Young Hee Kye\* (yhkye@kosin.ac.kr), 194 Wachi-Ro, Yeoungdo-Gu, Busan, S. Korea, Busan, South Korea. Paradigm and Pan-paradigm in Mathematics and Architecture. Preliminary report.

Mathematics teaching is often more effective when teachers connect the contents of mathematics with history, culture, and social events. In the history of mathematics, the 'paradigm' theory from Thomas Kuhn's scientific revolution is very effective to explain the revolutionary process of development in mathematics, and his theory has been widely quoted in the history of science and economics. However, it has not been appropriate to use his theory in the other fields. This is due to the fact that the scope of Kuhn's paradigm theory is limited to mathematics and science. In this study, this researcher introduced pan-paradigm as a general concept that encompasses all, since through any relation in the field of mathematics and architecture, Thomas Kuhn's theory of paradigm does not explain the phenomena. That is, at the root of various cultures there exist always a 'collective unconsciousness' and 'demands of the times,' and these two factors by synergism form values and controlling principles common to various parts of the culture, and this synergism leads the cultural activities, the process of which is a phenomenon called pan-paradigm. (Received September 24, 2012)