Locus: Regional Renaissance and Evolution of Innovative Clusters
In Japan on the Global Scene

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Abstract
Peru gradually becomes to be an icon of modern industrial revolution that integrates the innovation of modern industrial revolution with advanced high technologies for production and the evolution of information industrial revolution with arts, high sense for human life. The driving forces for modern industrial revolution are the twin wheels of environment and welfare industry with the common axis of natural providence and human ethics. The neo water science, norm, technology, skill and industry, closely related with the global climate changes and the human economic development, exerts a great influence on the modern civilization on the global scene. In contrast to Japan, like Israel, Peru occupies an adequate locus for rejuvenation of role in the evolution of modern water sciences not only in natural science, effect of “El Niño” and “La Niña” but also in human science, role of international law of ocean, internal river and lake. When considering the development of science and technology parks, functions of sciences on the global scene, especially between the highly industrialized countries and the developing countries, are often overlooked, notwithstanding the development of global market and global community instead of liberalized world market.

This paper will illuminate the lessons of Japanese development of science and technology parks for developing countries in the viewpoint of its locus, regional renaissance, evolution of innovative cluster and role of university and institutions, paying due regards to the regional development policy and innovation system.

Concerned with the innovation system, especially in a local area, the leading synthesizer plays an important role in the evolution of innovation system that
composes the innovative culture, resource, environment and locus. Within the system, the communication channel and the transaction route are the basic condition to manipulate and manage the innovation system, paying due regards to the barriers and obstacles against the feedback loop in the channel and on the route. The synthesizer is not a total designer of this system but also a coordinator to sweep these barriers and obstacles. The ability of coordination is indispensable for the synthesizer who needs the role of creator, cooperator and collaborator. Among innovative resources, a local area usually lacks an innovative talent, more than technology, capital and materials. Therefore, the first and best important task for establishing Science and Technology Park is the selection of this synthesizer to recruit the distinguished leader, a charisma who generates the economy of status, taking much care of economy of speed, scope and scale. A lot of lessons could be learned in the intelligent cosmos project in Tohoku promoted by Professor Nakao Ishida and the Okinawa Institute of Science and Technology project led by Dr. Sydeney Branor, especially in a local and developing area. Among lessons, the synthesizer should take care of synchronism between the structural change and the practice of planning whose timing easily causes the synergism for development, paying due regards to the change of innovative locus.

As for a change of innovative locus, its historical entity and its special relations with particular places on the global scene play an important role in the evolution of regional renaissance and of innovative clusters. The regional planning policies such as Technopolis in Japan could not promote the regional renaissance, if it could not find out the timing of synchronism to fit with the structural change and its trend in the nation on the global scene. They provide not only the room to accept the trend of structural changes by the constructions of infrastructures, estates and institutions at the improved cross-roads on the global scene, but also the tolerance to introduce the latest ideas by the developments of hosting environment with cross cultural creation system to adapt with the transformations of market and society on the global scene. Without saying, the regional development policy could not overlook the artificial and structural economies of agglomerations, scale, scope, speed and status as were seen in the establishments of arsenals and yards and national institutes, besides the power of regional planning, paying due regards to the politico-economic organization and the socio-cultural system, especially in the local community on the global scene.

Usually, the university becomes the iconography for concentration of latest ideas, sciences, technologies and skills in its expanding orbit on the global scene.
Practically, the local R&D institutes and polytechnics help largely the evolution of innovative clusters, including excellent artisans to copy and improve latest technologies and designs in the innovative culture and environment. Namely, the science park and brain area could not exert their influences on the evolution of other innovative clusters and on the regional renaissance. In other words, the regional industrial development policy plays more important roles in the evolution of science parks and brain areas where we could enjoy the economy of agglomerations, especially the economy of speed and the economy of status.

Among the innovative clusters, especially in Japan, the roles and functions of industrial community is extremely important to absorb shocks and conflicts for development of technology and industry, which generates the mutual trust and the tolerance for introduction of latest ideas, technologies, skills and products and for development of division of labors in industrial community. With the globalization of industry, the industrial society, especially centered at university, gradually plays its important role in the evolution of other innovative clusters as a catalyst. The process of globalization and localization of industry, without saying, could not be overlooked in the innovation system, particularly, in the interface between the industrial society and industrial community those are the pivot and hinge. The academic and industrial society is a sort of conveyer of latest science and technologies all over the world and also a kind of communication system for development of cooperation, collaboration and creation. It is closely related with the globalization of science, technology and industry, which could not be smoothly transferred into the local community for industrialization of technology and science. That is to say the localization of science and technology needs the skills and know-how for their industrialization and commercialization.

Considering the development of science and technology parks in Japan on the global scene, the locus of park in the region and the stage of evolution of market and society exert their indispensable influences on the regional renaissance on the global scene. Concerned with the power of regional policy, the industrial society on the globe and the industrial community in the region play their important roles on the adaptation and the re-adaptation with the changing phase of globalization and the localization in addition to the legal regulation and political subsidy. The flexible tolerance and an adequate room to reduce the cost and to enrich the profit and benefit are important for regional and industrial innovation systems, paying due regard to the innovative clusters. Among innovative clusters, the university and the academic society and community on the global scene play important roles
in the development of techno polis, science park, brain area, super-techno-polices, platform for industrialization and academic and industrial clusters for transfer of latest technologies into industry, if the university could develop well the hosting environment for creation of latest science, technology, skill and industry.
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