

A Proposal of Activating History, Theory and Social Demands of the Earth and Planetary Sciences

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Earth and Planetary Science, once used to be called Chi-gaku (Geo-science), has been rapidly evolving to relate closely with a variety of research fields (physics, astronomy, biology, environments etc). Now STS (Science, Technology and Society) is a trio from which we Homo sapiens can never be escaped. In our research program DEEP (Decoding Earth's Evolution Program; 1995~8), we have listed a set of seven big events in the Earth's History to be tackled with as the science research target. The first big event is the formation of the Earth and planets in this Solar system. The seventh event among them was the emergence of scientific exploration by a human being to start exploring the history and destination of the Earth and the Universe. Such a statement was criticized of too much extreme view. However, the actual history of science runs faster than people feels. A new research organization WPI-ELSI (Earth Life Science Institute) was launched (Maruyama, 2012), and its aggressive activities had started to push evolving the research fields of our interests. We are changing and so is the science and the associated technology.

Under such a situation, we recognize the necessity of the three essential elements: (1) 'Theory of Science' to understand science itself on the basis of science, (2) 'History of Science' to learn from our own past experience with science, and (3) 'Future of Science', with which we Homo sapiens has "our own destination to survival continuation of both our life and its cultural valuables created so far".

Whereas there is not any logical reason at all to the three factors in the above, we intuitively demand us those three by means of developing the better science, simply because we do not know anything better and potential than science to understand this World. In other words, we are in the position to design and create a desirable hybrid of 'Homo sapiens and Science' as a consequence of our past history in this World.

Logic is an essential key in science, whereas a human being is influenced mostly by emotion. Whereas emotion itself is quite difficult to observe, so called 'mind climate' appears as such a phenomenon that could be observed and measured by means of science method much easily once research investment is made. Our preliminary study on the and it could be related to social behaviors of human beings. Mind climate has not been science terminology. Consequently, we propose the scientific study of the mind climate, so as to be manageable with ethical way.

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