## The Datarchist legal philosophy

Traditional anarchism uses natural language institutions and implicit social conventions to establish appropriate human behavior and ensure peaceful relations between people. This works well for everyday interaction, but not necessarily for large-scale or complex interactions, such as the sum of all fishing activities or coordinating the manufacturing facilities and supply chain for personal computers. Today's society is far too large and complex to be governed solely by human interactions while being expected to maintain high performance.

With the availability of immense computing power, and the use of modern mathematical and computational sciences, new and extended types of social structures are possible. Datarchism is a technologically-enabled extension of traditional anarchism that uses computational and ecological concepts to craft rich, complex legal structures from simple tools. These structures aim at removing control of people and by people in favor of autonomy of people and control by computers. Anarchism as it applies to social interaction works well, and my aim here is not to argue one way or the other for anarchism. Social interactions must simply be made peaceful and autonomous to work well.

Industrial, scientific, and economic processes, however, require a finer level of parameter tuning, and so should be governed by a more systematic approach. These are goal-oriented processes, often holding critical importance in peoples' lives, which leave little room for subjective interpretation. The efficacy and outcome of these processes are determined by how well their parameters incorporate timely and accurate data. Using this idea, we can create mathematical and computational structures to entrain these large and growing processes onto a path where they can be effective without causing harm. A system of such structures could be called a datarchy.

The closest example of a high-performance datarchy is the GNU/Linux project. Development changes are made by a combination of use data, consensus decision, and third-party contributions. This leads to a highly versatile, highly standardized, highly open, highly stable operating system. The user can modify the system any way he or she feels is necessary, so older hardware can still run newer kernels or specific programs, rather than being told to pay for an upgrade. Older versions of the kernel are available to download and modify, as well.

Thus, a datarchy distinguishes itself first by its use of physically observable data to drive its decisions, rather than consensus of opinion or measures of subjective valuation. Individuals in dominance systems like nationalism and capitalism thrive on information asymmetry, because it gives the information holder an advantage of other parties. Though HP's computers have a strong reputation for failing immediately after its two-year warranty is up, HP does not readily disclose the expected lifespan of the computers, because they know that it would reduce their income. Users in a datarchy can only benefit from sharing information, because products are distributed as free information, and thus the design of products becomes common heritage.

The datarchy distinguishes itself second by its use of computerized or cybernetic actions based on physically observable data. In applications where control hierarchies exist, it is important that their coupling to a specific individual or group be kept to a minimum. That control should be offloaded to software or cybernetic systems, which are built as free, open standards. These two practices will keep corruption to a minimum by reducing conflicts of interest and private control as well as increasing transparency and reliability. However, despite rigorous rules and control being the goal of the system, these rules are based on human needs and developed via free association.

A killer feature of a datarchy is its ability to bootstrap itself out of the existing legal system, and develop to a near-final state without the need for any change in the host legislation. Following the Viable Systems Model (VSM), existing legal instruments can be used to build high performance organizations and processes using recursion to generate generate structures that operate at different trophic levels¹. This holarchy² of legal structures runs the range of complexity from a team of workers to an entire community. The path of the datarchy is to reduce the need for humans to decide on the actions of large groups. An advanced datarchy should be characterized by cybernetic reconciliation of the many individual decisions of its members, with high-order logic changes occurring through software, not retraining or legislation.

The bootstrapping process revolves around the creation and utilization of a Turing-complete programming framework for law. While initially this will require some degree of specialist knowledge, a good, generalized interpretation could use an existing programming

<sup>1</sup> A *trophic level* as defined by ecology is the position and role an organism occupies in the food chain. In industrial ecology and natural economics, it has a similar definition, describing its position and role in the socio-economy.

<sup>2</sup> A *holarchy* is an organizational structure similar to a hierarchy, with the key difference that each higher level is controlled by a group of lower levels and not by an elevated individual or committee.

language and simply utilize the appropriate laws under the hood. This is no different than what programming languages currently do: They allow the programmer to be apathetic and agnostic to the underlying mechanisms that make the higher-order logic function appropriately on different machines. Likewise, a well-implemented datarchy framework will open up the possibility for socioeconomic programming in a high-level language, with the "machine code", the actual manipulation of the legal system, being implemented by the specialist developers working on the framework.