talking about Indonesia, fields of study of *social complexity* are found to largely vary; from the construction of a holistic social theory that gives anthropology, economics, politics, public safety and national defense a breakout; up to the realm of cognitive structure of each Indonesian as a unique race among other *Homo sapiens*.

Social complexity can no longer dream of the birth of this century's Max Weber, Emile Durkheim, Sigmund Freud, Talcott Parsons, Carl Jung here in Indonesia: *social complexity* only forces ourselves to speak in Indonesian symbolic system. In macro-social level, *social complexity science* seeks for a more comprehensive picture of individual interactions that brings emergence in higher social level (bottom-up), while in micro-social level, it seeks the same from the playfield of neurons and hormones, up to the level of decision making and creativity.

No more scientific cosmetics or cosmetic science here, since scientific certification and academic accomplishment are as a classic science heritage as those borders represented by scientific hierarchies and their ethos. Down with all scientific achievements of the old age that are furnished and embalmed inside academic mausoleum of the modern times, modern division of labor, but at the same time, not to proclaim that it does not take a genius to construct a science, no matter how. In other words, it brings science home to its proper meaning and understanding. Science should be mystical for those who are unable to comprehend scientific methods, yet becomes solution for those who stand against any forms of life complications.

How information or gossip could transmit and replicate like a disease and become epidemic, how social system locally evolves, how cooperation and collective action appear among human, how cognitive structure works, how cultural hybridization occurs, what is there to be done so economics wastes no more time to speak all about aggregating data instead of prosperity, how interpersonal conflicts emerge, how an organizational management and leadership become as democratic as possible, how social dynamics persists; so many hows, all embraced within the study of *social complexity science*. In other words, it is all about how Indonesian social theories are born from the complications of Indonesian mother-land, and not merely as a result of ad hoc theoretical transplantations we commonly found. Yet it is an epistemological willingness of *social complexity science* that we are bound to seek and accomplish.

Admittedly, that social system is hard-to-bear system if we can only treat it linearly. Social system should be viewed as a system that is complex and adaptive, evolutionary, and requires inter-disciplinary epistemology: jump freely from one science discipline to the other as we need. Social complexity science is not only mathematical or computational model. She is the guidance and demand for all of us, to bravely change our paradigm.

And now, it is just about our way to try to overcome local problems in Indonesia comprehensively. Be it arranged within the hands of *social complexity science*.□

research. Present members of *Board of Science* are Hokky Situngkir, Rendra Suroso, and Yun Hariadi.

3. **SERVICE AND ADMINISTRATION UNIT** is a complimentary and organizational unit in BFI. Inside *Service and Administration Unit* there lies structural institutions as follows:

- **RESEARCH AND EDUCATION**

It is a unit of organization who designs techniques of research, educational and training system that is implemented by BFI.

- **PUBLISHING (*Bandung Fe Institute Press*)**

It is a unit of organization that arranges publications of BFI to the public, including working papers, *Journal of Social Complexity*, books or writings of BFI researchers, *Buletin BFI*, various BFI catalogues, etc.

- **ADVISORY AND CONSULTANCY**

It is a technical or implementative consultancy unit of BFI that is performed on the basis of complexity science. It selects working projects carried out in the compiled researches of BFI.

- **HUMAN RESOURCES DEVELOPMENT**

It is a unit of organization that designs system of technical membership of BFI. All that concerns the acceptance or rejection of members, workers, or researchers of BFI, are wholly the authority of the *Board of Science* of BFI.

- **PUBLIC RELATIONS**

It is a unit of organization whose duty is to relate BFI and its research results to the public and wider audience. This unit becomes the only gate that relating BFI and the public.

Institution of *Service and Administration* is led by President of BFI that is chosen from the member of and responsible to the *Board of Science* of BFI.



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