

# **From Divided Nuclear States to Connected Gigacity**

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In 1996, Professor Choe Sang Chuel at Seoul National University noticed that about a 100 million people already lived in a corridor shaped like a S lying on it's side ~ and stretching 1,500 km from Beijing-Shenyang-Dalian-Pyongyang -Seoul-Osaka-Tokyo. They are divided by language, by history, by politics, but most of all, by the threat of nuclear war.

In 2050, this corridor will be the world's first Gigacity, what Choe called an *ecumenopolis* of more than a billion people. Seoul will be a suburb of Beijing; Inchon will be a suburb of Dalian; Tokyo will be a suburb of Shenyang.

People will speak local languages; but they will be multi-lingual and cosmopolitan. They will have hybrid and multiple identities that transcend borders. Wherever someone is at any given moment in this Gigacity, they will also be everywhere, all the time, due to their virtual connectedness.

The Gigacity in this region is emerging without anyone planning it at the top. It is unstoppable because it's the result of bottom-up, decentralized behavior by hundreds of millions of networked people, villages, cities, firms and even states.

For one part of a Gigacity to target another with nuclear weapons would be...absurd. Why would you target yourself?

The Gigacity will have many problems of security, and sustainability. Fractal design will solve some of these problems by maximizing the interface between biological and environmental services and the constructed Gigacity. Aggressive

swarming will be regulated by new forms of networked and community policing. The Gigacity itself will have networked governance that transcends state borders.

What could break this connection? Well, a nuclear war could do so. Even a small nuclear war in Korea could immolate and inject enough debris into the upper atmosphere to cause a decade-long nuclear winter that would create global food shortages and block the networks.

If a city is taken hostage by a terrorist with nuclear weapons, much of our travel, trade, finance, and communication, will screech to a stop. Such an attack would at least slow down the Gigacity's arrival.

A neighbor with nuclear weapons will not be welcome in the Gigacity. Thus, the Gigacity will be a mosaic of thousands of local and municipal nuclear weapon-free zones. The costs of keeping nuclear weapons will far exceed the gains, as North Korea will discover.

The Gigacity will be powered primarily by renewable energy transported via smart networks. The buildings, machines, and people in it will be super-efficient users of resources. It will be a net sink for carbon. This is the positive legacy of the Fukushima tragedy. The Gigacity won't rely on the fantasy of a plutonium perpetual motion machine for power.

There no force more powerful in history than determined people organized in networks.

The Northeast Asian Gigacity, the ultimate network of networks, will replace the division of people by threat of nuclear war with the living, breathing connection of a billion people determined to live their lives and in so doing, pass Earth onto future generations in a better condition than they inherited it.

This is a good trend. The sooner we abolish nuclear threat, the sooner we can build a sustainable and secure Gigacity.