Datarchist Legal Structures

The following structures seek to create a "legal programming language" which allows the application of computational methods to law. This enables the creation of responsive organizations that are resilient against corruption.

Contract Identifier: **$ID**

A unique identifier (DOI, URI, et cetera) that provides an unambiguous identifier to a specific contract.

Conditional Contract: **#CC**

A digitally-coupled contract that performs an action one or more times based on the value of a digital resource meeting the condition. The contract remains dormant while the value does not meet the condition.

Interface Contract: **#IC**

A highly-generalized contract that provides a framework for high-level behaviors whose details differ depending on application. An interface contract performs no actions by itself, and only works via the creation of an implementary contract.

Extensive Contract: **extends**

By including the keyword 'extends' in the head of a datarchist contract, followed by a contract class identifier, we shall treat the contract as if it includes all provisions of the contract class following the keyword. The extensive contract can modify specific provisions of the contract by including its subsection ID and rewriting that subsection.

Implementary Contract: **implements**

By including the keyword 'implements' in the head of a datarchist contract, followed by a contract interface identifier, we shall treat the contract as if it includes all provisions of the contract class following the keyword. The extensive contract can modify specific provisions of the contract by including its subsection ID and rewriting that subsection.

Linked Contract: **links**

By including the keyword 'links' in the head of a datarchist contract, followed by a square-bracketed list of contract identifiers, we shall treat the contract as if it affects any or all of the contracts in the list of contract identifiers.

Summoning (or Entry) Contract: **#SC extends #CC**

A conditional contract which creates an ad-hoc organization by "summoning" signatories through electronic communication.

Summoning contract (#SC) parameters:

```
#SC: TYPE OWNERSHIP EMP_STATUS EMP_ST_DIFF REV_SHARE
REV_USE DUR ST_CHANGE [MEMBER_IDS]
```

Organization type:

Nonprofit
>(NP) The organization will remain/become a nonprofit. Recommended for most organizations.

Business
>(FP) The organization will remain/become a business. Recommended for organizations supporting tourism.

Collective
>(CP) The organization will remain/become a collective.

Capital ownership:

VO-owned
>(VO) Child organization's capital is held by the VO. Recommended for committed businesses.

Child organization-owned
>(CO) Child organization's capital is maintained in its possession. Recommended for nonprofits.

Shared
>(SO) Child organization's capital is shared by each organization in proportion X% and Y%. Recommended for reluctant businesses.

Rented
>(RO) Child organization's capital is owned by one organization and rented to the other at $X/(unit).

Employee status:

Employed by child
>(CE) Employees remain employed by child organization. Recommended for nonprofits.

Volunteer to parent
>(VP) Employees leave the child organization and volunteer as workers of the VO.

Volunteer to clone
>(VC) Employees leave the child organization and volunteer as workers of a nonprofit "clone" organization. Recommended for committed businesses.

Mixed
>(ME) Employees reduce their hours on the clock by Y hr/wk to X hr/wk, and volunteer Y hr/wk to the parent or clone. Recommended for reluctant businesses.

Employee status change:

Keep
> (K) Employees will be kept for the initiation of the VO.

Opt-in
> (I) Employees must opt-in to the status of employment change. Not opting in is considered a resignation, or a reduction in hours.

Opt-out
> (O) Employees must opt-out to the status of employment change. Opting out is considered a resignation, or a reduction in hours.

Drop
> (D) Employees will be terminated from the organization on initiation of the VO.

Revenue share:

Parent cost-only
> (CO) Revenue to a VIAAC member is kept entirely, except to cover costs of the VIAAC.

Profit-only
> (PO) Revenue to a VIAAC member is kept to cover costs, and the profit given to the VIAAC.

Parent
> (RP) Revenue to a VIAAC member goes entirely to the VIAAC.

Child
> (RC) Revenue to a VIAAC member is kept entirely.

Revenue use:

Recruitment
> (R) Used to increase membership in the VIAAC.

Capital
> (C) Used to obtain capital for the VIAAC.

Wages
> (W) Used to pay individual members of the VIAAC.

Duration:

VO failure
> (FFF) Contract will terminate on failure of the VO.

Terminal
> (TXX) Contract will terminate after XX years.

Conditional
> (TID) Contract will terminate after condition ID.

State changes:

Contract systems
> (CSM) A contract system or contract state machine (CSM) is a group of conditional contracts that interact with one another to form a sort of legal

finite state machine.

Performance measures
> (PRF) A contract condition based on the performance of the VIAAC, the VO, or a specific member organization.

Interactive events
> (INT) A contract condition based on the presence or action of a nearby VIAAC.

Legalized proportion:

Mostly legal - The VIAAC's behavior will be primarily programmed through contract systems. Recommended for VIAACs with few devoted members.
Mostly computational - The VIAAC's behavior will be primarily programmed into its supporting computer systems. Recommended for VIAACs intended to be responsive or experimental.

Entry contract requirements:

Legal consultation: The EC structure should, at some point, be examined by a lawyer to ensure its validity and evaluate whether or not there are types of laws that would invalidate it.
EC building tool: A software tool that allows users to easily build ECs and plug in relevant laws from a database of previous progress. It should lower the barriers to entry for new, nearby VIAACs to be created.
Recruitment strategy: A reliable strategy to convince organizations of the benefits of entering a VIAAC should be created.

Relief (or Exit) Contract: **#RC extends #CC**

A conditional contract which dissolves an ad-hoc organization by "relieving" signatories through electronic communication.

Modification Contract: **#MC extends #CC links [$ID]**

A conditional contract which allows the replacement of any contract in the list $ID.

Computer-controlled Trust: **@CCT**

A trust whose assets can be controlled automatically by a remote machine. The machine should include an inventory of the trust as well as a log-based file system to allow reversibility and review.