

Global Brain Institute (GBI) Vrije Universiteit Brussel (VUB) Krigskundestraat 33, B-1160 Brussels, Belgium

www.vub.ac.be www.globalbraininstitute.org info@globalbraininstitute.org

Press Release

Francis Heylighen receives WIC Outstanding Technology Award

Professor Francis Heylighen, a GBI/VUB cybernetician and complexity scientist, has received the *2015 WIC Outstanding Technology Award* for his contributions on "Global Brain and Collective Intelligence Technologies" from the <u>Web Intelligence Consortium</u>. The award was presented to him by Profs. Ning Zhong and Jiming Liu, co-chairs of the WIC, during a ceremony at the consortium's WI-IAT conference, which took place in Singapore on December 6-9, 2015. Previously, Heylighen had given a well-received keynote speech to the conference, entitled "The web as a self-organizing, distributed intelligence: towards a global brain".

Over the past twelve years this prestigious distinction has been awarded to 14 of the world's leading researchers in artificial intelligence and neuroscience, including Lotfi A. Zadeh, Karl Friston, John R. Anderson, and John McCarthy (see the full list at http://wi-consortium.org/wicweb/html/wicawards.html). Professor Heylighen now joins them thanks to his theoretical development of how an Internet-mediated collective intelligence could enable a higher level of global organization, a phenomenon he refers to as the "global brain".

Heylighen's research program on the future development of the Internet has been recognized before, mostly notably in 2011 when he was approached by Russian technology investor and billionaire Yuri Milner to develop a mathematical model of global collective intelligence. Milner is well known for being an early investor in almost every disruptive social media startup in Silicon Valley and beyond, including Facebook, Twitter, and WhatsApp. He saw the potential in Heylighen's vision of the future of humanity's symbiosis with technology, and decided to financially support his research through the Yuri Milner Foundation. This funding allowed

Heylighen to create the <u>Global Brain Institute</u> (GBI), an interdisciplinary research center at the Vrije Universiteit Brussel (VUB) dedicated to modelling the self-organization of the Internet and its expected impact on the information society.



Photo: Francis Heylighen (right) having just received his award from Jiming Liu (middle)

The idea of the global brain is not new, as futurists like Peter Russell and Ray Kurzweil have previously speculated that some kind of superhuman intelligence would emerge out of our ever more powerful computer networks. However, Heylighen's theory sets out a concrete scenario for how such a planetary intelligence is developing out of the network of humans and computers as coordinated by the Internet. It moreover lays the foundations for a mathematical model and computer simulation of this process.



Photo: Francis Heylighen (middle) showing his award plaque, flanked by Jiming Liu (left) and Ning Zhong (right)

After four years of research, Heylighen and his GBI team believe they are ready to start the next phase of their research program. They are now focusing on the development of a post-monetary sharing economy, where not only information exchanges but exchanges of goods and services are coordinated through the emerging intelligent network. Cadell Last, an anthropologist working with the GBI research team says that the coordination mechanisms envisaged by Heylighen's global brain theory "could help humanity to develop an economic system aligned with a more holistic value system."

This most recent project of Heylighen focuses on what he and Ben Goertzel, a prominent Artificial Intelligence researcher, refer to as "offer networks" — networks for intelligently matching information, goods and services offered by individuals, organizations and technological systems against needs and demands. Heylighen believes that offer networks could transform the current Internet into a universal sharing medium that overcomes the conflicts, waste and inefficiency of our present economy. "From what I can see, the various streams of research related to the Internet, collective intelligence, and post-monetary economy start to

converge in Heylighen's theory in a fascinating way. I think Francis is getting close to developing a universal protocol that could revolutionize human co-operation worldwide in ways similar to how the TCP/IP protocol has revolutionized the global exchange of information" says Marta Lenartowicz, another member of Heylighen's team.

Being work in progress, the offer network protocol still requires considerable development and testing before it can become operational. Yet, it seems that the work of Francis Heylighen and his team is gaining momentum. The attention of the international research community, following Heylighen's well-deserved WIC Outstanding Technology Award, appears to be reaching his Global Brain Institute at the right moment.



Photo: Heylighen during his keynote speech on the Global Brain at the 2015 WI-IAT conference