

PROMETHEUS: A MODEL FOR A STRONG INTEGRATION OF COMPETENCIES BETWEEN CYBER AND MEDICAL INTELLIGENCE

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One of the simplest but all-encompassing definitions of **Intelligence Activity** can be summed up with the concept of **knowledge**. Knowledge represents the essential **Intelligence tool** for grasping weak signals, environmental irregularities and transforming them into useful data and information for policy makers. The ability to **predict and manage global risks** requires the **integration** of **cyber and medical intelligence competencies** by personnel with specialist and generalist skills. **Specialists** have extensive knowledge of specific issues of their fields but obviously do not always have a global vision. On the contrary, **generalists** know some information about many topics and therefore have a global vision. Theoretically, in stable **environmental conditions**, specialists would not need generalists but as soon as the environmental pressure changes, the support of generalists is needed to maintain an acceptable risk forecasting capacity.

	Competences					
		Specialists		Generalists		S
INTELLIGENCE	Cyber- Intelligence	Hackers and Data scientists	+	Philosophers	= Cybionts (<i>H. sapiens technologicus</i>)	JPEROF
	Medical- Intelligence	Physicians and Veterinarians	+	One Health Epidemiologists	= Symbionts (H. sapiens medicinalis)	SUPERORGANISM
		Stable		Changing		S

Environment

(Image credit Paolo Zucca)

This integration model of Intelligence Activity is a **Superorganism** made of a **Cyber** (Cybiont – Longo 2003) and a **Medical** (Symbiont – Rosnay 2000) **Intelligence unit**, where division of labor is highly specialized within a framework of integration of **technical** (specialists) and **philosophical** (generalists) knowledge. Specialists are more adapted to survive in a **stable environment** while generalists have the capacity to deal with **fast changing environment** conditions. The two units are not able to survive by themselves for extended periods of time because each one needs the contribution of the other due to deal with the different environmental pressures to which human beings are exposed. Unfortunately, at present, most of the Intelligence Activity is done by Specialists in Cyber-intelligence while the involvement of the other fundamental components of the model represented by medical intelligence and philosophers is usually poor or absent. The use of **artificial intelligence** within a cyber intelligence program **cannot compensate** for the absence of medical intelligence units. We must **overcome the cognitive bias** that leads us to **underestimate global biological risk** through the **integration** of **competencies**.

References

Longo GO (2003) Il Simbionte. Prove di umanità futura. Booklet (ed), Milano, Italy.

Rosnay JD (2000) The Symbiotic Man: a new understanding of the organization of life and a vision of the future. Mc Graw -Hill, 2000.

Zucca P (2020) The Zoonosecene: the new geological epoch of intensive breeding, of wildlife trade, of antibiotic resistance and of pandemic diseases, following the Anthropocene. *Platinum, Sole 24 Ore English edition*, **11**, 114.

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