TOHOKU UNIVERSITY

Human-Centric Design towards society without regional disparities

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Introduction

Global problems
expansion of regional differences

✓ Concentration of population into urban areas

✓ Information gaps

✓ Inequality in education and employment opportunities

Society in 2040

✓ Society without regional disparities

✓ Optimized logistics system

We discussed design to realize society without regional disparities.

Ideas

✍ Tele-existence
Holography and VR

Device for bidirectional and long-distance information propagation

Hologram   Virtual Reality

・With tele-existence technology e.g. VR and holography, users can enjoy high quality experience regardless of location.

✍ Optimization of Logistics
Equal service for everyone

Technology for future logistics

Autonomous Driving   Drones

Forecasting traffic congestion with machine learning

・Autonomous driving and machine learning improve logistics and enable us to deliver goods to local areas sooner.
・Drones create new delivery routes.

Assessment

○ Enjoying everything at home

○ Saving time, money, etc.

○ Opportunity to choose one's lifestyle

× Disconnection from the real world

× Social Isolation

× Echo chamber

× Privacy problem

Optimized Human-Centric society is convenient for our lives and eliminate regional disparities. There are still problems to be solved and we have a responsibility to judge right and wrong of the technological progress.

Column

Liberty and Governance of/by Technology

How does technology change human being?
• With technology, what we can do is increasing in a great variety.
• Human being can no longer be inseparable from technologies.
 (some researchers have described this situation as a "Cyborg" or "Hybrid")
• It can be said that human being has been free by technology.

However,
• Does extending what we can do only contribute to happiness?
• Is the master of technology human being?
 for example, the appearance of smartphones may have changed the specifics of the rule that late contact should be done as soon as possible, increasing the degree of obedience to efficiency or rationality.

Design introduces ethical and political values.
• Technical artifacts seem to set the condition for autonomy and ensure effective freedom.
• We need to integrate various values into the artifact.