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The Ladder of Cyber-Subsidiarity as a Mediation between the Autonomous Citizens and the Commons †

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Abstract: The process of globalisation leveraged by digital technologies has dramatically increased the capacities of the capitalist milieu and its homogenisation momentum. This indeed endangers the preservation of cultural and community identities and their related capacities to act, including the capacity to sustainably adapt to their environments. Before this global issue, the author proposes the subsidiarity principle as a kind of fundamental ground for the Global Information Society, based on Stafford Beer's Viable System Model.

Keywords: subsidiarity; cyber-subsidiarity; Viable System Model; Global Information Society; commons; autonomy

1. Introduction

When the Calvinist communities of the 16th century tried to organise themselves, preserving their identity, autonomy, values and goals, they were immersed in a vast Catholic empire whose capacity to homogenise the societies under its rule were increasing. The threat to be simply kicked out was continuously actualised here and there. In this context, Althusius developed the concept of subsidiarity in order to preserve the autonomy of the Calvinist communities while enabling symbiotic relations with the larger society [1]. In the long run the principle became a fundamental pillar for decentralised government and autonomous agency in vast and heterogeneous societies.

Nowadays the globalisation process leveraged by digital technologies has significantly increased the capacities of the capitalist milieu and its homogenisation momentum, which endanger the preservation of cultural and community identities and their related capacities to act. Before this global issue, should not we claim today the subsidiarity principle as a kind of fundamental ground for the Global Information Society as Althusius did? Indeed, the technological and economical trend linked to big-data technologies offers the opposite solution in which the autonomy of the citizens is completely out of the stage.

The commons in themselves constitute toeholds for the living of many cultural forms, but, at the same time, alien to the capitalist understanding of ownership. The latter focus on privateness as a condition for autonomous agency, often employing the very subsidiarity principle (though in a negative sense, i.e., claiming the elimination of some public capacities) in order to get rid of any interventionism from the social sphere. Moreover, this is frequently and paradoxically done to depredate from the common structures erected in the social sphere to solve the inequality problems tackled since the nineteen century in name of the subsidiarity principle (in a positive sense, i.e., claiming the constitution of some public capacities), for instance, concerning education and healthcare [2]. As we will show, a cyber-subsidiarity principle based on Stafford Beer's Viable System

Model provides the necessary and sufficient conditions to support autonomous citizenship and attached commons from the local communities to the Global Information Society [3]. In addition, it offers an alternative way to big-data for the deployment of digital technologies at the service of mankind [2,4].

2. The Cyber-Subsidiarity Model

As we can observe in Stafford Beer's Designing Freedom [3], his positions clearly stands for the development of a completely new way of making sense of computing and telecommunication capacity as a means to overcome the bureaucratic paradigm in the benefit of both deploying freedom and the coping with complexity. By these means, he envisions a reconciliation of private and public action superseding the limitations of the liberal ethics and the bureaucratic organization of economic and political life. As the author has discussed elsewhere [2,4], Stafford Beer learned from biology the lesson of how to deal with complexity, deriving the fundamental and necessary structure depicted in Figure 1 that any viable system—able to constantly adapt to its environment—should hold [5]. The functionality of Systems 1 to 5 are direct correlates of subsystems identified by S. Beer in the human nervous system [4,5]. In short: System 1 autonomous and mutually adaptive operative units; System 2 coordination and conflict management; System 3 strategic planning and optimization; System 3* auditing of system 1 performance; System 4 long term planning; and System 5 ethos and normative management.

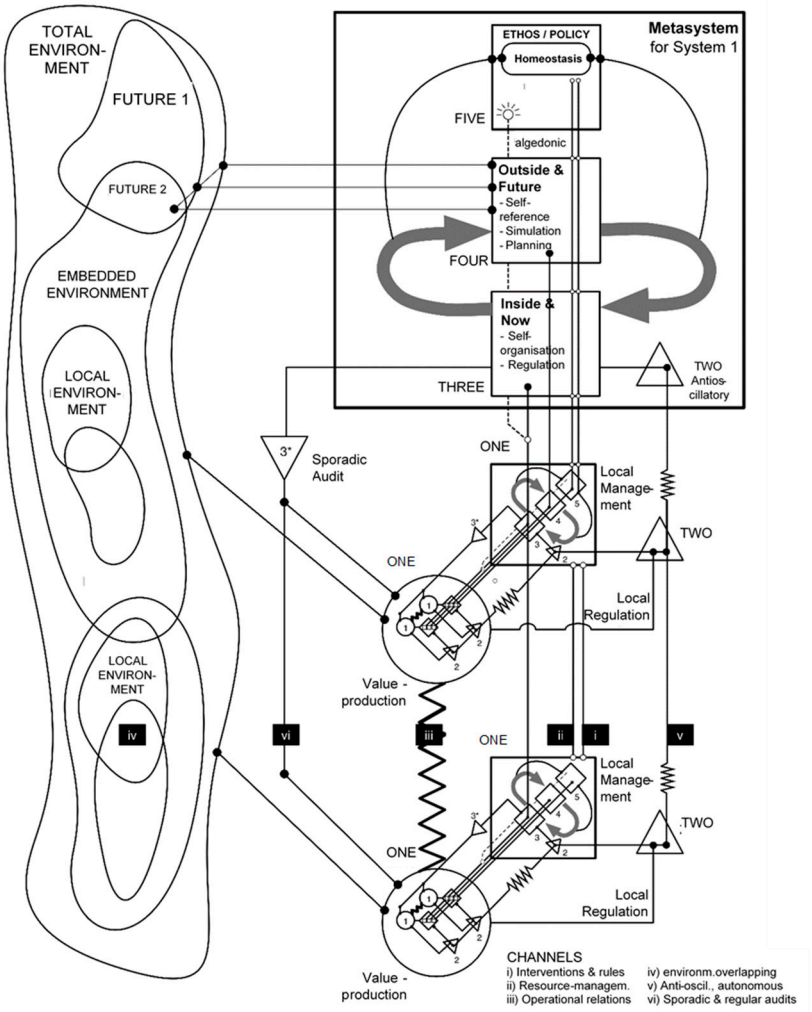

Figure 1. Stafford Beer's Viable System Model (cyber-subsidiarity) for any sustainable organization. Its recursiveness is explicitly represented in System 1. System 3* correspond to an extension of System 3 to enhance its knowledge about System 1 performance in order to provide a better regulation. (Illustration elaborated from [6])

The model relies on two fundamental principles [5]: (i) Ashby's law of requisite variety and (ii) the principle of recursiveness. According to the first principle, the capacity of System 1 has to be balanced with the framework of operations that it assumes, leaving a sufficient leeway and guaranteeing that the only variety (complexity) left corresponds to what is better achieved at a higher cooperation level. The recursiveness is an obligated counterpart of the former principle in order to distribute the coping with a complexity which is much higher than what a reduced number of autonomous agents can perform. Downwards, the levelism stops at the agency that is taken as the model of sustainability (namely, the human), but upwards it is in principle unbounded—therefore scalable until the level of the Global Information Society. We can symbolically express the recursive structure of the VSM as:

$$\text{VSM} \stackrel{\text{def}}{=} \left\{\{\text{S1}\}, M \mid \text{S1} \stackrel{\text{def}}{=} \text{VSM}; \text{M} \stackrel{\text{def}}{=} \{\text{S2, S3, S3*, S4, S5}\}\right\} \quad (1)$$

Similar to the unlimited productivity of the language [4], this property enables its application to an unlimited complexity, which management comports the devising of appropriate information channels (as illustrated in Figure 1). Hence its deployment is entangled with the supporting information infrastructure, which is not structurally neutral [4]. The success of this architecture has been shown in several organizations broaden discussed in the literature [2–5,7]. Its recursive property enacts the concept of subsidiarity-ladder from the private sphere to the global commons.

Conflicts of Interest: The author declares no conflict of interest.

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