agreement.

3.6.3 Initial contribution "Meet and Greet" meeting

The meeting agenda is typically as follows:

1. Initial greetings.
2. Confirm name and contact information.
3. Confirm GitHub "Issue: Contribution Membership Request".
4. Confirm agreement to Terms and Conditions.
5. Identify level of understanding of the Project on the part of the potential contributor:
   A. The potential contributor will present their understanding of the Project's purpose, vision, goals, composition, organization, etc.
   B. The coordinator will ask questions to clarify the level of understanding of the potential contributor.
6. Identify the potential contributor's level of agreement/alignment with the Project.
   A. Discuss the potential contributor's understandings in relationship to alignment/ agreement with the project.
   B. The coordinator will inquire about interests and goals.
7. Allow the potential contributor to present evidence of prior competence and past relevant experience, or not.
   A. Discuss past experience(s), qualifications, and training if appropriate.
   B. The potential contributor should also disclose their affiliation(s) here (to organizations, corporations, States, etc.).
8. Discuss how the potential contributor would like to contribute to the project.
9. If appropriate, discuss a work description (role) for the potential contributor.
   A. Discuss sub-projects, roles, proposals, work descriptions, etc.
   B. Discuss schedules.

3.6.4 On-boarding contribution meeting

The meeting agenda is typically as follows:

> *Note: It is best practice to include sub-project team/group coordinators in the contribution service coordination meeting where the contributor agrees to a role/work description. This ensures that the team gets a needed role (with a work description) met, in order to complete their sub-project purpose.*

1. Check-in.
2. If appropriate, continue discussion of understanding to ensure that it is at a sufficient level to proceed.
3. If appropriate, continue discussion of alignment to ensure there is sufficient agreement to proceed.
4. Discuss motivation and readiness.
   A. Clarify the purpose for the individual's contribution.
   B. Discuss key readiness elements necessary for participation.
   C. Assess readiness. Assess need for orientation/ mentorship.
5. Set expectations.
   A. Explain potential outcomes and consequences of accomplishing (or failing to achieve) the goals, tasks, and accountabilities of a role.
6. Assess agreement(s).
   A. Align expectations with the current team/group.
   B. Assess operational roles and project outcomes.
   C. Assess alignment with current work description.
   D. Identify if there anything still unclear or ambiguous?
7. Share and discuss (in-depth) the written work description for the contributor's role.
   A. Ensure the contributor understands their role.
   B. Ensure the contributor understands the role of others close to their role.
   C. Ensure the contributor understands their position in the organization.
8. Discuss schedules.
9. Take time to decide, and, potentially have another meeting to confirm agreement to a written work description.
10. Record contributor and coordinator(s) agreement to the role/work description.
    A. Confirm agreement by all in the meeting (could be asynchronous also) to a written work description and human identity.
11. Support registration of person.
12. Coordinate communication.

3.6.5 Contribution service coordinators meeting

> **NOTE:** *It is best practice to include sub-project team/group coordinators in the contribution service coordination meeting where the contributor agrees to a role/work description. This ensures that the team gets a needed role (with a work description) met, in order to complete their sub-project purpose.*

The meeting agenda is typically as follows:

1. Check-in.
2. Share analyzed data of a contributor to ensure that understanding of the project's purpose it is at a

sufficient level to proceed.
3. If appropriate, discuss between contribution service team members and the project team members.
4. Clarify the purpose for the individual's contribution.
   A. Discuss key readiness elements necessary for participation.
   B. Assess readiness. Assess need for orientation/ mentorship.
5. Assess agreement(s).
   A. Share work description with which to align expectations with the current team/group.
   B. Assess individual's alignment with current work description.
   C. Identify if there anything still unclear or ambiguous?
6. Advise operational roles and project outcomes.
7. Coordinate communications.
8. Support registration of person.
9. Share a written work description per the contribution service system template.
10. Take time to decide (potentially have another meeting to confirm agreement to a written work description.
11. Confirm agreement by all in the meeting (could be asynchronous also) to a written work description and human identity.

3.6.6 Off-boarding contribution meeting

The meeting agenda is typically as follows:

> *Note: It is best practice to include sub-project team/group coordinators in the contribution service coordination meeting where the contributor agrees to a role/work description. This ensures that the team gets a needed role (with a work description) met, in order to complete their sub-project purpose.*

1. Check-in.
2. Identify reason for leaving.
   A. Learn what promoted the contributor to decide to leave.
3. Identify expectations.
   A. Learn if the role lived up to the expectations, and if not, a reason for the dissatisfaction.
   B. Learn whether the work description and work environment was clear for the role.
   C. Identify if there is anything still unclear or ambiguous?
4. Social organization review (evaluation).
   A. Learn if the social structure of the organization lived up to expectation, was efficient, was effective, and if not, a reason for the issue.
5. Technical organization review (evaluation).
   A. Learn if the technical structure of the organization lived up to expectation, was efficient, was effective, and if not, a reason for the issue.
6. Work environment review (evaluation).
   A. How was the work conditions; how was the working environment? Could it be improved?
   B. What is the morale in the group from their point-of-view?
   C. How are they feeling about the team/group?
7. Advice.
   A. What is working well?
   B. What could be improved?
   C. What advice would the off-boarding individual give to the organization?
   D. What advice would the off-boarding individual give to someone starting in their former position?

3.6.7 Contract service coordinator meeting

> **NOTE:** *It is best practice to include sub-project team/group coordinators in the contribution service coordination meeting where the contributor agrees to a role/work description. This ensures that the team gets a needed role (with a work description) met, in order to complete their sub-project purpose.*

The contract service coordinator meeting is typically as follows:

1. Check-in.
2. Share analyzed data of a contract to ensure that understanding of the purpose it is at a sufficient level to proceed.
3. If appropriate, discuss between contribution service team members and the project team members themselves.
4. Clarify the purpose for the contract contribution.
   A. Discuss key readiness elements necessary for allocating a budget to the contract.
   B. Assess readiness. Assess need for orientation/ mentorship.
5. Assess agreement(s).
   A. Share work description with which to align expectations with the current team/group (i.e., share a written work description per the contribution service system template).
   B. Assess contract alignment with current work description.
6. Take time to decide (potentially have another meeting to confirm agreement to a written contract.
7. Confirm agreement by all in the meeting (could be asynchronous also) to a written work description and human identity.

3.6.8 Short-term update meeting (or, meeting phase)

The meeting agenda is typically as follows (3 phases):

1. Check-in.
2. Short-term updates. The coordinator/facilitator identifies accountabilities and inquires if there are any updates to each accountability. Share only those things that are considered updates in the context of this meeting to accountabilities since the last meeting. Go through them one-by-one.
   A. Provide update per project accountability, focused on delivered output.
   B. Do not talk about the future.
   C. Do not talk about big visions.
   D. What are the operational changes only.
   E. Only talk about what has actually happened as a result of the efforts "energized" by you (an individual) in that role.
   F. Say "no updates" if there are no updates.
3. The coordinator/facilitator looks at the roles and asks about each accountability on the list, individually, for each individual role.
4. The contributor then states the update(s), or not. The contributor gives an update, possibly going through metrics, to make sure everyone is up to date on progress, and going through roles changes (if changed).
5. During this time, or after, participants are free to ask clarifying questions. Clarifying questions are not a suggestion with a question, such as, "have you thought about..." Clarifying questions are an information gathering tool.

3.6.9 Issue resolution synchronous agenda meeting (or, meeting phase)

The synchronous agenda building phase of a meeting involves:

1. Check-in.
2. Conduct a "short-term updates phase".
3. Build an agenda synchronously within the meeting and go through the agenda items in the meeting. Collect agenda items during this phase, so that when someone says something this is the time to right an inquiry down. The process of building a synchronous agenda of issues to process during the meeting involves -Build agenda of issues to process in a meeting (i.e., the agenda-of-items are issues):
   A. Individuals write out issues that they want to share (output) or receive (input), including but not limited to: requests for input, requests for information, requests for work, and work itself.
      1. Ask about proposals, inquiries, calculations, resolutions, or any work.
      2. Present proposals, inquiries, calculations, resolutions, or any work.
   B. The coordinated triage of these issues occurs at a societal Decision System level, where they become coordinated/facilitated projects that resolve issues about real-world human need fulfillment (*see,* Decision System Standard*).*
   C. The coordinator/facilitator has the goal of getting through all agenda items in the allotted time.
   D. Firstly, take time and have everyone input their agenda items after what they heard. The agenda is built during the meeting. People write in their agenda items.
      1. May or may not be free to add agenda items during the meeting. This will interfere with time.
   E. Have list of agenda items.
   F. Identify number of agenda items.
   G. Identify how much time is left and calculate how much time may be triaged or evenly distributed to each agenda item (issue).
      1. Triage. If important roles need to drop off, then triage them first.
   H. Process agenda items.
      1. Firstly, each agenda item is readout by the coordinator/facilitator. The individual coordinator of the issue (agenda item) re-states the issue; then, the issue is addressed by stakeholders. In other words, to process each agenda item, the facilitator asks the person to restate the issue, then might ask: "what do you need?
         i. Something to share?
         ii. Someone to get something done?
         iii. To receive input or data?
         iv. To share input or data with others?
         v. Is there something you expect to need on an ongoing basis?
      2. Then, the coordinator/facilitator (and secretary):
         i. Listen to issue-owner's request.
         ii. Capture accepted next actions. Add action items as a result of discussing the issue. Add action items.
      3. Secretary logs all action items.
         i. Names and contact details for each senders and receivers.
         ii. What needs to be sent and by whom.
         iii. What needs to be received and by whom.
      4. Then, the coordinator/facilitator asks, "Did you get what you need?"

3.6.10 Working group standards review and approval meeting

The objective of any standards meeting is to develop and produce community standards that reflect a complete and optimal organization of information and to serve the users and InterSystem teams.

Agenda items for the working group meetings are as follows:

1. Check-in.
2. Disclosure of affiliation or change to affiliation.
3. Update on the working group and related working groups.
4. Review draft material.
   A. Draft material was sent out in advance of the meeting.
   B. Was anyone not able to review or access the draft material?
   C. Start draft review by reviewing updates given by those who had been assigned work (action items) in the past.
      1. Authoring.
         i. What paragraphs and sentences were modified, added, deleted or changed?
         ii. What figures were added, modified or changed?
         iii. What tables were added, modified or changed.
         iv. What is the source of the content. Is it original or taken from somewhere else? Is use possible, is citing necessary?
      2. Commenting: Are there any comments or thoughts?
5. Review proposal material.
   A. Show issue, data, discussion for change.
6. Set action task after meeting if revisions are necessary.
7. If ready for voting, then poll working.
   A. All those in agreement say agree.
   B. All those against the change, state objection.
8. New inquiry items will be discussed and action items developed.
9. Review and agree on date of next meeting.

3.6.11 Decision working group inquiry (review and approval) meeting

Agenda items for the working group meetings are as follows:

1. Check-in.
2. Disclosure of affiliation or change to affiliation.
3. Identify location of issue [decision resolution inquiry] in the decision system.
   A. Follow decision system standard decisioning flow chart.
4. Review the issue/proposal.
5. Clarify issue by asking and answering questions:
   A. Clarify inquires.
   B. Clarify roles and deliverables.
   C. Clarify resolutions.
6. Review decisions necessary for the resolution of the issue (through sub-inquiry resolutions).
7. Review proposal/solution material for the resolution of the decision.
   A. Share work/information.
8. Review working solution for the decision.
   A. Show issue, data, analysis and synthesis, results for decision.
9. Discover if a sub-inquiry needs to be complete:
   A. Ask for something required to be done.
   B. Ask for input to facilitate a resolution.
10. Decide via consensus poll:
    A. All those in agreement say agree.
    B. All those against the change, state objection.
11. Develop action items that have developed because of the decision.
12. Review and agree on date of next meeting.
13. Coordinator and/or others execute the decision (generally occurs after conclusion of meeting).

3.6.12 Problem solving group meetings (simplified)

The agenda items for simplified problem solving working group meetings are as follows:

1. Check-in
2. Identify and state issue(s).
3. Determine whether the issue is an actual issue (note: determination may not yet be possible).
4. Problem solve:
   A. Discover what information is available about the issue.
   B. Discover what information is available to solve the issue.
   C. Discover what additional information must be acquired to solve the issue.
   D. Discuss the information available.
   E. Identify available solutions to the issue.
   F. Decide and select with the information available the appropriate solution.
5. Develop action items that have developed because of the decision.
6. Review and agree on date of next meeting.
7. Coordinator and/or others execute the decision (generally occurs after conclusion of meeting).

3.7 Habitat operational team meeting

Agenda items for habitat operational meetings are as follows:

1. Check-in.
2. Identify current roles and accountabilities.
3. Confirm location of master habitat operations plan.
4. Confirm current tasks.
5. Provide updates to all accountabilities (short-term updates).
6. Confirm schedules.
7. Confirm communications.
8. Do operations (not a meeting; or could be looked at like a synchronous physical production meeting).

3.7.13 Task challenge meeting

Agenda items for the meetings about tasks that have problems/challenges are as follows:

1. Check-in.
2. Identify obstacles:
   A. What are the challenges that are hindering success?
   B. What could be better?
   C. What needs changing?
   D. What are the concerns/tensions?
   E. What are the obstacles/blockages?
   F. What are the problems?
   G. What could be better?
   H. Where are the gaps?
3. Identify needs for project:
   A. What is needed to complete the project/task?
   B. From who is it needed?
   C. Ask for something to be done.
   D. Ask for input.
4. Identify decisions:
   A. What new decisions are necessary to resolve the challenge.
5. Brainstorm and think together about needs and solutions to the challenge.
6. Identify what resources are available to resolve the challenge.
7. Clarify next steps.

3.7.14 Presentation meetings

A.k.a., Information presentation meeting, presentation.

Agenda items for presentation (information sharing) meetings are as follows:

1. Check-in.
2. Set expectations for meeting.
3. Introduce presenter.
4. Presentation
   A. With/without out questions during the presentation.
5. Open questions and answers.
6. Clarify next steps.

3.7.15 One-on-one catchup

A.k.a., Briefing, updating.

Agenda items for the one-to-one catchup meetings are as follows:

1. Check-in.
2. Set expectations for meeting.
3. Review priorities.
4. Status update.
5. Share information.
6. Inquire and comment.
7. Identify new tasks, decisions, and/or course corrections.
8. Review and agree on date of next meeting.

3.7.16 Transition operations meeting

Agenda items for the transition team meetings are as follows (same as habitation operational team meetings):

1. Check-in.
2. Identify current roles and accountabilities.
3. Confirm location of master transition operations plan.
4. Confirm current tasks.
5. Provide updates to all accountabilities (short-term updates).
6. Confirm schedules.
7. Confirm communications.
8. Do operations (not a meeting; or could be looked at like a synchronous physical production meeting).

3.7.17 Relationship development "Meet and Greet" meeting

Agenda items for the working group meetings are as follows:

1. Check-in.
2. Set expectations for meeting.
3. Introductions.
4. Discussions.
5. Clarifications.
6. Next steps.
7. Set a next meeting date.

3.7.18 Residency membership decision meetings

Habitat residency membership decision meetings

(a.k.a., governance meetings) meetings that take place specifically around the purpose/goal/objective of filtering the entrance and facilitating the exit of individuals:

1. Contribution service membership working groups meet to determine changes of membership:
   A. An individual's understanding of the project by means of an interview hosted by contribution service coordinators.
   B. An individual's agreed upon statement of acceptance to a set of by-laws that control entrance, existence within, and exit from the habitat.
   C. Whether the master plan of the habitat can accept a new residential member without reverting to boundary sprawl or creating any form of excessive tension on habitat services and/or internal social relations.
   D. Objections and rejection.
   E. Acceptance and approval.
   F. Resolve necessary market-State transactions.

3.7.19 Contribution service decision meetings

Project contribution decision meetings (a.k.a., governance meetings) meetings that take place specifically around the purpose/goal/objective of organizational contribution issues (involving roles and policies):

1. Contribution service coordinators and working groups meet to determine changes in contribution:
   A. Identities and roles in project.
      1. People enter and leave; roles change; accountabilities change).
   B. Tasks and times for project completion
      1. Identities in conjunction with knowledge, skills, and resources use tools to complete work within scheduled amounts of time and resources.
   C. Gives the contribution service decision working group the power/responsibility to decide changes to: add and remove identities, add and remove projects, add and remove roles.

4 [Contribution] Working members organizational structure

This section outlines the various responsibilities of contributor roles in Auravana (a community-type society). The Auravana project is sub-divided into sub-projects under Societal System categorization. Responsibilities for most roles are scoped to this societal projects organization:

Table 14. *Contribution service organization by role, responsibilities, and requirements.*

Role	Responsibilities	Requirements	Defined by
Community Member (member of general population)	maintain awareness of changes	none	Community-type society standard + team webpage
Global Coordinator (Reviewer + Approver)	review and approve accepting contributions	highly experienced and active reviewer + contributor to a societal subproject	OWNERS file reviewer and approver entry + team webpage
Local Coordinator (Reviewer + Approver)	review and approve accepted contributions	experienced and active reviewer + contributor to a standards subproject	OWNERS file reviewer and approver entry + team webpage
Working Group Member (Developer + Approver)	develop article, review and approve contributions	developer of standards subproject	Auravana WG member + team webpage
Habitat Team Member (Builder & Operator)	build and operate physical systems	operator of habitat service subproject	Auravana HSS member + team webpage
Transition Team Member	facilitate transition to community	operator of transition subproject	Auravana Transition member + team webpage
Consulting Member	available for consultation	time for consultation	Community-type society standard + team webpage

To any societal project there are several high-level categories relating to contribution:

1. New contributors.
2. Continuous contributors (continuing contributors).
3. Members/persons of the larger community that may use the results of the contribution.

New contributors should be welcomed to the community project by existing members, helped with contribution workflow, and directed to relevant documentation and communication channels.

Project Auravana is organized into:

1. Coordinators:
   A. Follow the standards in order to meet:
      1. Requirements for execution of projects.
      2. Requirements for fulfillment of human needs.
      3. Requirements for unified information integration.
      4. Requirements for communications coordination.
      5. Requirements for decision resolution.
2. Working Groups:
   A. Follow the standards in order to meet:
      1. Requirements for information collection.
      2. Requirements for working documentation.
      3. Requirements for actual solutions.
3. Habitat teams:
   A. Follow the standards in order to meet:
      1. Requirements for habitat [services] operations.
      2. Requirements for habitat [services] coordination.
      3. Requirements for habitat decisions.
4. Transition teams:
   A. Follow the standards in order to meet:
      1. Requirements for transition [services] operations.
      2. Requirements for transition [services] coordination.
      3. Requirements for transition decisions.

The group of people working on a standard is called, the working group. Every [standards] working group has a coordinator that facilitates communications, integrations, and decisions. The team of people working in habitat services is called, the habitat service team. Every [habitat] service team has a coordinator that facilitates communications, operations, and decisions. The team of people working on transitioning to community is called the transition team.

4.1 Membership

Team members (a.k.a., project members) are active contributors on the InterSystem Team (i.e., on HSS teams and working groups in the community). It is relevant to note here that membership is a someone irrelevant concept to use in relation to everyone (the whole population) of community, because in this sense, every human on the planet is technically a member of community.

Members (of a team/group) are expected to maintain a situational awareness of:

1. What is expected of an understanding?
2. How do I acquire an understanding?
3. What must be done because of this understanding?

4.1.1 Members (participants)

Group/team members as a whole are expected to participate, contribute and drive the work of the project.

There are two types of team/group members:

1. **Participating (P) members (i.e., has currently active participating member status)**
   A. Has the following attributes:
      1. Active role.
      2. Voting obligation.
      3. Identify experts
      4. Stakeholder engagement within his/her habitat service system.
      5. Voted in by habitat team O members.
2. **Observing (O) members (Consulting members, inactive members)**
   A. Those who wish to follow.
   B. No voting rights in committee.
   C. Can make contribution.
   D. But do not want to commit.
   E. Maybe open to everyone, open to formerly active members, and/or open to active members of the InterSystem Team.

4.1.2 Membership list

A.k.a., Roster, list of contributors, list of people contributing, contribution register, team list, personnel list.

A roster is a list of the people or things that belong to a particular group or team. The membership list of a list of people contributing to the project in a coordinated manner. Herein, there are three primary categories of membership:

1. People who are contributing time and effort (physical or mental).
2. People who are advising and/or consulting.
3. In the market, people are contributing financial resources or required physical resources.
4. In the State, people are contributing documentation and relationship develop with governments.

4.1.3 Additions to the group/team

During the course of its deliberations, the group may determine that it's in the best interest of achieving a quality and informed outcome to add additional members with different perspectives to the working group. Such new members may be added by consensus of the working group.

4.1.4 Sub-groups (and sub-teams)

The group/team may decide to employ sub-groups (sub-teams) as an efficient means of delegating topics

or assignments to be completed. Sub-organization members need to have a clear understanding of issues they work on as well as the results to be achieved. The members of sub-organizations report their results to whole working group for review and approval.

Any member of the group/team may serve on any sub-organization; however, depending upon the specific tasks to be accomplished, the coordinator (facilitator/moderator) should ensure that the sub-team is properly balanced with the appropriate skills and resources to ensure successful completion. It is recommended that the sub-organization appoints a coordinator who heads up the sub-organization and is responsible for providing regular progress updates to the group/team. There is no need for formal confirmation by the group/team of such a coordinator. The lifespan of a sub-organization should not extend beyond that of the Working Group.

Decisions made by sub-organization should always be shared with the larger group/team and a call for consensus (100% agreement without serious objection) must be made by the entire group/team.

4.1.5 Replacement of members

If a group/team member is unable to serve, given the duration of time and requirements of the group/team, a replacement may or may not be found.

4.1.6 De-enrolling project members

Enrolment and de-enrolment in a role/job is decided by coordinators in a functional hierarchy in conjunction with a contribution service working group, and the individual workers themselves. All potential roles are public, there are task, knowledge, and skill requirements of people for all role/tasks. Preferences are accounted for, but may not be realized.

Contributing to service means that there are performance requirements. In some cases, the performance requirements are higher, and in other cases, lower. For example, participating working group members will be de-enrolled, and re-enrolled as observing members if their behavior meets the following criteria:

1. Failure to vote in two intermediary ballots: will cause a membership downgrade to observing O-member status for a period of 6 months.
2. Failure to vote in one primary ballot: will cause a membership downgrade to observing O-member status for a period of 6 months.
3. Failure to appear in two meetings: will cause a membership downgrade to observing O-member status for a period of 3 months.
4. Failure to do work description work missing tasks without justification: will cause a membership downgrade to observing O-member status for a period of 3 months.

To be reinstated after the status change period:

1. Know that you cannot appeal.
2. Know that reinstatement does not happen automatically.
3. Contact a coordinator to be reinstated after the 3-12month period is complete.

NOTE: *Participating P-status members can comment on working drafts, submit written positions for decisions to be taken at meetings. Observing O-status members can only observe, and cannot interact.*

4.1.7 Working technical advisors

A.k.a., Technical advisors to the working groups.

The groups and teams may choose to invite other individuals with special knowledge and expertise related to the topic issue to attend meetings (and/or complete work) to provide information and/or advice. Advisors will be encouraged to participate in discussions, but shall not participate in the decisioning of the working groups.

4.1.8 Public user involvement in contribution

Group and team members serve as conduits for two-way information exchange with their users and habitat service systems access. Public users wanting to provide input to the process are encouraged to channel their concerns and suggestions through individual members of a working group or team. Members will make a concerted outreach effort to communicate regularly with their users or habitat service systems to keep them informed about the process and the issues under discussion.

Public comments received as a result of a public comment forum held in relation to the activities of the group/team should be carefully considered and analyzed. In addition, the group/team is encouraged to explain their rationale for agreeing or disagreeing with the different comments received and, if appropriate, how these will be addressed in the report of the group/team.

4.1.9 Participation and observation by members of the public

Often group/team meetings are open to the public (commons) and observers are welcome. Meetings of the working group are meant to be working meetings focused on collaboratively developing a decided change regarding their specific issue(s). As such, the working group meetings are not designed to be opportunities for soliciting input from the general public. However, members of the public are encouraged to raise their concerns with working group members before or after the meetings, as well as during breaks, to help ensure that all issues of significant concern to the public are considered in the working group's decisioning.

4.1.10 Open review participation

In community, the whole scientific community can contribute to the review process (for information standards and for decisions), should they wish.

There are requirements to participate in the information review process by the community of scientists:

1. **Review** users with five publications assigned to their profile are able to review.
2. **Comment** users with one publication assigned to their profile are able to comment.

> **CLARIFICATION:** *Exceptions are made for anyone who does not meet the requirements. Individuals who do not meet requirements may still review after a coordinator(s) ensures they will do so in a polite and intelligent way.*

The review process in community is fully transparent and visible to the public. It is expected that everyone who reviews or comments does so under their real identity. Everyone is aware of everyone else's identity.

It is also relevant to note here that peer review is a continuous process. Scientific research, writings and reports are always open to re-evaluation given new information. Continuous peer reviews allow authors and working groups to gain continuous feedback and important criticism of their work. The social evaluation of science does not end with one round of peer review.

4.1.11 Citation in standards (of working group members)

A.k.a., Working group member/labor attribution.

Working group (standards developed) articles are cited in the following way:

1. Only those people who have been working on a specific publishable version of an article, via a working group, have their name(s) on the title page. Past working group developers who have not worked on the specified version of the article will have their names replaced (on the article's title page) by current working group members. If someone wants to see who, over time, has worked on an article, then they will have to either look up past publications, or look up the standards revision log that includes publication dates and associated working group members. In other words, the most recently published articles only have the names of those members who participated in the actual working group for that publication. Working group member names are written on their article's associated title page.
2. The coordinator (approver) for the article will always have their name appear first, followed alphabetically by the other working group members.
3. In concern to translations, the publication log lists the translators on a separate column than the working group members.

In other words, the title page of each article in the standards includes the last working group members who worked on that article in the standards, only. The coordinator's name comes first, followed by the other working group members in alphabetical order. In other words, the title page of each article does not include former working group members who did not work on that current version of the standard. Future standards do not cite former standards, though commenting and review may do so.

4.2 Contribution status

There are two primary forms of contribution as the status of an individual following a role within the InterSystem Team. There is:

1. Active status currently contributing.
2. Inactive status not contributing.

How activity is measured:

> *Active members are defined as members of one of the InterSystem Team Organizations currently contributing. To contribute is to complete objectives through tasks in a coordinated manner. This is measured by the Contribution Service System project [team]. All roles have associated work descriptions (work proposals).*

How inactivity is measured:

> *Inactive members are defined as members of one of the InterSystem Team Organizations with no contributions across any organization within 18 months. This is measured by the Contribution Service System project [team].*

It is possible that after an extended period away from the project with no activity those members would need to re-familiarize themselves with the current state before being able to contribute effectively.

4.2.1 [Active] Project members

Contributing [community] members are expected to have familiarity with project organization, roles, procedures, and socio-technical and/or writing ability. Role-specific expectations, responsibilities, and requirements are enumerated herein.

There are two main types of active project member:

1. **Acting members** are expected to remain active contributors to the project.

   A. Can have issues and coordinators assigned to them.
   B. Are participating in working groups (WGs) and/or teams.
2. **Consulting members** are expected to remain available for consultation.
   A. Cannot have issues and coordinators assigned to them.
   B. Are not participating in working groups (WGs) and teams.

The contribution system is divided into sets of system requirements:

1. [Coordinator] Coordination system requirements
2. [Non-Coordinator] Working group/team requirements
3. [Decision Coordinator] Decision system team requirements

4.2.2 [Active] Working group (information work)

A.k.a., Working group members, standards groups, standards development groups, scientists.

The main task of working groups is to remain actively involved in the development of standards. Working groups develop the societal specification standard. Teams implement the standards. Sometimes, the working group that develops the standard is also called a team. The core technical working group that develops the whole standard is divided into working sub-groups by articles within the Standard, or by situational relevant topic.

Work on standards, articles, code contributions, and habitat services involves socio-technical action, in addition to the consensus of the working group (or team). Technical working groups are groups of people (and technical systems) working together to develop and update articles within the societal specification standard. Project coordinators coordinate member activities such as technical meetings, publishing/committing, and administration. In concern to modification of the master Societal Specification Standard repository, working group members are able to submit pull requests to articles (or code) for final acceptance on some part of a project. They are knowledgeable about both the article-base, standard-base, code-base, and/or planned operations-base.

Working group contributions are added, if accepted, to the master Societal Specification Standard repository. Acceptance of standards, articles, and code contributions require all of the following:

1. One approver (the project coordinator).
2. Multiple approvers -the consensus of the working group (or team).
3. Protocol approver -the protocol resolves the approval.
4. An team-level inquiry review from the decision system (economic decisioning) and habitat service system. Consensus from the coordinator team.

Project Auravana organizes the development of a set of societal standards through a set of functional/technical working groups. As a coordinated participant on a working group, there are requirements:

1. Evolve articles by research, analysis, discussion, and group integration.
2. Evolve articles by completing all known associated tasks.
3. Meet formally once a month (or when appropriate):
   A. To help each other resolve open source issues.
   B. To integrate work completed separately.
4. Interview experts (when appropriate).
5. Meet formally annually to:
   A. To help each other resolve open issues.
   B. To integrate work completed separately.
   C. To republish new revision of the unified standard.
6. Full members of a working group are those who are active, as demonstrated by the completion of tasks and attending formal meetings as working group members. Individuals will be removed from active status if they do not complete tasks and/or do not attend formal meetings.

Working group (WG) members are responsible for (i.e., WG members are expected to):

1. Attend WG meetings.
2. Stay up-to-date with all information.
3. Follow discussions and issues on the relevant communications platforms.
4. Guide discussions as appropriate.
5. Take action to achieve working group milestone and decisions relevant to their WG and ability.
6. Take action to achieve milestone decisions by keeping to the timeframe as described in the document.
7. Make a collective, final decision supported by a reasonable level of awareness as to whether a particular proposal, decision, or issue has received consensus (ensure agreement).
8. Inform the society when a proposal has received consensus and should become an approved document.

Examples of working group member responsibilities include:

1. Develop and draft working-group documents.

2. Contribute ideas and knowledge to working group discussions.
3. Act as liaisons between the working group and their respective stakeholder groups.
4. Ensure that stakeholder group statements are developed in an informed and timely way.
5. Actively and constructively participate in the discovery, integration, and decisioning process.

Working group full members are expected to have previous domain knowledge and understanding of the subject matter, and the subject matter's integration into the unified societal system (as currently published). There are two means of becoming part of the Auravana working group core team. The first is to become an active contributing member with previous domain experience. Show the domain experience to the project coordinator and identify a task or tasks that you will start completing. The second is to become a mentee, whose task completions are overseen and reviewed by a more experienced working group contributor. In this case, there is no requirement for previous domain experience. There is no coercion to complete tasks, but if they are not completed, then the contributor will have their role status changed to inactive. Working group members are expected to complete working group tasks. Working group members are active contributors only; if someone is not going to be active on a daily or weekly basis. An inactive role means no interactive access to chat-discussions, nothing beyond monitoring access to meetings and outputs.

The following work-phase structure describes the generalized process of standards development:

1. Create: Content creation ("preparatory").
2. Comment: Commenting and resolution ("committee").
3. Revise: Review and revision (internal editing; "enquiry").
4. Approve: Coordinator(s) approval.
5. Publish: Publication.

A second way of viewing the work structure is as follows:

1. In phase 1 of this project – Identify and review the body of existing human factors and standards, best practices, and guidelines for applicability (both published by the project and published by other organizations). Collect standards related information.
2. In phase 2 – Apply a human user-centered design (UCD) approach to societal organization in order to determine how existing standards can be mapped to human (community) needs, technology and processes, and identify standards gaps. Identify gaps in standards related information.
3. In phase 3 – Determine where the project may use existing standards and where it may need to augment existing societal standards and/or create new societal standards to address gaps and meet human (organizational) needs. If there are gaps in current standards, then the organization must address those gaps by creating new standards to fill its needs. Analyze gap in standards related information.

Working group phased procedures usually include some combination of the following phases:

1. Identify opportunities for standards review.
2. Articulate project proposal.
3. Establish technical committee (i.e., coordinator team).
4. Develop full working group participation.
5. Preliminary study and development.
6. Visualization and consensus building.
7. Public review of the draft standard.
8. Approve the draft standard by vote (or consensus).
9. Publish the standard.

The requirements for an active working group member are:

1. Enabled two-factor authentication on their GitHub account.
2. Work on a contribution to the project or community. Contribution may include, but is not limited to:
   A. Filing or commenting on issues on GitHub.
   B. Contributing to working groups, teams, sub-projects, or community discussions (e.g. meetings, Slack, etc.).
3. Have read and understand, at least:
   A. Project Plan article entitled "Contribution service system", and Lifestyle System Standard entitled "Contribution Cycle".
4. Knowledgeable about the article-/code-base.
5. Actively contributing to 1 or more subprojects.
6. Active following of SSS procedures when doing activities. Demonstrates clear socio--technical determination.
   A. Responsive to issues and schedules assigned to them.
   B. Responsive to mentions of teams they are members of.
   C. Can be assigned to issues and actions, and people can ask members for reviews with a /cc @username.
7. Active owner of working group issues (unless ownership is explicitly transferred).
   A. Addresses issues related to system and/or

article.
B. Addresses issues discovered after documentation (and code) is accepted.

Not here that the Decision System Service includes a process called decision inquiry review, which is a decision system inquiry to a change to an article, code, and/or plan. Reviewers, who are members of the decision system inquiry working group are able to review planned state changes, as well as articles (and code) for quality and correctness on some part of a sub-project. They are knowledgeable about both the article-based and/or code-base and systems engineering principles.

Decision review working group requirements include, but are not limited to:

1. Focus on decision quality and correctness, including testing and factoring and data accuracy.
2. May not review for holistic issues, is expected to review to a set of decision objective-requirements.
3. Expected to be responsive to review requests as per community expectations
4. Assigned inquiry issues related to inquiry discipline of expertise.
5. Demonstrate reasoned technical judgement.

4.2.3 [Active] Habitat operations (physical work)

A.k.a., Habitat service team members, technicians.

Habitat Service System Teams implement the standards and do technical/physical work in the real world, and mostly within local habitat service systems (i.e., cities).

4.2.4 [Active] Coordinators (coordination work)

A.k.a., Coordination team members, facilitators, moderators.

Coordination is a project system inquiry contribution to support contribution among working relationships. The purpose of a coordinator is to call meetings, preside over group/team deliberations, coordinate the process so that all participants have the opportunity to contribute where appropriate, and report the results of the group/team to the Chartering Organization. Herein, coordinator role specifics are scoped to a part of the systemor standard-base.

Coordinators must know the relationships between societal systems relevant to the work being competed. Conversely, working group members do not necessarily need to have knowledge of the whole societal system to develop one vertical of the system. Because coordinators integrate changes to articles into the whole societal standard, they must have an understanding of the whole societal standard to:

1. Ensure the integrated information is in alignment with community
2. To identify whether a change to one vertical affects other verticals throughout the system.

Coordinators, who are members of the Societal Specification Standard Team are able to commit changes to articles (and code) to the master repository. They are knowledgeable about both the system-base and/or standard-base, and systems engineering principles. Coordinators may approve articles and code contributions for acceptance. In general, coordinators are defined by an entry in an OWNERS file in a repository owned by the Auravana project.

Common coordinator tasks include, but are not limited to:

1. Registration.
2. Scheduling.
3. Track access and edits/changes.
4. Monitor progress.
5. Control/decide changes.
6. Communicate (act) as a point of contact for all participants.
7. Collect and review issues.
8. Prepare and provide documentation to internal groups/teams.
9. Share status and updates.

Working group coordinators (i.e., WG coordinating members) are responsible for (WG coordinators are expected to), at least:

1. Coordinates all aspects of meetings of the Working Group.
2. Coordinates the development of the Working Group.
3. Coordinates the implementation of the Working Group.
4. Works with external stakeholders to identify and coordinate needs, requirements, and resources.
5. May approve articles and code contributions for acceptance.

Sub-responsibilities for working group coordinators include, at least:

1. Updating working group project descriptions (updating working group charters).
2. Solicit relevant presentations for the WG session.
3. Post a draft agenda for their WG session (at least 2-3 weeks before a meeting, where possible).
4. Lead the WG session and encourage active participation.
5. Review and approve the minutes/video from their

WG session (4-6 weeks).
6. Attend WG meetings.
7. Attend WG Coordinator meetings.
8. Update the action list of their WG after the meetings.

Contribution service coordinators are responsible for, at least:

1. Coordinating meet and greets.
   A. Schedule "Meet and Greets".
2. Identifying what roles are required.
   A. Identify all projects.
   B. Identify all roles for all projects.
3. Ensuring alignment on agreements.
   A. Check understanding.
   B. Check agreement.
4. Ensuring safety.
   A. Monitor for potentially dangerous contribution.

In general, all coordinators are expected to:

1. Understand societal system interrelationships.
   A. Coordinators must know the relationship between relevant societal systems to ensure appropriate integration of new information.
2. Maintain input-output contribution tasking charts.
   A. Input-Output analysis of contributions based on working time (minutes, hours, days, weeks, months, years) in association with task. In other words, an input-output tables of time and task (TIOT)
3. Role planning matrix.
   A. Matrix of enrolled contributors (or, to-be enrolled) and required roles to reach target fulfillment.

This charting and matrix dataset includes:

1. Identify relevant systems and databases.
2. Identify user(s).
3. Identify user demands.
4. Identify target production/deliverable requirements.
5. Identify necessary contribution effort to meet user demand given production requirements (identify what contribution tasks, roles, tools, and resources are required).
6. Identify what contribution tasks (roles) are occupied and available.
7. Identify resources.

A suggested procedure to conduct elections for a group/team coordinator may be:

1. Nominations or self-nominations. For example, in the case of a new project, the person starting the project may be the first self-nominated coordinator.
2. Statements and evidence of qualifications from candidates, which sets forth the qualifications, qualities and experience that they possess that will serve the particular group/team.
3. Vote by 90% majority.
4. Consensus by 90% majority.
5. Notification of and subsequent confirmation by the Project Organization (Chartering Organization) of results of actions.

The requirements for an active coordinator are:

1. Enabled two-factor authentication on their GitHub account.
2. Have made multiple contributions to the project or community. Contribution may include, but is not limited to:
   A. Authoring or reviewing Pull Requests on GitHub.
   B. Filing or commenting on coordination issues on GitHub.
   C. Contributing to coordination working groups, teams, subprojects, and/or community discussions (e.g. meetings, Slack, etc.).
3. Have read and understand, at least:
   A. The whole societal system standard.
4. Knowledgeable about the the societal system standard and coordination tools.
5. Actively contributing to 1 or more projects.
6. Active following of SSS procedures when coordinating activities. Demonstrates clear socio--technical determination.
   A. Responsive to issues and members assigned to them.
   B. Responsive to mentions of teams they are members of.
   C. Can be assigned to issues and actions, and people can ask members for reviews with a /cc @username.
7. Active owner of coordination issues (unless ownership is explicitly transferred).
   A. Addresses issues of coordination.
   B. Addresses issues discovered after documentation (and code) is accepted.

4.2.5 [Active] Project owners

> **NOTE:** *This is a generalized high-level description of the role, and the specifics of the sub-project owner role's responsibilities and related processes MUST be defined for individual SIGs or sub-projects.*

Project owners are the technical permissions registry

("authority") for a sub-project in the Auravana project. These people control access to final code commits and are owners of habitat service project operations. In a control hierarchy of access, these people are higher in access. Hierarchy does not necessary involve domination. They MUST have demonstrated both good judgement and responsibility towards the health of that project. Project owners MUST set technical direction and make or approve design decisions for their project either directly or through delegation of these responsibilities.

Defined by: owners entry in project OWNERS files.

The requirements for a project owner are:

1. The process for becoming a Project owner should be defined in the service contribution system. The owners of a project are typically limited to a relatively small group of decision makers, and updated as fits the needs of the project.
2. The following apply to the sub-project for which one would be an owner.
3. Deep understanding of the technical goals and direction of the project.
4. Deep understanding of the technical domain of the project.
5. Sustained contributions to design and direction by doing all of:
   A. Authoring and reviewing proposals.
   B. Initiating, contributing and resolving discussions (emails, GitHub issues, meetings).
   C. Identifying subtle or complex issues in designs and implementation decision review requests.
6. Directly contributed to the project through implementation and/or review.
7. Make and approve technical design decisions for the project.
8. Set technical direction and priorities for the sub-project.
9. Define milestones and releases.
10. Mentor and guide approvers, reviewers, and contributors to the project.
11. Ensure continued health of project.
12. Ensure a healthy process for discussion and decision making is in place.
13. Work with other sub-project owners to maintain the project's overall health and success holistically.

5 [Contribution] Societal service system membership

A contribution service system for a community-type society coordinates contribution through groups and teams, which are composed of dedicated volunteers coordinated by project coordinators (also volunteers). Those who chose to contribute, members, have accountabilities and responsibilities to the organization to which they are contributing.

> **CLARIFICATION:** *Using early 21st century language, it could be said that a community-type society is administered by coordinators and operated by technicians.*

A community-type society contribution service system has three high-level roles for contribution. Contribution to:

1. **Contribution to the Habitat Service System Team**.
   - *HSS Team Member (HSS Team).*
2. **Contribution to the Societal Specification Standard as a member of a Working Group**, and also, member of the Habitat Information Service System Team.
   - *SSS Working Group Member (SSS WG).*
     - The societal specification standards are the result of a consensus-based process of technical content development followed by intense review and formal vote.
3. **Contribution to the Decision Service System Team**, as a member of the Habitat Information Service System Team.
   - *DS Working Group Member (DS WG).*
4. **Contribution to the Societal Transition Team**, as a member of the Societal Transition [Interface] Team.
   - *Transition System Team (TS Team).*

Every habitat service system team (**HSS Team**) has three main deliverable-type goals:

1. Construct system to plan.
2. Operate system to plan.
3. Maintain system to plan
4. Evaluate system to plan.

Every specification standard working group (**SSS WG**) has four main deliverable-type goals *(the first four)*:

1. Discover information.
2. Integrate information.
3. Decide new information standard.
4. Commit change to standard.

Every decision inquiry working group (**DS WG**) has four main deliverable-type goals *(the first four)*:

1. Discover information.
2. Integrate information.
3. Decide new solution master plan.
4. Commit change to master plan.

Every transition system team (**TS Team**) has four main deliverable-type goals:

1. Discover information useful for the movement of resources and people into a community configuration.
2. Develop useful resource relationships to facilitate the movement of resources into a community configuration.
3. Develop positive individual relationships to facilitate the movement of people into a community configuration.
4. Develop positive State relationships to create policy that moves people and resources into a community configuration of society.

There are three types of membership to the coordinated organization of human [membership] service contribution. There are people who coordinate, people who work on working groups, and people who work on habitat teams (and in the market-State, there are also societal transition teams. The three types of membership to a community-type society's InterSystem team are:

1. A **Member Coordinator ("coordinator")** is a Member that agrees to actively participate in coordination activities, follows InterSystem decision procedures, and meets the requirements for participation as defined by the Coordinator Group Charter.
2. A **Working Group Member** is a Member that agrees to actively participate in the Working Group, follows InterSystem information standards, and meets the requirements for participation as defined by the Working Group Charter.
3. A **Habitat Team Member** is a Member that agrees to actively participate in habitat operations, follows InterSystem decision plans, and meets the requirements for participation as defined by the Habitat Group Charter.

In the market there is also an Societal Interface Team:

- A **Societal Transition [Interface] Team Member** is a Member that agrees to actively participate in societal interface operations, follows InterSocietal procedures, and meets the requirements for participation as defined by the Societal Interface Group Charter.

The Coordinator Team is composed of designated representatives from the Working Group's Coordinator Team tree, along with elected and appointed members as specified by the Charter. One or more representatives assume the role of Coordinator. The terms by which the Coordinator Team is formed and maintained must be defined by the Coordinator Group Charter.

> **NOTE:** *In Auravana, coordinators are persons who have read (and are familiar with all of the Societal Specification Standards (or have equal understanding), a necessary requirement in order to coordinate work-service effectively.*

A Working Group that engages in Specification Standard work must have a Specification Standard Coordinator. The Specification Standard Coordinator Team is responsible for executing the Societal Specification Standard (SSS) for all Specification Standard Projects. The Specification Standard Team Coordinator must be an member of a the Project to have Modification-to-Master (OWNER) membership. The terms by which the Specification Standard Team is formed must be defined by the Working Group Charter. The Coordinator Team provides oversight for the Specification Standard Coordinator Team.

A Working Group that engages in collaborative production may designate a resources access coordinator. The resource access coordinator is responsible for working with material (and/or financial and State) resources to produce and maintain the budget for the Working Group's activities. The terms by which the resource access coordinator is formed must be defined by the Working Group Charter. The decision team provides oversight for the resource access coordinator.

There are three types of possible service organizations for a contributing member:

1. **Coordinator Members:** To coordinate and control group/team development and implementation.
2. **Team Members:** To complete all relevant accountabilities and responsibilities.
3. **Working Group Members:** To complete all relevant accountabilities and responsibilities.

> **NOTE:** *Distributed version control and distributed operations control requires working members (groups/teams) and coordinating members.*

5.1 [Societal] Working group service structure

Working groups are formed through the "living" [working group developed] societal specification standard, which coordinates decisions for new materialization, and the operations therein. At a societal level, a working group

usually emerges from a human need for a societal information service, of which there are two primary:

1. **Information Specification Standards:** A working group to develop a Societal Specification Standard.
   - *SSS Working Group Member (SSS WG).*
2. **Material Habitat Decisions:** A working group to solve new states of the habitat service system through societally standardized decisioning.
   - *DS Working Group Member (DS WG).*

There are three time-based categories related to working groups:

1. **Active working groups** *(only active working groups are shown above).*
2. **Inactive working groups** *(groups that only become active when specific issues arise).*
3. **Retired working groups** *(groups that are no longer existent because of fundamental changes to the system).*

5.1.1 Coordinated modification of the societal specification standard

The Auravana Project Societal [Specification] Standard is held in a digital, open source repository. Contribution to the project must meet the definition of open source:

> *Does the repository have a license? Usually, there is a file called LICENSE (Terms and Conditions) in the root of the repository. This LICENSE (Terms and Conditions) is required for the market-State.*

Working groups and coordinators use the following tools, including an issue tracker, to coordinate change to the standard(s) within the repository:

1. **Issue tracker:** Where people discuss issues related to the project.
2. **Pull [requests]:** Where people discuss and review changes that are in progress. Pull requests are responses to issues. They are people who have solved the issue and want to proposed a change to be submitted. This is where the change review process happens; meaning, an Auravana coordinator needs to review the change before you push it into the full project repository.
   A. **Git PULL** pulls synchronizes a local repository with a remote branch to which a branch is mapped.
3. **Push [request]:** The the update with changes is pushed to a remote repository.
   A. **Git PUSH** pushes your changes to the remote repository to which a branch is mapped.
4. **Add [Request]:** Adds files to the staging are in preparation for commitment.
   A. **Git ADD** adds your modified files to the queue to be committed later. Files are not committed
5. **Commit:** Final action of approval and modification of changes; the changes are committed to record. The staging area (or other) files are committed in the index to the repository.
   A. **Git COMMIT** commits the files that have been added and creates a new revision with a log... If you do not add any files, git will not commit anything.
   B. During the commit, the user-coordinator must:
      1. Describe commit: What was committed?.
      2. Explain commit: Why was the commit made; why was the commit necessary?
      3. Notify population of commit (of a change).
6. **Team chat:** Some projects may use these channels for conversational topics (for example, "How do I..." or "What do you think about..." instead of bug article reports or requests). Others use the issue tracker for all conversations.

This societal specification standard project may included within the repository:

1. **License** (terms: By definition, every open source project must have an open source LICENSE. If the project does not have a license, it is not open source.
2. **ReadMe** (about & procedures): The README is the instruction manual that welcomes new community members to the project. It explains why the project is useful and how to get started.
3. **Contributing**: Whereas READMEs help people use the project, contributing docs help people contribute to the project. It explains what types of contributions are needed and how the process works. While not every project has a CONTRIBUTING file, its presence signals that this is a welcoming project to contribute to.
4. **Code-Of-Conduct**: The code of conduct sets ground rules for participants' behavior associated and helps to facilitate a friendly, welcoming environment. While not every project has a CODE_OF_CONDUCT file, its presence signals that this is a welcoming project to contribute to.
5. **Other documentation:** There might be additional documentation, such as tutorials, walk-throughs, or decision procedures, especially on bigger projects.

5.2 Project roles (and responsibilities)

A.k.a., Participants.

Auravana is an open source project with the following types of roles

1. **Instantiator (author, issuing entity):** The person/s or organization that created the project.
2. **Coordinator (owner, accountable control entity, facilitator, moderator):** The person/s who has administration control ability over the organization or repository (not always the same as the original author). For the Auravana Project, this position is held by the principal project coordinator. Coordinators have commit control.
3. **Working groups (contributing member, accountable working entity):** Contributors who are responsible for driving the vision and doing the work.
   A. **Author(s)** writes and presents proposal.
   B. **Moderator (coordinator/facilitator)** facilitates process and discussion.
   C. **Reviewer (subject matter expert)** provide socio-technical expertise.
   D. **Approver (working group)** takes final decision.
   E. **Approver (coordinator)** approves final decision and executes change if appropriate.
4. **Habitat teams (habitat team member, accountable working entity):** Contributors who are responsible for following through on a standard (or, set of standards). Many team members are also called technicians, because they are technically competent. The societal standard working group is also a team.
   A. **Technician(s)** conducts socio-technical operations. Provides socio-technical expertise.
   B. **Coordinator** coordinates socio-technical operations.
5. **Contributors:** Everyone who has contributed something to the project.
   A. Real contributors ("volunteer" contributors).
   B. Paid "contributors" (employees, partners, laborers).
6. **Users and everyone else** (stakeholders): People who use the deliverables of the project or who are impacted by the project. They might be active in conversations or express their opinion on the project's direction.
7. **Project:** The totality of all effort and content/material to deliver something. The societal standard is a project with multiple sub-project including a societal standard and a materialized network of city service systems.

The Auravana Project's open source files are available via the Auravana Project's GitHub Repositories page. A GitHub repository is a directory (folder) where files and folders can exist. Other people can create their own copies of this "directory" and modify it as they wish, then request that their changes get put into the main repository.

Once you know the repository to which you will be contributing, then you need to do some first-time setup. Fork a repository to start contributing to a project. You can fork any public repository to your user account or any organization where you have repository creation permissions. The process is:

1. Fork the repository.
2. Make the addition/fix.
3. Submit a pull request to the project organization. The terminology used to merge a branch/fork with an official repository is a 'pull request'. A "pull request" is you requesting the target repository to please make your changes.
4. Working group review of pull requests.
5. Project coordinator commits changes [to master].
6. Modification of the Auravana Project files must meet the definition of open source.

Contribution necessitates forethought. The following items are important to consider when contributing to any project's files:

1. Files are modified through commit activities.
   A. Look at the commit activity on the master branch.
   B. When was the latest commit?
   C. Does the project have sub-groups that resolve decisions together, and then a coordinator makes the decided commit?
   D. Are commits made on some cyclical basis (e.g., annually, bi-annually)?
   E. How many contributors does the project have?
   F. How often do people commit? (On GitHub, you can find this by clicking "Commits" in the top bar.)
2. Does the project have active issues? Note here that issues may be worked through on a platform outside of that which hosts the files; i.e., outside of GitHub, such as using Slack).
   A. How many open issues are there?
   B. Do maintainers respond quickly to issues when they are opened?
   C. Is there active discussion on the issues?
   D. Are the issues recent?
   E. Are issues getting closed? (On GitHub, click the "closed" tab on the Issues page to see closed issues.)
3. Project is active with pull requests? Pull requests let contributors tell others about changes they have pushed to a branch in a repository on GitHub. Note here that pull-type requests may be worked through on a platform outside of that which hosts the files; i.e., outside of GitHub, such as using Slack).

A. How many open pull requests are there?
B. Do maintainers respond quickly to pull requests when they are opened?
C. Is there active discussion on the pull requests?
D. Are the pull requests recent?
E. How recently were any pull requests merged? (On GitHub, click the "closed" tab on the Pull Requests page to see closed PRs.)

5.3 [Societal] InterSystem team contribution membership

The societal project team working structure involves the following categories of InterSystem team membership, and some of their associated high-level tasks:

1. **Societal standards working groups (societal engineering development team)**
   A. Update standards and publish new versions when agreements has been achieved.
   B. Continued development and error correction of the existing standards. This includes integration of a continuous 'literature review' into the standards.
   C. The existing standards are:
      1. The System Overview Standard
      2. The Project Plan Standard
      3. The Social System Standard
      4. The Decision System Standard. There are two principal parts to the decision standard:
         i. The written documentation part.
         ii. The software system part, including all mathematical modeling and software programming. The mathematical modeling and software programming of the decisioning system.
      5. The Lifestyle System Standard
      6. The Material System Standard. There are four principal parts to the material standard:
         i. The written documentation part.
         ii. The architectural CADand BIM-based drawings for the integrated city system.
         iii. The 3D visually modeled representation of the integrated city system (with different configurations).
         iv. Integration of the 3D representation into a gaming engine for virtually simulating all technical operational aspects of the community.
      7. All standards together can be combined into a societal and city simulation – an open source virtual reality simulator of the city for societal engineering and marketing purposes.
2. **Project coordinator team (societal project coordination team)**
   A. This team is composed of all project coordinators.
   B. Coordinators are points of contact for working group members and perform integration and synchronization tasks for the project.
   C. This team may organize an annual conference/event for the whole working group team and between organizations/projects that share this similar direction to analyze, integrate, refine and re-finalize the most up-to-date version of the standards.
   D. This team continues development of the project's (i.e., organizations) operational procedures and website to ensure accuracy with the evolving standards.
3. **Societal interface team and working groups**
   A. On-boarding and Orienteering team and working groups.
      1. Service contribution coordination (a.k.a., contribution administration) and orienteering service.
      2. This team conducts screening, orientation, and administration activities for working group members (a.k.a., onboarding, etc.).
      3. Value screening questionnaire and documentation for entrance into the community once it is constructed. This is a proposal for an entirely different way of living with a value orientation highly divergent from the many other orientations seen throughout modern society. Entrance into the first city will depend highly upon the value orientation and abilities of the individual. The project will screen individuals to ensure that their value orientation and abilities are aligned with those of a community-type society.
      4. Orienteering guidebook to simply understanding, facilitate behavioral change, and provide appropriately relatable community life-case (i.e., user case) events.
      5. Continued development of useful perception orienting and knowledge content.
   B. State interface team and working groups.
      1. A jurisdictional and geopolitical analysis and plan to determine, develop and sustain possible locations for placement of the first community on this planet with comparison between locations and a feasibility/viability determination. Herein, there is a requirement for the establishment of relationships in the geo-political/geo-jurisdictional area where the community has a probability of placement.
      2. Regional planning relationships and interfaces.

C. Market interface team and working groups.
   1. A business plan and accompanying analysis to ensure the continued financial viability of the community within the larger monetary market. The first version of the community [at least] will require significant resources from the market, and hence, the community will require some balance of [angel] donations and business interaction. The Community will have to interact with the market [to some degree], and this will have to be planned and accounted for.
   2. Market suppliers relationships and interfaces
D. Public relations development team and working groups.
   1. Workshops and promotion.
   2. An oral narration of the standards (i.e., turning them series of audio/video presentations). Note that this is challenging because the standards are "living" documents and republished annually.
   3. Creation of video media detailing the specifics of the proposal through a series of professional videos for both marketing and learning purposes. Descriptive video media of the standards presented in a professional, personal, and visually appealing manner.
   4. Usage of an open source virtual reality simulator of user cases in community cities.
   5. Fictional media:
      i. A fictional radio drama
      ii. A fictional story (i.e., novel) of someone's life in community (in the not too distant future so that it is relatable). This should not be distant science fiction, but portray a short-term view of the lifestyle of individuals among community and the community's operation.
      iii. A high-budget movie.
      iv. A board game as a learning and sharing tool.
   6. Interviews, which serve two purposes:
      i. To remove contradictions and fill in the gaps in the proposal through discussion with others.
      ii. To facilitate in sharing of the system and possibly get others involved. Interviews with others who could facilitate the evolution of the standards and with whom a relationship would be useful for the formation of the community network.

4. **Habitat Service Operational Teams**
   A. Become present when there is a surface (e.g., land) that is being occupied by a population operating a habitat service system based upon a set of continuously developed socio-technical standards (developed by the working groups).
   B. There are four primary habitat service teams: Life; Technology; Exploratory; and Decision.

6 [Contribution] Membership procedure for project teams

A.k.a., "Join the Auravana Project Team".

The following sub-sections represent the basic understandings and requirements for contribution to the Project. The Auravana Project maintains a contribution service system, and the information contained herein describes the current procedures for volunteering to be of service to the Project.

6.1 Read this overview if you want to join Project Auravana

The Auravana Project is a contribution effort to develop a community-type society by means of a set of socio-technical standards for its conception and operation. Herein, community is a societal-level organization that orients individuals toward their highest potential of human need fulfillment. The desire to commit to work toward global human fulfillment is strong in many of us, our coordinated effort will bring into existence a society that works well for everyone.

The Auravana Project coordinates and hosts the development of the societal standard for a type of society with several features unique to community: (1) A societal system based upon cooperatively shared access to common resources, and thus, trade-less (and hence, moneyless). (2) A societal system based upon a formalized socio-technical standard and open-source development, and thus, coercionless. In a community-type society, there is no property and no trading of property (either for other property or for money). In a community-type society there is no State coercion. In a community-type society the resources, and hence, production outputs are the common heritage of everyone.

A community-type society is conceptualized by means of a Societal Standard, and operationalized by a habitat service team. When another society, like the market-State, is operating, then the project also has a transition team to coordinate between the different societies. Auravana could be considered a societal standards setting organization, and like any professional standards organization, working groups develop the socio-technical [societal specification] standards.

6.1.1 Overview of agreement and alignment

To agree to work toward the direction of global human fulfillment through the development of a community-type society necessitates agreement to relate to others and do work under bounded conditions. The Auravana Project is an open source project operating within the market-State under a CC By-SA 4.0 License. Please read the Terms and Conditions (auravana.org/about/terms-and-conditions) for the project; these explain how data is processed and is available through the Auravana Project organization. To agree with the project means to agree to a set of open source agreements and what the project is about (see auravana.org/about). Fundamentally, the Auravana Project is a service to all of humanity.

People who commit to contribute to the development of a community-type society are in alignment with the Project's direction, orientation, and approach. The following are some important questions for potential contributors to ask themselves:

1. Am I aligned with the description of the project?
2. Am I aligned with the direction, orientation, and approach of the project?
3. Am I committed to the dedication of my time and effort to bring a community-type society into existence?

6.2 Contribution membership procedure

I.e., Follow this procedure if you want to join Project Auravana.

The Auravana Project maintains a contribution service for those who desire to contribute to a community-type society. The procedures and overview for contribution are available below.

To become a contributing member of the Auravana Project involves four simple steps:

1. **Join** two communications platforms.
2. **Agree** to the Project's terms and license.
3. **Meet** with a coordinator for alignment determination and project role assignment.
4. **Start** working.

To become a project contributor you must have at least two types of accounts:

1. A GitHub account. [github.com]
2. A specific chat messenger (communications) account (may be whatsapp.com, telegram.com, or discord.com).
3. An email address.

The procedure to become a contributing member is as follows:

1. **Agree to all open source Terms and Conditions** (see Terms and Conditions webpage) by signing a statement of agreement to the Project's Individual Contributors License Agreement.
2. **Join the Auravana Project's GitHub project** by submitting a NEW "Issue: Contribution membership request" through github.com/TrvsGrant/Auravana-Project/issues
   A. Via GitHub, create a new "Issue: Contribution Membership Request"

B. Fill in the template, and send it. The sent form is a request to apply to a working group or transition team.
C. **Warning** Please use the appropriate project issue labels in issue creation or coordinators may miss issues. Labels are necessary for effective search.
D. **Notification** If you do not complete step 2 within one month, your Contribution Membership Request will be denied and closed.
E. **Notification** Make sure an Auravana Project coordinator can associate your messenger-communications account with your GitHub account or a coordinator may miss the association.

3. **Join the Auravana Work Communications Group from the link sent to your email address.** Please use your real name. You cannot join a working group or team if you are not accountable, and you are not accountable if you do not use your real name.
   A. After you send your messenger-communications (e.g., WhatsApp) contact details in an email to the Project's website (step 2), a project coordinator will send you a link to the Auravana Communications Contribution Group to your email address.
   B. When posting in this group please always use:
      1. The appropriate Coordinator [@mentions].
      2. The appropriate Category/Tag [#hashtags].
   C. **Warning** This is the main contribution group for high-level coordination of contribution among all contributors. Please keep the work messenger-communications group clean of distractions and unnecessary attention attractors, such as unnecessary emojis and all caps. Post only content relevant to the contribution service system (i.e., to the coordination of people contributing to the project).
   D. **Notification** If you do not become a contributor, or become inactive in all contribution efforts for one month, then you will be removed from this group. Also, if you post content that harms the project, then you will be removed from this group. When you are no longer contributing, you will be removed from this group.
4. **Schedule and attend a "Meet and Greet"** by means of a link sent to you over messenger-communications by the Global Projects Coordinator. After completing steps 1, 2, and 3, the global coordinator will send you a link to schedule a meeting with a projects coordinator. Scheduling and attending the meeting is step 4. The "Meet and Greet" will help all parties determine contribution feasibility. (webcam required)
   A. Attend the contribution service introduction meeting with a project coordinator. (webcam required)
   B. The meet and greet has several functions:
      1. For the potential contributor to discuss possible roles for contribution.
      2. To share understandings; to present an understanding of the Project's purpose, vision, goals, composition, organization, etc.
      3. To discuss agreement/alignment with the project.
      4. To confirm alignment/agreement with the project.
      5. To present evidence of prior competence, or not.
      6. To confirm a role/position for contribution.
      7. To review and agree to a work description.
      8. To provide data for the coordinator to make a decision on contributability to a project role/work.

Important procedural items:

1. A webcam is required for the Meet and Greet.
2. The Meet and Greet will be recorded and may be shared publicly. It may be shared with other contribution service coordinators to decide a best outcome. Meetings for contribution service are recorded and should be expected to be public access.
3. Work descriptions are agreed to over recorded video for all to see. The terms of the Project are agreed to via email. The contribution desire instantiation is created with coordination software.
4. The link will be sent directly to "you" in messenger-communications (e.g., WhatsApp), and should NOT be posted in the Public Auravana Updates Group. The coordinator will send a personal, single-use scheduling link over messenger-communications (directly to you, and NOT in the Public Auravana Updates Group).
5. Regardless of the time for the duration of the meeting specified in the scheduling link, please expect to spend ~45min in the Meet and Greet.

The "Meet and Greet" may lead to:

1. Another meeting to ensure alignment and resolve agreements.
2. An acknowledgment of alignment and/or dis-alignment with the Auravana Project's direction, orientation, and approach (as explained in the

Societal Specification Standard).

3. A coordinator's approval, denial, or wait status of the membership request:
   A. **An approval** to contribute to an Auravana working group or team.
      1. An assigning of a role and tasks to the volunteer.
         i. All roles have work descriptions, which is what the contributor is agreeing to.
      2. A scheduled plan to assign a role and tasks to the volunteer in the near-future.
   B. **A denial of approval** to a contribution team.
   C. A need for **further coordinator consultation** for approval; wherein, coordinators will review the "Meet and Greet" and consult with one another.
   D. A need for **additional "Meet and Greets"** between a coordinator and the volunteer to ensure understanding and agreement.
   E. A need for **further applicant self-reflection and orientation** for approval.

If approved for a role, the coordinator will assign a role contribution identifier to you, which identifies your location/position on a group/team. Once approved for a role "you" will have tasks to complete. Some of these tasks may be assigned by another member and some of these tasks may be self-assigned. It is important to clarify here that the contributor becomes active when they commit to a role and begin completing tasks in a coordinated manner. When work starts, the person doing the work is added to a public tabled roster of contributors.

Once a person is approved and agrees to join a team/group, it is useful to get up to speed as quickly and smoothly as possible. The next step will be working with the team coordinator (or, working group coordinator) to get you started on those project(s) relevant to your qualifications, role, schedule, and interest. The coordinator will set you up with access to relevant communications channel, explain everything needed for how to work as a member of the volunteer team, and provide other details relevant to your action item(s).

> **IMPORTANT:** *Once a team member is assigned to a task(s), s/he is held accountable for completing it on time.*

Contribution necessitates agreement from several individuals. The individual volunteering to contribute must agree with the project and agree to an identifiable role. Simultaneously, the coordinators of the project need to agree that the individual is a good fit for a specific coordinated role.

The procedures the coordinators use to decide alignment with a role is as follows:

1. **Allow for procedural coordinator decisioning** by the global project coordinator in the assignment of a contributor to an accountable role:
   A. If there is mutual agreement between you and project coordinators, then you can select either an immediate full working group position or a mentee position (where available). If you can demonstrate prior competence, then you can become a full working group member.
      1. I am (or, am not) able to demonstrate prior competency? Evidence of prior competence may include a resume or presentation of prior produced deliverables.
      2. Full working group members are expected to be competent (with knowledge and skills) in their subject area, and to become a full working group member, competence must be demonstrated. In the channel, project coordinators will ask you to demonstrate experience (prior competency) in the subject matter area of the working group to which you are applying. Full working group members should have a high-level understanding of the project, the proposed society, and their subject area.
      3. As a full working group member, you will not always be given tasks, you are expected to identify and to know what the tasks are for your subject area, and complete them.
   B. Mentees are expected to make mistakes and have their work double checked. I f you don't have demonstrable experience, then request a mentee position. As a mentee, someone is available to give you tasks (if you don't know what tasks to select yourself) and to double checks the outputs of those task. Depending upon the current status of contribution, there may not be any mentee positions available.
      1. As a mentee working group member, you may be given tasks and are expected to complete them with support and guidance if needed.
2. **The project coordinator(s) will agree** the individual as a full working member, or a mentee under the oversight of someone responsible for tasking and work output, another sub-coordinator. Or, the project coordinators will deny a membership because there is agreement that a potential risk is posed. The most common risk is a misunderstanding of the fundamental structure of a community-type society; therefore, taking decisions that are dis-unified with the rest of the system.
3. **Simplified coordinator decisioning procedure** for working group / team assignment:
   A. If the volunteer has no sufficient understanding

of the project and/or no agreement to Terms and Conditions then the coordinator may decide to either carry on with orientation, or may deny a role.

B. If the volunteer has interest and no prior competence, then go to supervised contributor position, a mentee position (if available).
C. If the volunteer has prior competency, then go to working group or team position (if available).
D. Position availability is dependent on not threatening or harassing (seeking to hurt) others on the project. Position availability is also dependent on an agreement to work on an open source project. Position availability is further dependent on understanding the fundamental structure and operation of a community-type society and the Project.
E. If prior competence with Auravana sub-projects, then request coordinator status (if available).

6.2.1 [GitHub] Issue: Contribution membership request template

The following is the Auravana Project GitHub membership request issue template to be filled out by an applying volunteer and submitted to Auravana Project Github Issues. Use the template directly below, which is already present in the GitHub issue creation area, to request to become a volunteer (i.e., to issue a contribution service request). The template starts directly below:

[PURPOSE] This issue concerns the coordinated admission of new contributing members.

[INTRODUCTION] Have you ever wanted to contribute to the global human fulfillment through societal design? This template will help a coordinator and "you" to the best understand a good place and position to get started contributing. There is no financial investment to becoming an Auravana contributor, only a time and effort requirement. Minimum time expectations to be a contributor at this phase of development are 7-10 hours per week.

[*WARNING*] This contribution request is public.

[*NOTIFICATION*] You will only be contacted to setup a "meet and greet" for volunteering if you state "Yes" to the required "Yes" sections.

[ACTION] Fill in the template below to complete the request.

[MEMBERSHIP REQUEST INQUIRY]

First name:
Last name:

Role identifier:

Do you agree to all of the following?

- I have skills applicable to a societal engineering project.
- I have a minimum of 7-10 weekly hours to volunteer (20+ for coordination positions).
- I have communication, project-management, and time-management skills.
- I am accountable, responsible, and dedicated to producing quality work/end products.
- I can accomplish all of the above when working under normal, healthy conditions.

---[Yes / No]----

Do you agree to the Terms and Conditions and agree to be contacted?
---[Yes / No]----

Do you agree to contribute if you are approved as a volunteer to an Auravana Project Role with Auravana Project tasks/activities, to be held accountable, and to co-operate with others by means of integration, coordination, and communication?
---[Yes / No]----

Are you willing to put effort toward "tangible contribution" that addresses tasks on a globally coordinated Work Breakdown Structure? We differentiate this time from other activities because it directly impacts the completion of a project.
---[Yes / No]----

Do you understand the direction, approach, and overall orientation of the project; do you understand the project's vision?
---[Yes / No]----
If "No", then why?
If "Yes", then why?

Do you know where you can best contribute? (Not a "Yes" required question)?
---[Yes / No]----
If "No", then why?
If "Yes", then why?

How are you qualified to contribute? (Not a "Yes" required question)?
---[Yes / No]----
If "No", then why?
If "Yes", then why?

How long (weeks, months, years) do you expect to contribute? (Not a "Yes" required question)?

Do you have any references you would like to publicly include (Not a "Yes" required question)?

Do you have any evidence of prior work would like to publicly include (Not a "Yes" required question)?

6.2.1.2 [GitHub] Current issue categories (FYI For Your Information)

Project activities are completed through the coordination of working issues. There are currently three primary types of working issue present:

1. **Contribution membership request** issue.
   - The on-boarding of new members. This issue concerns the coordinated admission of new contributing members.
   - **Issue: Contribution membership request.**
     - *This concerns the volunteering.*
2. **Changes to an article** in the standard.
   - **Issue: A change to a current article.**
     - *This concerns one article working group.*
3. **Additions, subtractions, and/or integrations of articles** in the standard.
   - **Issue: Additions, subtractions, and/or integrations of articles.**
     - *This concerns multiple article working groups.*

NOTE*: Issue categories will evolve in time as the societal system continues to develop. There will eventually be software decision system code added to the issue categories. Therein, instead of article changes, there will be actual software code changes.*

6.3 Auravana Project membership role identifiers

A.k.a., Accountability identifier, membership role identification management, permission identifier, roster identifier.

Every [accountable] role in the Auravana Project has an identifier assigned to it. These roles are coordinated and assigned by the appropriate project coordinator. The role identifier identifies a members current location of contribution.

Note: Sometimes @mention (i.e., @person-name) will follow the identifier. Please use the @person name to identify relevant persons in communications.

Possible role location identifiers include (work roles are organized to effectively and efficiently meet human need fulfillment optimally):

1. **SSSWG (Societal Specification Standard Working Group**; sometimes also known as SSST (Societal Specification Standard Team) standards development organization.
   - PP-WG (Project Plan Working Group)
   - SO-WG (System Overview Working Group)
   - SS-WG (Social System Working Group)
   - DS-WG (Decision System Working Group)
   - MS-WG (Material System Working Group)
   - LS-WG (Lifestyle System Working Group)
   - LI-WG (Linguistics Working Group, a.k.a., translation team)
2. **DSST (Decision Service System Team)** decision development organization.
   - SD-T (Software Development Team)
   - SI-T (Solution Inquiry Team)
   - DI-T (Decision Inquiry Team)
3. **HSST (Habitat Service System Team)** habitat operations organization.
   - LS-T (Life Support System Team)
   - ES-T (Exploratory Support System Team)
   - TS-T (Technology Support System Team)
   - IS-T (Information Service Team)
4. **STST (Societal Transition Service Team)** transition operations organization.
   - MT-T (Market Transition Team)
   - ST-T (State Transition Team)
   - PT-T (Public Transition Team)
5. **CSST (Contribution Service System Team)** Contribution service organization.
   - MS-T (Membership Service Team)
   - OS-T (Orientation/Workshop Service Team)

Unique role location identifiers include:

1. **GPC (Global Projects Coordinator)** coordinator of the global projects coordinator team.
2. **GPCT (Global Projects Coordinator Team)** team of global project's coordinators.
3. **PC (Project Coordinator)** coordinator of a local project.
4. **PCT (Project Coordinator Team)** team of local projects' coordinators.
   - SSWG>PCT standards coordinator team/ organization.
5. **ARTICLE (Article Title)** the title of the article the working group is dedicated to developing; article-based working groups are titled after the name of the article.
6. **SUBTEAM (Name of Sub-Team)** the name of a functional team doing some action.

Clarification:

1. Individual working groups (WG) develop individual Articles in the Societal Specification Standard, SSS).
2. Teams are sub-divided by primary function, and often named as such.
3. All identifiers in the project start with, "AURA>".
   A. For example:

1. AURA>SSS-PP-003 (in the case of the standards).
2. AURA>SSSWG>LI-WG>PC @Name (in the case of a working group projects coordinator).

B. In general, the designator "AURA>" is excluded in writing.

NOTE: *The concept/acronym "AURA" means the following per the Project's FAQ. The "aura" from "Auravana" (Read: name of Project) is a reference to an emanating [field/information environment], a metaphor for the societal information system for any given society. In this sense, every society has an AURA, whether it is made explicit, or not. An AURA is representative of an information field/system about some entity. At the societal scale, it represents the informational and operational system for a type of society, including its concept and operation. In a sense, every society has an AURA, and the AURA for a community-type society is detailed in the societal standards herein. Additionally, AURA is an acronym that stands for All Unified Research Associations. An "AURA" (Read: information system) is a necessary precursor to engineering a community-type society, and the transition thereto.*

For example,

1. The role of Global Projects Coordinator is located at:
   - AURA>GPC
2. The role of a member of an article working group (on the Project Plan) is located at:
   - AURA>SSSWG>PP-WG>ARTICLE
   - ARTICLE is replaced by the title of the article working group the individual is a member of.
3. The role of a coordinator of an article working group (on the Project Plan) is located at:
   - AURA>SSSWG>PP-WG>ARTICLE>PC
4. The role of a member of an Habitat Service System Team (on the Life Support Team) is located at:
   - AURA>HSST>LS-T>SUBTEAM
   - ARTICLE is replaced by the title of the article working group the individual is a member of.
5. The role of a coordinator of a Habitat Service System Team (on the Life Support Team) is located at:
   - AURA>HSST>LS-T>SUBTEAM>PC
6. The role of a global working group member (someone who is a contributing member to multiple articles in the Societal Specification Standard) is located at:
   - AURA>SSSWG

6.4 Auravana Project membership requirements and qualifications

A.k.a., What it takes to contribute.

Project Auravana is a volunteer, contribution-based production. As a volunteer organization, we are not seeking paid consultants or offering any paid positions. We seek to work with like-minded individuals and organizations that:

1. Have skills applicable to a societal engineering project.
2. Have a minimum of 7-10 weekly hours to volunteer (20+ for coordination positions).
3. Have excellent communication, project-management, and time-management skills
4. Are accountable, responsible, and dedicated to producing quality work/end products
5. Can accomplish all of the above when working from home and using virtual-collaboration tools like video conferencing services and team chat/communications apps (e.g., WhatsApp, Discord, Micrsoft MeetNow, or Google Meet) and file sharing services (e.g., Google Docs/Sheets, DropBox, Google Drive, etc.).

The people who join our team as volunteers and consultants typically fit one or more of the following descriptions:

1. People who understand and wish to contribute to the goal of global human fulfillment.
2. People looking to gain experience and share new skills (students, recent graduates, etc.).
3. People seeking to share experience and build their relationships.

The project publicly recognizes contribution by:

1. You can use the Auravana Project as a reference and add it to your resumé.
2. The Societal Specification Standards are professionally citable.
3. The Project credits sufficiently active contribution on the Team webpage related to the area in which someone is an active contributor. The contributor must be active for two months before being added to the Team roster on the website.
   A. Inactive contributors (formerly active contributors) who wish to remain contributors may join a Consulting Team position.
   B. Inactive contributors who do not wish to remain active contributors will be moved to the inactive state.

A contributor to the project should be familiar with the

organization of a project:

1. Project definition.
   A. Focused scope.
2. Project contribution procedures.
   A. Contribution coordination procedures.
3. Project elements.
   A. Strategic definition (project purpose).
   B. Proposal (community-type society).
   C. Concept design (societal specification standard).
   D. Development (working groups and teams).
   E. Construction (habitat service construction).
   F. In-use (habitat service operation).
4. Project roles (working groups and teams).
   A. Coordinators (coordinating members).
   B. Working group members.
   C. Habitat team members.
   D. Transition team members.
5. Project tasks (activities).
   A. Coordination tasks.
   B. Article (Societal Standards) tasks.
   C. Habitat tasks.
   D. Transition tasks.

Working Groups and Teams are expected to share understandings, resources, communications channels, etc. Sharing understandings and resources provides for effective communication. All conditions established regarding these shared understandings and resources must adhere to the principles of freedom of access and fulfillment for all Participants.

6.5 Membership conduct decisioning

A.k.a., Contribution behavior code, code of conduct, work co-operation agreement, harm agreement, acceptable communications and actions agreement.

There are multiple possible ways anyone could be removed (i.e., suspended or expelled) from a contribution role to a team/group. Of utmost importance to any contributor is knowing the ways in which s/he could be removed from a team, such as for behaving unprofessionally, and/or a violation of code of behavior/ conduct. In cases of service suspension, service member team error could be the cause. Fundamentally, members are expected to be kind and respectful to each other. Project Auravana includes people from all around the world, and from a wide variety of different backgrounds, religions, and cultural norms. If a member violates this kindness code of conduct, then they maybe removed from their contribution role.

All contributors have the responsibility to:

1. Contribute to maintaining a safe, supportive, and orderly online work environment that is conducive to working and to show respect and dignity to other persons.
2. Be familiar with and abide by all Auravana Project Terms of Use.
3. React to direction given by coordinators and other contributors in a respectful, positive manner.
4. Maintain behavior free from all forms of bullying, harassment, retaliation, and discrimination.
5. Avoid injuring others, their property, reputation, or employment by false or malicious action.
6. Accept responsibility for their actions.

Unacceptable (inappropriate) behaviors include:

1. **Violence inducing speech:** Any form of expression (e.g. speech, text, or images) that can increase the risk that its audience will condone or commit violence against members of another group, or even outside the group.
2. **Violence or threats of violence:** Violence and threats of violence are not acceptable online or offline. This includes incitement of violence toward any individual, including encouraging a person to commit self-harm. This also includes posting or threatening to post other people's personally identifying information (doxxing) online.
3. **Harassment or deliberate intimidation:** This includes offensive verbal comments related to gender, sexual orientation, disability, physical appearance, body size, race, religion, sexual images in public spaces, stalking, and/or deliberate intimidation.
4. **Unwelcome sexual attention or behavior that contributes to a sexualized environment:** This includes sexualized comments, jokes or imagery in interactions, communications or presentation materials, as well as inappropriate sexual advances.
5. **Sustained disruption of online discussion, talks, or other events:** Sustained disruption of events, online discussions, or meetings, including talks and presentations, will not be tolerated. This includes 'talking over' or 'heckling' event speakers or influencing crowd actions that cause hostility in event sessions.
6. **Abuse of the peer system:** This includes posing as another person, and not citing where citation is legally required.
7. **Retaliation:** Punishing someone is not socially acceptable. This includes harassing, bullying, or filing a false report against someone for raising a sincere concern about your own behavior. Additionally, it is unacceptable to give a someone a bad peer review simply because you disliked them.

6.5.1 Potential consequences for violation of Code of Conduct

Potential consequences for violating the membership conduct decisioning for what is unacceptable may include any of the following:

1. Nothing, if the behavior was determined to not be a violation.
2. A verbal or emailed warning.
3. Requiring that the reported person not direct message (DM) an online community member.
4. Requiring that the reported person not join specific communication channels.
5. Not publishing the video or slides of a talk that violated the appropriate conduct.
6. Immediately ending roles that the reported person holds.
7. Requiring that a person immediately leave the team, communications channel, and/or group, and not return.
8. Removing the reported person from the online platforms or mailing lists (either indefinitely or for a certain time period).
9. Removing the reported person from admin or moderator rights to infrastructure.
10. Removing a person from membership of relevant projects.

6.5.2 Enforcement of conduct

This is how the contribution service will generally handle misconduct:

1. Warning: For most first-time misconduct, the team will remove offending content (where possible) and send a warning. Most issues are resolved here.
2. Account suspension: For repetitive misconduct or behavior containing harassment, bigotry, or abuse, the team will impose temporary suspension.
3. Account expulsion: For serious cases, the team will expel people who display a pattern of harmful destructive behavior toward others and learning.

6.5.3 Resolving and reporting problems

Contact a contribution service coordinator to report incidents. In your report, please provide the following information:

1. Link to the area of incident.
2. Screenshot of the violation and text.
3. Written text of the misconduct.
4. Visible name of user.

If you are the subject of a reported incident or if you wish to report inappropriate behavior, the team will strive to maintain the anonymity and confidentiality of all individuals involved. There may be times, however, when the team may request permission to identify the individual(s) in order to engage in necessary correspondence to gather additional information to be able to identify for a fair process and resolution.

Disagreements and misunderstandings are normal in groups that discuss this type of content and have a diversity of participants. Ask for clarification and attempt to have a calm discussion before assuming that someone is being offensive. Don't lower your own effectiveness and efficiency of communication in response. If that isn't possible, report the issue to a contribution service coordinator.

6.5.4 Due restorative justice process

A.k.a., Due process, restorative justice.

"Due process" refers to a course of formal proceedings carried out regularly and in accordance with established rules and principles to resolve unfair, arbitrary, and unreasonable treatment. Restorative justice herein relies on restorative procedural fairness, where restoration principles and rules are applied consistently fairly (over time, location and sector). Herein, substantive fairness means that the rules and requirements are reasonable. The procedures do not favour or discriminate against any stakeholder. Standards are not arbitrary; they respond to a real need. Standards be applied commonly by all parties (conformity assessment). Transparency of Transparency facilitates trust in the process to ensure that all those [likely to be] affected are aware. Contextual open processes ensure that all who wish to be heard can be heard. Impartial facilitation of restoration so that decisions are made in a fair and consistent manner. Rules and procedures ensure that actions are consistent. Decisions are reviewed (independently) to ensure that procedures were followed. Appeals mechanisms are clear and in place.

7 [Contribution] InterSystem project teams

Real world problems and challenges are approached through 'projects', and therein, teams. A project is a coordinated effort toward intentional discovery and modification (i.e., "change"). Projects define tasks by requirements, with the purpose of a designed construction as the output. Projects involve teams of individuals working together toward the shared constructive purpose for the "team" project's existence. Here, there are tasks within which are processes for accomplishing the task.

For any project, there is a spectrum of effort automation for task-service processes. Simply, some tasks and subtasks are entirely automated, some involve a combination of automation and human effort, and some involve only human effort. Projects involve a timeline of tasks. Tasks have a constructive/-ion oriented output.

A 'team' is a number of individuals working toward a common purpose [in a system] through a similar structure (e.g., a similar approach, orientation, and direction). Teams are especially appropriate for conducting tasks that are high in complexity and have many interdependent subtasks. A team is a group of people with complementary knowledge and skills, who are committed to a common purpose, performance goals, and approach, for which they hold themselves mutually accountable.

It is important for a team to have a common, well-articulated, and meaningful goal. This goal can range from a relatively narrow and finite objective, to a broader, longer-term goal.

A 'group' does not necessarily constitute a 'team'. Teams normally have members with complementary skills and generate synergy through a coordinated effort, which allows each member to maximize their strengths and minimize their weaknesses. A team becomes more than just a collection of people when a strong sense of mutual commitment creates synergy, thus generating performance greater than the sum of the performance of its individual members.

> **NOTE:** *Generally, a "committee" is a group of people with collective [un]responsibility. It is a group where no one is directly responsible for the consequences of the group's action. Some committees are transparent, and others are not.*

7.1 InterSystems, interdisciplinary project teams

The systems team structure is interdependent in form; this is why the organizational structure has the prefix "inter-" in its name. In an interdependent team:

1. No significant task can be accomplished without the cooperation and coordination of any of the members;
2. Within that team members typically operate through different tasks; and,
3. Outputs are bound to the flow of the whole team.

The root of the word is "-systems". Though, one could also refer to these teams as "interdisciplinary teams". Whereas, interdisciplinary could be taken apart to mean, "disciplinary" practiced, and grounded in understanding. And, "inter" across artificial lines of division.

Herein, to cut off a single field, any field from the rest of cognition is to drop the vast context which makes that field possible and which anchors it to reality. The ultimate result, as with any failure of integration, is floating abstractions and self-contradiction, potentially generating a form of compartmentalization with respect to values, desires and logical self-interest, by the compartments of personal and political life. Relating one context of knowledge to another is necessary for integration.

Participants in an interdisciplinary team unite frequently to share information and complete tasks, which are related to their responsibility objective(s). However, putting a group of individuals from different disciplines in the same room does not necessarily mean that they will function well, or at all, as a team. One has to want to be part of a team, and value the cohesiveness that it brings. A cohesive team can only function optimally if the members can effectively communicate among themselves, especially under potentially stressful conditions. Sub-teams exist to address the critical pieces of a system. Crucial to the sub-team development is the clear delineation of roles and responsibilities within the team. With good communication skills, team members are able to define and coordinate (Read: arrive at synthesis of efforts) with other team members through the roles that each has selected to fulfill within the team context.

The value of interdisciplinary teams has long been recognized in many fields, including particle physics, astrophysics, and other "big science" disciplines. Interdisciplinary team science broadens the scope of investigation into problems, yields fresh and possibly unexpected insights, and gives rise to new interdisciplines that are more technically sophisticated. Traditional ("profession") divisions within a community can impede the pace of discovery and evolvement.

7.2 Common project-based team synonyms

A.k.a., Team language.

In the early 21st century there are numerous organizations that promote simple project coordination with a team-based organization, but they use different words to mean the same thing. In the context of functional teams, there are many words used in the

early 21st century to mean essentially the same thing:

1. Team, group, circle, holon, network, etc.
2. Issue, problem, tension, obstacle, challenge, etc.
3. Rejection, objection, disapproval, disagreement, etc.
4. Approval, acceptance, agreement, etc.
5. Coordination, management, governance, etc.
6. Planning, controlling, deciding, etc.
7. Work description, job, role, accountability, responsibility, etc.
8. Action, activity, task, event, etc.

7.3 Teamwork

> **NOTE:** *Teams exist to accomplish a purpose; hence, when a team communicates, it does so with precision and a desire to remove contradiction.*

In community, there is a localization of teams around operational process and service system. The word "team" has two principal meanings in common parlance. Firstly, it means that individuals are working together toward a common purpose (notice the "intrinsic", holistic orientation). However, it can also mean, as a qualified sub-characteristic of the first as "teamwork" against other teams (Read: one side or the other). So, in English, this word can be confusing because it appears to mean integration, but in normative practice it carries with it the connotation of competition between the interests of the teams. This is why, in the Community, the teams are known as 'InterSystems Project Teams'.

7.4 Team meetings (formal)

What do we want accomplished, by what time, and do we have the resources available? Let's formally decide accountability. Let's decide [to] change. Meetings as information sharing and design engineering must be organized and scheduled. What is a "meeting"? In community we share and we design in synchronous and asynchronous time. A "meeting" is a formalized process for structuring the flow of information [and performance]. In the market system a 'process' of information sharing and practical performance is called a "meeting". Teams are associated with habitat and societal operations. Working group meetings are a form of team meeting and are all formal.

7.4.1 Meetups (informal)

The opposite of a formal meeting is a "meetup" (an informal meeting). More recently, there is the concept of "meeting up" being applied to social "meetups" scheduled via a socially collaborative scheduling platform (most of which, in the market, are necessarily for-profit). These scheduled "meetups" are for "getting together" and doing enjoyable and otherwise desirable for oneself and/or for others. These activities are "wanted activities" that structure our quality of life measure. These are not, however, activities that are required to maintain the service structure of the habitat system. Instead, those active tasks are carried out by intersystems teams. "Meetups" are coordinated as part of the Habitat Service System > Exploratory Sub-system. In a sense, the Exploratory sub-system is a scheduling and resource coordination platform for generating access to the abundance of services that are produced through the core life and technology service support systems. Through "meetups" we practice, we explore, and we express; we grow ourselves and our systems. The Exploratory System provides a high-level structuring of those "meetup" services. Meetups are associated with public/semi-public activities. Meetups are generally informal.

7.5 The structuring of the InterSystem teams

> **INSIGHT:** *When we think as a network we can connect the activities of others with our own so that we synergize effort toward our mutual fulfillment.*

Team-based organizational structures are made of teams working towards a common goal while working on their individual tasks. They are less hierarchical and they have flexible structures that reinforce problem-solving, decision-making and teamwork. Individuals working within a coordinated system into teams that perform a variety of task-based functions. At the level of a service system, effort toward the resolution of a task (through "work") requires coordination. Simply, work requires tasks, and tasks necessitate a coordination of effort. In order to complete tasks in a system, there must be systems-level coordination processing. At the level of an accountable individual there is 'task coordination processing', which involves the sub-processes of [en] rolling and scheduling.

In community, individuals engage in an accountable manner with the service system to perform a service in the system that services their own fulfillment. As part of an intersystems team we are accountable to something other than our own inspiration. You don't have to participate in this structure, but when you do, you are accountable.

The selection of the interdisciplinary teams involves transparent processes and thresholds, and not "voting". The process of 'enrolling selection' is otherwise known as, "Rotation and Experience" (RAE). In effect, we rotate in and out of experiences that have an associated set of tasks that facilitate the continuation of our fulfillment in the community. Herein, the task "occupation" is a service performed by an individual to fulfill shared needs. In community, "jobs" are effortful tasks (i.e., services); individuals need to apply effort toward a task through a service-oriented role (ostensibly several) in order to maintain necessary services. This is the process

of 'technical standards and technical skills' alignment [rotation].

Rotation is a transparent and formalized process. It involves the cycling of people through available positions, and through responsibilities. The formalized process involves experience/contribution as a saliently weighted factor in determination of threshold for selection.

1. **Enrolling:** In the community there are no systems-oriented tasks (or "jobs") without a coordinated and definable role. To enrol is to choose or otherwise select a defined role of your present [operational] abilities with a set of identifiable responsibilities, for which there exist a series of associated, required tasks.
2. **Scheduling** involves accountability and identity coordination through temporal and spatial considerations.

Those with "experience" have contributed significantly to the system, and their contributions are accountable and transparent. In a community, anyone acquires the potential for increased responsibility to other individuals by contributing. The more value in your contribution over time, the more responsibility potential you end up with, and the more likely you are to be rotated into positions of critical task responsibility. Therein, transparency and contributory "status" makes it very difficult to corrupt the system, as does rotation.

Rolling scheduling is primarily based on what an accountable individual has already contributed to the system. This is a true "election", based on what a person has done, not what they say they will do. A central support database with skills assessment based on the learning system is operational.

In a team-oriented society, some people do specific jobs because they are more qualified, and therefore, the job will be done more efficiently, safely, and effectively, than someone who is not qualified.

There is prerequisite proficiency required for rotation into some tasks/teams, which is a necessary safety mechanism for the coordination of processes and technologies that have the potential of putting life and the ecology at risk if mistakes of precision are made. There are also tasks that require no general precision other than basic manual procedural knowledge. These tasks are rotated more frequently and have less of a proficiency requirement, and therefore, they are accessible [as a task] to more individuals.

Anyone's' intersystems contributory "status" involves trust in the individual to act responsibly in a situation of high consequence to the community. Some of the factors involved in determining contributory status, and hence, the potential for rotation into a position of greater responsibility include:

1. Past actions.
2. Consistency in actions.
3. Decision trace (i.e., evolution) of action.

When we are rotated into a position that is disliked, and we develop a shared experience, then we are more likely to develop a deep respect for how difficult the service may be, and hence, possibly change our behavior as a result.

Importantly, manipulation [of data] is difficult when there is rotation, and nearly impossible when there is transparency by design.

No individual person is giving orders or the "leader"; instead, we cooperate and function through similarity in the coordination of our efforts. In the Community, people are not "managed", and the inter-relationships between them do not have to be "managed", for everyone is arriving at the same or similar decisions about the system, while accountably identifying their responsibilities both to themselves and to the community. They think and act in a way that "their" responsibilities to the fulfillment of the community are also responsibilities that support themselves, and their lifestyle. They do not think and behave this way because they are robots, but because they have the same knowledge about the system, and a similar direction, orientation, and approach to the real world lifegrounded system that maintains the community.

Instead of "management", there is self-similar coordination. The individual coordinates themselves toward their own fulfillment in the same way as the socio-economic decision system coordinates for everyone's fulfillment. In community, the way we direct, orient, and approach our lives as individuals is similar, just at scale, to the way we direct, orient, and approach our fulfillment as a community.

When we are deprived of our essential powers as creative, intrinsically directed beings, then our service systems reflect that emptiness. What do we get in return for "submission"? Not security. Being one-down in a domination hierarchy is not a secure place to be. When we are deprived of fulfillment we have a potential likelihood of behaving like fearful and suffering caged animals.

In a community-oriented system, problems at any scale are settled through transparent, root level processes. This is rational self-organization; examining information accurately and using a solution orientation to seek the alignment of a decision with a particular direction.

Some people could be on call for minor action-tasks (only limited training required) after a signal is introduced into the decision system alerting to a necessary action. Some of these notifications could go out to anyone proficient in the task.

Being on a systems team involves precision at a task; it involves a degree of internal, self-controlled processing, because there are technical rules for safe and efficient technical operation. When participating on an intersystems team, the degree of freedom you have in your tasks is set by a coordination of task roles and responsibilities on a rolling scheduled basis. Here, we us

a transparent and formalized process to constrain our degrees of freedom in order to construct our emergence into a higher dynamic of our potential. Through coordination we have an access to a synergy of power. We are wasting energy all the time in the persistence of the active state of self-defense.

Elite identities are not helpful in a community. As a volunteer, one's effort (or "labor") doesn't make one's identity; how one relates to one's experience of the world and others in the world, as one's life moves through its various stages, that has a kind of flexibility and richness (as a non-judgmental experience of a wide-variety).

7.6 Operational self-directed team scheduling

In a community-type society, anyone can join the operational InterSystems team, which maintains the scheduled operation of the community. In a sub-team, when there are tasks required that no one wants to do, then those tasks are assigned via an algorithm that selects individuals who have opted to complete them in the most equitable and appropriately rational and rotational manner; but, individuals aren't required to do the task after being selected -they can always walk away and say no, and there are no technical consequences. Those who have selected to be accountable are expected to be so, and if not, they lose future access to accountable positions. So, if someone opts not to complete a task, that decision is transparent, and the algorithm selects another individual and conveys that information to the commons. It is important to recognize herein that users, who are also contributors, value and understand the importance of achieving abundance through automation and efficiency. It is common to seek to automate those tasks that are not desirable. Also, the fact that a task must be done and is not desirable means that a problem exists to be solved by the creativity of the community. If sufficient numbers of people opt not to complete the task, there is evidence for its undesirability and a potential opportunity for improvement. By rotating these undesirable tasks, someone is likely to come up with a creative way to solve the issue, eventually maybe by automating the task, or perhaps by creating a more efficient way of performing it: with less human effort and with added safety. Those types of solutions would represent authentic learning in action.

Rotation has a secondary benefit. Sometimes in life we are blinded [for various reasons] to the results of our behaviors. The product of undesirable behaviors is often undesirable follow-up tasks. When we rotate tasks we give individuals the chance to improve, compensate, and "make amends" for the problems they may have caused by their behavior; therein, lies an opportunity to learn from the experience. It is necessary to acknowledge here that coercive assignments are opposed (i.e., antithetical) to intrinsic motivation. In community, there is distributed responsibility and personal accountability. Of note, rotation also provides the community as a whole the opportunity to see and experience the consequences of others' problematic behaviors.

Simplistically speaking, a community-type society operates by means of a schedule of individuals with the knowledge, skills, and technology who self-direct their accountability in the form of an associated task placed on a schedule.

7.6.1 Task-based work

Task-based models chunk effort into short "doable" segments, and people will do it just because it is interesting, just because it might have some fun to it, just because it gives me a certain sense of meaning, just because it will fulfill us a little more. Efficiency allows for passionate contribution.

7.6.2 Task rotation

When there are tasks required that no one wants to do, then those tasks are assigned via an algorithm that selects individuals to complete them in the most equitable, and hence rotational, manner; but, individuals aren't required to do the task after being assigned its selection – the selection can be denied -anyone can always refuse a task, and there are no consequences. If someone opts not to complete a task, that decision is transparent, and the algorithm assigns the next individual in the rotation.

It is important to recognize herein that our design processes align with our automation and efficiency constraints in order in order to provide fulfillment for services that humans no longer desire (or do not desire) to complete themselves; in order to provide freedom of space and time elsewhere. We always seek to automate those tasks that are necessary, but not desired.

The fact that a task must be done and is not desirable means that a problem exists to be solved by the creativity of the community. If sufficient numbers of people opt not to complete the task, there is evidence for its undesirability, and this information represents a potential opportunity for improvement. By rotating these undesirable tasks, someone is likely to come up with a creative way to solve the issue, eventually maybe by automating the task, or perhaps by creating a more efficient way of performing it: with less human effort and with added safety. Or, by making the task obsolete, or coming to the realization that the task is actually unnecessary. These are real challenges and their solutions represent a type of 'authentic learning', learning in action.

Rotation has a secondary benefit. Sometimes in life we are blinded [for various reasons] to the results of our behaviors. The product of undesirable behaviors is often undesirable follow-up tasks. When we rotate undesirable tasks we give individuals the chance to improve, compensate, and "make amends" for the problems they may have caused by their behavior; therein lies an opportunity to learn from the experience. It is necessary to acknowledge here that coercive assignments are opposed (i.e., antithetical) to intrinsic motivation. In

community, there is distributed responsibility and personal accountability. Of note, rotation also provides the community as a whole the opportunity to see and experience the consequences of others' problematic behaviors.

Let us, for example, say a group of people have a "party" and leave a mess of trash (as either waste, or as the misplacement of items that are intended to be accounted for at the systems level, but because of the party they are now left unaccountable). In this case, the people who checked out the resources for the party, or who have been "exposed" via evidence generating "user flagging", will be rotated into the positioned role of "clean-up and resource re-entry" more frequently.

Next, imagine a group of people who have a concert and disrupt the natural restoration cycle of individuals in the community such that they submit issues into the decision system articulating that there was/is a "sound pollution" issue occurring with one of the service systems. In this case, the users accessing the resources causing the sound disturbance would be rotated into the project inquiry team studying mechanical wave pollution, its biological ramifications, and developing solutions to noise pollution issues.. Yet, if such a team was primarily composed of people with initial disregard for this need, then likely, nothing would be done about the issue.

Individuals could of course repetitively deny participation in resolution of the issue they are verifiably creating through their behaviors, but that would be transparent to the remainder of the community. There is 'social facilitation' here.

Imagine a lifestyle where tasks facilitate the construction of a fulfilled life experience. In other words, what would a lifestyle look like where tasks maintain the construction of services that generate a fulfilled life experience? How might that lifestyle be different than the lifestyle of having a Title and a career?

Herein, there is both assigned rotation and individual selection. Tasks become available and unavailable to accountable, intersystems team members on a rotated basis.

Tasks that someone has been rotated into as a community priority involve the factors of urgency/criticality (as per the urgency spectrum), and also, accountability itself. Someone who creates "pollution" into the system is selected the assignment of "cleaning up" after themselves. Rotation is the re-opening of a role to another qualified individual.

Rotation occurs when a role is exhausting, "unoccupied" (static/continuous), or when a functional characteristic of the role necessitates rotation for the confirmation of input accuracy through the multiplication of individual verification.

The application of rotation to functional roles expose individuals to a variety (or "diversity") of different experiences, and it is likely to facilitate the self-integration of the system (i.e., become a "generalist") as opposed to facilitate the myopic specialization of individuals away from integrated commonality, and toward, "professionalization".

Not every role is significantly rotated. Through coordination, tasks become available and unavailable, and we are presented with intersystems project tasks as part of the community. These tasks are provided to us through a transparent, and commonly formalized process task prioritization.

It is important to notice our biases and to identify our skills and our interests.

Tasks involving incidents and accountability are prioritized on our intersystems task contribution queue. Herein, individuals can also choose to be part of an intersystems project team wherein they accept [accountability for] a set of available responsibilities (representing tasks).

7.7 Social perception status

In a community-type society, efficiency will produce a scarcity of Habitat Service System InterSystem Team positions; this will likely produce competition for significance, achieve the available positions. Simply, societal efficiency will reduce the number of required work positions ("labor") to keep the society developing and operating.

7.8 Services, roles and responsibilities

We are all learners and participators in the community who are outwardly active sometimes and inactive other times. There is coordination between project participants through division of responsibility per a specified task. In community, there are service roles and responsibilities as characterized by a defined [service] task. When a function defines a service, then the service (i.e., "role") can be clearly delineated by its characteristics (i.e., responsibilities and accountabilities).

When we communicate, we desire to communicate precisely so that we resonate with the needs of each other, and hence, we can design systems that fulfill a construction of that designed resonance. When we understand what we have and what we need, then we can begin to coordinate our responsibilities (as opposed to one group commanding another group of "human resources"). When we are iterating and integrated structurally, then it is unhelpful to be giving commands; it is helpful to work transparently through formal processes, and to do so through inquiry.

7.9 The project team structure

At a high-level, the intersystems project team is divided into three functional areas: viability; feasibility; and maintenance & operations. Any given individual working as part of a intersystems team is doing work for one (or more) of these project teams.

7.9.1 Viability project teams

Strategic preservation planning as data collection and analysis toward sustained viability is essential for survival and flourishing. The viability [project] teams assess the viability of designs [as part of a decision inquiry process]. The role of any given member on one of these teams is to assess viability with increasing accuracy.

This team includes (RESEARCH):

1. Core research [center] laboratories.
2. Specialized research laboratories.

The feasibility research team asks questions, discovers new data, and applies that information to the resolution of an "issues" decision space.

It is interesting that younger and less experienced members of a team contribute greatly to the success of group decision making. In computer simulations of group problem solving, investigators have found that adding group members who know less about the problem topic but have different skills improves group performance compared with the performance of a group of members who all are knowledgeable about the problem topic . Organizational theorist James G. March has suggested that groups that consist of members who are too much alike find it harder to keep learning, with each member bringing less and less new information to the discussion. Therefore, the development of knowledge may depend on maintaining an influx of those who are less with the problem but have other skills. And, encouraging them to ask questions may give rise to the most creative ideas of a group. As Albert Einstein once said, "If at first the idea is not absurd, then there is no hope for it." The ability of individuals, team members and the community alike, to ask the "stupid" question may be as important as their willingness to question facts that the experts believe are indisputable.

7.9.2 Feasibility project teams

The feasibility teams engineer designs through constraint while they assess the feasibility of those designs in their technical integration into the habitat service system. The role of any given member on one of these teams is to design systems that precisely meet requirements with increasing accuracy.

This team includes:

1. Core development and fabrication [center] space
2. Specialized development and assessment spaces

Team members design processes and technologies, and develop the integration of those processes and technologies into the habitat service system where they fulfill requirements.

7.9.3 Maintenance and operations team

The intersystems maintenance & operations (M&O) teams implement the strategically planned design framework, and maintain the community systems. In other words, they act toward repairing, maintaining, and operating the habitat system's services. These team members make changes to the service system based on 'decision space resolution' outputs.

1. The maintenance team carries out active change requirements to the habitat service system. The maintenance team maintains the operation of the community.
2. The operations team uses those active services to fulfill specified ongoing service requirements.

In a sense, M&O teams are just project teams with a continuous task cycle for in-service systems (they are the operational task project teams, instead of the viability and feasibility project teams).

Systems maintenance procedures can be optimized when the knowledge base is appropriately organized into a set of well-defined modules, so that specific work corresponds to a specific module.

7.10 Inter-project team accountability factors

> **INTERSYSTEM TEAM PRIMARY:** *At the system's level, we treat each others time with respect, with due efficiency, and when we engage with one another, we do so with precision.*

These are factors for which we are held accountable for while operating as part of an intersystems team.

7.10.1 Technical negligence

Technical negligence applies when one was not paying attention to the task they had selected/accepted responsibility over, and due to their predictably accidental oversight there was a failure for which there are personal consequences (e.g., possible rotation off the team). Accidents happen, and they represent a potential opportunity to improve the safety of operational systems.

When technical efficiency is valued, then the reason to do the work at the systems level, is not to do the same thing repetitively, it is to get the job done so you can go do something else. Our life support feeds our creative expressions at the facility platform. In community, we get the job done, and we get it done with thought and efficiency. Change affects us; let us describe how it is affecting us, and let us direct our new wisdom toward the creation of the greatest potential expression of fulfillment in that moment. We can be in flow and oneness with ourselves, or with many. When we iterate change together we experience a synergy of potential

through the construction of 'community'.

7.10.2 Trust

Trust has to be earned over recorded experiences. Trust can be earned through:

1. Transparency of accountable actions.
2. Gathering feedback from those that will be affected.
3. Quality work.

7.10.3 Mistakes

Mistakes are bound to be made and there can be an access cost associated with them. Yet, a degree of freedom (i.e., "allowance") for mistakes usually allows room for learning to take place. Some of the best learning can take place by the method of trial and error (challenge/skill ratio).

Because there are the possibility of accidents, there are the inclusion of safety measures at the level of the intersystems teams.

When we make serious mistakes as a participant in an intersystems team, we stand up and walk away (i.e., we rotate immediately). Someone who is not, now, emotionally invested will come in and perform the responsibilities. The adage here is, "Trust the gaps". Without a pause to reflect, reasonable accidents could quite easily become tragedies.

7.10.4 Secrecy

At the economic level, secrecy is an essential tactic of warfare. It offers what is known as "leverage" (or, "competitive advantage"), as it denies an opponent informed choice, and could be considered a form of aggression. Concealment is a form of aggression when it denies an informed salient choice for either the individual or the community.

Diagnostics are consistently run on systems to ensure that they are functioning appropriately and to catch errors in their processing and/or newly created inefficiencies due to new knowledge and understanding. It is our goal to have all of our activity as part of a habitat service system's team accounted for; accounting is necessary for all forms of coordination.

> **NOTE:** *When there are security clearances, personnel exist in compartmentalized silos. Further, secrecy agreements (e.g., non-disclosure agreements, security clearances, etc.) allow for secret hierarchies to rule over human fulfillment, to control organizations clandestinely, and to advantage some over others. Secrecy agreements allow for and facilitate rule by fear and intimidation.*

7.10.5 Power structures

The community does not have a socio-economic power structure. A 'power structure' is an organizational structure that uses a means of [extrinsic] leverage in order to maintain compliance and control of action. Taxation and salaries are a form of this leverage. In community, there is no motivation for positions of authority, for none exist. Some positions involve greater responsibility, but not greater authority nor greater salary.

All decisions of control are formally arrived at through planning by the community, and through the transparent iteration of the information decisioning system.

7.11 Challenges to team coordination

Several pitfalls can occur within an interdisciplinary team and inhibit its success. Misunderstanding and mis-communication often occur in situations where there is a lack of a common language and a failure to use it precisely (i.e., lack of precision of its use). Even in a single department such as radiology, clinical physician scientists, image-processing computer scientists, and engineers may speak very separate and distinct scientific languages that require translation for mutual understanding. The more diverse the group, the more critical the roles of open communication, clarification, and mutual respect/resonance become so that all members can understand the distinct languages and needs of individuals on the interdisciplinary team.

In any organization, roadblocks may represent substantial impediments to the formation and continuation of intersystems/disciplinary programs, and overcoming them may require a shift in direction, orientation, and/or approach, in "culture".

Intersystems teams are structurally coordinated through:

1. **The project team's construction (i.e., the team "charter"):** How is the team defined, and what are the goals that it is communicating to the community? What are its anticipated outcomes and contributions; its timelines; and how it will measure both the outcomes of its work and the process the team followed to accomplish their task?
2. **Control:** Does the team have enough freedom and empowerment to feel the connection necessary to accomplish tasks? At the same time, do team members clearly understand their boundaries? How far may members go in pursuit of solutions? Where are parameters of operation (i.e., "limitations) defined?
3. **Clear expectations:** Is the team's expected performance and output(s)/outcome(s) clearly identified and communicated? Are they freely chosen? Do team members understand why the team was created? Is the organization demonstrating constancy of purpose in supporting the team with resources including people, physical

resources, and time? Does the work of the team receive sufficient emphasis as a priority in terms of the time, discussion, attention and interest directed its way?

4. **Context:** Do team members understand why they are participating on the team? Do they understand how the strategy of using teams will help the organization attain its communicated goals? Can team members define their team's importance to the accomplishment of goals? Does the team understand where its work fits in the total context of the organization's goals, principles, and structure?
5. **Commitment:** Do team members want to participate on the team? Do team members feel the team tasks are important? Are members committed to accomplishing the team's purpose and decided outcomes? Do team members perceive their service as valuable to the community and to their own interests? Do team members anticipate recognition for their contributions? Do team members expect their skills to grow and develop on the team? Are team members excited and challenged by the team opportunity?
6. **Competence:** Does the team feel that it has the appropriate people participating? (As an example, in a process improvement, is each step of the process represented on the team?) Does the team feel that its members have the knowledge, skill and capability to address the issues for which the team was formed? If not, does the team have access to the help it needs? Does the team feel it has the resources, strategies and support needed to accomplish its objective purposes (i.e., "objectives")?
7. **Collaboration:** Does the team understand team and group process? Do members understand the stages of group development? Are team members working together effectively interpersonally? Do all team members understand the roles and responsibilities of team members Can the team approach problem solving, process improvement, and goal setting and measurement, jointly? Do team members cooperate to accomplish the team purposeful task construction (i.e., "charter)? Has the team established group norms or rules of conduct in areas such as conflict resolution, consensus decision making and meeting management? Is the team using an appropriate strategy to accomplish its action plan?
8. **Communication:** Are team members clear about the priority of their tasks? Is there an established method for the teams to give feedback and receive honest performance feedback? Is transparency in communication being maintained? Do the teams understand the complete context for their existence? Do team members communicate clearly and honestly with each other? Do team members bring diverse opinions to the table? Are necessary individual needs raised and addressed? Is the team using non-violent communication?
9. **Responsibility:** Do team members feel responsible and accountable for team achievements? Is reasoned risk supported in the community? Do team members fear reprisal? Do team members spend their time finger pointing rather than resolving problems? Can contributors see their impact by the continuance of operation of community systems and evolvement of the system itself? Is the team's reporting relationship and accountability understood by all members of the community? Is there a defined review process so both the team and the community are consistently aligned in direction and purpose? Do team members hold each other accountable for project timelines, commitments and results?

7.12 InterSystem/interdisciplinary affect response

A "culture" of mutual respect/resonance (as a human being with needs and desires) is critical for an interdisciplinary team to be highly functional. In particular, when a team comprises diverse levels of expertise and many different disciplines, it is essential that all team members are comfortable raising issues, questioning ideas, and fully participating in discussion without fear of being ridiculed or having their ideas discounted. Only when open communication and a high level of respect are present do all of the team members feel comfortable sharing their ideas and contributing freely. The stronger the culture of mutual respect/resonance, the higher the likelihood that everyone will thrive. Another result of mutual respect/resonance is that it helps to reflect the value of each team member of the group, regardless of their level of responsibilities or experience. Members of a group who feel valued are more likely to be committed, creative, and contributory, and a group in which each member is respected and valued is much more likely to produce great work.

As participants, we understand that some of these roles are reviewed at a set periodicity, and rolled (in market terminology read: "renegotiated") at another set periodicity regardless of subjective affect. Responsibilities become systems-level access tasking (i.e., "systems-level access"). This doesn't mean that you "get access over" the system; instead, it means that a distributed element of the functional system becomes available for your effortful input.

7.13 Mentoring

Highly effective interdisciplinary teams often show strong mentoring. Mentoring has been noted as a critical component in both traditional training disciplines—science, the arts, even the special forces—acceleration in these areas can often be facilitated through mentoring. As the importance of mentoring has been recognized, a number of tools and techniques have been developed to maximize the productivity of the mentor-mentee relationship. A mentor is someone on an interdisciplinary systems team who facilitates the knowledge and skills development of an individual who is inexperienced in the system.

In facilitation there is attendance to need. There is a lot to being a person and there is a lot to being a person who contributes to society, which involves mentoring and facilitation through the community. Mentoring is systematically structured throughout the service system as a learning support structure.

7.14 From technological projects come technological services

Here, technology is the study and logic of technical [systematic] servicing. It is the study of the potential of an object [in service]. Technology is the logical reasoning of the optimal way to accomplish a functional task given what is known. Etymologically speaking, "techne" (or "tekhne") is the Greek word for "art", which means the equivalent of craft, skill, or construction. "Logos" is the Greek word for "reasonable language" or "reasoning about" the world. Technology isn't just about 'thinking', it is also 'constructing' and 'modifying' the world; of "manipulating" manipulatable variables in the material environment toward a required intention. The faster this happens, the more careful we must be with our intentions.

Technology is automatic means for fulfilling certain functions, whereas it is society (or "culture") that gives this content specific form; at the socio-economic level, technology interfaces with society, and it cannot be otherwise. Because the way in which people live their lives is determined by the prevailing cultural patterns, everything people do is an expression of the priorities (possibly taken for granted), and of the values observed in a given society. After all, to put it in philosophical terms, each cultured expression is a realized value-system.

Technology extends the natural capacities of humans. Taken in this sense, technology does indeed relate to basic needs, since a certain minimum of locomotion, sight, and hearing is indispensable for survival. This is even more obvious with respect to the use of simple tools, which are in an almost literal sense extensions of the human body. It is not by chance that the author of the first German monograph on the philosophy of technology chose the following sentence of Edmund Reitlinger as the motto of his book (Kapp, 1877): "Die ganze Menschheitsgeschichte, genau geprüft, löst sich zuletzt in die Geschichte der Erfindung besserer Werkzeuge auf." [All of human history, adequately examined, in the end is the history of better tools.] In a pointed formula one could say that we depend on technology and that we use technology just because we have a body, because we are part of the physical world.

Our technologies become encoded into our socio-economic system. As purely information, they have a neutral moral consideration; but as encoded structures (in the form of operative systems), they have behaviors. Their behaviors affect our behavior, and our behaviors cannot be fully separated from their behaviors.

For purposes of analysis, it is necessary to separate both areas in analytical terms. But, it must always be kept in mind that when dealing with the one of these two dimensions, at least implicitly one is necessarily also dealing with the other.

Consider the famous saying that technology is the art of guiding the forces of nature according to human purposes. This is to say that technology means to deliberately reshape the physical world in order to attain certain desired results or to fulfill specific functions. Technology and its usage have the potential to change us. In community, we coordinate modifications to the habitat service system through intentional integration at scale.

8 [Contribution] Project charters plan

Generally, projects begin are instantiated through the data contained in an instantiating document, often called a, project charter (or, project description). The Auravana Project is a project to develop and establish a community-type society on the planet. The Auravana Project develops and uses a project plan to set its instantiating definition/charter.

8.1 Project instantiating charter

The Project Plan (standard) serves as the Auravana Project's instantiating charter.

The Project Plan includes the following project charter elements:

1. **Project Title:** Auravana Project
2. **Purpose:** *See the Project definition and Social direction.*
3. **Goals:** *See the Project definition and Social direction.*
4. **Scope:** *See the Project definition and Social direction.*
5. **Objectives:** *See the Project definition and Social direction.*
6. **Stakeholders:** *See the Project definition and Social direction.*
7. **Approach:** *See the Project approach and Social approach.*
8. **Lists: See the categorical executable lists**
   A. **Alignment agreements:** *See the Project execution and Work descriptions.*
   B. **Contribution procedures:** *See the Project execution and Lifestyle contribution cycle.*
   C. **Operational activities:** *See the operational society.*
      1. *InterSystem team (a.k.a., global socio-technical team, socio-information-technology team, etc.).*
         i. *Habitat team working groups (habitat service teams).*
         ii. *Information system team.*
            1. *Standards working groups.*
            2. *Decision working groups.*
   D. **Transitional plans:** *See the Project transition.*
9. **Known risks:** *See the Project approach and Project transition.*

NOTE: *This is a project proposal for a systems-based, human contributed, organizational access service system, and that ultimately realizes a community-type life experience for all humans, globally.*

8.2 Sub-Project instantiating charters

The Auravana Project has three core sub-projects, each of which is contributed to by a team:

1. **The project to develop the societal specification standard (SSS).**
   A. Contributed to by SSS working groups.
   B. Deliverable is a societal specification standard.
   C. Deliverable available to the whole community population.
   D. Stakeholders are the whole community population
   E. The purpose is to produce a standardized, unified societal information system that informs and enables a societal-level community, composed of data, decisions, habitat operations, and a lifestyle for the individuals within the society.
   F. The goal is to develop six information sets (documents, models, etc.):
      1. An overview of the society.
      2. A project plan for the society.
      3. A social system for the society.
      4. A decision system for the society.
      5. A material system for the society.
      6. A lifestyle system for the society.
   G. The scope is a globally unified information set accessible to the whole global population and developed by contributors to a community contribution service system.
   H. The objectives are the objectives of each of the six information sets.
   I. Known risks are detailed in *The Project Plan*. Known risks include: health and safety, bias and belief (opinion), information sufficiency, and informational incidents (Read: adverse informational event; loss of useful information).
   J. The societal specification standard (SSS) is a deliverable that requires the approval of a SSS coordinator team.
2. **The project to construct and operate a habitat service system (HSS).**
   A. Contributed to by HSS teams.
   B. Deliverable is an operational habitat service system (global information and local city systems; global and local).
   C. Deliverable available to the whole community population.
   D. Stakeholders are the whole community population.
   E. The purpose is to construct and operate an integrated habitat service system through the utilization of a societal specification standard that provides an informational structure with

which to realize individual fulfilment at the societal scale.

F. The goal is to develop three primary operational habitat service systems:
   1. A life support service system.
   2. A technology support service system.
   3. An exploratory support service system.

G. The scope is a globally coordinated habitat service system accessible to the whole community population and operated by contributors to a community contribution service system.

H. The objectives are the objectives of each of the three primary habitat service systems.

I. Known risks are detailed in *The Project Plan*. Known risks include: health and safety, operational discipline, resources acquisition, and physical incidents (Read: adverse physical event; loss of access potential).

J. The habitat service system (SSS) is a deliverable that requires the approval of a HSS coordinator team.

3. **The project to facilitate a transition (locally and/or globally) to a community-type society.**

A. Contributed to by transition interface teams.

B. Deliverables are a transition proposal and transition operations.

C. Stakeholders are the whole, global population.

D. The purpose is to propose, develop, and execute a societal transition from another or other types of societies to a community-type society as identified in the societal specification standard.

E. The goal is to transition persons, resources, and technologies (including current cities) into a community-type society as detailed in the societal specification standard.

F. The scope is a globally coordinated transition to a community-type society. This scope includes the transition to a community-type society at local scales; and, it is developed and executed by contributors to a community contribution service system.

G. The objectives include:
   1. Resources moving into a globally coordinated commons.
   2. Persons moving into a globally coordinated commons.
   3. Information "moving" into a unified societal standard.
   4. Production and distribution operating into a globally coordinated commons.
   5. Individuals living in and contributing to a community-type lifestyle, while accessing community-type services.

H. Known risks are detailed in *The Project Plan*. Known risks include: health and safety, bias and belief (opinion), the drive toward coercive power, the state of a poverty of fulfillment without trading, and transitional incidents (Read: adverse transitional events; loss of useful [market-State] relationships). Coercive States (governments represent a risk -the belief in authority (as, power-over-others) is a risk. Profit driven market organizations (profit-based corporations) are a risk -the belief in property and trading [for fulfillment] is a risk.

I. The transition proposal (deliverable) and transition operations (execution) is an organization that requires the approval of a Transition Interface (TI) coordinator team.

9 [Contribution] Project instantiation work descriptions

A.k.a., Job description, role description, service description, service work description, contribution work description.

Generally, projects are contributed to (Read: enrolled in) by individuals who agree and commit to a contribution role (service event) as detailed in an instantiating workservice contribution [description] document, often called a contribution description (Read: job description and contract). The Auravana Project a contribution-based service system to coordinate contribution toward a community-type society. Individual roles (categories of service-work) develop and operate a [community-type] societal system. These roles, of which there are three primary categories, are detailed in the Project Plan as contribution service descriptions.

9.1 Coordination service contribution description (Coordinator member)

As a member of a coordination team, you will primarily work with physical and informational elements to coordinate projects, contributions, and resources within a service [contribution] system realized from a societal specification standard. The project for a community-type society is planned, developed, and executed to fulfill all human individuals globally.

1. **Member purpose (a.k.a., job purpose)**: State the purpose of the member's participation on the team/group:
   A. The team members purpose is to operate as a coordinator at some system's level. Coordinating information and decisions about projects and resources.
2. **Member role (a.k.a., functional assignment)**: Identify the functional role in the contribution service system.
   A. The coordination service team has a PC (projects coordinator) identifier in their role.
3. **Member identifier**: Identify the member as a unique entity in the contribution service system.
4. **Accountabilities (a.k.a., duties):** State the items that the member is accountable and responsible for:
   A. Objectives (goals).
      1. Coordination of users and contributors.
      2. Coordination of projects.
      3. Coordination of information.
      4. Coordination of resources.
   B. Tasks (actions/activities).
      1. Are identified by role.
   C. Conditions (value conditions that qualify decisions).
      1. Transparency.
      2. Accountability.
      3. Protocol (and safety).
5. **Project coordinator responsibilities**: What does it take to be a project coordinator:
   A. It takes a complete knowledge of the societal system as it presently exists.
   B. It takes an ability to use the project coordination software and systems.
   C. It takes the ability to organize and facilitate communication between project contributors.
6. **Qualifications (a.k.a., skills):** State the qualifications that the member must have to complete the work required by the working group.
   A. Primary societal system projects coordinator must have an understanding (and thus, have read) the whole societal system standard. A societal projects coordinator will likely have contributed significantly to the project. Sub-societal project coordinators simply needs to know the coordination protocol.
7. **Common responsibilities** common to all contributing members should be listed, and are as follows:
   A. **Health and safety**: To take responsibility for your own health, safety and welfare, being conversant and ensuring compliance with the organisation's standards and procedures.
   B. **Training and development**: To undertake all reasonable training, learning and development activity designed to support you in your role.
   C. **Freedom and equality**: To be responsible for your own behaviour and act in a manner that avoids and discourages any form of discrimination or harassment, or unequal habitat fulfilment.
   D. **Quality performance**: To be accountable for the quality of completion of the performance of activities as required.
   E. **Tasks:** Are identified by role.

9.2 Working group contribution description (Working group member)

As a member of a working group, you will primarily work with and contribute information to a unified societal standard. This unified societal standard is developed and used to fulfill all human individuals globally.

1. **Member purpose (a.k.a., job purpose):** State the purpose of the member's participation on the team/group:
   A. The working group member's purpose is to develop and code a societal specification

standard using language and object visualization. Accessing information and resolving decisions about the societal standard.

2. **Member role (a.k.a., functional assignment)**: Identify the functional role in the contribution service system.
   A. The the working group member has a WG (working group) identifier in their role.
3. **Member identifier**: Identify the member as a unique entity in the contribution service system.
4. **Accountabilities and responsibilities (a.k.a., duties):** State the items that the member is accountable and responsible for.
   A. Objectives (goals).
      1. Acquire and integrate information.
      2. Develop a unified societal specification standard.
      3. Develop software programming to automate function, of which decisioning is a primary societal function. Fulfill decision inquiry requirements.
   B. Tasks (actions/activities).
      1. Are identified by role.
   C. Conditions (value conditions that qualify decisions).
      1. Transparency.
      2. Accountability.
      3. Protocol (and safety).
5. **Qualifications (a.k.a., skills):** State the qualifications that the member must have to complete the work required by the working group.
   A. A working group team member must have an understanding (and thus, have read) the societal system standard of the working group they are a part. A working group member will likely contribute significantly to the project. Sub-societal working group members simply need to be familiar with the topic of their working group.
6. **Common responsibilities** common to all contributing members should be listed, and are as follows:
   A. **Health and safety**: To take responsibility for your own health, safety and welfare, being conversant and ensuring compliance with the organisation's standards and procedures.
   B. **Training and development**: To undertake all reasonable training, learning and development activity designed to support you in your role.
   C. **Freedom and equality**: To be responsible for your own behaviour and act in a manner that avoids and discourages any form of discrimination or harassment, or unequal habitat fulfilment.
   D. **Quality performance**: To be accountable for the quality of completion of the performance of activities as required.
   E. **Tasks:** Are identified by role.

9.3 Habitat team contribution description (Habitat team member)

As a member of a habitat team, you will primarily work with physical an informational elements to construct and operate a service system realized from a societal specification standard. This habitat service system is developed and used to fulfill all human individuals globally. The habitat team is tasked with the construction and operation of a physical-informational city networked environment.

1. **Member purpose (a.k.a., job purpose):** State the purpose of the member's participation on the team/group:
   A. The habitat team member's purpose is to construct and operate a habitat service system based on a societal information standard. In general, engineering and operations language are used, as well as visualization. Accessing information and resolving realizations (constructions and operations) about the physical existence of humans.
2. **Member role (a.k.a., functional assignment)**: Identify the functional role in the contribution service system.
   A. The the habitat service member has a HSS (habitat service system, HSST) identifier in their role.
3. **Member identifier**: Identify the member as a unique entity in the contribution service system.
4. **Accountabilities and responsibilities (a.k.a., duties):** State the items that the member is accountable and responsible for.
   A. Objectives (goals).
      1. Actualize (Read: actually materialize) information and operate the resulting system.
      2. Sustain human need fulfillment.
      3. Develop habitat service systems to meet fulfillment requirements.
   B. Tasks (actions/activities).
      1. Are identified by role.
   C. Conditions (value conditions that qualify decisions).
      1. Transparency.
      2. Accountability.
      3. Protocol (and safety).
5. **Qualifications (a.k.a., skills):** State the qualifications that the member must have to complete the work required by the working group.
   A. A habitat team member must have sufficient

knowledge, skills, and tools to complete objectives related to their role in the habitat service system. A habitat service team member will likely contribute significantly to the project. Sub-societal habitat service members simply need to be familiar with the procedures of their contributed role.

6. **Common responsibilities** common to all contributing members should be listed, and are as follows:
   A. **Health and safety**: To take responsibility for your own health, safety and welfare, being conversant and ensuring compliance with the organisation's standards and procedures.
   B. **Training and development**: To undertake all reasonable training, learning and development activity designed to support you in your role.
   C. **Freedom and equality**: To be responsible for your own behaviour and act in a manner that avoids and discourages any form of discrimination or harassment, or unequal habitat fulfilment.
   D. **Quality performance**: To be accountable for the quality of completion of the performance of activities as required.
   E. **Tasks:** Are identified by role.

9.4 Transition team contribution description (Transition team member)

As a member of a transition team, you will primarily work with physical an informational elements in an opposed environment (e.g., market-State) to develop relationships that facilitate greater understanding and community realization. The transition team handles external societal affairs (i.e., relationships with other societies).

1. **Member purpose (a.k.a., job purpose):** State the purpose of the member's participation on the team/group:
   A. The transition team member's purpose is to develop relationships that benefit the whole community population. Accessing information and resources essential for the realization of a community-type society.
2. **Member role (a.k.a., functional assignment)**: Identify the functional role in the contribution service system.
   A. The the transition team member has a categorical identifier in their role.
3. **Member identifier**: Identify the member as a unique entity in the contribution service system.
4. **Accountabilities and responsibilities (a.k.a., duties):** State the items that the member is accountable and responsible for.
   A. Objectives (goals).
      1. Acquire and develop market relationships.
      2. Acquire and develop State relationships.
      3. Acquire and develop public relationships.
      4. Facilitate compassionate awareness and sufficient understanding of a societal-level community.
      5. Facilitate access to resources that enter the commons in a coordinated social manner.
      6. Facilitate contribution to services that meet global human need fulfillment requirements without trade and coercion.
   B. Tasks (actions/activities).
      1. Are identified by role.
   C. Conditions (value conditions that qualify decisions).
      1. Transparency.
      2. Accountability.
      3. Protocol (and safety).
5. **Qualifications (a.k.a., skills):** State the qualifications that the member must have to complete the work required by the working group.
   A. A transition team member must have an understanding (and thus, have read) the transition proposal, which acts as a standard for market-State relationship development. A transition team member will likely contribute significantly to the project.
6. **Common responsibilities** common to all contributing members should be listed, and are as follows:
   A. **Health and safety**: To take responsibility for your own health, safety and welfare, being conversant and ensuring compliance with the organisation's standards and procedures.
   B. **Training and development**: To undertake all reasonable training, learning and development activity designed to support you in your role.
   C. **Freedom and equality**: To be responsible for your own behaviour and act in a manner that avoids and discourages any form of discrimination or harassment, or conflict with the market, State, and public.
   D. **Quality performance**: To be accountable for the quality of completion of the performance of activities as required.
   E. **Tasks:** Are identified by role.

10 [Contribution] Work-trade relationship types (payment or non-payment for work)

The completion of work relative to a community-type society, and the transition to a community-type society, involves four possible work-trade relationship categories. In other words, there are four possible categories of work for the transition to and operation of a community-type society:

1. **Contribution** *(true contribution, volunteer)* no trade; no payment. Contributors are not paid anything for their work. Contributors are people who freely contribute their time and resources toward the creation and operation of a community-type society. Within a community-type society all work is of this type (i.e., there is never any payment or exchange for work). If there is any payment for work, the a community-type society is not in existence (has not yet been achieved).
2. **Freelance** *(not contribution)* personal payment; someone pays out-of-pocket through their personal financial account for a service. Freelancers are paid (usually in the form of money) by individual persons to complete work. Here, there is the exchange of money (or other) for work.
3. **Staff** *(a.k.a., partners, employees, etc. Not contribution)* money (financial resources) are paid in exchange for service. Staff members are paid to do work by the [Auravana] Project. Here, there is the exchange of money for work; and in general, a salary (or, payout for working proposals). The Project will pay for services at a reasonable and responsible rate. Note here that if there is mandatory reciprocal token exchange, there there is staff (a.k.a., partners, employees, etc.), until such time as there are no tokens exchanged. The word partnership is used in more cooperative market-State organizations, and the word employee is used in more competitive market-State organizations.
   A. **[State] Labor** *(a.k.a., partners, employees, etc. Not contribution)* a social-State pays credit for a service. Laborers are paid by the State in the form of a credit/token to do work. Here, there is the exchange of a State credit for work.

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TABLES

Table 15. Project Approach > Project Team Tabularization: *Simplified project team table. This table includes the name of the team (identifier, etc.), the responsibilities of the team (as a whole). As well as the name of the coordinator that has the communications and approval role. The communications tools and locations are essential to identify, as are the meeting types that the team holds, and their frequency.*

Team Name	Responsibility of Team	Team Coordinator Name	Communication Tools	Meetings (type, frequency)

TABLES

Table 16. Execution > Team Roles: *Societal team stability organization (this is an example).*[1]

1. *Teams*. Ubuntu. Accessed: 11 March 2020. [wiki.ubuntu.com]

Team Name	Responsibility	Delivery (common to all)	Accountability	Communication Tools	Meeting Frequency (a.k.a., Touch Duration)
Facilitators Team *(internal societal facilitation)*	Handle other's tactical socio-technical needs	Provide guidance to support a better space for learners	*name*	Subscribe, #facilitation	12 days cycle
Orienting Team *(facilitation of new arrivals)*	Support the readjustment of newcomers	Provide guidance and support to learners from a different societal background	*name*	Subscribe, #orienteering	15 day cycle
Accessibility & Marketing Team *(external societal facilitation)*	Improve the socio-technical support available and provide promotional outreach	Deliver more community members	*name*	Subscribe, #relationship-development	12 days cycle
News Team	Gather and publish news on relevant stories	Deliver a daily report	*name*	Subscribe, #updates	5 days cycle
InterSystem Communications Service Team	Handle all of the issues that go to core communications	Deliver a synchronous communications system with no downtime	*name*	Subscribe, #communications	3 days cycle
Forums & Wiki Team	Handle all of the issues that go to the open source collaborations forum	Deliver an asynchronous project communications system with no downtime	*name*	Subscribe, #design-collaboration	*many*
Documentation Team	Writes and maintains the core documentation (manuals)	Deliver recorded linguistic and visual informational support	*name*	Subscribe, #documentation	9 days cycle

Table 17. Execution > Team Roles*: Societal team organization (team structure).*

Team Name	Responsibility	Delivery (common to all)	Accountability	Communication Tools	Touch Durations (Meetings: Frequency,Day)
Information Team	Handle all of the issues that go to informational services and computation	Deliver the core information system *(includes decision system kernel)*	*name*	Subscribe, #auravana-devel	10 days cycle
Kernel Team	Handle the resolution of all kernel issues	Deliver a sustained functional kernel	*name*	Subscribe, #auravana-kernel	5 days cycle
Issues Team	Handle the coordination and priority of all issues	Deliver an organized and safe informational-spatial environment	*name*	Subscribe, #auravana-issue	1 day cycle
Habitat Service Team	Handle all of the issues that go to habitat global service	Deliver the core spatial system	*name*	Subscribe, #auravana-habitat	3 days cycle
Habitat Service Sub-Teams	Handle all of the issues that go to local operations	Deliver the complementary spatial systems	*name*	*many*	*many cycle*
Market-Interface Team	Handle all of the issues that go to market interface	Deliver access without waste	*name*	Subscribe, #auravana-market	3 days cycle
State-Interface Team	Handle all of the issues that go to State interface	Deliver access with peace	*name*	Subscribe, #auravana-State	3 days cycle

TABLES

Table 18. *Project execution contribution/labor role matrix.*

Identity (Unique)	Contributor (Name)	Role Specification (Role identifier)	Actions (Tasks for role)	Standard Operating Procedures (Documentation)	Status Specification (Live and active at work)	Association Types (Decision issues and needs work)	Token Accounting (Wage payment)

Transition Service Operation (Plan)

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Abstract

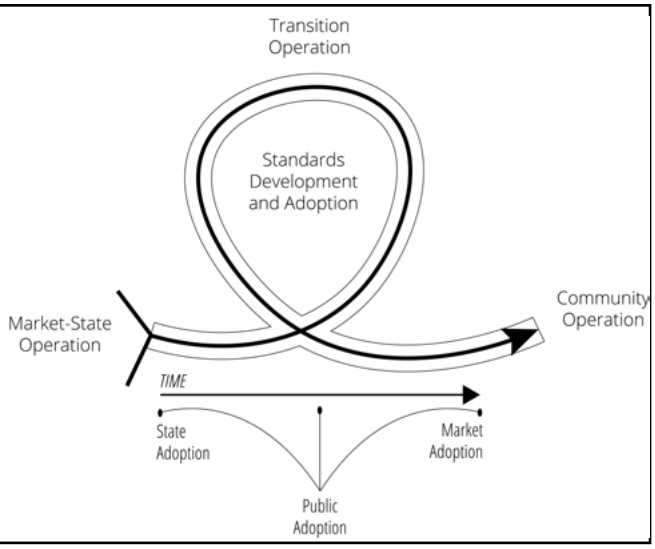
This is the planned execution of transition to a community-type society -a plan (is proposed) for the project's execution of transition to community at the societal level. Early 21st century society has the mandate of re-imagining the control, use, and access to all land, buildings, houses, and resources on the planet. Through a planned, transparent, and contributed organization of educated persons it is possible to develop a safe and feasible transition to community at the societal scale.

An interface plan is necessarily part of the Project's execution, in order to transition from the market-State to a community configuration of society where there is neither a market nor a State. Prior to this plan there is a whole societal system standard which presents a workable vision of society where there are no markets and no States. This interface exists for a purpose; the proposal is to transition from a market-State type configuration of society to one representative of community at the societal scale.

Preparing the science, standards, and transition comes first, before the actual transition. This article proposes (a description and explanation) for how to do work in a community-type way, while building bridges from the old to the new.

Graphical Abstract

Figure 7. *Community comes into operation when humanity adopts standards for community. The gradual adoption of a community standard by market, State, and public entities will lead to the gradual emergence of community at the societal scale.*



1 [Plan] Direction of societal transition operations

NOTE: *Transition is actually an ongoing process, rather than a means to a defined end/goal. Herein, the approach and transition to sanity and stability (at the societal scale) itself needs to be sane and stable.*

In part, this is a project to transition from building market-States (the building of markets and States) that meet trade and regulation/protection requirements to the building of a habitat service system that meets global human flourishing and fulfillment requirements. The transition must create the conditions for (local and global) transition to community. Through a planned, transparent, and contributed organization of educated persons it is possible to develop a safe transition to community at the societal scale. This is a project to create a society that allows for the fulfillment of human needs at a global scale.

During societal transition, contributors to community need to change the informational and material worlds in order to change people's consciousness toward what is possible today, given what is known and available. They will do this, in part, through the creation of a unified information and planning system expressed into and through a materially integrated city system network (a.k.a., a habitat service system network) commensurate of community. Transition requires change to the socio-technical world, to change people's consciousness (for the better). It is optimal to change the socio-technical world through the development, adoption, and operationalization of a set of standards commensurate to community at the societal, planetary scale.

The transition involves at least the coordination of the following sub-interfaces:

1. **The residents interface** in a community-type society use to access habitat service-objects (i.e., residency coordination service and resident access). This interface may or may not involves users having token accounts that can be used to buy priced "socially" goods and services (possibly, by life phase):
   A. Community does not use tokens at all, anywhere (i.e., no prices for intermediary or final service-objects).
   B. Use tokens by life phase (e.g., leisure doesn't use tokens, education has unique non-fungible tokens, amongst these services there is a set of services do not have tokens).
      1. Various variable include: labor hour "pricing", natural material unit "pricing", in-kind habitat service unit "pricing".
   C. Trading tokens:
      1. Trade, or do not, trade tokens amongst end users.
      2. Trade, or do not, trade tokens amongst producers.
         i. Do not use tokens in production (i.e., simply inquire, design, calculate, decide, construction, operate, together), but do use tokens for end users to acquire personal and common access items and services within the global habitat service system.
2. **The market interface** (a.k.a., trade and token account interface) that the community uses to trade for access (via "profit") in a token market economy (i.e., market coordination service and object/service access).
   A. Local and regional market interfaces.
   B. International market interfaces follow two primary principles:
      1. The trade of property for State currency; to trade, State accepted currency is required. In other words, when some person, business, State, wants to import foreign-State property (a.k.a., international goods), it must buy them with this currency, which must itself be bought (referred to as a currency exchange/rate).
      2. Production/economic units are competing in a regulated market, where the State allows sub-units to organize economic processes in ways that suits them best, a.k.,a., "efficient allocation and use of capital. To do the work of production requires trade of objects produced to sell above a paid for price.
   C. Here, the standard market-user principles are:
      1. If the community needs to spend less collective labor to buy the good abroad than it needs to produce it at home, the good should be imported.
      2. If a good can be exported at a price higher than its labor cost in community, it should be exported.
3. **The State interface** that the community uses to facilitate standards development and adoption, and the transition of people and resources into a community network of customized habitat service configurations (i.e., State integration regulation service and authority/control access). Jurisdictions range from local governments, through regional and national States, to international States, and globally influential institutions.
4. **The public advertising and marketing** that the project uses to spread information in an information environment that costs money to

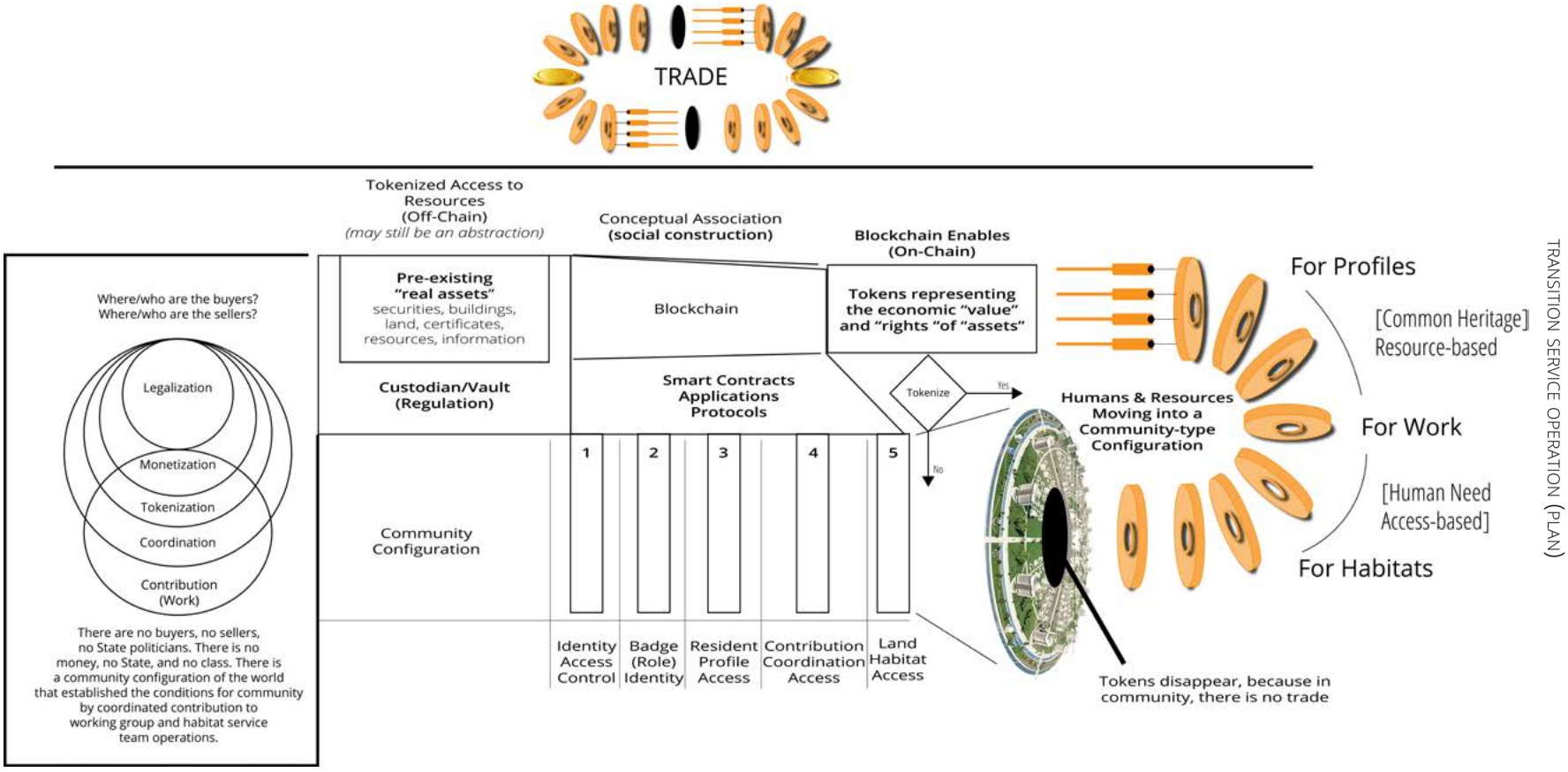


Figure 8. *Graphic showing the utilization of tokens to transfer people and resources into a community configuration at which time the token system disappears that community remains. Here, real assets are stored on the blockchain.*

become heard.
5. **The education and workshop interface** (a.k.a., education services) that facilitate discover, learning, and participation in standard for a real-world, human need oriented community-type society.

This community project must execute three projects (project lists and plans) to complete the transition project:

1. **The community standards creation plan** (i.e., information operations): Working groups follow standardized operational procedures to develop standards, software, decision systems, and master-plans.
2. **The community habitats operational plan** (i.e., habitat operations): Habitat teams conduct material socio-technical operations per master-plans, following standard[ized] operational procedures in physical habitats.
3. **The transition development operational plan** (i.e., transition operations): Transition teams conduct socio-technical operations to link people and resources in the market-State and transition resources into community allocation, and people into community habitats.

The questions of what is required to phase in and out a constructed and configured socio-technical system become relevant:

1. What is required to phase out the market-State, and completely replace it with a community-type configuration?
   A. What social changes; what resource production and usage configuration changes, what technical production unit changes?
2. What is required fully phase out trade, money, and property and fully replace it with habitat access.
   A. What social changes; what resource production and usage configuration changes, what technical production unit changes?

There will come a point in the future when the existing system that people experience and observe in the early 21st century is fully replaced; that is, the population no longer trades. The transition is one of a shift in direction, an adoption of values, and a selection of a new approach:

1. **Direction:**
   A. **Market-State:** To profit and power-over-others acquisition. Freedom means property (physical and/or money), which gives more options to access market where priced goods and services are sold and bought. In the market, money is the unit of measure of social productive relationships.
   B. **Community:** To human need fulfillment and ecological restoration based on systems sciences. To full socialization (i.e., where everything is free). Freedom means access to a coordinated set of common heritage services (and objects) through free access configurations of common heritage resources. Local populations customize their habitats and access then free of charge. The access of some does not inappropriately rise above others. In community, contribution, fulfillment and material quantities (resources) are the measure of social productive relationships. For most (if not all) of what you need, money (price) never enters the equation (i.e., the economic "picture").
2. **Orientation:**
   A. **Freedom means** that human needs and preferences are accounted for without trade or coercion. Here, full socialization means free access to society.
      1. **Get rid of property and price**. Freedom does not mean freedom to purchase [property] goods in a contrived (Read: manipulated, artificial) and business centrally-planned market for a price. Freedom does not mean stability by coercion.
      2. **Get free habitat services** (i.e., get free fulfillment, get all socio-technical societal services for free). Freedom means to have what is needed in life, to feel "good" and to be capable of living life well and performing enjoyable tasks in life, for oneself and others.
   B. **Restorative justice means** that "we" create a socio-technical system that does not produce structural conflict, and where conflict has occurred, fulfillment is sufficiently restored. Here, full socialization means appropriate equal access to society and restoration services where there is harm.
      1. **Get rid of the punitive (retributive) criminal justice system**. Justice does not mean punishment. Justice is no longer a procedure based in violence and coercion.
      2. **Get the restorative justice system**. Get standards that create environments where well-being is restored to all stakeholders after conflict, and where feedback [through standards] has the potential to evolve the whole system so conflict is less likely to emerge in the future.
   C. **Distributed justice means** that "we" create a socio-technical system where there is no

separation in access to human need fulfillment.

1. **Get rid of wealth access inequality**. Getting rid of priced wealth inequality between all people. You don't necessarily need money to have wealth inequality, but you do need property. People who have control over land-property and other valuable resource-properties, still are the wealthiest. Getting rid of the price of all habitat services and habitat service objects. The scarcity of habitat services (and goods) needs to be [systems science] engineered out of society.
2. **Get common, objective human needs and preferences met, and have human dignity**. Petty crime goes away because no one is trying to escape from the misery of being poor (physically, socially, or psychologically). Here, wealth is measurable human need fulfillment (well-being) and human dignity.

3. **Approach:**
   A. **Efficiency means** that resources are economized, services are optimized, and people are intrinsically motivated. Here, full socialization means coordinated education and contribution services.
      1. **Get rid of standards that withhold efficiency** and optimization all objective and common socio-technical societal systems. Get rid of trade (secrecy, property, price, and profit). Efficiency does not mean trade.
      2. **Get standards and operations that are efficient**. Develop standards that are sufficiently integrated and unified that there is understanding and certainty that optimized fulfillment is the most likely next outcome. Get decisions informed by systems science. Get economic [resource] calculation and economic [decision] intelligence to occur together at both the local and global scales, given a common direction and orientation.

There are several general categories for transition to a community-type society at local and global scales:

1. **The State approach (a.k.a., the top-down approach, the authority-coercion approach):**
   A. The social-State (i.e., a planned centralizing economy with a mix of priced and free goods and services).
2. **The market approach (a.k.a., the distributed-market, the price approach):**
   A. **The stakeholder capitalism approach** an approach to business and corporate governance that emphasizes the importance of considering the interests of various stakeholders beyond just shareholders. Stakeholders in a business are all economic classes, and can include shareholders, employees, customers, suppliers, cities, governments, and the environment, among others.
   B. **The market-cooperative approach** a planned centralizing economy with mostly price goods and services.
3. **The restorative approach (a.k.a., distributed sustainability)**:
   A. Sustainable technological development, adoption, and usage.
   B. **The circular economy approach (doughnut economics)** an economy that has rules and procedures for reducing waste and seek to circulate resources.
4. **The community habitat network approach:**
   A. The operation of a global habitat service system that meets the needs of all humans justly and without price or coercion.

In the early 21st century, there has to be advancement of social systems, decision systems, material (technological) systems, and lifestyle systems to achieve community locally and/or globally. These societal sub-systems may advance together or advance separately. However, just the advancement of any one system (e.g., the material/technical system) isn't by itself going to create/construct a community-type society; there needs to be advancement in all the societal systems too. There has to be conditions if society is going to advance toward community: advancement of human fulfillment and awareness of data of community. There has to be a greater purpose to life; there has to be fulfillment and challenge. There has to be advancement to decisioning to include [human and ecological] need accountability, contribution (work) accountability, and resource accountability, occurring through coordinated accountability (optimization algorithms). Decisions create change in the material system; which, in turn, start changes in the lifestyle system.

> **INSIGHT:** *Deprivation of knowingly resolvable human fulfillment insufficiency is a metaphorical crime against our social human population.*

In the market-State, [more] money gives people more access to the world. In community, contribution and transparency and accountability give everyone the most optimal access to the world. The management of money as debt (market-State) or credit (social-State) requires coordination. The coordination of community requires socio-technical intelligence. A transition from trade and power-over-others to coordinated socio-technical operation will require human effort.

Transportation system will need to be cooperatively coordinated and not separated by unique business entities (i.e., they become social-State operated "public"

utilities with three priority levels: life, technology, and exploratory support). Local societies need uniquely coordinated systems for transport. This system will be administered by coordinators and operated by technicians.

The environment can really affect how we think and behave, so concordantly as the community population develops true habitat service systems separate from current urban environments, it needs to consider how to update its current urban environments simultaneously.

The transition planning proposal herein is divided into the following transition focusing elements:

1. A direction for the transition [of the market-State] to Community [at the societal level].
   A. Objectives what are the requirements?
   B. Risks what risks could create incidents?
2. New inputs:
   A. Phase in process what conditions information and/or technologies are specifically to be phased in, and over what duration of time?
   B. Amplification processes what is to be amplified?
3. Old outputs:
   A. Phase out what conditions information and/or technologies are specifically to be phased out, and over what duration of time?
   B. Reduction processes what is to be reduced?
4. Filtration processes (strategies; what works and what doesn't?) what strategies and filters are to be applied to move people and resources into a community-type configuration?

INSIGHT: *Events will occur while the market-State is in existence; the question is: How did the event affect transition?*

Transition is encompassed in a proposal for using the market and State to transfer people and resources into a community configuration of society.

Here, importantly, is the challenge to give community access to "democratize" both the people and the resources (together, the urban environment), at all levels, by including in the decisioning process a community network of habitats whose residents are stakeholders in the decisions being taken.

1.1 Simplified direction of transition

The direction of transition is the simultaneous transition away from the market (trade and tokens) and the State (authority) to community at the societal scale. In order to transform ("get rid of") the State, society must simultaneously transform ("get rid of") the market. In order to transform ("get rid of") the market, society must simultaneously transform ("get rid of") the State. Fundamentally, a global community-type society requires a globally recognized community standards as a pre-requisite to attain global community goals.
The goal is to establish the appropriate conditions for the instantiation of community (Read: a community-type society).

1. Construct the transition system:
   A. Base of the system for transition
      1. Education of population
      2. Life support for population
      3. Technology support for population
      4. Exploratory support for population

The direction/objective is one of full establishment of a global common heritage (a.k.a., full socialization, full commonization):

1. Common information (i.e., common heritage information, socialize information, etc.): The coordinated usage and access of information.
   A. The sharing of an information environment where individuals have access to knowledge and education.
2. Common land (i.e., common heritage land, socialize land, etc.): The coordinated usage and access of land.
   A. The sharing of the material system, sharing space in the material system (e.g.,, land, water, minerals, wildlife).
3. Common habitat support (i.e., common heritage resources, socialize resources, etc.): The coordinated usage and access of utilities.
   A. Common life support the sharing of life support services to provide safety and optimal human functioning.
   B. Common technology support the sharing of technologies that extend human functioning (e.g., construction and communications systems).
   C. Common exploratory support the sharing of activities that provide more opportunities for beneficial experience to the population.
4. Common contribution support (i.e., contribution coordination, socialized labor, etc.): The coordination of contribution to information standards and habitat operations (on land and water).

All governments work on creating the conditions for emergence into their stated configuration of society. A State is the territory and property that a government has power over. Corruption of power is prevented by the adoption of community-based socio-technical standards of operation and transparency.

In concern to objectives, the continuous questions are:

How will each of these objectives be completed?

What tasks, resources, and human contributions are necessary? What is the timeline for movement along the direction through transition to community [at the societal level]? Where are we now? What is happening over the next weeks to transition people and resources into a community configuration of society?

1.1.1 Simplified task view of transition

A simplified task-based view of transition from the market-State to community as a type of society may be organized as follows:

1. **Create the relevant information set.**
   A. Create the relevant data and knowledge.
      1. Create a foundational standard for a community-type society.
2. **Engineer the system.**
   A. Create the relevant technical drawings and code.
      1. Create a physical interface foundation for computing (hardware & software) the materialization of a community-type society.
3. **Animate/simulate the system.**
   A. Create the relevant technical simulations of engineered systems.
      1. Create a simulation of present and future possible objects, concepts, and human inter-relationships in a real-world community-type society.
4. **Disseminate the relevant knowledge and experiences to the:**
   A. People get the content to the people.
   B. State get the content to politicians.
   C. Corporate get the content to employees and employers.
5. **Facilitate continued development and adoption of the standards by maintaining a community standard setting working group.**
   A. Transition of education from one based on a mixture of unintegrated standards, to one based on a unified and integrated standard for understanding and human [socio-technical] development.
6. **Facilitate transition of pre-existing organizations through adoption and joining as "citizen" members a community-type society.**
   A. Transition of the market from one that has trade of property among "legally permissible owners", to one in which there is no trade fro cooperative work.
   B. Transition of the State from one that coerces behavior among "citizens", to one that coordinates production for community habitat service fulfillment.

1.2 Execute transition analyses

The primary transitional executive analyses are:

1. **Community-societal level analyses:**
   A. Education analysis
      1. Simply, how is community education going?
   B. Contribution analysis.
      1. Simply, how is community contribution going?
2. **Transition-societal level analyses:**
   A. Geopolitical analyses.
      1. Market analysis.
         i. How is survival and wealth accumulation going?
         ii. How is the transition of people and resources into community composition, given the presence of a market, going?
      2. State analysis.
         i. How is peace and dispute resolution going?
         ii. How is the transition of people and resources into community composition, given the presence of a State, going?
      3. Public analysis.
         i. How is the transition of people and resources into community composition, given the local public population, going?
3. **Habitat-level analyses:**
   A. Residency analysis.
      1. Including, are there issues with residency?
   B. Justice analysis.
      1. Including, are there issues with justice?
   C. Proximal local habitat master-plan decision work group analysis.
      1. Including, what is the next likely habitat master-plan solution.

There are many analyses of locations in the early 21st century that could facilitate in transition at a local and global scale:

1. Human needs analysis.
2. Sociological analysis.
3. Geographic analysis.
4. Historical analysis.
5. Geopolitical analysis.
6. Jurisdictional analysis.
7. Situational report.
8. Ecological analysis.
9. Infrastructural analysis.
10. Property analysis.
11. Values analysis.
12. Impact analysis of these new environments on other existing towns, people's, etc.
13. Land analysis.
14. Promotion and marketing analysis .

Accompanying any analysis is an accounting of information:

1. Resource survey.
2. Biological inventory.
3. Materials inventory.
4. Land inventory.
5. Technology inventory.
6. Etc.

From these analyses, societal engineers and developers are be able to propose solutions that involve building of new cities, or in other cases, the adaptation/ modification of existing cities. These analyses could would be done for each political situation in each city today. Fundamentally, an analysis of the actual state of the situation is necessary for transition.

1.3 Transition duration

Transition will take as long as transition takes. There are two general sides to the discussion of transition duration, which is not yet predictable.
Transition can be:

1. Fast, hard, and painful transition.
2. Slow, gradual, and safe transition.
3. Some combination.

Transition can occur at different times and different locations over the planet. Some nations and corporations may adopt community-type societal standards more quickly than others.

1.4 Cybernetic-type project requirements

The execution of the transition to community, and the operation of community itself, are carried out as projects that integrate and control for feedback (Read: cybernetic projects). These types of projects have a set of basic phase completion requirements, as well as coordination requirements. These project organizational elements must become active and open to observation by all during transition.

The common phase completion requirements for this project are (note: the cycle repeats with a complete database from which to design solutions and take decisions):

1. Databases complete.
   A. Initial state visualization [of fulfillment] complete.
   B. Initial processes description [of fulfillment] complete.
   C. Objectives complete.
   D. Requirements complete.
   E. Issues complete.
2. Solution designs complete.
   A. Decision algorithms complete.
   B. Optimization calculations complete
3. Operations complete [signal sensor].
   A. Evaluations complete.
   B. Surveys complete.
4. Updated database complete [result integration and controller updating].
   A. New state visualization [of fulfillment] complete.
   B. New processes description [of fulfillment] complete.

Continuous project coordination requires the integration of a set of lists that identify and plan for work/action in the material-informational environment (i.e., in material-time):

1. Objectives list.
2. Humans list.
3. Teams list.
4. Schedules list.
5. Events list.
6. Concerns/Issues list.
7. Actions/Tasks list.
8. Deliverables list.
9. Tools/Technologies list.
10. Resources list.
11. Locations list.

1.5 Patchwork versus structural change

A.k.a., Patchworking, patching, temporary fix, temporary solution, non-structural change.

Patchwork is, by definition, the incomplete resolution of a problem. Often, when complex systems are patchworked, problems don't go away, they just transform it into a different kind of problem. When patchwork is considered a long-term solution, then possibly, a society is not recognizing the structural nature of societal problems. The current system has deep structural problems. This is likely to lead to the desire to patchwork the existing system rather than restructure the system itself by building a new system to make the existing one obsolete. All patchwork is a temporary solution. Sometimes, temporary solutions are necessary (e.g., to bring people up to a baseline standard of living); however, in the context of society, temporary solutions are avoided in preference for structurally corrective solutions.

> **INSIGHT:** *To change what "you" are experiencing, it is normally essential to observe what you are already actively choosing.*

All patchwork is a quick (and "messy" solution); all temporary solutions are (not aligned with strategic societal safety):

1. Inelegant not completely logical, not beautiful, more pollution otherwise.
2. Slow not the fastest or most optimized due to comprehensive strategic information collection, decisioning, and planning.
3. Incorrect will not correctly respond to all input cases.
4. High-coupling unnecessarily couples (links) with other components in the system, making future changes more difficult.
   Note here that the concepts of "property-over-others" and "power-over-others" create high-coupling in a market-State society; whereas, "duty-to-service" and "strategic-common-heritage" are concepts that creates high-coupling in community.

The specification standards for a community-type society do not exist to facilitate a patchworking of the early 21st century market-State. They are specifications with a purpose to transition and construct a community configuration of society. Here, it is important to focus intentions on the structural development of community, which is a whole and integrated system, and not on patching a system structurally antagonistic toward human cooperation, fulfillment, and ecological regeneration.

> **APHORISM:** *Trying to fix what you don't understand is unwise.*

Its time to stop talking about patchwork (Read: temporary fixes and "band-aids") and start to address the underlying problems with the structure of the societal system. When addressing surface problems, it is extraordinarily difficult to also address structural problems. Generally, a problem-solvers attention is either focused on surface issues, or focused on the structure, which necessitates an awareness of surface issues. We can take actions now as "band-aids" to help us get out of our immediate suffering, but it should be our goal to restructure the environment so that the suffering is not continuously regenerated.

And yet, given the abhorrent conditions that many people live under within the 21st century, temporary solutions are unavoidable in order to give better conditions to those in immediate need. Patchwork can improve conditions in the present, which gives people a greater space to consider true structural system change. However, there is also the idea that when people are fully exposed to the aberrant conditions of the early 21st century, they may be more likely seek out and implement systemic change.

> **INSIGHT:** *It is unwise to believe a system is corrected, when a patch is applied, when in fact, the patch is actually just compensating (providing temporary compensation).*

The system of which early 21st century society is composed is not reformable because it does exactly what it is supposed to do for powerful and vested interests. For all practical purposes, the modern monetary system was setup with the interests of a ruling class in mind. Early 21st century society has been designed by the cultural appetites of its designers. It is the result of a structural emergence, as well as people with a plan and access to wealth and power.

> **INSIGHT:** *It is not as wise to patchwork a car into a boat as it is to just build a boat, when a boat can be built. In engineering, patchwork is for resuscitative maintenance until a new and better structure is built. When navigating the vehicle, the driver of the car or captain of the ship does not cause structural changes to the vehicle through his/her interactions with a wheel that adjusts the angle of the tires/rudder, which re-adjusts the direction of forward movement.*

The following is a conveyor belt analogy for the idea of patchwork:

> *A moral person who was manufacturing something and noticed an unexpected defect in an item would shut down the conveyor belt. Patchwork is like seeing a defective item and trying to patch it so that it kind of works (the market), but mostly it is just watched (the State) until it falls off the end of the conveyor belt.*

In a sense, patchwork is an admission that the structure of the system is broken. A structure that produces cycles of harm needs to be re-worked at the structural level. When "you" find yourself in a hole, stop digging. Using the problem to fix the problem is a recipe for unintended consequences, and for, disaster. There are solutions that reveal new and more optimal structures.

It is possible to enable change in a broken system, but in order to build a new system, "you" have to build that new system. It is unwise to confuse the problem(s) [in part, the structured system] with the symptom(s) [in part, the surface behaviors]. Fixing symptoms doesn't fix the problem. Patchwork is re-construction of the same, or something similar, and not, systemic re-structuring (through a new set of standards).

A structurally significant element of a society will embed its objectives in the lifestyle of those within the society. When 'business' is a significant element of a society's operation, then the objectives of business will be embedded within the lifestyle of those in said society. And, the two principle objectives of business are:

1. to maximize profit; and
2. to minimize costs.

If it is a business [organization], then at the end of the day money controls its existence or non-existence. Patchwork will not re-direct the structural objectives of the system. It might re-orient individuals within the confines of the set structure by a slight degree, but it

does not provide a means for re-directing the structure as a whole.

Trying to patch up the market system is artificial, it's crude, vulgar and will not provide a solution. Herein, it is important to recognize that money alone does not produce incentive to accomplish work. For example, if we lived in a community with all of our needs met, we would have no desire to chase money (sometimes aptly known as an "incentive disorder"). It is only when something is withheld from us, and then, out of necessity will we chase money, or through lots of conditioning (one might suppose). Hence, in a society where money is a requirement to meet needs, then "yes", money does produce incentive. But, it also has the characteristic of producing incentive for corruption and embezzlement, which span the spectrum from subtle to gross. Therein, when people seek advantage by money, then we cannot have a decent world [space]. Because, money is the source through which an individual maintains their very survival. Right now, billions of dollars are being made in the war industries. Yes, war is an industry. It is a profit generating action. And in war, there is also the embedded value of competition, which enhances scarcity and conflict. A system that facilitates and incentivizes profit from war cannot be patchworked to become something it is not.

We are literally flying at the speed of light on spaceship earth and we have lost our way. We need to re-orient and re-examine what we have created. A system that has foundational flaws needs to be accurately modeled so that the new design doesn't contain the same flaws. Fundamentally, we need a new design, a new model. Patchwork will never change what a system is.

And yet, early 21st century society is a construction of beliefs and we can change it anytime we choose; not through money in the hands of the few, but through accurate information in the minds of many.

In the early 21st century, problems and their perpetuation create and sustain jobs. Many people do not want solvable problems to be resolved, because that would destroy more jobs. This insight is just another reason why patchworking the market system will not work in facilitating integral fulfillment. There is no way of making the market-State system just or equitable. It cannot be made just and equitable; because, of property and expropriated labor. Instead, when everyone has sufficient free access to goods and services in the context of contribution, no one in society has to fight for "rights" (as in, women's rights or men's rights, or black rights or what rights, or any rights). No one has to petition the State for grievance, because there is optimal access based on human need, which supersedes all subclassifications of "rights".

> **NOTE:** *Some say that if you don't contribute to society the way the leaders of the society want you to contribute, then you don't deserve its support, you don't deserve a quality-of-life or even living. Therein, in the market, "financial independence" means you don't have to surrender to life through a wage; you can come and go as you wish.*

1.5.1 Structural deterministic transformers

In systems science, the term "structural determinism" is important when discussing any change to a system. Structural determinism (a.k.a., structural constraint, consequential structural constraint) is a systems science principle that states that structural elements (factors) deterministically (causatively) affect behavior -the behavior of any system is primarily determined by its internal structure (given an environment). And, by its nature of being a structure (in an environment), it is resistant to external influence or interventions; hence, the factor of constraint (resistance to change). The higher degree of intervention against the natural flow of the system (against the structure), the higher the degree of resistance, or reactionary constraint. Structural determinism means a systems behavior is relatively fixed, and not easily altered, if it is possible to alter it at all. It is relevant to note here that purely structure-determined systems are mechanical machines systems, or composite entities, wherein everything that happens within them, as well as to them, is determined within them (not environmentally) at every instant by their structure and structural dynamics at that instant. There are internal system mechanisms (feedback loops) and driving incentives that are so tightly coupled that attempts to modify or influences a systems behavior (moving against the structural determinism) inevitably has minimal impact, because the structure "fights" back (Read: resists the change through human agents and organizations that embody the structural constraints). Societal systems can have reactionary forces that will push back against structural change to protect the continuation of the system/structure, including but possibly not limited to:

1. **Obedience** to belief and cultural values. Where people consciously object a more moral structure of society.
2. **Invested self-interest** such that those with purchasing power and/or money over-others do not want to let go of the advantage and access they have over other people.

It is relevant to note when discussing the topic of determinism that society is not a mechanical machine. When the topic of cybernetics is introduced into systems science, then there are no longer just simple purely determinant machines with one-to-one correspondence between cause and effect, but instead there are many correlated, closed, single-valued transformations that lead to environmental adaptations over time. The parameters of mechanical systems are its informational input, but this is complicated when in the presence of biological or social systems, for the parameters involve the organism's genetics, experiential history,

and environment – the conditions of its life – as an appropriate source of informational input. (Jeon, 2022)

2 [Transition elements] The societal systems

A.k.a., The types of societies, the societal structures.

All countries in the early 21st century are run in a similar way. They have what is known as a mixed [market-State] system. The mixed systems are mixed to different degrees. Some countries have a little more capitalism, other countries have a little more centrism (capitalist socialism). That said, they are all (to relative degrees) working toward having certain basic needs met, such as

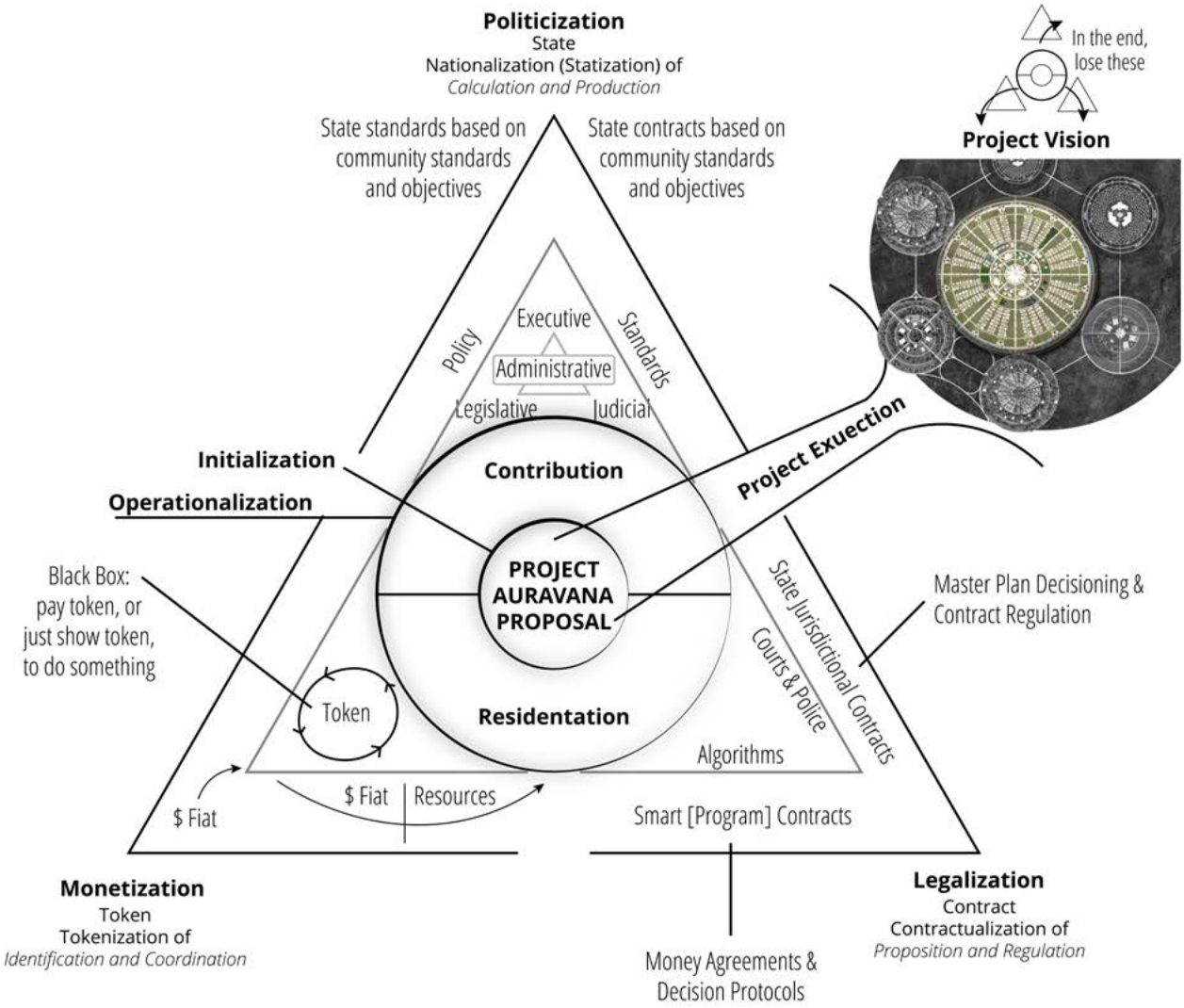


Figure 9. *A transition from the market-State to community requires engagement with the three operational ends of the market-State: the political aspect (politicization), the token/monetary aspect (monetization), and the legal aspect (legalization). Hence, it could be said that the transition necessarily must be politicized, monetized, and legalized. Therein, the branches of the political State may facilitate the adoption of policies and standards that support transition. A token/monetization model may be used to collect fiat/money, and begin shifting people and resources into community. A legal model may be used to create contracts that allow for the creation of community and also facilitate the flow of resources and people into such a societal configuration. The Auravana Project proposes a contribution and residentation program to operationalize this transition. Over time and through the execution of this transition program a community network of habitats/cities will emerge; wherein, there is no longer State-politics, market-tokenization, nor contract-legalization).*

healthcare, subsidized by the State. Often, schooling is subsidized, as well as social security (retirement). Every country has social policies, every country has trade, and every country has market and citizen regulation. The commercial [access] determinant of all life, technology, and exploratory services, in the market-State, is money and/or influential power. In community, human and ecological service need are the determinants of all life, technology, and exploratory services support. In the early 21st century, the market and State operate together to maintain society.

> **NOTE:** *People are averse to socialism, in part, because in the past, the authorities, when they acquire State power have traditionally become horrible despots. The "Machiavellian" way of running government is through secrecy and enforcement by punishment, pain, death, torture and prison. Secret discussion between governments and corporations, lead to each side telling their people whatever they want. This way or running the State is unlikely to lead to greater human flourishing. During transition, States will transition from covert to transparent operations.*

The State has various influences into the regional and global markets. Herein, States have industrialization ("fulfillment") policies that guide production:

1. States can nationalize and have direct State Ownership (so the technicians are State employees). The technicians and administrators of the State corporations then buy products and services from State stores where objects and services are prised in some manner (possibly, by resource availability and human working hour).Hence, in concern to the State, where appropriate, the State may nationalize (publicly own) productions and services, in order to share resources to support some significant policy change that mandates transparency and planned human fulfillment.
2. The State can discipline businesses when they don't meet targets of production.
3. To ensure continued investment, States can make it attractive and accessible through lucrative tax incentives.
4. States can directly subsidize the operations of a business.
5. States can give grants to industries for development work -States can directly invest.
6. In concern to the market, individuals can develop cooperatives that form unions of cooperatives. Possibly, these unions could be coordinated by the State, which develops standards and calculates optimal economic efficiency and effectiveness.

The transition from the market-State to community is a transition from laws governed by the State, to standards maintained by societal working groups, and habitat team technicians that work within an integrated city network that meets the socio-technical needs of the whole population. Society is no longer navigated by authorities, politicians and enforcers, but by working groups, habitat teams, and coordinators, all of whom represent a group of dutiful contributors [to community].

During transition there will likely need to exist participation in the market-State in order to facilitate transition to community. The results of this participation will likely include:

1. Reduction of the market where where people produce products for trade and profit.
   A. Reduction of the profit imperative. Reduce and gradually remove the profit incentive.
   B. Eventually, eliminate the profit incentive.
   C. Reduce the circulation of money.
2. Create incentives that improve cooperation, reduce waste, and restore ecologies to states of productive abundance.

Signaling in the market-State about what is wanted is done through three primary processes:

1. Signaling though voting by people with property (citizen behavior).
2. Signaling through violence by people with authority (authoritarian behavior).
3. Signaling through purchases by people with purchasing power (consumer behavior).

Conversely, in community, the population intelligently surveys themselves about their needs and preferences, which are used by InterSystem teams among the population to produce optimized habitat fulfillment solutions based on the resources, contribution, and knowledge available.

To safely transition from what has come before (market-State) to what will be (community) necessitates an understanding of the structures of "what is" and "what could be". To engineer a safe future system and a transition thereto. Both systems must be understood and visualized together. The question, the task of operating the economy:

1. Is the duty of the State (State capitalism). Thusly, "public servants" are charged with certain [economic] tasks, narrowly defined, but which are seen as the province of the State.
2. Is best left to the market of private capitalist enterprise (private capitalism).

In concern to the economics in a market-State, there are people with property and purchasing power:

1. A class of employers who take important decisions

and take a larger cut of the income.
2. A class of workers (laborers) who may take few important decisions and carry out the plans of the employers.

Transition involves the production of the means of production of community (i.e., community cities). In an integrated network of community habitats, the means of production are the cities (generally), and the products are the habitat services therein.

In the market-State, there is fixed capital and circulating capital, and then, labor. In community, there are common heritage resources (i.e., fixed capital) and there contributors to a common socio-technical environment (i.e., the circulating capital of contribution) The market, State, and community have different ways means of production (materialized society is a complex interacting system with sub-systems):

1. **In the market** production and distribution is a business function (Read: partnership for trade and profit). In the market, buyers and sellers trade; they trade resources, humans, and products.
   A. Production by mixture of:
      1. Fixed and circulating capital.
      2. Labor exploited capital.
   B. When the means of production are transferred to market ownership, then production and distribution becomes *a private and for-profit function*.
   C. Products are made by private funds and sold for private funds.
   D. Production controlled by private interests and partnerships; production involves trade, and likely, money.
   E. Production and products are generally not

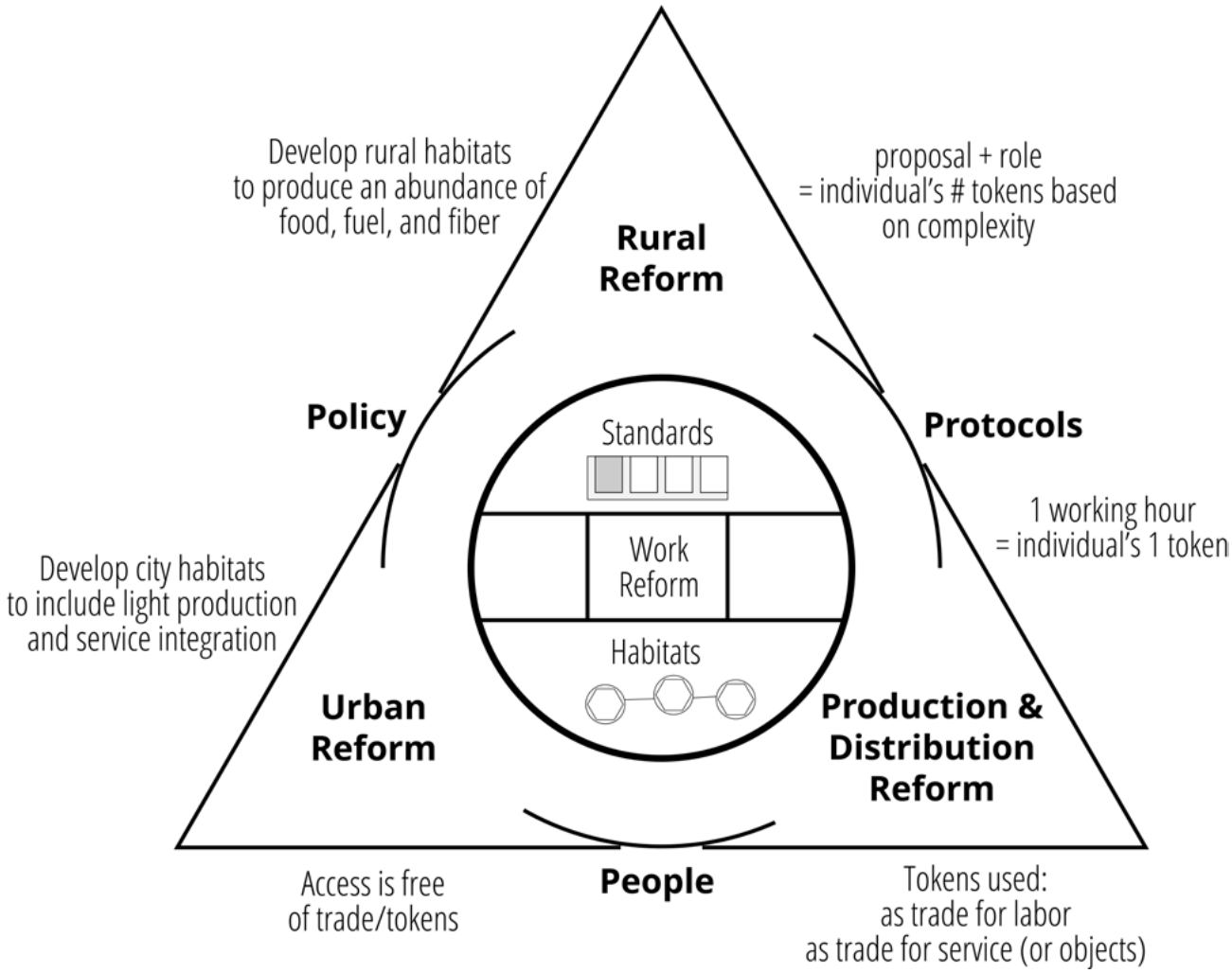


Figure 10. *To transition from the market-State to community, there is a need to reform (change) the material environment and how it is produced. Hence, there is the need to reform/change the rural and urban environments, and the production and distribution system in general. In order to make the change, there must be a change to people, policies, and protocols. Therein, there must be a consideration of [community] standards, work reform, and habitats.*

transparent, but there is some transparency with interoperability standards and open-source.

2. **In the State** production and distribution is a State [duty / coercion] function.
   A. Production by mixture of:
      1. Authoritarian control power-over, power-over-others.
      2. Duty rightness, correctness.
   B. When the means of production are transferred to State ownership, then production and distribution becomes *an authoritarian/coerced and/or duty function*.
   C. Products are made with State funds and may be either sold or given for free.
   D. Production controlled by whoever controls the State; production may involve trade, money, duty, expropriation, and/or other territorial law.
   E. Production and products may or may not be transparent.
3. **In community** production and distribution is an InterSystem Team [community duty] function.
   A. When the means of production are transferred to community access, then production and distribution becomes *a commonly coordinated contribution function within a unified information standard*.
   B. Products are made by production systems composed of common heritage resources, contributed to by human contributors, who provide a service support system for the whole community population to access for free (no cost) and with freedom (abilities).
   C. Production controlled by contributors, guided by users.
   D. Production and products are transparent.

Each societal system provides choices:

1. In the market, when "you" have more money, "you" have more choices.
2. In the State, when "you" have more authority, "you" have more choices.
3. In community, when "you" have a each other, a unified information standard, and a common set of coordinated resources, complete and optimized fulfillment for all is possible.

The market-State social contract contains:

1. **Employers** are the businesses and the State own the means of production and exchange payment for the employee to operate machines that produce the final products.
2. **Employees** receive a salary by a business and/or the State, who use intermediary technologies (means of production) to build final products.
3. **Consumers** are citizens, who buy final products.

The types of transactions (trade relations) in the market-State under the social contract are:

1. **Citizens** (individuals, in a market).
   A. Consumers (consuming owners) may trade their labor for something.
   B. Employers (employer-ing owners) own production property and pay employees.
   C. Employees (employee-ing owners).
2. **Business-to-business** (another business as consumer).
3. **Business-to-State** (State as consumer).

The community social contract contains a community standard and a set of habitat user agreements:

1. Societal specification standards (SSS).
   A. Community project charter.
   B. Community agreements.
   C. Habitat agreements.
   D. Systems science information system.

In the market-State, if transparency can even be gained, it usually must be gained through request (e.g., freedom of information act). In some a States there are no laws (Read: freedom acts) that allow citizens to request transparency. It is important to note here that it is possible to have a State-type society with both high and low transparency. In community, the socio-economy is, by default, structurally transparent (because, the users are the producers).

> **NOTE:** *In the market, in general, the entities in control of the State are oligarchs and dictators (in more authoritarian States), and representatives (in more democratic States). These entities are typically oriented by profit and power (especially after their first term in power). During transition to community, entities in control of the State are people oriented by community standards.*

In the market-State, the question is, which State and/or business produces the resources "you" need? In community, the production is planned (flexibly) in advance, in the form of a habitat societal system. In the market-State, the production is post-hoc (a.k.a., there are products/commodities that are sold into a market, via a price inclusive of competition among production, that is paid). In the market-State, profit signals a satisfied want/demand; profit also identifies to producers (businesses) where and what to produce more of. In market-Socialism, there are planned products that are sold into a market inclusive of competition, via a price that is paid. In community, there is no price paid; there is only free of price (cost, money, currency, credit, points,

tokens, finance, etc.). In community, society is flexibly planned through one globally cooperative InterSystem team composed of societal information working groups (standards and decisions), and societal habitat teams (who work in a actual real-world habitats).

In the market-State, market entities go a long way to mask and conceal how objects and commodities are produced. Businesses in the market do not want (would prefer) the public not know what labor and materials go into a product, both for competitive reasons and to make the commercial transaction (purchase) easier and less thoughtful on the part of the purchaser (consumer, end-user). Businesses (production organizations in the market-State) know that the less the consumer thinks about what labor and materials went into a product, the easier it will be for them to consume product. More realistically, it can be said that under no circumstances do most businesses want the public to know how their products are produced; which is the exact opposite of what happens in community. Sometimes even the brand owners themselves, and other employees internal to the company, don't even know how or where their products are manufactured. Alternatively, community is a system where everyone understands (or has the opportunity to understand) what is going on in concern to the manufacturing and production of everything in the economy (i.e., everything in the global network of habitats). In a community configuration of society, the producers and users, who are the same individuals, just in different phases of their life, want everyone to know how everything is produced so access (Read: consumption) maintains the link between production and usage. Versus, in the market-state where that link/relationship is broken by the "price mechanism", and

Table 21. *Transition of societal system types via primary sub-conceptions. This table shows three types of society (columns) with the primary sub-conceptualizations of society (rows). The table has be filled in with the appropriate associable conceptions.*

	Types of Society		
	Market-State Type Society	**Social-State Type Society**	**Community-Type society**
Societal Sub-System Conceptions	**Concepts and objects in market-State configuration**	**Concepts and objects in social-State configuration**	**Concepts and objects in community configuration**
Social	*Individuals*	*> Increasing to >*	*All individuals*
Direction (purpose)	Profit and Power	Community Standards Education and Adoption	Human Need Fulfillment
Orientation (values)	Competition, Security, Leadership	Openness, Collaboration, Intrinsic Motivation	Freedom [through togetherness], Restorative Justice, Efficiency
Approach (methodology)	Market-Politics (market economics), State-Politics (politics), Public-Politics	Standards Development, Standards Adoption	Systems Science, Critical Linguistic Method, Rational and Experimental Sciences
Decisional			
Resources (classifications)	Private Property, State Property	Cooperative Property, State Property	Common Heritage (no property)
Persons (subjects)	Citizens, Consumers, Producers	Producing-Consumers	Community Users, Information Working Groups, Habitat Service Teams
Objectives (requirements)	Profit, Power-Over-Others	Community Values	Community Values
Processes (procedures)	Trade, Government	Standardization, Cooperative-State Organization	Integration, Contribution, Coordination
Specifics (solutions	Products and Services	Products and Services	Products and Services
Material			
Teams (humans & resources)	Businesses, Governments, Sub-Governments	Cooperative Businesses, Eco-Social State(s)	InterSystem Team
Roles (tasking categories)	Employer, Employee, Consumer, Authority	Self-Employee of Cooperative, State Employee, State Consumer	Personal Access, Common Access, Team Access
Objects (materials)	Real and Reifications	Real and Reifications	Real
Services (users)	Business, Government	Business, State(s)	Habitat
Lifestyle			
Contribution (works)	Little to None	Increasing	Full
Exploration (discovery)	For upper socio-economic class	Increasing for all	All
Recuperation (restoration)	For upper socio-economic class	Increasing for all	All

individuals and institutions become disconnected from common human needs and optimal fulfillment.

What is "value" in a societal system?

Note: Different configurations of society view "value", as a concept, as well as, what is of actual value, differently.

1. **Value is a concept** that means to have identified objectives that will conform decisions, and thus orient actions/results toward greater or lesser states of fulfillment and flourishing. Value can take different forms. In community, the three values are: freedom, justice, and efficiency. Values becomes objectives, which is why it is important to know what is meant, in-depth, by a given/stated value. In a social system, a value is an orientation, an intention when taking a decision that conforms the decision space in one resulting direction (and not another), because the intention has an objective (e.g., greater human fulfillment and not lesser). Here, a value (objective) is both a system state (a condition), and also, an on-going behavioral processes (conditioning). Here, there is valuing that which is best for the individual, which is based on common needs and individual preferences.
2. **[Actual] Use value form (useful to end-user humans; is the usage of the assembly of components)** the utility/function of an service-object [as applied to meeting a human need] makes that which is being classified, as a "use value". The decision (object production or change) has some useful objective (completes some goal). Some function thing (tool/object) may have a useful purpose, a "use value". It is an objective value of an object to a user that the user can put it to valuable and specific use. Engineers have requirements to produce what users expect, which are met by specific material quantities and qualities. Users (all humans) in society have human needs that must be met with global socio-technical services. These services are of use to all humans; their use value is global, common life support service, technology support service, and exploratory support service [use values]. Use value is measured in well-being (qualitative unit of the feeling well, happy, and with flow).
   A. **Individual-feeling unit form:** Individual-feeling units involve individual conscious with feeling(s) of being complete in their fulfillment, and having wellness, happiness, and flow in life.
3. **[Actual] Material value form (useful to engineers and operators; is the assembly of components)** valuable to the engineer, because their material properties meet real-world material engineering requirements. Individuals working in any society would want to know how many resources go into a product.
   A. **Physical unit form (a.k.a., physical quantity form):** Physical units involve measuring the inputs and outputs in terms of static physical quantities, including but not limited to: kilograms, liters, hours, watts, or units of production. For example, in an input-output table, the columns may represent various sectors of the economy, and the entries within each column would indicate the physical inputs required by that sector to produce a unit of output. Physical units allow for a quantitative assessment of resource requirements and can provide insights into the physical flows of goods and services within the economy. Materials are measured in physical units (quantitative units).
4. **[Actual] Ecological service value form (useful to the biosphere and life within it; is the planetary biosphere within which the components exist)** refers to the tangible and quantifiable economic worth or value derived from the ecological services provided by natural ecosystems. It represents the measurable benefits that ecosystems offer to human well-being and the economy. It is valuable because it provides and cycles needed resources and creative a liveable environment for humans and a diversity of other species.
   A. **Ecological unit form:** A unit is a group (a.k.a., unit) of organisms that interact with each other and their environment in a way that is characteristic of that unit-environment. These unit-environments can be as small as a single population (how a specific population interacts within itself and with its environment), or as large as an entire ecosystem (how a diversity of populations interact between themselves and their common environment).
5. **[Market Concept] Exchange value form (i.e., market value, trade value, reciprocating value, price value, etc; is the trade of private property)** expresses something equal between things that are being exchanged (traded). The exchange value question is, "What is someone else willing to trade for the commodity?" Note that it is unwise to use the market (trade, price, and money), to account for and/or assess real-world human value. By doing so the real-world types of value (e.g., ecosystem service and human need fulfillment) cannot be adequately measured, and real-world value can be unsustainably destroyed to get money exchange value. There is no currency with its own

internal financial mechanisms (like interest that create an embedded growth obligation) that is compatible with global human need fulfillment and ecological restoration. There is no positive global human future that is compatible with the market where accumulation are possible. The two are fundamentally, mathematically (due to trade accumulation over time), and morally (due to incentives and signaling) incompatible. Note that in the market, things which have no actual value may have a price.

A. **Consumer price value form** refers to the price/value a customer's willingness to pay. Subjective consumer [value] willingness to pay form.
B. **Producer price value form** is a market standard that depends on:
   1. **Labor cost value form** refers to the cost value (price) of producing an object, including materials and labor.
   2. **Production value form (commodity value form)** refers to something having value because can be resold at a price (either as final usage, or to be used to produce something else). The sell value (price) of the commodity itself in the market.
      i. If the demand for a commodity increases, and the amount of the commodity in the market stays the same, the value (price) of the commodity increases.
   3. **Intrinsic value form** refers to the value of money itself (inherent). If the money supply increases, inflation occurs, and the value of a given single unit of money decreases.
   4. **Authority value form** refers to the defensible protection of traders in the market, who maintain a monopoly on force (violence and coercion) in order to maintain the order of exchange/market system.

6. **[Market Abstraction] Price value form (a.k.a., points value form, tokens, credits, money, currency, certificates, financial value, bank account value, etc; is an account of the trade of private property as price output, paid, and points input, earned)** refers to a linear quantity count of some abstraction tied to a person physically (e.g., cash) or digitally (e.g., crypto), as their private property, and used to purchase products (or services) in a market. Money is an abstraction that humans give value to; because they believe that it is a unit of account and that it is the only possible unit of account, or only fair unit of account [in an economy]. Money forms a static quantitative social relation between people. Here, money is the measure of accountable value of exchange over time. Money is a record (database / ledger) for the private and State property accounting of the exchange of goods and services, and for time shifting the exchange of goods and services. Points, tokens, money and currency are the "price" paid (by a user), in trade, for some object or service. The price is the quantity (of the abstraction) to be traded away from someone's total quantity (of that abstract/intangible unit), and into another person's account of that unit, for their own usage (as their new private property). It is possible for the points (i.e., money) necessary to purchase a commodity to become more or less valuable (liquidity value, a.k.a., financial value), and for the desirability of a commodity to not change. It is equally possible for the desirability of a commodity (desirability value) to change and the money value to remain the same. Individuals living in a market-based configuration of society will value points, tokens, etc. Monetary values may be derived from market prices or other valuation methods. Monetary units allow for the assessment of market economic value and can facilitate the comparison of different sectors and their contribution to the economy. Monetary point value input-output tables (i.e., bank accounts) provide a framework for analyzing the economic interdependencies between people and economic sectors, and abstracting the value-added at each stage of production.
   A. **Monetary units (monetary unit form; is a price-based tally unit that can be cycled after spent):** Involves measuring inputs and outputs in terms of monetary values (a.k.a., currency) that can be cycled after it is spent. This approach assigns a monetary value to the inputs and outputs to capture their commodity economic worth.
   B. **Point units (point unit form; is a price-based tally unit that cannot be cycled after spent):** Involves measuring the inputs and outputs in terms of priced value, whereupon once the value is "spent", it is deleted. Point units allow for a closer assessment of human value than monetary units because they do not incentivize re-use of the money (as a commodity itself). Hence, point units (as user demand surveys and accounts of working hour) and can facilitate the comparison of different sectors and their contribution to human fulfillment. Point input-output tables provide a framework for analyzing the economic interdependencies more objectively than monetary units, between economic sectors and also in estimating the value-added at each stage of production. Point

units involve measuring the inputs and outputs in terms of human values (i.e., human demands, needs and preferences, including working hour contribution). This approach assigns a point value to the inputs and outputs to capture their needed and preferred economic worth. Point values may be derived from user surveys or other valuation methods.

7. **Labor value form (a.k.a., labor value substance; is human all human work)** refers to labor in the market and contribution in community. Here, that which is valuable is that human that does any work. Individuals working in any society would want to know how much work/labor goes into a product. Labor value can refer to,
   A. **Working hours:** The magnitude of the value is determined by the amount of labor time it takes to produce some object (regardless of "laziness" of some workers over others). In Marx's labor theory of value, the value of a commodity is determined by socially necessary labor time (in hours).
   B. **Complexity labor value:** In capital, Marx theorizes that complex labor produces value at multiples of the rate of simple labor, based on how much extra labor it takes to train a complex laborer.
   C. **Wage labor value:** The token (money) income value a laborer makes per hour, per month, and per year.
   D. **Contribution labor value:** The magnitude of the value is determined by the presence of intrinsic motivation to contribute to production (community service). For instance, on a scale from 1 to 5, do "you" want to do the work; is the work intrinsically motivated and would it be done if "you" were not being extrinsically motivated, paid or coerced?
8. **[Market] Surplus value form (a.k.a., exploitation value form)** refers to the additional value generated by workers' labor beyond what is required to reproduce their own subsistence. Surplus value is the source of profit for the owners of production (Read: capitalists).

In the early 21st century, people trade property in a "market", frequently using a single, unified "purchase-option" token (Read: money) as the "integrated" sum comparator (i.e., the size of anyone's financial token banked account).

STATEMENT: *To transition safely and intelligently, the structure of each configuration of society must be fully understood.*

2.1 Access control at the societal level

Access (socio-economic) can be controlled at the societal level in the following main ways:

1. Force (State).
   A. Law contracts and police.
2. Trade (market).
   A. Property contracts and production enterprises (a.k.a., capital).
3. Agreement (all).
   A. Individual "I will or "I will not" statements.
4. Availability (all).
   A. Actual, physical availability.
5. Life-phase (community).
   A. The phases of life (nurturing, educating, contributing, leisuring).

2.2 The simplified structure of community

NOTE: *The community societal specification standard (SSS) identifies the structure of community in full.*

Community [socio-technical] standards are the entire basis for the structure of community at the societal scale. Community is a societal structure of global cooperation; it is moneyless and Stateless in operation; instead based on global coordination of contribution to configure common heritage resources into optimized habitat configurations. In order for there to be global cooperation, there must be global inter-operability; and for their to be inter-operability, there must be a common global standard (for society). In community, services and goods (objects) are produced for the common and personal [free] access of end-users (Read: the population). The system is designed with human end-user needs in the requirements from the start. In community, where production is a contribution by users, products cease to be exchanged; goods and services cease to be commodities, and private property ceases to exist. Instead, there is social contribution and common access, and things are not exchanged as commodities (i.e., there are no private owners exchanging commodities). A community-type society is a society without markets or States, where all socio-economic access is free of charge and violations lead to restoration and societal improvement. In community, there is no price, no trade, no currency; there is no token for access to common human need fulfillment. At the end of ones work life years, and months during work years, the contributor has access to leisure cities. In case of nominal fulfillment in habitats with local material configurations of access, there is no token, credit, money, debt, finance to access local socio-technical fulfillment. No currency is created or destroyed to meet global human needs for common object fulfillment through socio-technical habitat services. In community, people trust the system,

themselves, and one another, and hence, there is no need for coercive authority. Community is a structure that will be slowly, but continuously, transitioned to.

In community, people get access to a complex socio-technical platform of [habitat] services through:

1. An InterSystem team with an information set inclusive of one office (a unified standard) and one factor (a unified network of local habitat service systems). Herein, the products for end-users are:
   A. Habitats services.
   B. Information services.
   C. Technological object in service.
      1. User access (personal and common).
      2. Contribution/InterSystem team access.

The structure of a community-type society is significantly composed of:

1. Community information sets.
   A. Community standards.
2. Common heritage physical resources.
3. A community decision system.
4. A community contribution service system.
5. Community residency agreements.
6. Free access habitats (formed into a community network of habitats).

In community, there is a community coordinated working organization that involves:

1. Contribution service.
2. Information working groups.
   A. Decision working groups.
3. Habitat operational teams.
4. Transition operations teams.

The two objective constraints on community are:

1. Human needs (as those common to all humans).
2. Available physical resources (including ecological services as processes).

Users are people with [opportunity for] free access to all of the following:

1. Personal access for personal use only.
2. Common access for common or scheduled use only.
3. Contribution access for InterSystem team use only.

NOTE: *Instead of there being legal persons (with rights), as there are in a market-State type society, in community, there are three types of access (coordinated to optimize human fulfillment and resource usage).*

Community necessitates a specific built environment in order to produce a societal system where need fulfillment is achieved through the processes of:

1. Access (consumption): Users access freely.
2. Production: Users contribute to production via working groups and habitat service teams.
3. Habitation (regulation): Cities are societal production and user access environments.

Community conditions are created through operationalization of community values as decision and master-plan objectives. All societies have a set of core, primary values around which they relate and materialize. In community, these values are defined and explained in a social system standard):

1. A core set of axiomatic values that orient toward human flourishing, and become objects that resolve decisions and new materializations more greatly toward human flourishing and ecological regeneration:
   A. Freedom optimized human need fulfillment, given what is known and available. Optimized autonomy of mind and body. The psychological dimension of freedom involves autonomy, intrinsic motivation, to complete contribution-related work.
   B. Justice distributive/egalitarian access (distributive justice) to ensure global sufficiency of human need fulfillment, and restorative justice operations where there are violations. The psychological dimension of justice involves effectiveness, of effort (mastery), as intrinsic motivation to complete contribution-related work.
   C. Efficiency around resources and operations to ensure no wasting of human life or resource, sustainability and future preservation. The psychological dimension of efficiency involves flow and sustainability as intrinsic motivation to complete contribution-related work.
2. A set of stabilizing values that stabilize the core orientational values in ensuring an on-course/on-direction orientation.

Community is based, in part, on rational and experimental science (about the real-world and human fulfillment):

1. Observing, measuring, and recording quantities (of objects; identify objects).
2. Establishing inter-relationships between quantities/objects (identify concepts and processes).
3. Establishing inter-relationships between quantities/objects, humans (people), and the planetary ecology (identify human and ecological

requirements).

Hence, the stages of advancement of society in community are:

1. What is real and existing (do rational and experimental science).
2. What is the plan and predicted outcome (do analysis and planning).
3. What is the tested outcome (prototype, test, and record).
4. What is the integrated outcome (update, analyze, and revise).
5. Advance continuously.

Production in community is based on:

1. Global cooperation a global contribution coordination structure.
2. Global information a global information system based on a global information standard.
3. Subjects users (i.e., those with the potential for fulfillment).
4. Objects quantities of shapes (a quantity of a shape).
5. Services configuration of objects animated to meet human fulfillment requirements (processes that meet human fulfillment requirements, known as service concepts).

Herein, motion occurs to objects, which are arranged into technical configurations. Motions can be categorized and contextual by whether or not they meet human need fulfillment requirements at a societal level:

1. Human motion labor time.
2. Motion of objects motion of material quantities.
3. Service motion motion of material quantities in service to human fulfillment. For example,
   A. Power (energy) time (a.k.a., power production).
   B. Water (hydraulics) time (a.k.a., water pressure).
   C. Architecture (buildings) time (a.k.a., architectural shelter).
   D. Etc.

In community, the categories of market-State (capitalist: owner, property, authority) law code/standards are transitioned away from and replaced by societal standards and human habitat service code/standards. Instead of their being property, ownership, and capital, there are real-world human needs, community-based societal standards, and a habitat service fulfillment network is conceived of. Instead of capitalist law being the starting point for conceiving of the structure of society and interpreting cases of behavior therein, there is scientific knowledge of human well-being, fulfillment and flourishing. The starting point of community is human needs and the production of what is needed, as habitat objects and services, required by all humans to be alive and thrive. Effectively, community agreement provides free ("unfettered") access to production as a user and a contributor.

In community, the "producing individual" (Read: human contribution worker) is interdependent with the whole population. In the market, the "producing individual" (Read: employee, laborer) is competing with the whole population for economic-resource access. Under State conditions, the "producing individual" (Read: the superior manager or the subservient subordinate) is competing with others for power-authority access in a State organization/corporation. Simply, the conceptual starting point for a community-type society is different than that of the market-State.

In the market-State, there are approaches and strategies adopted by the various market sectors/ industries to promote ideas, products, and choices that are detrimental to health, well-being, and the ecology. In community, there are approaches and strategies adopted by a cooperative and coordinated organization that produces products and services that meet human needs throughout all life phases.

The question of what is actually needed survive by means of production is an important one that separates the market-State from community. In the market-State, the workers (who produce) need a paying job, and the owners need to profit, in order to keep producing (paying the workers and buying luxuries). Conversely, in community, the population needs contributors, access to resources and the means of production, and community standards.

Community is a type of society without money (i.e., it is moneyless), without a State (i.e., without relations based on power-over-others), and without property privileges (class division):

1. Moneyless means (a.k.a., marketless) no trade, no currency, barter, no market, no exchange tokens, no "options" tokens, no wage, no price, etc. Moneyless means that no mandatory exchange is necessary for survival and access to all services and objects in community. Moneyless means that there is no price for anything; that everything is free of the price mechanism. Moneyless means that there is no employer or employee class. Moneyless means that there is no private property. Moneyless means that there is three types of access to common heritage: team, common, and personal. If there is no property, and everyone owns nothing (a.k.a., everyone owns everything), then there is need for tokenization of exchange for final goods and services, and hence, no need to tokenization of labor services (because labour is a felt intrinsic contribution).
2. Stateless means (a.k.a., free of coercion) no government; no authority with the capacity to

make laws of coercion, enforce laws coercion, and punish transgressors of the law within its territorial/jurisdictional borders. Stateless means there are no social relations based upon coercion, and the belief that power-over-others makes "right". In community, there is no State coercive (Read: punitive, retributive) justice system. In community, place of laws, there are societal standards, in which there are in specific codes of behavior, accountabilities, and restorative justice consequences when there are violations. Stateless means that humane societal standards are applied and restorative justice is operative. Stateless means there is no market, because the market continuously recreates the state of authority over others to defend property transgressions. If there is no criminal class, then there is no need for a State.

3. Market-Stateless means users are educated [on community standards] and contributors are intrinsically motivated to contribute [to commonwealth national services] to the operation of societal service systems.
4. Property privileges means privileging some people with better access over other people, while in the same life phase/stage (nurturing, eduction, contribution, or leisure). In community, access is not stratified on the basis of a monetary or priced account.

Community and the market-State maintain fundamentally different perspectives:

1. In the market, resources, services, and assets can be bought and sold, measured in price, and organized according to private decisions.
2. In the State, the resources, services, and assets are owned by the State, some of which can be bought and sold (measured in price), and some of which are measured in authority, power-over-others.
3. In community, resources, services, and assets cannot be bought and sold, but they are still measured and organized. Things are produced for the purpose of being used, and not sold and used.

As a type-of society, relative to other potential organizations of society, community is:

1. A system that is *decoupled* from the market, and hence, market economic growth -not a societal system that contains a market/transactional system of societal relations.
2. A system that is *coupled* to real-time life and cooperative iteration; itself, coupled with a discoverable, affective (i.e., influential) real-world information-material environment. Community accounts for life and actions in an environment that may rapidly affect the life of all.
3. A societal system capable of coordinating a healthy habitat, as opposed to a societal system that incentivizes the mismanagement of the habitat.

Community can sometimes be confused with the market-State; wherein, people may confuse:

1. **Politics** *with* **science.**
2. **Politics (governance and market economics)** *with* **decisioning.**
3. **Politics** *with* **global objective, residential agreement.**
4. **Industrial production** *with* **human need fulfillment within productive and operational habitats.**
5. **Markets** *with* **global cooperation.**
6. **Govern[-ance/-ment]** *with* **global service accountability.**
7. **Priced and taxed market-State services** *with* **free and contributed community services.**

> **NOTE:** *In the market, the pursuit of money [to the detriment of all] is a universal given incentive. In the State, the pursuit of power [to the detriment of all] is a universal given incentive. In community, the pursuit of global human need fulfillment [to the benefit of all] is a universal given. Together, these factors for a spectrum of possible configurations of society.*

There are horizontal and vertical links in the market-State:

1. Vertical links market subsidiaries and State authorities.
2. Horizontal links the market businesses, the State administrators.

> *Note: Vertical links do not need to be hierarchically based upon power-over-others, and horizontal links do not need to be based on extrinsically motivated employment.*

Community necessitates a configuration of a society that does not encode the concept of trade or competition, which are properties of society that emerge together:

1. When trade is no longer encoded in society's configuration, then a global standard for human fulfillment may become the common open-heritage of all.
2. When competition (as a value/objective) is no longer encoded in society's configuration, then the State as a means of control through force, violence, and coercion is no longer incentivized to defend for malignant behaviors as a result of scarcity, induced by competition.

As long as there is competition as the system in which people have to operate and maximization of value (profit) is the key goal (purpose of the structure of society), then the exploitation will still be present, even if it takes a different form. The "laws of motion of capital" (as in, human behavior adapted to trade and competition) will still be present until the market and State are replaced with a community configuration.

A community-based economic system is based on human needs (i.e., their periodic completion) in the context of common heritage resources and habitat [re-] productions. Note that the productions in community are habitat service systems, forming a whole integrated fulfillment network of societal services and objects. In community, productions are [master-]planned, and most consumables are produced on demand (or, *to* demand). In other words, products engineered by community working groups, go to those who needed (and ordered) them. Those who ordered them knew what they were getting. In simple terms, in community, there is production for demand (of human needs), and not trade (of wants). Production occurs to directly meet human need fulfillment and not for trade, profit, etc. Households and whole habitats (cities) may estimate their daily, weekly, monthly, yearly, bi- and tri-yearly needs; given, transparency in production and decisions, using common heritage resources dedicated to the optimization of human-need fulfillment over many generations. Simply, households can estimate their needs, when what is known, currently available, and master-planned to be available over several years (given state conditions) is transparent to them.

2.3 The simplified structure of the market

A.k.a., The simplified structure of trade, commerce, exchange, property, free enterprise, business, buying and selling property.

The term "market" refers to the overall system or environment in which buyers and sellers engage in economic transactions that trade ownership of tangible and intangible items. Property exchange (trade) is the fundamental basis of the market; to necessitate property exchange, there must be custom and/or lack of abundance. In the market, services and goods are produced in order to be exchanged (for other objects or for money). Although a "market" is an abstract concept, a "market" economy can be defined as one in which goods and services owned and exchanged on the basis of prices paid; it is where transactions are negotiated, prices are determined and paid, and civil conflict settled. Here, it could be said that the buyer and the seller are two strands of a metaphorical economic rope. And, the State is the third regulating strand. Commerce (trade) doesn't depend on trust of/in others, but on a strong authority and trust in money. A market is somewhere trade occurs -if there is trade, there is a market; if there is a market, there is trade. In the market, access is priced and bought. Summarily, in a market there is the exchange/trade of ownership. Trade always carries with it the risk of dependency as one gains advantage over another.

The presence of a market influences all aspects of society, in particular, user behavior. In the context of trade, over time there is accumulation (of property in the hands of the few), which leads to a few people of with sufficient accumulated property to influence State policy and political projects for their own advantageous benefit. Doing so will make the system obviously better for them. And, anyone who opposes that system is also opposing those who are doing well out of it. And so, there is behavior (likely) by the "elite" and "well done by" people to suppress knowledge and development, and particularly resource and people transfer, from one system to another where they are no longer above others in service to self as opposed in service to others. In other words, the elite in the market-State are most easily represented as thinking and behaving based on service to self (economic profit and authoritative power) and not service to other (systems engineering) who seek to optimize the fulfillment of all, because it benefits oneself most greatly in kind.

In order to engage effectively with the market, it is essential to understand the composition and affects of the market. It is essential to characterize the system in order to design an interface with the system that functions well. The market perspective is highly characterized by:

1. **Competition [at the societal level]** Actions take reflect a state of competition (in the market); hence, a lack of recognition of the common resource base, and common human needs, of all individuals on the planet.
2. **Trade [throughout]** There is a mandatory exchange of the self or of objects owned by the self (in the market); hence, competition [between individuals] is an incentive.
3. **Profit [for some]** This is a mandatory requirement for income as individuals and services (in the market); hence, gaining income [between individuals] is an incentive.
4. **Security [of future profit]** Actions taken reflect a state that competition will continue and future requirements will be met by taking more profit; hence competitive advantage and hoarding [between individuals] is an incentive. Personal resource acquisition facilitates the security of future profit.

The is observed to behave like what it produces; the market observably produces the exploitation of scarcity, not overcoming it through design (abundance). Socio-economic inequality is a defining characteristic of the market model, which inevitably deprives some cross-

section of society (obviously, because it isn't unified).

> **INSIGHT:** *If "you" can't produce for the market system or "you" can't consume from the market system, you are effectively worthless to the market system. A good tag line for the market might be, "Infinite wants, ignored needs". The market is responsive [only] to those people (or groups of people) with money.*

The structure of the market is significantly composed of the following concepts (entities) related to trade and ownership:

1. **Property (a.k.a., specific objects or information)** refers to authority (control) over real and/or imagined objects. Property in the market is generally tradeable. Property may be controlled/owned by individuals and organizations. The State is a type of organization that can controls property. Technically, all property is mixed market-State property, because the State has ultimate say over property within a given jurisdiction (i.e., the State's decision are universal and final; they have a monopoly over the enforcement mechanism also known as police and military). Conversely, in community, there is no property.
   A. **Private property** refers to property owned by a citizen (individuals), or citizens together.
      1. **"Public" corporate property** is a type of business/company whose shares are traded on a public stock exchange, and ownership is distributed among numerous shareholders. The term "public" in this context refers to the fact that the company's shares are available for purchase by the public. The assets and operations of a public corporation are distinct from the private property of individual shareholders. But, the individual shares are held as a form of private (tradeable) property by individual citizens.
   B. **State property (a.k.a., national property, public property, government property)** refers to property owned by the State.
      1. **State-private property** refers to someone's private property where the State 100% decides what is possible (e.g., a nature preserve on one's own landed property).
2. **Trade (a.k.a., event where an exchange occurs)** is an exchange event between people; it is the process of giving and/or gifting, and getting given and/or gifted in turn. Trade is a dynamic concept, meaning that something is exchanged. It is [mandatory] reciprocal exchange. Trade can be voluntary or coerced. A trade event is a transaction. Trade is not what co-operators do; trade is what those in competition do. Note that when gifting is expected to be reciprocated, then it is a trade. Conversely, in community, there is no trade.
   A. **Wage (a.k.a., price paid for usage of a human body to complete tasks in the market)** money received in trading self (as labor) for money (tokens). In the market-State, most of the population depends on an business employer, or the State as a business employer, for wages (a.k.a., salary, income, etc.). A wage is a reward that can be used for a future purchase (of priced object/service). In the market, wage determine one's lifestyle, one's way of living, and what someone has access to; it determines what options for access anyone has. The conditions of one's life, where you can go and who you can associate with, and even what one eats and drinks, is highly determined by ones wages and financial net worth. The average person ("citizen") is dependent on the employer and the wages they receive from the employer. The average person is really a "wage slave" (i.e., someone being exploited) for the profit of another. The whole working class in the market-State is highly dependent upon the capitalist class. No one can do more with their life than their wages or financial net worth permit. The wage (or net worth) is all the freedom one has. In other words, anyone's degree of freedom doesn't go beyond the salary and net worth someone has to themselves. Here, in the market where there is scarcity and competition for fulfillment, there is no shortage of people who will profit from others misery in the market.
3. **Price (a.k.a., cost of acquisition of an object or information, sale, cost)** refers to the monetary value assigned to a commodity (or service) in a market exchange. Price determines what can be accessed. Price is the amount of money or other objects/information that must be given in exchange for a specific object or information (as a "commodity"). Price is influenced by various factors, including money supply, the costs of production, supply and demand dynamics, and the social relations of production. The market is a system where price allocates resources (and money, applied in a "growth" framework, is a means of extracting resources). Prices on human need fulfillment create harmful incentives (they create [the values/objectives of] secrecy, competition, and scarcity, from which poverty, loneliness, and depression originate). In this sense, the market is an algorithm that accounts for trade; a system of private entrepreneurs (competitive individuated

units) bidding up and down prices. Market prices tell producers what to produce, and determine what can be produced. Conversely, in community, users tell contributors what to produce; and, there are no prices (i.e., no priced accounting). Money defines value by price. There are several types of price (a.k.a., currency, money):

A. **Barter (a.k.a., intrinsic value money, object trade)** refers to a trade of a useful object with another useful object owned by two different people. Here, another useful object is the price of the trade. In this case, any object useful for trade is money.
B. **Money (a.k.a., currency, token, credit, score, exchange ledger, finance, cash, share, legal tender, coinage, funds, capital, assets, monetary units, payment, purchase)** refers to a medium for trade accounting. Here, money is the price of a trade. In the early 21st century, money is an abstract [socialized unit] quantity produced by a State (or, private-public partnership) and tied to legal authorities therein (i.e., in the jurisdiction of the authority). Money is a unit of account[ing for mandatory reciprocal exchange]. Money has multiple synonyms, including but not limited to currency, credit, token, payment, etc. There is a money-demand element to a market-based society; money is demanded for access (as purchase) and for contribution (as employment). Money is whatever people give "value" to in the market where objects, information, and services are traded. Money is a concept, it has no intrinsic value. Money is whatever is in someone's mind as that which can be sold for more money. Money is that which commands the labor of others. Money is the value someone gives to something under the condition that they believe it can be resold to someone else and/or exchanged for something else. All money is a faith-based operation, especially debt-based money; because, the users has to have faith that the people administering the monetary program can be trusted, faith that the administers are not going to quickly change the rules, faith that the money will continue to have value in trade, etc. Conversely, in community, there is no money. In the market, money is fundamentally used to buy access and incentivize actions. Money is means of incentivizing the extraction of resources from the ecology, for profit. And, money is the power to command the labor of others.
    1. **Reification money (a.k.a., abstract money)** refers to a medium of exchange and a unit of account used in economic transactions. Money is a static concept. Money is a[n abstract] homogenous representation for [real] heterogenous objects. In other words, money is a coordination tool/function for the standardization of the means of measuring value, facilitating the exchange of goods and services of all types. The term "homogenous representation" indicates that money allows different goods and services to be compared and valued on a common scale (with a common global/centralized unit), despite their inherent heterogeneity or diverse characteristics. As a "homonogeous representation" (a stable unit), it can be used to keep score for players in a competitive game for scarcity to fulfillment. Money is a social score between competing individuals (and families) for access to what humanity can provide. Money is a central accounting system for trading (of property with price) between users of a market. In the market-State, "money" means comfort, security, and power; more money gives better access. It does not matter who someone is, all are valued by their financial worth, by the size of their bank account. Everyone is compelled to take part in the race, competition for possession of property (and money accumulation).
    2. **Commodity money (a.k.a., extracted money)** refers money that has value because it is physically made of something valuable/useful; "money" that has intrinsic value because of what it is made of and can be used by a human for some valuable purpose. Historically, commodities like gold, silver, salt, or other precious metals or goods have been used as forms of money.
    3. **Usury money (a.k.a., interest money, debt-interest money, growth money)** refers to usury in its historic meaning, any positive cost, interest, tax, fees, etc., on money (i.e., on a currency). For example, the determined interest [usury] rates of a loan or the taxing of an exchange; making interest money on staked money or money in a "savings" account. The expectation of having more money returned than was "invested" in a "business" by a "bank".
    4. **Capital money (a.k.a., "means of production" money)** is money applied only in order to get more of it back again.
        i. **Surplus value money (a.k.a., growth money)** refers to the driving economic

dynamic in capitalism as the maximization of surplus value (divided between profit, rent, and interest) in order to accumulate yet more capital. (Marx, 1990: 742)

5. **Legal tender money** money is allowed to be used for purchases, the most significant of which is the purchase of the State as a service (through taxation). A punishment-based authority may be engaged to enable or disable purchases using a currency.

4. **Profit** refers to receiving a larger return of money (or commodities) after an investment in production and the sale of the product/service. From the workers perspective, profit is the surplus value appropriated by the owner of production through the exploitation (wage labor) of the worker. Profit is the difference between the total value produced by workers (and machines) through their labor minus the wages the workers receive in return. In the market, there are business who have a duty (a.k.a., fiduciary responsibility) to take steps to make profit for their shareholders. Conversely, in community, there is no profit. Note: A system of profit making (worker exploitation) is not compatible with considerations of humanity having common needs, and the wellbeing of workers.
5. **Commodity (a.k.a., object or information produced for trade)** refers to a product that is produced for exchange in the market. A commodity has an exchange value that allows it to be traded or sold (i.e., someone else wants or needs it for some real or manufactured reason). Conversely, in community, there is no property. A commodity is something produced to gain additional property (i.e., produced to be exchanged/traded). Conversely, in community, there is no production for exchange.
   Commodities generally have several value-type inputs:
   A. **Use value** the usefulness or utility they possess.
   B. **Exchange value** the value of what the commodity can be traded for.
   C. **Labor value** the value determined by the amount of socially necessary labor time required for production.
   D. **Resource value (scarcity value)** the rarity of the materials.
   E. **Complexity value** the assembly complexity of its production.

The market is trade, and trade, in any advanced form, is price/money. Price-money is [valued as a representation of] trade accounting in the market. Money is a tool of control -- is [purchasing] power in the market-State. Money is, and has always been, a mechanism for control [of others]. The financial system is a system for the control and manipulation of humans, as slaves, to those who own the financial system and/or have the greatest financial wealth. Money is intrinsically linked the power of the authority. For example, a viable currency is a currency that can be used to pay taxes to the State. Thus, the State (as the "supreme authority of the land") has a interest in perpetuating the State money cycle:

1. When the competing players do commerce, money changes hands.
2. When money changes hands, taxes are paid.
3. When taxes are paid, the State party gets funded.
4. When the State party gets funded, "our utopia gets strong and everyone is better off for it".

Trade (the market) is based on price. In the market, there are two things reified for a price:

1. A price for (i.e., salary, wage for) physical or fictitious (e.g., corporation) people.
2. A price for (i.e., cost, expense) physical or fictitious objects (a.k.a., goods, products, resources, commodities).

Price may be incorporated into economic calculation plan:

1. Production commodities (more market) through to production indices for calculation (more community): An "internal" pricing system within the planned economy - a pricing system between producers. Here, there are prices for objects and services that the means of production use to produce final production habitats).
   A. For objects (really, resources).
   B. For services (really, business/State).
   C. For labor (really, users).
2. End-user production commodities (more market) through to user needs (more community): An "external" pricing system within a planned economy - a pricing system for end-user purchase/acquisition of final products. Here, laborers make a token wage, which they use to purchase priced objectively (or by supply/damand) goods and services.

Money operates on one value system, it defines value by "price" (of labor and resources). If there is no "price value", then there is no human value -if there is no money (or, power) to be gained, there is no desire (motive) to take action. The primary function of the market is to exploit scarcity and increase consumption, to hoard for competitive advantage, and to survive scarcity, or near scarcity. Money is an accountable "token" for value preand post-trade; it is a token for value (in the belief system of the "currency" having value). The market is

trade involving property and the accounting of value by way of money tokens (associated to individuals/families as money). Tokens are expressions of scarcity and a competitive value orientation. Tokens are a game theory reification of the option to access real-world objects and services. Tokens exist to account for trade (i.e., account for trade events in time with objects and work). A token management system is a system for the accounting of trades. Trading at the societal scale requires are a system of accountability that records tokens assigned to every State authorized possible identity (as on-person money, and their financial-monetary bank account). Tokens are a score of access to property for every individual and/or family. Money has no intrinsic value, it must be believed in to have value. In the market, money has maximum opportunity to get a buyer access to anything that can be acquired and traded as property. In the common market, materials (commodities), humans (wages labor, employees), services (businesses), technologies (industries), and power-over (coercive government) policy can be bought and sold.

The commonly known words, "debit" (withdrawl, subtractive) and "credit" (additive) are the two sides of a financial bank accounting equation involving a system of accountable trade entries. In this system, debits and credits must balance for each transaction. In the context of double-entry bookkeeping for a bank, every financial transaction has two aspects:

1. A debit entry, and a
2. corresponding credit entry.

> *Note: In common parlance, sometimes the terms mean their opposite.*

Money is supposed to index real value in goods and services, and human labor (in years). Money could be seen as an "optionality token" it that it gives people who have it the option/choice to buy what they want (Read: trade) in the market. Money gives someone or some group the continuous ability to have proprietary access (a.k.a., private access, proprietary, property access) to whatever they want and is available to want, under the context of scarcity of access and competition for access, where the score of the competition is "money" scored in State currencies and individual/family net currency worth (relative individual belief-demand-want account of global financial value), where coercion maintains stability in the market for trade, that stability is controlled, typically by a State Law and enforcement.

In a market there is, unless it is barter, a money-sequence function in operation (i.e., a money market). The construction of that market overlays the human need for exchange without price; it creates a socially constructed contract, a "social contract", that humans must abide by (whether wanted or not). The real common and objective human needs become just, "*wants* in the market", which has its own set of incentives to continue functioning, its own structuring, which could be viewed as necessarily taking priority over human needs.

> **INSIGHT:** *Some societal systems are, because of their structure, life-blind.*

The market syntax is:

1. Self-maximizing strategies in,
2. conditions of scarcity or conflict over,
3. desired trade (payoff or profit) at,
4. minimum costs for the self to,
5. win/gain more.

> *[encode property] > [encode currency as private money-value, $1] >$2>$3>$n (money multiplication sequence, transactional sequence).*

It may be of note that without a market (as a significant conception in fulfillment), the State may alternatively be used as a [national community service] platform for creating, coordination, and transitioning society to a community-type societal configuration, safely and effectively, transferring people from the old market-State type to the community-type configuration of the socio-technical environment.

Money is a proxy for what humans in the early 21st century value. Humans in the early 21st century think competition, and scarcity of access as property, is a value; they think authoritarian rule following is a value. In decisioning in community, human need fulfillment is the direction a scientifically informed user-contributor standards are the guide. In the market, all resources are private (and State) property. In community, all resources are the common heritage of all the world's people, and a coordinated contribution service delivers those resources into a development and operational system composed of an information service system and a material service system, which together meet all the needs of the common heritage human population living in a unified biosphere, planetary ecology with a diversity of other species. In the market, property (money) is anything that is measurable, extractable and changeable, and/or believable. Human need fulfillment is a [societal] systems engineering problem requiring specific social procedures and material resource configurations. Individual human need fulfillment, project operation and coordination, and physical objects must be measured and accounted for at the global decisioning level in community. In community, what is of value is global human need fulfillment, with a set of objectives within the values of freedom, justice and efficiency, which together with a set of stabilizing value procedures, informed by systems science-engineering, resolve our experienced society and its socio-technical constructed operations.

Money is a most highly decentralized "score accounting system" in a competitive game for resources and power over others. In the market, everyone is relative to each other in the state of competition for property (and not contribution for service). Here, there

is creation and defense [of private/State property], and defense incentives to innovate new technologies, based on scientific-engineering innovations, that maintain and make greater private property profit. Community removes defense (of property) incentives by removing property and replacing it with distributed contribution and habitat coordinated access to societal services and service objects.

In the market, the production to sales/purchase cycle (and then waste) must be inefficiently, continually active for users in the market to have money, and thus, survive. Sales events must be continuous, otherwise, sellers don't have the money to pay themselves or employees. Hence, store (physical and online) locations must be continuously present, continuously marketing, and continuously selling to consumers (who are themselves just employers and employees by another name). The market system is a wasteful production system, and it obfuscates the waste through the core separation of three socio-economic classes of access (to property).

Conditions in a market are highly likely to include, because they facilitate and are necessary for profit, are:

1. **Scarcity** means that there is not sufficient (insufficient) access to resources required for optimal human need fulfillment.
2. **Secrecy** means that individuals are hiding useful information.
3. **Competition** means that individuals are not working as a team together.
4. **Coercion** means that if "I will not do what I am told", then there is punishment with removal of access to need fulfillment. In the market, people need to work to have money to buy things. If people do not work, they do not have money, they cannot access/buy things. Access only comes through work to have money to buy things. The market is a coercion-constraining structure that constrains peoples motivations and behaviors to that of employment as given by employers for access.
5. **Property** means personal and/or State control over some object or area.
6. **Trade** means that there is a requirement for mandatory reciprocal exchange, which over time leads to individual/personal resource accumulation. That which is real (i.e., objects and humans) as well as that which is not real (i.e., abstractions, money) can all be traded.
7. **Corruption** means behaviors that are pathological to others regularly occur in the market; because corruption flourishes mostly in "muddy waters" in conflicting objectives, shifting priorities, and secrecy.
8. **Delegation** refers to the transfer of responsibility for specific tasks from one person to another.
9. **Discrimination** means individuals favor one group of humans over another because of belief and/or attribute. The usage of money itself, such that some can pay for greater access over others is a primary form of discrimination (i.e., discrimination against the poor).

2.3.1 Business

A business is an organization or entity that is setup to operate within the market and conduct commerce (i.e., trade). Businesses operate under the rules of commerce of the State territory in which they do business. A business is a market-based economic activity that includes the purchase and sale of objects and people, and the providing of products and/or services to acquire money. In the market, business is required for survival, because it is through business that money is acquired, and then, spent to purchase needed goods and service. The two general objectives of a business are:

1. To acquire money, and
2. to minimise costs.

No business can last without acquiring money through funding and/or profitable sales. All businesses exists within a configuration of society known as, the 'market'. In a community-type configuration of society, there are no businesses.

A business plan is just the addition of the money factor to a normal project plan. At a high level, a business plan is a proposal to produce a product or service for profit. If it wasn't for profit, then it would just be a production plan. A business plan (market-interface plan) is a written document that describes a business (i.e., an entity conducting trade). It sets out a business's operating structure, goals and objectives, and strategies for achieving them. A business plan is focused on explaining what the business is going to do, how it is going to accomplish its goals, and also, the amount of money required and expected in return.

2.3.2 The business cycle

A.k.a., The structure of business, the structure of property trade.

There are three socio-economic [business] classes of users in the market:

1. The **consumers** have money (or don't, and are in poverty) and pay money to purchase what they (1) finally want and (2) have the money to purchase.
2. The **employees** need money to survive and make purchases, and therefore, work (through extrinsic motivation) for the employers for money (extrinsic reward), by following employer instructions and producing...what they purchase as consumers.

3. The **employers** have money and pay money to the employees to produce products for a profit of money for themselves. Generally the employers organize the means of production, but there are socialized market models where the employees are the ones organizing the means of production (and profiting).

In other words, user roles in the market are (market-user access types):

1. **Employers** these are the sellers who pay employees to do work (production owners, under whom employed managers reside).
2. **Employees** these are the workers who accept payment from employers to do work for the employers benefit.
3. **Consumers** these are the people who buy what the employers sell.

Essentially, the users of production products are classified as consumers (purchase final products) and employers (who use intermediary products, commodities, to produce final consumer products), both of whom are separated from one another under State law and market conditions. The consumers [pay money to] use the products of production to meet their wants. The producers are employers who pay money to employees who do the work of production (i.e., are the means of production, operating under socio-legal relations called "businesses" owned by the employers). The employers use the employees to make profit, which they then reinvest as "capital" (money and assets) for future productions. The employees who make the services and objects, are the same people who must then buy what they have made, while the employers "extracting profit" (i.e., exploiting the system for their benefit over employees, benefit-over-others) the whole time.

The global market is something like an "artificial intelligence" that is running parallel inquiry resolution processes (decisions) in order to resolve the current socio-economic configuration of society of the early 21st century. In community, where there is artificial intelligence (AI), AI is used to facilitate the resolution of an optimal solution selection, as the result of a parallel decision inquiry resolution process, in order to resolve, construct, and operate the optimal configuration of society, to date, given the intelligence of all commonly directed sources available. What was once done at the tribal (Dunbar number) level of human compute, now, through technology, may use human compute as well as electrical energy-power compute-power (composed of hardware and mathematical operations) that create software for the societal information, decision, and material systems. The market-State runs billion of distributed-parallel operations on billions of people maintaining trade and the protection of individual and State property. Conversely, a community-type society runs millions of parallel operations on billions of people in order to maintain global human need fulfillment with common heritage resources and contributions.

The global market-State may be seen as a mis-aligned super intelligence (of many interoperating agents); the market-State structure is misaligned with common human fulfillment and global ecological regeneration. Note here that there is a recursive process when determining alignment; wherein, the socio-technical operating system is running on each individual human, and also running all the individuals humans together. In community, this socio-technical operating system that becomes recursive through education, employment/contribution, and leisure is open source, science informed, standardized, and contributed to be of human service.

In the market, there must be the continuous presence of stores occupying physical and computational space in order sell products continuously. A store that goes out of business will have it's computational resources stopped and all the effort that went into making the store interface wasted or re-branded. A physical store that goes out of business will have to have it's physical resources re-purposed for another store, or wasted. Products that aren't sold must typically be wasted otherwise their free access would negatively impact the sale of products that might be sellable

Property owners create and complete contracts (civil legal-State authorized) for purposes of self-interest and profit. Different market entities have different production projects. The market is the structure, the market is the political-economic organization in control. The market maintains power through personnel populating a set of primary roles:

1. **Owners (of the business; a.k.a., the capitalist class, the bourgeoisie)** those legally own the business property and take the profit. Owners own and controls the means of production (including, land, factories, personnel, information, etc.). Owners wield economic power, and owners profit from the [exploitation of] labor.
2. **Laborers** (**workers of the business; a.k.a., the working class, the proletariat)** those who do the actual work of production. Those who do not own the means of production and must sell their labor power to the capitalist class in order to earn a livelihood. The working class is exploited by the capitalist class and relies on wages for their survival. These are the business socio-technical laborers.

The three layers of activity ("class", socio-economic class, class division, class hierarchy, class consciousness, ownership level classes) in the market:

1. **Business owner(s) [profit takers]** entrepreneurs,

investors, sellers. Take decisions (or not, if not authority) and communicating with the State. These people take the profit. The primary owners of major businesses have the most ownership and most access. Business owners own the property [means] of production, transportation and distribution, and re-collection. These people have the greatest power to hire and fire. These are the employers. Who has the ultimate right to hire and fire is who is in charge. These are people who take the profit.

   A. Community relation: these are the profit takers, and this class is not present in community.

2. **Business administrative workers [information departments]** do the work of administering the business and communicating with the State. These are coordination [information] departments. These people take a large cut of the profit. Business administrators maintain businesses for the owners. They take care of business property and delegate business work to do. These people manage and take significant decisions. These people have the secondary level of power to hire and fire. These are employees, but may also be employers. These people administer business operations and take some of the profit.
   A. Community relation: these are the information and decision working groups and standards.
3. **Laboring workers [habitat departments]** do the actual laboring work; wage slaves. These people take what is left over after the other higher employee-r/-s take their first cut of the income. Laboring workers may also sometimes not be paid at all; and in such cases, they do not have a wage, so they are just slaves. These people have the least ownership and least access. These people do the physical and/ or mental labor to produce products. These are not typically people who hire or fire others. These are the employees. These are people who work to make the profit for those who take the profit.
   A. Community relation: these are the habitat service team members.

In a market, the following types of labor transactions are common:

1. Employee receives tokens for labor:
   A. An exchange:
      1. Equal exchange (i.e., is an owner in a cooperative).
      2. Unequal exchange (i.e., is an employee who receives salary, where owner receives profit).
   B. Tokens (e.g., money, credit, etc.).
      1. That circulate.
      2. That do not circulate.
   C. No thing exchanged (i.e., not employee, is contributor with community access, or slave).
2. Consumers, who have acquired tokens through labor, can buy from one or more sources:
   A. A market of businesses composed of private owners.
   B. Competing cooperative (competing groups of worker-owners).
   C. A cooperative union (no competition; commonwealth of worker-owners).
   D. State store (no competition, national industry).

The following elements are relevant to a work for wage/ income system:

1. **Price:** objects and services have a direct price to be paid by a consumer.
2. **Cost:** the production of objects and services has a cost to be paid by the producer.
3. **Conditional:**
   A. Money is provided based on employment. Only the employed get it only those that work get it.
4. **Social-State and central cooperatives:** Quantity of money is provided based on working hours, complexity, and demand.
5. **Distributed cooperatives:** Quantity of money is provided based on working hours and profits, or set cost agreed by group to be paid to worker for completion of a work proposal.
6. **Capitalism:** Quantity of money is provided based on ownership status, managerial status, and ability to make profit. Prior profit is put toward production in the form of "capital" to produce more money.
7. **Individual:**
   A. Money is provided to the individual doing the work (employment).
   B. Money is provided to the business (individuals) doing the sale (sales).
8. **Periodic:**
   A. Money is provided on a regular inter-dependent with work basis (e.g., weekly work, monthly work, yearly work).

A market economy is governed principally by a set of market "laws" (a.k.a., business principles):

1. **Law of [market] demand:** A "law" (or, if one prefers, assumption) holds that people will buy more of a good if the relative price falls, and less if it rises; people will also tend to buy more of a good as their relative income rises, and less as it falls. Additionally, any development that changes the relative price of a good or the relative income of an actor will create an incentive or disincentive

to acquire (or produce) more or less of the good on the part of a producer.
2. **The law of supply:** A "law" that states that there is a positive relationship between the price of a good and the quantity supplied by producers. Producers are then incentivized to produce more to acquire more profit. As the price of a good rises, producers have an incentive to supply more of it, while a decrease in price typically leads to a reduction in quantity supplied.
3. **The law of competition:** A law that states producers and consumers have the freedom to enter and exit the market (and, if it is a regulated market, then the State is present; note here that "citizenry" is always a regulated State market). Every decision involves an opportunity or a cost, an "opportunity cost".
4. **The law of business profit:** Society continues to advance because some people are willing to take risks as entrepreneurial business owners, in order to take a profit.
5. **The law of competitive advantage:** A law that states in any given trade, one party will be advantaged in the end, over others. Then, it is best to have competitive advantage over others when going into a trade to benefit greater at the end, than the others.
6. **The law of scarcity:** A law that states that if something is wanted, but scarce, then it can be sold (traded) for a higher price.

> **CLARIFICATION:** *The term, "market economics", has multiple synonyms (a.k.a.'s), including but not limited to: bourgeois economics, capitalist economics, mainstream economics, neoclassical economics, Austrian economics, orthodox economics, conventional economics, political economics, liberal economics, etc.*

The market necessitates a specific built environment in order to produce a societal system where want fulfillment is achieved through the processes of:

1. Consumption: Employees consume.
2. Production: Employers produce.
3. Regulation: States regulate trade.

In the market-State, there are markets where the following are exchanged (traded and sold):

1. People are traded (Read: people markets):
   A. En-slaved no bodily autonomy.
   B. En-waged purchasing power gives bodily autonomy.
2. Objects are traded (Read: objects markets):
   A. Raw planetary eco-system resources.
   B. Means of production objects (hardware machines for production).
   C. Intermediary production objects.
   D. End-user objects.
3. Services are traded (Read: services markets):
   A. Management of production (including surveillance and policing of property).
   B. Knowledge of production of objects (information and software systems for production).
   C. Intermediary production services.
   A. End-user services.

Herein, "capitalism" is a system of productive market/trade relations with the following characteristics (Marx, 1984):

1. The **private ownership** of the means of production and the circulation of property.
2. The **purchase and sale of labor** where the laborer works at the point of production for wages and turns over the product of his/her labor to the owner who hired him/her.
3. The **sale (and disposal) into a market** of the commodities produced to enable the owner(s) to receive money (a.k.a., "revenue") greater than the money spent on labor wages and machines (i.e., to realize profit; a.k.a., surplus value).

As a societal system, capitalism a set of linked structures:

1. **The primary organizational structure** has three primary branches:
   A. **Industrial** produces products for other industries and for consumers. The primary industries are: extraction of raw mineral and liquid materials (i.e., mining, mineral wells, water sources, etc.); agriculture of plants and animals; chemical production; transportation; communications; computations; energy and power; machinery production; construction; production of consumer goods (including necessities and luxuries); etc.
   B. **Commercial** sells (a.k.a., "retails") product to end consumers.
   C. **Financial** sells abstract/intangible financial "products" to industry, commerce, and end consumers.
   D. **The State** to regulate the other economic sectors, and to provide services that the other three sectors miss.
2. **The sub-structure** of the capitalist system is the planets mineral and ecological resource base, ready for exploitation.
3. **The infra-structure** of the capitalist system involves two sub-classifications:
   A. **Human workers (a.k.a., human capital):** the

population of common [working class] humans who are [human] resources to be exploited as a labor force (a.k.a., wage slaves) for the profit of the owners. This labor force is paid a salary (wage) in order to handle and control the subjects and instruments of labor.

B. **Public/social capital:** the socio-technical infrastructure that maintains the continuation of the society, including but not limited to: schools; transportation pathways (e.g., highways, railroads, airplane control); sanitation systems; water systems; etc.

4. **The supra-structure** of the capitalist system involves the multiplicity of beliefs, ideologies, and political views that spread and behave live viruses among the human population.

In the market-State people get access to products that they or a family member can purchase. Therein, people get access to the products of:

1. Other individual citizens (a.k.a., grey market, gray market, black market).
2. Businesses (organization with a requirement for profit; a.k.a., industry, white market).
3. States with a limited budget for expense on public [free] services (a.k.a., federal-market).

Under capitalism (a.k.a., market-State conditions), producers produce not for themselves, but for a market where people have wants. The immediate purpose of the producer of products is not to satisfy human wants, but instead, to sell products for a price that will make it worthwhile to continue to produce. The basic purpose of the producer, however, is not the sale of goods for a price, but the acquisition of profit (a.k.a., "surplus value"), which is the sum of money that is over and above the cost of production (or, the cost of doing business in the case of a non-producing organization like a charity or foundation). Profit makes production worthwhile and allows for the continued survival of every business (including "non-profits", which must still have a profit in order to survive). The general drive of the capitalist (owner of production) is to increase the rate and the mass of profit. Although, fundamentally, the rate of profit is more important than the mass of profit, the mass of profit is the more immediate goal. Naturally, the mass of profit can be increased, other things being equal, if the mass of products can be increased and sold in the market. (Weisbord, 2022)

It is relevant to note here that this organizational structure is relatively resilient and has a mix of stabilizing and destabilizing mechanisms, along with an overall characterization of violence. It mixes access [to property] classes. Everyone is a slave to their income, because income equates to access (replacing free access with access through income). Some laborers are also invested in business through the "stock market" constructed as a "financial instrument" through which individuals can become fractional owners of a business. Herein, banks through the "fractional lending money creation model" construct "money" by which "debtors" can "purchase", but also must return with "interest". Fractional reserve banking is a system in which only a fraction of bank "money" deposits are backed (Read: available) by actual cash, and thus, are available for "money" withdrawal (for re-storage elsewhere or purchase usage). In this way, creditors (purchaser of money by means of interest payment) may be considered "borrowers", but are also in fact investors in some contractual inter-relationship between themselves and the producer of a [market-economic] service, the bank. Further, some laborers are themselves the administrators of the business. Some business owners are also the laborers in the business (i.e., do more than just take decisions and take the profit).

The governance [role] of market partnerships interfaces with the State through State acceptable governance documentation, including but not limited to:

1. Articles of incorporation (statements of what is to be done; certificate of incorporation).
2. Charters (statements of what is to be done).
3. Bylaws (rules of operation).
4. Business and financial plans (planning of what is to be done).
5. Contracts (human and enterprise agreements).

> **INSIGHT:** *The physical market where buying and selling occurs is influenced by many factors, the most fundamental of which is the size and use of selling space and its relationship to traffic circulation, parking, and advertising.*

In the market, capitalists (production owners) are compensated for their ownership of the means of production. From the capitalists ownership of all income (as compensation for ownership), some income is removed to pay the laborers. Capitalists then primarily spend the profit taken from ownership (granting greater income to them than the laborers) on luxury [market] items. Therein, the upper socio-economic classes (capitalists) can afford to purchase the luxuries that the lower socio-economic classes cannot. Access to all items in the market comes at the price of one's personal income, the income of one's family, and the income of the State someone lives in.

Employers in the market-State include:

1. The State [corporation] employs people.
2. State legalized corporations employ people.
   A. An incorporated individual (State permitted seller) may employ people.
   B. A small group of incorporated individuals (State permitted seller) may employ people.
   C. A fractionally shared group of incorporated individuals (e.g., stock market "financial

instrument", is a State permitted seller) may employ people.
3. Non-incorporated individuals may employ people.

Buyers in the market-State include:

1. The State may buy products.
2. Individuals may buy products.
   A. Citizens may buy products.
   B. Foreigners (other State's citizens) may buy products. Note that sometimes only citizens can buy products in a specific jurisdiction. For example, when purchasing requires a local State designated personal tax number, which a "foreigner" does not have. In Brazil, in 2022, for example, to make a purchase online requires inputting the person's Brazilian personal tax number in order to complete the purchase.
3. State legalized corporations may make purchases.

2.3.3 Business ownership

A.k.a., Market governance, business contracts, business property decisioning, employer ownership, employer organization ownership, business control, business governance.

The business is the employer. The employer produces products bought by consumers. Business governance is the system by which businesses (corporations) are directed and controlled to produce products to be bought. The business [organizational] governance structure specifies the distribution of rights and responsibilities among different participants in the business, such as, the share of owners, board, directors, officers, managers, shareholders and other significant owner stakeholders, and spells out the rules and procedures for making decisions on business affairs. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance. Doing this also establishes transparency with the State who seeks to regulate all business.

The people who own businesses, who operate businesses through their labor, and who purchase from business, must all sign contracts/agreements to conduct their economic business, and transact money/finance and ownership. In the market-State, all ownership is decided through contracts and the arbitration of contracts [by the State].

INSIGHT: *People don't run corporations; corporations (business rules) run people.*

2.3.3.1 Contracting (contracts interface)

PRINCIPLE: *The contract is the only thing that matters [to the State arbiter].*

The contract is a description of the respective responsibilities, agreements, and allocation of risk between the two (or more parties). Contracts document the requirements for a solution and document the agreement. A contract is defined initially in text, and then secondarily, based on obligation(s):

1. Initially, defined (explicated) agreement of obligation by two (or more) competing agents.
2. Secondarily, defined by a judge who rules (decides, determines) whether or not everyone met their obligation(s). The judge asks:
   A. Was there a breach?
   B. Who benefited and who suffered?

2.3.3.2 Financial statements

A.k.a., Financials, operational business standards, revenue and profit and loss statements.

All businesses survive and operate based upon their "financials" (as in, their income and outgoing money). Financial statements (or financial reports) are formal records of the financial (money) activities and position of a business, person, or other entity. Financial statements facilitate the financial organization of businesses and hold information the State uses to tax businesses. Financial statements are fundamental for businesses; they provide a comprehensive overview of the company's financial "health and performance". They help the business itself, as well as other businesses (and States), make production and financial decisions (when made public). In other words, they are used for internal as well as external decisioning. They are a means of reporting on performance (according to price and profit), and are typically required for compliance with State regulatory oversight and financial taxation requirements. Financial statements also are signals to investors as to whether or not a future profit is likely to be made from any given organization.

1. **Revenue, profit and loss statements (P&L statements, master financial statement)**:
   The profit and loss (P&L) statement is a principal financial statement that summarizes the revenues, costs and expenses incurred during a specified period, usually a fiscal quarter or year.
   A. **Revenue statements (a.k.a., income statements)** is the total amount of income generated by the sale of goods or services related to the company's primary operations. An income statement shows the revenue (how much money came in), expenses (what you paid for), and profits (what is left over) for a specific time period.
   B. **Cost statements (a.k.a., expense statementes)** is an amount that has to be paid or spent to buy or obtain something. Expenses

are business expenditures over time [in order to "do business"]. Expenses are used to produce revenue [for the business]. There are several potential types of cost/expsnese to project's in the [capitalist] market:

1. **Fixed cost** *of capital* a one-time setup cost of project (or system).
2. **Marginal cost** *of capital* cost of producing additional units of a good or service produced by the project or system.
3. **Operating (running)** *cost of capital* continued cost of operating the project (or system).
4. **Cost of labor** *of capital* cost of human [psycho-physiological] effort.
5. **Cost of materials** *of capital* cost of materials for operating/running the project.
6. **Cost of penalties** *(for the State)* a penalty, "What's the penalty for violating that law/rule."

C. The primary equation for a profit-loss statement is that of the profit equation:
   1. **Profit** = revenue – expenses (Read: Profit equals revenue minus expenses)
      i. Profit(s) is what money is left over after money in is subtracted from money out.

2. **Balance sheet:** The table of everything that is owned.
   A. **Assets** what is owned (e.g., cash, inventory, receivables, etc.)
   B. **Liabilities** what is being payed out (e.g., accounts payable, etc.)
   C. **Owners equity** the initial amount of money invested in a business.

2.3.3.3 Budgeting (budgets interface)

QUESTION: *How much is available to spend?*

All elements of a project attached to the market are likely to have a cost attribution. A project may require elements from the market, which may or may not have a cost attribution. A budget is a pre-set allotment of some resource or currency. If the set-allotment isn't used, then it returns to a common pool. In the market, there is the incentive to use the whole budget, otherwise the budgeted items will return to the common pool, and next time the entity is budgeted, it may be budgeted less. In community, there is no budget, per say. Instead, the is a unified information system within which unified decision occurs, making budgets (Read: pre-allocation of some useful item) unnecessary and inefficient in most cases. In the market-State, budgets are generally associated with currency as purchasing power (e.g., how much money has the project been budgeted?). In community, service systems are designed for optimality, given what is known; therefore, budgeting of resources does not normally occur, except in rare cases, often involving ongoing incidents/emergency-related situations, where resource budgeting (i.e., pre-allocating) becomes necessary.

A plan of finances is related to a budget; within a Project Proposal that involves the market, the issue is expected to carry a plan of finances. This would include a budget and a breakdown of how the money is expected it to be spent over the one year that the project will be in operation.

2.3.1 The structure of capital[ism]

A.k.a., The structure of the free market system, the free enterprise system.

The structure of capitalism is business owners making profit off of common heritage resources and human individuals. While making a profit is a central objective of a capitalist, it is important to note that capitalism encompasses a broader economic framework that includes other market principles, such as private property rights, State arbitration, and competition. In common definition, "capitalism" is where the means of production are not owned by the State (or citizens); but instead, the means of production is owned by private entities (i.e., by individuals in the market). In contrast, "socialism" means the State owns the means of production. "Capitalism" is private ownership of the market of commodity production. The things which the workers build do not belong to the workers themselves, but instead to the employer (capitalist) who pays a wage for the work.

NOTE: *It could be said that "exchange value" is capitalism, which is expressed as a "market" in which competition is "valued", and likely controlled by a central authority neutral to all competing entities, a "government".*

In the market, in capitalism, the employer has a legal right (sometimes even, mandate) to gain profits from the sale of the things the workers build. Thus, on important topics about the fundamental nature of what is right and wrong, in most capitalist societies, people are told to share and think, and then, expected to obey and are even incentivized to behave against sharing (as they age). Under the capitalist industrial system the majority of the population must work for an employer, and there must be employers to get anything done. The factory, machinery and tools all belong to the employer (employing) class, so most everyone else must hire themselves out to that class in order to live.

NOTE: *In the early 21st century, all States are mixed capitalist-socialist (i.e., they all have a mixture of these principles/policies).*

Capitalism is a system of productive relations marked by the following three relationships:

1. The private ownership of the means of production and circulation of private property, including

money as private property.
2. The purchase and sale of people to do work (i.e., labor), where the laborer works at the point of production for wages (a salary) and turns over the product of the labor to the owner who bought the labor.
3. The products of the labor are then sold in a market, the whole purpose of which is to get more money back than the owner put into making the product (inclusive of labor; a.k.a., profit is the name given to it by the owning class, and expropriation is the name given to it by the laboring class).

Capitalism can be explained simply as having two base types of socio-technical relations:

1. A group of the population has to sell their labor in order to survive and live.
2. A group of people who own the means of production, who pay for the work of the laborers, and then, make profit off of their work.

The structure of capitalism is the structure of the free market:

1. Private ownership of the means of production and of good and service deliverables.
2. Goods and services have price for access by users.
3. Competition among users and producers (when there is more, there is "shareholder capitalism", and when there is less there is "stakeholder capitalism", or "distributed capitalism").
4. Profit by those who are the private owners (or, share/stakeholder owners).
   A. Entrepreneurship as an incentive. The free enterprise system encourages entrepreneurship for profit. Individuals are free to start and operate businesses, take risks, and seek opportunities for profit.
5. Limited/regulated State intervention to create a sufficiently safe environment to operate.

In the early 21st century, capitalism is then structured into three + one branches:

1. Industry any production of a physical product or service.
   A. The industrial structure starts with minerals (mining, mineral wells, etc.), then cultivation field products (agriculture, cattle-raising, etc.), and includes metallurgy, chemical processing, transportation, communication, energy and power, production machinery, construction machinery, production of end-user "consumer" products and services (from home items to tourist services).
2. Commerce (a unique type of industry) the selling of products to end-users:
   A. Citizens.
   B. States.
   C. Other businesses.
3. Finance the selling and gambling of money.
   A. Central business finance "stock" market.
   B. Distributed business finance "crypto-currency" market.
   C. State finance "currency" market.
4. The State (which, is the +1 additional branch). The existence of jurisdictions/territories with their own rules and ability to control object and service flows, can be seen as a constraint on the expansive and unstable nature of capitalism.

In capitalism, the following pattern of behavior is the most common (and also most problematic for society and the ecology):

1. Form a physical bill of possible materials and techniques (for production).
2. Use a price list to convert this into a list of money expenditures.
3. Add up the list of money expenditures to form a final cost.
4. Select the cheapest final cost materials and techniques of production, in order to make the most profit.

In social-economic literature, "capital" is the value of all the means of production. Capitalist society, where the means of production is privately owned, is dominated by commodity exchange to produce and operate means of production, and capital finance, where owners (agents in the market) are actors in the economic system who gain profit over/out-of others (i.e., who "exploit" others). One of the agents has "money" and the other agent has a "commodity" (note, the principal commodities for any given economy is food and human labor). A trade then occurs (a swapping of places) and the physical/digital "commodity" swaps places. In a capitalist economy, economic production units compete with one another, and to gain competitive advantage, they keep commercial secrets and use the authority of the State to settle disputes.

The idealized version of the capitalist system has 2 owners (agents) and 2 items of "property" (Read: a commodity and money) as that which can be "owned" by the agents. The owners in this idealized and closed-system confront each other as equals. Yet, in the real-world, there has been accumulation going on for a long time when any given trade occurs, and advantage over others will occur certainty. The owners confront the money and commodities as objects of property, wherein the commodities are actual physical 'objects' and "money" reified as an object (note, money is a

concept made into an object that can be moved around like something physical can be). In the market, both money and commodities are property owned as objects that can be moved around. Effectively, capitalism means exploitation and wage slavery for the masses and luxury (at the expense of the masses) for the few. The law upholds and protects that robbery; the State then fools people into believing they are independent and free.

Capitalists are a group of people who live by making profit out of the work of others. Those who make the biggest profits are "rich" in options for access. Those who cannot make profit are "poor" in options for access. In capitalism, where the means of production are privately owned, the one people who cannot make any profits are the workers (instead, they make a wage), unless the workers are a cooperative, and then, revenue/profits are shared. In this way, the interests of the workers are separated (i.e., employer and employee), or together, in ownership. Workers seek to improve their lives by getting higher wages, and becoming owners (as investing and/or cooperative owners). Employers seek to improve their lives by making more profit and spending less on labor (workers).

> **NOTE:** *There are no owners or property in community; only owners and property in the market-State (capitalism).*

There are serious contradictions between what people are told in capitalist society versus the actual reality of the situation. Many people are confused and lied to about the situation all the time, from one's earliest childhood. People are told to be honest, while being exploited; told to respect the law, while the law protects the capitalist who is doing the exploitation; told not exploit others, while incentivizing people to become capitalists; told to not bully or coerce, while the law is based on coercion; told to not hit others, while much video media glorifies violence; told not to be ostentatious, while the capitalist class flaunts his/her wealth and extravagance; told that hard work leads to success, while many hardworking individuals struggle to make ends meet; told that everyone has equal opportunities, while systemic inequalities persist; told that consuming brings happiness, while it often leads to empty materialism; told that money can't buy love or happiness, while financial stability is crucial for basic well-being; told that democracy ensures equality, while money and corporate influence sway political power; told that competition is healthy, while it often breeds exploitation and undermines cooperation; told that education guarantees upward mobility, while student debt burdens and limited job prospects prevail, told that the free market rewards merit and hard work, while it often favors those with inherited wealth; told that wealth "trickles down" and benefits everyone, while income inequality continues to widen; told that corporations prioritize the well-being of their employees, while many companies prioritize profit over worker rights and safety; told that entrepreneurship is a path to financial independence, while the majority of small businesses struggle to survive and thrive; told that the pursuit of individual success is paramount, while neglecting the importance of community and collective well-being; told that employment is the goal, while neglecting intrinsic motivation; told that competition fosters innovation and progress, while it hinders cooperation, sharing and intrinsic motivation.

The law forbids stealing; it says that others are not allowed to take your property without your consent. But, the employer takes from the employees what the employees produce, and returns to them a wage. The whole wealth produced by labor is taken by the capitalists and kept as their property. The law says that the employers of the world do not steal from the employees because the exchange is done with the employees consent; because, the worker has agreed to work for his/her boss for a set pay. The law says that the employers of the world are not stealing property from the employees, because the labor is done with consent. The employer has the right, because of consent, to all that the employee produces (per the contract). Because the employee consented to the process, the law says that the employer did not steal anything from the worker.

However, when someone robs someone else with a gun, and the victim hands over their valuable belongings, did the victim consent. The victim turned the belongings over, but is that consent? The victim is compelled by the gun to consent to turning over his/her valuables. The gun compels the consent of the victim to take the action of turning their property over to the thief. Similarly, are people in early 21st century society are compelled to work for an employer, for a wage, in order to just survive. Human need for material survival compels people, power and wealth then compel people further. Work for the profit of others, or die, is a form of coercion. In is in part where the that a capitalist system is a structurally violent system because it would let others of our species die and it would coerce those with the means to compete against each other.

The two fundamental categories of socio-technical [economic relationship] in a market-State type of society are (taken as given, and eternal), which become objective constraints on the whole [socio-economic] system:

1. Owners (2 or more).
2. Items of property (2 or more).

Herein, trade occurs between the owners (1 & 2) and their two items of property (as an event in time):

1. Before the event:
   A. Owner 1 has a commodity, and
   B. Owner 2 money.
2. The event takes place (i.e., a trade occurs; trade).
3. After the event:
   A. Owner 1 has more money, and
   B. Owner 2 has a new commodity.

Then, to create (reify) "capital", there is:

1. Private ownership over (or, investment in) the means of production.
2. Production is for exchange (a.k.a., commodities).
   A. Human labor that constitutes "value".
   B. Products constitute "commodities".
3. Extrinsic personal reward for labor, profit and wage.
4. Items of property produced by the employees themselves have prices (at which a trade will occur) between owners.
   A. If something doesn't have a price then it can't be accounted for in the market system, and it can't have markets address and resolve it.
   B. Herein, it could be said that under market conditions in the early 21st century, corporations control the issues (of society) through price.

Capitalism is based on the circuit:

Money to commodities to more money.

M -> C -> M'

Note that this is a simple money growth equation and requires a constant growing stock of money for the economy to be maintained.

The primary economic touch points in capitalism are:

1. **Employee (laborer)** sells body for a price, gets money from employer.
2. **Employer (owner of production, capitalist)** owns means of production, including finance production, and purchases living bodies as "employees" for a price; purchases "means of production" to produce products to be sold to consumers for a price, whereupon through sale there is profit to the owner who distributes some of to the employees.
3. **Consumer** purchases, for a price, the delivered outputs of production.
4. **Regulator** creates and enforces laws (as rules/code) that bound the actions of the other three actors, and often also, bound the regulators themselves.

There are three primary types of "private" property:

1. **Money (i.e., intangible property produced for accounting for trades)** abstract physicalized commonly trusted account of trade.
2. **Commodities** actual physical resources that can be traded (note: typically a commodity is something that is produced for trade).
   A. **Land (a.k.a., real property)** actual landscape.
   B. **Materials** (mineral and other raw resource property) minerals and other raw resource materials extracted from the environment and processed.
   C. **Capital** money and assets involved (or to be involved in) the means of production.
   D. **Buildings (a.k.a., real-estate property)** objects fixed to the landscape.
   E. **Products** movable objects smaller than buildings.
   F. **Bodies (a.k.a.,, humans)** trading the body's (self's) mental and physical labor for a wage.
   G. **Information (a.k.a., intellectual property)** private owning of information.

There is also private and State ("public") property:

1. **Private property:**
   A. Objects as property (real property ownership) for individuals and businesses.
      1. Means of production as property.
   B. Partnership as reified property (business ownership).
   C. Information as reified property (intellectual ownership).
   D. Trade accounting (money or tokens) as reified property (financial ownership).
2. **State-related [federal/union government] property includes:**
   A. State territory.
   B. State departments and their assets.
   C. State businesses and their assets.
   D. Public-private partnerships State assets as determined by contract.
3. **City-/municipal-related [government councils, boards, departments, commissions, officials, etc.] property includes:**
   A. Council (a.k.a., boards, commissions, councils, departments, etc.) territory.
      1. Physical territory (a.k.a., State, country, nation, municipality, county, etc.).
      2. Decision territory (a.k.a., governance).
   B. Council departments and their assets.
   C. Council businesses/utilities and their assets.
   D. City-private partnerships assets as determined by contract.

CLARIFICATION: *State property (i.e., government property) is sometimes called "public property", which is a misnomer, because it is not directly controlled by a consensus of the public)*

The primary values of capitalism as inherent in the market-State are:

1. Freedom, as:
   A. Market freedoms (purchasing power).
   B. State permissions (rights).

2. Justice, as:
   A. Punitive justice (debt payment).
   B. Market justice (monopoly of life).
3. Efficiency, as:
   A. Inefficiency for profit.
   B. Inefficiency for lack of intrinsic motivation.

Because there is only ever information, objects, and people, there are only three types of property rights in the market-State:

1. The real-object property [right] is the "right" to own objects as property, and have that control (of property-over-others) defended by the State.
2. The information property [right] is the "right" to own information as property, and have that control (of property-over-others) defended by the State.
3. The self-ownersgip property [right] is the "right" to own oneself as tradeable property for a wage, and have that control (of property-over-others) defended by the State.

Within the two categories of property, there are special types of property:

1. Within the commodities category there are:
   A. Means of production (machines and information in productive arrangement) property that can be used to make and sell products, and make profit (in the market). This property is also known as "capital".
   B. Humans here, the commodity is the self, someone's body and mind *(human employment; human is property as labor for the profit of another human).*
2. Within the money category is finance:
   A. Stocks/shares a shared/distributed ownership of a single item.

The market-State (capitalism) accounts for the following specific concepts in trade:

1. **Profit and loss of tokens/money** (derived from human labor and business trade).
2. **Income and expenditure** (derived from business sales and business purchases).
3. **Assets and liabilities** (derived from business property and business debts).
   A. **Investments** (derived from giving money/property to another owner in expectation of getting more money/property back in return).
4. **Taxation** (derived from State politicians, legislation, and enforcement).

All of these lose their validity in a community-type society. Transition will require a transformation in the understandings of some terms and concepts.

The two categories of money can be classified according to their relationship to the real-world (either real/physical or abstract/conceptual):

1. **Real** (physical) [PROPERTY].
   A. **(C) Commodities (Actually Useful physical objects).**
2. **Abstract** (reified) [PROPERTY]
   A. **(M) Money (Trade Account).**

Where there is accumulation (of property), then there is:

1. **Real** (physical) [PROPERTY].
   A. **(L) Land (Actually Useful Physical Land).**
2. **Abstract** (reified) [PROPERTY]
   A. **(B) Bank (Trade Account).**

Summarily, there is:

1. **Legal persons** (subjects: legal personality/identity) :
   A. People (a.k.a., legal people, "citizen", legal person, etc.) individual citizens who can own property. Typically, a legal person is someone who can enter contracts, own property, and be a party to lawsuits.
      1. Property => contracts (trade).
      2. Contracts => lawsuits (disputes, which naturally arise where there is competition).
   B. Organizations of legal persons.
      1. In the early 21st century, some organizations of legal persons can became legal persons themselves.
         i. For example, Firms (corporations, universities, cities, States, etc.).
2. **Property** (objects: commodities and money):
   A. Those objects that can be owned and traded by a subject (legal person).
      1. Commodities (real-world objects, physical).
      2. Tokens (single use trade account abstraction, trade reifications, distributed single user accounting no circulation of tokens between agents; after use, they are deleted.
         i. Money (circulating use of trade abstraction) tokens that circulate and can be stored.

These socio-technical production relationships then go on to form the basic categories of a legal system (in order to control property and ensure production continues functioning). Production relations generate legal relations for the production process to continue to occur. The types of legal relations derived from capitalist production relations are:

1. **Market Support Law Code/Standard:** (a.k.a., capitalist laws, common market law, "Bourgeoisie" law, international law, etc.).
   A. **Criminal Law Code/Standard** (a.k.a., punitive

justice, retributive justice, penal system, etc.).

2. **Constitutional [Bill of] Rights Law Code/ Standard** (a.k.a., constitutional law, etc.). Constitutional rights given/granted to people (citizens) under State authority by what was written in a document by past political figureheads. These rights are given to entities in the system. In the market-State, there are two types of granted rights:
   A. **Legal person (citizen rights)** there are "right" relationships between people as "citizens".
   B. **Property (property rights)** there are "right" relationships between people and "property".
      1. Object [property] rights.
      2. Informational [property] rights.
      3. Self-body [property] rights.

NOTE: *In the construction of the set of laws that derive from market-State production relations, the existence of individuals bartering and exchanging (trade of property) is taken as pre-given, unquestioned and eternal.*

Capitalism is a structure designed to take a profit in abstract tokens off the labor of others in production of human market want (need) fulfillment. Capitalists profit, because they are the [property] owners of production (capital). Capitalists produce to make a profit, so that production can continue as "capital" for the next stage of production. And, under conditions of high competition and real risk, capitalists produce to make as much profit as they can, to buffer themselves from the loss of all socio-economic access. Herein, through the mechanism of profitability in the context of supply and demand, the market system adjusts production. A market-State society creates a role for "capitalists" who seek "profit" for themselves, and for further production. Capitalists make profit from others through what some have termed, "[surplus] labor". Capitalists accumulate, whereupon they reinvest a portion of the profit (into production), a portion is spent on luxury items inaccessible to the masses, a portion is spent on commonly accessible necessities, and a portion is spent into savings and financial investment profitability (of other capitalist organizations). In the market-State, production is entirely done for the purpose of trade (of commodities), and not direct human fulfillment. Markets lead to horrible waste, the degradation of people and the ecology. Money is an abstraction (reification) that humanity becomes subjugated to in a supply-demand commodity-money economy.

The abstraction known as "capital" exists in several sub-conceptual forms as money/tokens move around the economic system. Capital "exists" in:

1. **Money form** (have money), then
2. **commodity form** (money traded for commodity, have commodity), then
3. **production form** (commodity mixed with labor-wage, have production), then
4. **commodity form** (have deliverable product), then
5. **in money** form (sale of product), then commodity again (purchase of commodity), then
6. **the cycle repeats**.

Capitalism is not interested in employing all those who want and are able to work; instead, a minimum of workers (wages) and a maximum of effort (productivity) is the principle and the profit of the market-State system. Capitalism is money growing more money. Money is intrinsic to markets (circulation), and tokens are intrinsic to trade (no-circulation). Trade-based transactions do not honor "our" human interconnectedness; they are inherently *severing* of human harmony. When anything/ everything is commodified or commodifiable then some sort of misunderstanding of human identity is gripping psychology obfuscating our commonality and ability to live in fulfillment together. In capitalism, if it can't be sold, then either less of it will be produced, or it won't be produced at all. Community-based habitat service systems are not something that is sold or sell-able. The separation of production under market-State conditions into: means of production and means of consumption, become unified within a data derived, materially realized, continuous habitat-need production network. In community, what is needed is tradeless and coercionless life, technology, and exploratory support in a habitat life-radius context.

2.3.1.1 The layered structure of the early 21st century financial system

In the early 21st century, the State financing system involves two layers of finance:

1. **Layer 1 (State money, currency):** This is the foundational layer, also known as "cash" money, which is issued by State entities like central banks and State treasuries.
2. **Layer 2 (bank money):** Commercial banks issue this secondary layer, often referred to as "digital" money, which vastly exceeds the amount of cash money on hand due to the banking practice of credit creation or fractional reserve banking.
3. **Layer 3 (non-bank digital money):** This layer is composed of digital money or credit that is created by entities that are not traditional (State approved and regulated) commercial banks. These could include online payment platforms like PayPal, mobile payment services, and protocols and exchanges (that allow users to hold balances).

In fractional reserve banking, when a bank receives deposits (Layer 1 money), it can lend out multiples of that amount in the form of digital money or credit (Layer 2 money). This is possible because banks are required to hold only a fraction of their deposits as reserves. When

a loan is issued, the bank doesn't hand out the cash it has stored, but rather creates new digital money that reflects the loan's value.

Banks issue these digital tokens/credits in two primary scenarios:

1. **For depositors:** Banks credit depositors' accounts with digital money in exchange for cash deposits, effectively transforming cash into digital form.
2. **For borrowers:** When issuing loans, banks create digital money as a promise to the borrower, in exchange for a future repayment agreement. The borrower agrees to pay back more money over time than the amount borrowed, representing interest.

The sum of Layer 2 money in the economy can grow significantly as banks make loans and contract as loans are repaid. Despite being different in form and creation, both Layer 1 and Layer 2 money share the same name and are used interchangeably in the economy, which can lead to a divergence in the monetary base (Layer 1) and the broader money supply (Layer 2).

2.3.2 Societal tokenization

There are two types of tokens in society:

1. **Cryptographic tokens (a.k.a., technical tokens, cryptographic keys)** are the outputs of cryptographic programs that use cryptographic algorithms and are the math behind user authentication. Cryptographic tokens are used to verify identities and authenticate users, which secures data and assets, and allows for effective coordination of any economic systems.
2. **Trade tokens (a.k.a., money, money tokens, options access tokens)** are used as medium's of exchange, enabling individuals to trade without resorting to barter. A "trade" token represents value and is universally accepted within an economy. Traded tokens allow for the effective coordination of price-based economic systems.

There are three top-level societal token quantification factors, which include, but are not limited to:

1. **Creation element (token management):**
   A. How are the tokens created?
   B. Who creates them?
   C. Based upon what/why are they created?
   D. And, what happens to them when used; can they be circulated or are they deleted?
2. **Distribution element (wage management):**
   A. How are tokens distributed:
      1. Labor time (in hours).
      2. Life-phase.
      3. Salary class.
3. **Sales element (price management):**
   A. How are goods (services) priced?
      1. In the market, goods and services are priced based upon supply and demand (and salary class).
      2. In community, goods may be priced based upon:
         i. Labor time (in hours).
         ii. Life-phase.
      3. A good's attributes:
         i. Sustainability - for example, waste may increases cost of product.
         ii. Depreciation - per day, month, year. As use value deteriorates/depreciates, then the price lowers.
         iii. Abundance - for example, ease of copying or producing will lower price.

2.3.2.1 Cryptographic tokens ("keys") compression (algorithmic information)

A.k.a., Keys, cryptographic keys, authentication tokens, authorized access tokens, technical access tokens.

It is important not to confuse the term "token" as it is used in cryptography (a.k.a., digital token, cryptographic token, etc.) with the definition of the term as used in the market, where there is a mandatory requirement to get tokens (abstractions) in order to purchase access (i.e., trade for access, a.k.a., digital token, trade token, crypto-coin token). Trade tokens are used as medium's of exchange, enabling individuals to trade without resorting to barter. Instead, cryptographically speaking, a "token" refers to a digital identity verification "key" (not money), that is required to technically authenticate a user, and thereupon provide access [via a coordinated protocol] to a particular system or service. Cryptographic tokens are not money tokens (i.e., are not trade tokens). Cryptography, a token system serves as a secure method of providing or obtaining access via protocols (a.k.a., access rights), authentication, and/or authorization, often aiming to enhance security (and privacy where appropriate). Cryptographic tokens are utilized as a form/method of user-protocol authentication, and can take at least the various forms:

1. **Hardware tokens:** Physical devices, like USB tokens or smart cards, pins and biometrics, that store digital certificates (keys) or authentication information (keys and methods).
2. **Software tokens:** Digital representations generated by software applications. These can include One-Time Passwords (OTPs), cryptographic keys, or access tokens generated by authentication apps.

3. **Authentication tokens:** These are used in multi-factor authentication systems where a user needs to provide something they know (like a password) along with something they have (a token), increasing the security of access to systems or data.
4. **Access tokens:** In the context of web applications or APIs, access tokens are strings of characters representing the authorization to access specific resources. These tokens are commonly used in OAuth or similar protocols to grant limited access to a user's data without sharing their credentials.

2.3.2.2 Trade tokens ("money") tokenization (trade monetization)

A.k.a., Money, money tokens, options access tokens, credits, debts, etc.

Trade tokens (a.k.a., "options" tokens, money, etc.) are used as medium's of exchange, enabling individuals to trade without resorting to barter. A "trade" token represents value and is universally accepted within an economy. The basis of the global (as well as local) economic systems on the planet in the early 21st century is the market, where people and organizations trade objects and tokens (a.k.a., credits, money, currency, etc.). Tokens (credits) are a trade reification (i.e., conception made/believed real). All tokens are credits giving the owner/user options for greater access, and hence they are sometimes called "options tokens", because they give their owners more options than they would have without them. In community there are no options tokens. During transition to community it is possible to imagine their being options tokens for some leisure activities.

Tokens (credits) are reified representations of objects that are owned by people (or groups of people), and can be exchanged for real-world objects and services. Tokens are given after (or, during) labor. The laborer then uses the tokens to purchase access [for a credit amount price]. A market-based system is based on the conceptual model of trade, which is sub-conceptualized by token (e.g., abstraction exchange) and barter (object exchange). Objects are exchanged in bazaars and fairs. Tokens (credits) may sometimes also be used in bazaars and fairs, as well as barter, but the only means of trade [exchange] at larger scales is through the concept of token. In the market, token (i.e., credit, money, currency, etc.) is what gives access, and so, token is used as a[n extrinsic] reward for doing work for others. All forms of token create a separation between individuals in society, wherein the focus for work/production becomes about money, and not about human contribution to human need fulfillment, and thus, all forms of credit are eliminated as an encoding in a community-type society. A transition society will likely use some form of token to facilitate the transition of persons and resources from the market-State structure to operation within a community-type structure. Fundamentally, token is an abstraction reified as a "unit" of exchange.

CLARIFICATION: *Barter is trading one less wanted object for another more wanted object, without any set medium of exchange. In other words, barter is trade without any equalizer (witout an equalizing "monetary" unit of account), without money, currency, etc. Barter does not use money; instead, each party in a trade wants what the other party has (more than they want what they have), and they exchange/trade the objects directly.*

NOTE: *In the early 21st century, there is a long standing tradition for the need to own property as security [to sustained commercial and State access]. Hence, there is a long standing tradition for property accumulation.*

In the market, a token (credit) is access (i.e., money provides the option to have current / future access). There are many sub-types of access in the market. Conversely, in community, contribution is access, in that contribution produces services that provide access to users who are or have been contributors. In the market (trade), token is given by an [access] authority as a reward in the form of a physical certificate or digital token that signifies purchaseability (Read: ability to have access). The first form of credit is that of doing physical (including mental) work to achieve the token. The work accounting consists of physical/mental deliverables and/or time worked.

In most cases, tokens are produced by market and/or State entities, and then given by the token authority (generally, the State or some central bank). The work done to achieve the token is most frequently called, having a proposal to gain a loan, and employing labor, wage labor. After acquisition of the token, it can be used to purchase from a store, which is either: (1) a business or State that then uses the token to make additional purchases, or (2) is a cooperative or social-State that then deletes the token.

In some cases the token(s) can be exchanged for another type of token. In some cases the token(s) can be exchanged Again after the first use for an additional purchase. In some cases, the tokens can be stored over time. In some cases there are fees associated with storage of token over time. In some cases, there is "interest" (profit) given to the storer of token over time. In some cases there are fees associated with each exchange transaction. In some cases there are fees associated with regulation (e.g., State taxes). In all cases there are [habitat service] requirements for production and transaction of tokens, and therein, power being the first and universal requirement.

During transition, money circulation may still be necessary for some duration of time. In newly built habitats, money may not be required to circulate internally, but there may be a necessity (for some duration of time) to acquire money to access trading markets and provide sufficiently for the population. In cities that are transitioning to community, there will likely be a need for continued money circulation until such

time as there is the infrastructure to provide sufficient fulfillment.

> **NOTE:** *When tokens are an incentive to do work, how society produces money will likely determine what individuals work toward. The question then quickly arises, If "you" are not a commodity, why would you want to use a currency based on commodity.*

The first from of token-type trade, after object-to-object trade, is double ended:

1. Exchange of body or object for token. Here, token is given to [some]body, who receives the token and associates it with their identity/address (Read: personal token account/number). The most important question here is, how do people get the token?
   It is necessary to ask how tokens are received:
   A. Tokens received for doing work (labor).
      1. Tokens only received for doing work that meets specific criteria (e.g., community values, community objectives, net benefit, etc.).
   B. Tokens received for mere presence, citizenship (universal income).
   C. Tokens received for releasing property to community access.
2. Exchange of token [by some body] for access to a product or service. Here, the token given is given for some[body's] access to a product/service.
   A. The most important question here is, what can be done with the token?

There are two primary accounting systems for tokens:

1. Token exchange between users is not possible. No individual exchange of tokens is possible (i.e., non-tradeable tokens). A token can only ever belong to one person. That person's balance still goes up when s/he gets paid and down when s/he makes a purchase, but that money is created within their personal account by a tokenized payment system, and then deleted from their personal account upon purchase (i.e., the token does not cycle).
2. Exchange (i.e., a tradeable/exchangeable token) a token may move from
   A. Person to person it can belong to another person by transferring it to them
   B. Person to seller to person the token can be transferred to a seller through purchase, and the seller transfers it to the workers/owners who then make purchases for themselves and the business.

It is relevant to note here that in common parlance there are several forms of "token", including:

1. **Credit (token)** a credit, token, or certificate that can be applied to the purchase of some product and/or service. Credit is used to buy (trade for) goods or activities in a market.
2. **Exchange credit (exchange token)** a specific credit unit that can be exchanged for another type of credit unit (usually called "currency").
3. **Debt credit (debt token)** a credit that has fees attached to it (usually called "money").
4. **Social credit** a credit that relates to the existence, work, and/or reputation of someone (usually called, "social credit", "benefit token", etc.).

Typically, in the market-State, trade is measured (and measurable) at three levels (i.e., the categories for keeping a measured account of trade):

1. **Inter-State-level**:
   A. **Trade balance (a.k.a.,, balance of trade)** the balance of trade is typically measured as the difference between a State's exports and imports of goods.
      1. How many exports were traded versus imports?
2. **Intra-State-level**:
   A. **Gross domestic product (GDP)** is a monetary measure of the market value of all the final goods and services produced and sold in a specific time period by a country or countries.
      1. How much product (in its monetary value) was traded?
3. **Production-/labor-level**:
   A. **Time and effort (i.e., measured time and/or human effort)** work duration or work completed. As in, trade of body (sale of self) to do work for money or object(s), "wage labor".
      1. How much time/effort was traded?
   B. **Money** an abstract intangible that is believed to have value. Money is fake in the same way patents are fake.
      1. How much money was traded?
   C. **Physical access (real objects)** products and services that are valued, wanted and/or needed.
      1. How much physical access (to real objects) was traded?

> *"Anybody can come up with money, it's how do you get anybody to accept it." -Hyman Minsky*

There are several primary interrelated functions (or, properties) of money (i.e., of tokens in a market):

> **NOTE:** *Money as a medium of exchange, as a unit of account, and as a store of value, are similar and interrelated conceptions.*

1. **Money as a useful object** (a.k.a., intrinsic

"money", barter market, useful value) is barter, where the is no abstract money; instead, two objects of (intrinsic) value to their owners are traded. For example, trading salt for meat, both of which are food (and have nutrition). These types of trades typically occur either:

A. Out of survival (i.e. need fulfillment scarcity) because someone is in desperate need of something, or
B. Out of abundance because there is sufficient abundance to not sacrifice need fulfillment when one thing is traded for another.

2. **Money is a medium of exchange *with a traceable supply* (a.k.a., money market, commodity market, trade token, options tokens, circulating medium, medium of circulation, commodity money, representative money, finance, crypto-currency, fiat money, abstract money, intangible money, etc.)** in the market it is possible to trade objects for money, or money for money. As a medium of exchange, money allows someone to buy goods and services with an abstract thing. Money is an options "token" for "purchasing" access to something, and as a token, it circulates (note: not all tokens circulate). A medium of exchange is an intermediary "object" that is used to equalize value during a trade. This type of money can take physical and digital form; it can be tangible like coins and bank notes, or it can be intangible like digital money. Money is a claim on something else (i.e., an option to access something else). Money facilitates the purchase and sale of goods between parties who are not bartering. A circulating medium is any "object" used to determine goods and services' price ("value") during their exchange between parties (i.e., people). In general, anyone can possess money and participate "equally" in the market. Users of money want it to be fast, quick, and not cost much (Read: highly "liquid", high speed of transaction, and low cost). As a medium of exchange money is an abstraction, and it does not need to have any physical base, although it can have a physical base (e.g., gold, slat, etc.). The function of money, here, is to exist (and/or have a supply). The real-world questions here are, why is society organized to require a medium of exchange in order for humans to get their needs met, and why is society organized to require the circulation of an abstraction in order for humans to get their needs met? Note that in some cases, it may be possible to change the supply of money (currency) to meet changes in demand, so the supply is more stable. And, a supply may come into circulation over time through a protocol.

A. **Exchange "value"** (i.e., exchangeable for value, as object or information) item produced to be sold in the market for a price (abstract value, commodity value, not life value):
   1. Was it produced to be sold in the market? Can it be sold in the market?
   2. What quantity of something else will it exchange for?
B. **Money is an interchangeable unit (i.e., "fungible")** meaning that it is interchangeable with other instances of the item:
   1. A can of soup is more-or-less interchangeable with other cans produced from the same batch.
   2. A brand-new tennis racket is more-or-less interchangeable with other brand-new rackets of the same make and model.
   3. Units of a currency are designed to be interchangeable with all other units of that currency. For example, Alice spends 10 tokens from her wallet, there's no way of identifying whether the units she's spending are ones she got from Bob, Carol, or elsewhere. It's like water scooped into a bucket: when you scoop some out, you don't know which inbound scoop of water the molecules you're getting came from.
   4. Note: Actions are not interchangeable. Land is not interchangeable. Humans are not interchangeable.

3. **Money is a unit of account (a.k.a., payment for debt, credit money, debt money)** the ability to be able to price something in that unit (a.k.a., token, currency, etc.), as well as the ability to pay for something in that same unit (token, currency, etc.). As a unit of account, money provides a standard measure for pricing goods and services. It is an abstracted representation of a standardized unit "value", as price-purchasability. Money is a unit of account when someone trades with abstract money as the price. The price of the trade is a debt paid for in [abstract] money. As a means of paying for debts, money is an abstraction, and it does not need to have any physical base, although it can have a physical base. The real-world question here is, Why must humans be in debt to other humans in order to have their needs met, and what is actually being accounted for in the real-world when money is used as the unit of account (in place of human need fulfillment and socio-technical material services? Here, economic price stability is important. If the value of the money goes down, then prices increase. Volatility in the value of money is not ideal. Ideal is purchasing

power stability over time as opposed to money that is more volatile. The function of money here is to have a uniformly quantifiable account of exchange so that created money can circulate. Money can be a unit of account for anything, from "debt" to real work to materials to citizenship, etc.

A. **Money is a store of "value"** you can hold your wealth in that token and have faith and trust that you are going to be able to hold your wealth in it over time. This function allows for money to be stored in a private [bank] account ledger (or, on a public distributed ledger). Where money is a "store of value", it holds value over time, allowing people to save and accumulate it (on a ledger, private or public). As a store of "value" (i.e., as the store of a competitive score, a competition-drive historical score of personal and family/tribe/State trades). As a store of value, those with [more] money want: (1) continued belief in the value of that money, (2) supply scarcity, and (3) future demand. When there is greater supply (a.k.a., oversupply, abundance) money loses purchasing value, and the opposite is the case when there is insufficient supply (it gains purchasing value). People want to store their [purchasing credit] value in a bank (or, on a public ledger) and have trust that it will remain stable in [purchasing] value (or even, increase in purchasability), over time. The real-world question here is, what is value? The function here is to hold onto money in order to use it later or have it grow as time-events pass. Note here that hoarding is the result of money (or a commodity) as a store of "value".

4. **Money as legal tender (a.k.a., a State currency system, State tokens, State money, legal money, legal currency)** means that money (typically called "currency" in this case) is recognized by the State as a valid/legal form of payment. The State authority declares that something is a valid/legal currency, and this is enforceable by law. Here, currency (money) a unit of taxable account; its use is taxable by the State. Typically, State issues [legal] money to provision themselves -State's issues debt. Money is merely a unit of account that the government issues as a tax[able] credit. In order to ensure that the population finds "value" in the money, they put a tax on it. The tax is only payable in the State currency. In other words, the State creates a tax as it is creating (or having the banks create) the accountable money. The State creates itself out of an abstraction (money), and "banking" is its typical vehicle. Governments of States spend money into their economy (if they have it) then delete it after collecting the tax (or, recirculate it sometimes).
   A. **Deletability**: Credit/tokens are retired (deleted) from circulation; an action that potentially makes the circulation more stable, as both incoming and outgoing token quantities can be adjusted (a.k.a., "quantitative easing"). This is the practice of all known States and is commonly referred to as "Modern Monetary Theory" (MMT). The MMT abstraction is based in law and enforced by humans with weapons. The question is, Who is the State that controls money production and cycling (i.e., who controls the currency)?
   B. **Liquidity:** Credits/tokens with the condition of being easily exchanged for other property (i.e., can be used to purchase quickly and without some intermediary step(s). Can it be used to buy anything quickly?
      1. How quickly (in time) can some current item of property (digital or physical asset) be converted into cash?
      2. How quickly (in time) the item be bought or sold in the market?

The monetary system (a.k.a., monetary market) is the set of structures, institutions, rules, relationships, policies and procedures that do ate the supply and circulation of money, by which a country creates and circulates money in its monetary economy. It typically involves:

1. A State territorial/jurisdictional authority a government with law creation and law policing authority. Here the States role is to create and enforce laws that influence the monetary system (per some directive).
   A. Fiscal policy involves government decisions on taxation and spending to influence the economy.
2. A central bank institution responsible for managing a country's money supply and maintaining monetary economic stability. The central bank may be privately owned or owned by the State itself. Typically, the central bank has the greatest control on the supply of money (i.e., has the most money supply control). Money supply control refers to the produced/regulated amount of money in circulation.
   A. Monetary policy policy that comes from the central bank and related directly to the supply of money and circulation of money.
   B. World central banks play a role in the international monetary [funding] system.
3. Commercial banks these banks exist under the primary central bank and interact directly with

users (i.e., consumers, employers and employees), providing loans of money, accepting deposits of money, storing money, and facilitating monetary transactions.

Money (trade tokenization) is an extrinsic reward that decreases critical faculties because the potentially rewarded [deciding agent] is thinking about the reward (while doing what someone else wants). Money is an options as well as a power-over-other type of conception; it sets up a socio-technical relationship set based on domination. Simply, money is a social power relation between people, one of domination and being dominated. Money is the power to command the labor of others. If someone has money, and money is valued, then that person can command a others labor with sufficient money. If a firm that has money it can command employees. If a government has money, it can command work forces and/or militaries. Note that these immoral characteristics are hidden in [market-State] economics 101 courses in which phrases like "medium of exchange" and "store of value" are used. The actual social relationship which exists is command over the work/energy of other humans (labor), and the extraction of "value" from their efforts.

> **NOTE:** *There are other ways of commanding, such as direct ordering/dictating about the work/behavior of others through authoritarian and slave-based social structures. The military is an example of an authoritarian-based social structure where commanders (officers of the State) order their soldiers/subordinates to labor. One person is in command, and others are to be commanded. If a command based structure is present then the authority, the commander, must be marked out in some way; they must have an emblem of authority, issued by the State. People under authoritarian governments often have their bank accounts frozen, they have their currency devalued, they are cutoff from outside information, financial transactions, and the common market. Under market-State conditions, these actions can significantly reduce the fulfillment of populations and ecological stability of regions.*

In a community-type society, there are no credits (money or tokens) used in the decisioning system of an economy (i.e., all goods and services are free to access and accessible without fees). In community, there are recorded changes to the informational and physical environment. The inputs to the information system are:

1. The original state of the system, and
2. the new change, and the output is the new state of the system inclusive of an environmental change.

In a credit-based [economic] system (i.e., a market), the transaction/trade[able] outputs can be spent/circulated by individual identities composed of addresses (representational of public cryptographic keys, which are representative of people). In a credit system, each trade/transaction consists inputs (the original state of all credit associations and the new trade) and outputs (the new state of all credit associations given the change and verification). Here, a "transaction" is a recorded trade/transfer of credit (e.g., bitcoin) from one address to another on the blockchain. A [transaction] fee is the full price/cost [in credits] associated with the record of that transaction. In both community-type and market-type cases, a change is recorded. The difference is that in the community-type system, there are no computed "token" outputs that can be transferred among individual people and market organizations. Community requires a trusted real-time auditable log of the state of the societal information and physical system, where messages are timestamped, ordered, and verified. Markets require an additional layer, that of trade, fees, and profit (credit).

During trade, except in barter, people accept something as a medium of exchange:

1. Salt, gold (has natural limit).
2. Paper bills, crypto-tokens.
3. Promises for money, traditional "credit" (has no natural limit).

Because a token (credit, voucher, etc.) is a reification, it can take on many forms. Tokens can take on at least the following forms (from physical to digital/virtual):

1. **Mineral (via mining technology)** useful resource (e.g., salt). Minerals used to make a purchase.
2. **Piece of paper (bill reward via paper-printing technology)** paper certificate (e.g., bill). Bills used to make a purchase.
3. **Metal (metal reward via metals product production)** metal certificate (e.g., coin). Metal used to make a purchase.
4. **Digital token (digital reward/credit via distributed ledger technology)** distributed ledger technologies (e.g., distributed blockchain ledger or agent recorded ledger. The blockchain is auditable, is inherently transparent. An auditable distributed ledger for trading, exchange, and accounting for anything. Messages recorded on the ledger cannot be changed. This results in a verifiable and permanent record of data and transactions between two or more parties. Digital tokens are used to make a purchase. It is important to mention here that distributed ledger technology can be used for validation without having to produce credits (i.e., without fees for validation and credit circulation. A verified transaction using distributed ledger technology can validate any type of message, including crypto-currency transactions, contracts and their

signatories, any records (essentially, any type of recordable information). There are several different on-chain consensus mechanisms for "proof" (of an uncorruptable record/ledger). In this case, "proof" means verification (up to consensus) that a record (transaction) is valid ([ap]proved). These mechanisms include, but may not be limited to: Proof of work, Proof of stake, Proof of burn, Proof of capacity, Proof of authority, Proof of presence.

A. **Data centric distributed ledger technology (Data-DLT) (e.g., bitcoin)** Distributed, decentralized blockchained hash ledger that uses proof-of-work (or, proof-of-stake "consensus") hashing to confirm transactions, wherein a confirming node (that did the work of "mining") is given a credit (as a reward) for the work. Each node in the network verifies the entire distributed ledger. This method require more power and other resources because every node in the network must verify the entire ledger. All the nodes validating the transactions have the same state (Read: copy of the data). This model uses distributed ledger technology (DLT) with a decentralized ledger for all nodes to copy. As blockchain networks grow with additional nodes, increased energy is needed to confirm transactions. In the early 21st century, this technology is used to produce, distribute, and circulate credits ("coins") among network addresses. Here, "mining" is an algorithmic process that uses electrical power to perform computations. "Mining" creates/issues new coins and rewards participation in the network.
   1. This technology is used to create an electronic [messaging] payment system (a.k.a., electronic trading economy, electronic profit economy).
   2. Every digital "coin" on the blockchain is a credit (a.k.a., token, certificate, money, currency) that can be transferred between entities (Read: addresses, cryptographic keys).
   3. Digital integrity is achieved through centralized validation (Read: global consensus). A blockchain is built by running software and linking several nodes together in an manner that algorithmic sustains accountability, trust, and validity.
   4. Proof of Work has miners crunch numbers to validate transactions on the network. Validators collect a block reward. Here, credits come from validating messages. With proof of Stake, validators do not collect a block reward, instead they collect network fees (as their reward). Here, people who hold the credit get the new credit/coins issued to them based on the amount of credit/coins they have.
   5. In concern to Bitcoin, "miners" use electrical power and perform software computations in order to sustain Bitcoin. Therein, the "miners" receive two types of credit/reward for "mining" (i.e., "mining", in the early 21st century, is a two fee process): (1) new coins are computationally created with each new block (the first fee), and (2) transaction fees from all the transactions included in the block. Bitcoin provides two "incentives" for "miners": block rewards and transaction fees. Currently the vast majority of miner revenues come from block rewards, but in the long run they will come primarily from transaction fees as block rewards dwindle. Transaction fees are an anti-spam measure. A Bitcoin transaction is a transfer of bitcoin from one address to another. A transaction is a transfer of a "coin" value on the blockchain from one address to another. The initial recording of a transaction is broadcast to nodes in the Bitcoin network, these node then passes the recorded change along the network until it reaches a mining node. Miners will then order this transaction into what is called a block template. This is a "blueprint" for the block that the miner is attempting [via computation] to add to the blockchain. If a "miner" successfully finds [via computation] the next block in the chain, then this block template is considered "mined" (Read: found) and becomes an immutable block on the blockchain. Finally, this block is broadcasted to the network's nodes who record it in their copy of the block-chain. All Bitcoin transactions are published to the "mempool", where they are considered 'pending'. When a "miner" computationally adds a transaction to a block, it is then considered 'confirmed'. Importantly, there is a hard cap of 21 million Bitcoin that can be produced ("mined"), with the final coins (credits) being produced around the year 2140. Once the circulating supply reaches its maximum, Bitcoin "miners" will no longer receive block creation credits ("rewards"). They will instead be credited ("rewarded") with transaction fees, assuming there are no major protocol changes to Bitcoin between now and then. A Bitcoin "halving" event is when the credit/reward for "mining" Bitcoin transactions is cut in half.
      i. Simplistically,

1. A purchase is to be made, or a message is to be sent/recorded.
2. That purchase/message request is recorded in a [signed] message/record (i.e., a new transaction is entered and/or a new message is recorded).
3. A message is signed, and if the record has to do with credit, then the destination address for the credit is identified.
4. The transaction is transmitted to a peer-to-peer computer network consisting of "nodes" (computers running specific software).
5. The network of nodes validates the transaction and the user's status using known algorithms. Nodes on the network solves equations to confirm the validity of the transaction. Nodes can compete or cooperate to verify a transaction and place it into a block with other transactions. Under the state of competition, nodes are rewarded with payment of fees in the form of a credit/token, which can be used for purchase (or sale...which is just purchase of the credit by another). It is during this phase where digital credits ("cryptocurrency") may be created.
   a. Here, the validation of new messages creates the credit itself. The credit itself is just another message with an number (amount/quantity) associated with a user's address ledger (chain of blocks).
6. Once confirmed, the legitimate transactions are clustered into blocks [of data] to be added to the ledger.
7. The node(s) that solve the equations (in some cases, first) receives credits as a reward.
8. The blocks are then chained together creating a long history of all transactions that are permanent. A block on the chain is a permanent record/ledger, and cannot be modified.
9. The transaction is complete.

B. **Agent centric distributed ledger technology (Agent-DLT) (e.g., holochain)** Agents (nodes) share records of their actions, including any data meant to be shared with the group, in a distributed hash table (DHT). All the nodes validating the transactions do not have to have the same state (Read: copy of the data). Apps are shared on the distributed hash table (DHT). Each agent owns an immutable hash chain and stores public data on a DHT node. Here, the user is the host. The more users (or agents/people) start using the application (Read: app), the DHT network as a whole gets more storage and computational ability. In some ways, this type of technology could be described as a a 'post-blockchain' technology that requires no staking and no mining. A distributed hash table (DHT) means no Proof-of-Work (PoW), Proof-of-Stake (PoS), or any other consensus mechanism. This model does not need to produce credit (tokens) as a medium of exchange, but it can still do so. Here, credit as reward is acquired ("earned") in two ways:

1. Sharing hard drive space (e.g., holochain holofuel/holo token is a reward).
2. Sharing processor computations (e.g., holochain holofuel/holo token is a reward).
3. Digital integrity is achieved through distributed validation rules. If these rules are broken, other nodes can tell how and by whom, and then react accordingly. Each node that receives a record of a message validates it against the shared application rules and propagates it to their peers. If the rules are broken, that transaction is rejected by the validator. If foul play is detected on a node's part (the node is either propagating or validating bad data) that node is blocked and a warning is sent to others. A holochain is built by running software and linking several nodes together in an manner that algorithmic sustains accountability, trust, and validity.
4. Simplistically, the process is:
   i. A message is created in an application using this distributed ledger technology.
   ii. The message is signed by the identity.
   iii. A local copy is saved.
   iv. The local identity adds the signed message to its own tamper resistant log.
   v. The local identity shares the tamper resistant log with a selection of random peers that are using the app.
   vi. Each peer app validates the message using its own copy of the application rules.
   vii. If the message breaks any rules, validator app marks it as "Rejected".
   viii. If the log does not break any rules, validator device saves the message, marks it as valid, and signs that statement.
   ix. Validator propagates a copy of the log.

NOTE: *A blockchain is a digitally distributed, decentralized, public ledger that exists across a network. A block-chain-type distributed ledger is an auditable distributed ledger for trading and/or accountiing. A "block" is a file of permanently recorded data. All data about change is written into the block.*

Tokens (credits, currency, vouchers, etc.) may be produced as:

1. **Credit (work and/or life produces "credit")** is defined as something produced to be used for purchases. In its simplest form, there are no costs to the usage of credit as a product (i.e., no "usury"). In its simplest form, the credit is produced, given to those who contribute their service, then absorbed and deleted when the consumer purchases something from the [State] store. More simply, labor is an opportunity to earn credit, it is not an expense, no one pays for it, it's simply created when it's earned, and then it is deleted after being spent. Not having usury (Read: no cost) means that there is no demurrage, fees, interest, or tax. The credit (certificate of credit by the State or cooperative) cannot be commoditized as wealth itself (Malouf, 2021). Here, credit is meaningless if it is not applied to something we (Read: society) has produced to sell and to be used.
   A. **Labor vouchers (a.k.a., wage, salary, money, income)** is a credit (addition) into the account of an amount, during and/or after a period of labor, that may be used to purchase access to some service/object in the future by that laborer (i.e., the future "option" to take access). Laboring hours can be used to account for human labor.
2. **Debt (i.e., interest owed, taxable; produce "money" that produces "money")** is defined as money created by the market and sold to States (and sometimes, individuals) by market-based entities. In general, there is a cost (a.k.a., usury) to the use of the product "money" (an abstraction) produced by "bank" market-based entities. Here, money is a traded product. To be in debt means to owe something in return. Simply, if a currency has any cost involved, directly or indirectly, it presents itself primarily as a commodity. (Malouf, 2021)
   A. Here, money is a "product" (it is an abstraction reification) of market-State entities. Money literally becomes a commodity, an external object capable of becoming the private property of any individual. And, in terms of authority, this capability "grants" its holder the power to call on the use of force/violence [through State authority] to protect the property.
   B. In the market-State, there are costs (necessary returns of investment "lending") to the usage of money as a product/commodity (i.e., "usury").
      1. Usury means: practice of lending money at interest, as a requirement for greater return on the lending. It comes from the medieval Latin "usuria", alteration of Latin "usura", which means, "payment for the use of money, interest." There, usus means, "a usage, use, enjoyment." Here is the idea that if you get enjoyment from life and use objects, then it is because of an authority (as financial "king"), and therein, you must give more (objects/currency) back to the authority (as financial "king") gave you. From mid-15c. is is defined as, "premium paid for the production and use of money. Note that sometimes "usury" is used to mean, exorbitant interest, but herein, it means any cost to the production and usage of money. Here, usury means any interest on currency, not exorbitant interest. A transition token model transition away from (remove) usury.
   C. The four general types of usury (i.e., cost to monetary usage; rent on usage of money) are:
      1. **Demurrage** traditionally, demurrage is the cost (price) associated with owning (i.e., using, holding) currency over a given period. It is sometimes referred to as a "carrying cost" of money. For commodity money (e.g., gold), demurrage is the cost of storing and securing the gold. In concern to the protocols of specific cryptocurrencies, some cryptocurrencies have taken on the principle of demurrage by penalizing users for hoarding, where a fee is charged for holding unspent or unstaked coins. This fee may increase as time passes. It is meant to ensure that the cryptocurrency continues to circulate, thus stimulating price appreciation.
      2. **Fees** the price paid for usage (as in, one-time-fee or rental).
      3. **Interest** the price paid for the "debt" of having access to the production of money.
      4. **Tax** the price paid for [State] dispute resolution services (i.e., the price paid to the State). The price paid for State [social] services.
         i. When a State collects money through taxation there are one of two things it can do with it:
            a. It can be deleted.
            b. It can be put in a general (public) for usage by State service or funding information/habitat production

(through grants and subsidies).

ii. A State can tax any possible occurrence:
    1. Tax a "non-trade" event.
        a. Gift.
        b. Operation, construction, presence and/or usage.
    2. On "trade" event.
        a. Sale/purchase.

Note that because money is (tokens are) a "product" [in society], that uses power to be produced, either electrical and/or mechanical. Herein, mechanical refers to physical money (Read: bills and coins), and electrical money refers to tabular ledger production and accounting of money (i.e., non-block chain digital currency as well as blockchain digital currency. In the market-State, currency has an energy (Read: power] cost.

There are four fundamental parameters that characterize the usage of a currency exchange model (Malouf, 2021):

1. The amount created and availability (finite or infinite).
2. Distribution method (connected or separate from work done).
3. What it is based on (tangible or not, e.g., gold or work).
4. Costs or not (usury, demurrage, fees, taxes, or none at all).

2.3.3 Digital trade tokenization

A.k.a., Token contract[-ion], token introduction.

A token (a.k.a., crypto-token, digital currency, digital money, digital token) is something that is presented digtitally as [a representation of] something else. Any physical or digital thing/asset or process/action can be tokenized (i.e., represented as a token). Tokenisation is the process of digitally representing an existing real asset (e.g., land), another digital asset (e.g., intellectual property), or any action (e.g., labor) on a distributed ledger (Hileman and Rauchs, 2017). The action, exchange, is an event that is market on the ledger to have occurred. The tradable ownership of the digital and real assets occurs through the production and usage of tokens (fungible and non-fungible). Distributed ledger technology, and therein, blockchain, is a technology for recording any event cryptographically and for tokenizing anything, whether it be:

1. **Something physical** (e.g., land, gold, real estate, resources, tools, etc.).
2. **Something done** (e.g., any service, any event, platform access, work-roles, etc.).
3. **Something abstract** (e.g., currencies, investments, securities, projects, proposals, reputation, etc.).
4. **Something digital** (e.g., digital picture, music, as access control).

In other words, market-State assets (information and physicality) may be tokenized, and events (e.g., trades) may be recorded simultaneously, cryptographically. The tokenisation of assets involves the creation of digital "tokens" issued on the blockchain that represent/associate the asset. Herein, a token is a digital unit of numerical count that is placed in users' token bank[ing] accounts ("wallets"). The token system should record transactions as agreed by participants in a blockchain with redundancy to secure it.

Tokens issued through tokenisation (Read: token creation) exist on a distributed digital ledger (i.e., block chain). Where authority approves, tokens carry the "rights" of the assets they represent, acting as a store of options to access ("exchange value"). The real assets that are "legally" associated with cryptographic issued tokens continue to exist in the "off-chain" world, if there is even any association with real assets (which, there does not need to be). In the case of real physical assets, those would typically need to be placed in the "custody" of an authority to ensure that the tokens are constantly backed by these assets. Custodianship of assets is generally necessary tokenisation transactions.
Tokens are generated digitally by means of:

1. A **protocol** (protocol token).
2. An **application** (application token).
3. A **smart contract** (smart contract token).
4. A **powered computer, communications and data storage network.**

> **Clarification:** *Most tokens run over existing protocols as application specific tokens or as smart contract tokens. Hence, application tokens use smart contract tokens.*

Tokenization has the following processes/functions:

1. **Create** token token is created to assign ownership (access control), and token is assigned to an entity's ownership.
    A. After the token is created,
        1. does it have a limited life-time?
        2. can it be deleted?
    B. After the token is created and assigned,
        1. can it be re-assigned?
        2. can it be fractioned?
    C. After the token is recognized,
        1. what is the "smart" contract association of the token to the real-world?
2. **Get** token(s) token is acquired by an individual identity on a ledger.
3. **Give** token(s) token is traded to another individual identity on a ledger. After token is given is the token deleted or fractioned?

4. **Store** token(s) token is locked up for a period of time.
5. **Show** token token is shown for access. After token is shown is the token deleted or fractioned?

It is relevant to note here that all tokens are held in a "wallet" (address) recorded on an immutable ledger that links the "wallet" ID address to a token amount. Wallets hold cryptographically verifiable "digital" ownership of tokens (fungible or non-fungible). The amount of tokens possible with the address may be dynamic or fixed in some way. For example, it can be fixed [with a smart contract] so that it will only accept one type of non-fungible (ID access) token, like one ticket to an event or one ticket to continuously access some physical area as long as the ID non-fungible token is in the account.

Types of tokenization system contracts (a.k.a., smart contracts):

1. **Control contract** to change the protocol (master plan/specification) for a token system (under what conditions/terms).
2. **Token contract** to produce or trade/exchange a token (under what conditions/terms).

There are number of essential questions to answer when observing and/or designing a trade tokenization model. The primary questions for designing a token system (credit, currency) that orients a population living under market-State conditions more greatly to community may include (Dapprich, 2022):

> *Note: Money is based on the labor theory of value and is called a labor token, it simply doesn't circulate, and is required to access fulfilment services that are not free, and have a price to "you" (Dapprich, 2022).*

The baseline questions for a token [control contract] system are:

1. Who controls the production, distribution, and deletion of the token?
2. Can the token be accumulated?
3. Can the token be traded?
4. Is there price for access, an expectation of tokens in return (an "I owe you", IOU)? An IOU, a phonetic acronym of the words "I owe you," is a document that acknowledges the existence of a debt. An IOU is an informal note that promises to pay a debt. That debt can be a debt to the State, to an institution, or to the public (i.e., the people).
5. Do people get unequal token distributions, based on labor, life-phase, mere existence, or other factors?
6. How much is available current, and how much will be made available, and when?
7. How are the tokens acquired?
8. What is the relationship between tokens and salaries?
9. How are the objects and services priced (in exchange for tokens)?
10. What software and algorithms will be used?
11. Is the organization an infinite treasury that can deal with contribution and salary accounting from the beginning?
12. How will fiat (State) currency be turned to tokens.
13. How will tokens be turned into fiat (State) currency?
14. Which tokens can be traded on what exchange?
15. What is the socio-technical relationship between tokens and the prices for the means of production (intermediary products) and the final-/end-user priced products?
16. How much energy is consumed to run the distributed ledger for community accounting (baseline)?
17. How much energy is consumed to run the trade-token accounting (tokenization)?

The primary list of questions for the design of a token control [contract] system are:

1. **Everyone has a token (or profile) account on a ledger that is stored at a:** Where is the bank, the ledger, the record, the statement, the data?
   A. Private bank.
   B. State bank.
   C. Private individual.
   D. Individual-public distributed digital network (e.g., Holochain, a distributed blockchain network powered by each device the app is active on).
   E. Organizations (mostly businesses) digital ledgers (e.g., Bitcoin, a distributed blockchain network powered by investors).
2. **What is the token's creation and deletion, and quantity, linked to?**
   A. **A physical object:** A token is created because of the existence of some thing physical. A token could be deleted if the physical thing no longer exists.
      1. A useful object (or, object believed to be useful), such as gold, silver, or salt.
      2. A physical person's presence (i.e., a citizen's presence). State vouchers (a.k.a., free tokens, citizenship points, citizen vouchers, citizen credit, etc.) are tokens allocated to all citizens (as a universal basic income) so that each individual gets a certain number of tokens (cyclically), because s/he exists as a citizen under the State.

i. State vouchers (a.k.a., universal income, free money, etc.) can be exchanged for things that are produced (in the market and/or by the State).

B. **A digital "object" (information):** A token is created because of the existence of some thing digital (e.g., intellectual property). A token could be deleted if the digital thing no longer exists.

C. **An event:** A token is created after some event/process has occurred.
   1. A trade event (could lead to tokens being created or deleted).
   2. A threshold event.
      i. Associated with the clearing rates (i.e., rate of take/accessing by users) of the products, where demand matches supply.
      ii. Is a token given to someone in exchange for their labor? For work to be done is there a requirement to pay tokens for the labor. Is there a salary, income vouchers, wage tokens, labor tokens, etc? Does work mean the opportunity to acquire mandatory "options" tokens for life, technological, and/or exploratory services? Does work create money to purchase goods and services (priced with or without an embedded account for the work)?
      iii. Work time duration (working hours, weeks, months, etc.) token is given per working hour.
      iv. Role-set project task(s) credit is given for the completion of role and set of tasks (project or project milestone). Does the issuing and distributing of new tokens ("shares") result from the passing of a new proposal for a project, role?
      v. Life-phase associated credit distributions. How do token distributions and usages relate to the four life phases of nurturing, education, contribution, and leisure?
         1. Education credits.
         2. Contribution credits.
         3. Procreation (i.e., having a baby) credits.
         4. Leisure credits (a.k.a., luxury credits; note: leisure activities are considered luxuries).
            a. After completing a certain number of total life working hours (contribution years) a nominal leisure credit is given for the remainder of the life.
            b. If leisures are desired past the nominal phases (nurturing, educational, and contributional), then more work would earn more credits.
            c. A set nominal credit for leisure (vacation) activities is set per year per life phase (nurturing, education, contribution).

3. **What does the [token system] authority do after a purchases with a token? What can the authority do after a trade/purchase event?**
   A. Tokens can be exchanged for priced [city/habitat] products and services, and after exchange, the credits are:
      1. Semi-circulatable (some deleted, some stored, some circulated; mondern monetary theory currency).
      2. Circulatable (i.e., can be given and/or sold to others). Does the token circulate; do tokens circulate? Can the token itself be traded, gifted, or re-sold? To circulate, the labor-tokens can be given and exchanged amongst people (i.e., laborers are paid in tokens that agent circulate). Laborers are paid in tokens that circulate amongst the economic agents. If tokens circulate, then indeed they (labor certificates) would just be money.
         i. Where there is no circulation, the labor-tokens cannot be given and exchanged amongst people. In other words, when a someone redeems/exchanges tokens for a good/service, the certificate is cancelled and cannot circulate. What distinguishes labor certificates from labor money is that they do not circulate. Each person has a unique and distributed labor ledger token account. Laborers are not paid in tokens that circulate (i.e., they do not circulate amongst agents). To prevent circulation, the certificate has to be tied to the person. To tie a token to a person, the following techniques have been used:
         ii. Historically, social punch cards hours worked are printed on a punch-type card, which ware then cancelled out when you bought something from the social store. Holes would be punched in the card to cancel out hours worked.
         iii. Today, social smart cards (electronic cards and distributed ledger wallets) a labor service accountability inquiry would keep time accounts of how long everyone in the population had worked, and if/what they spend their labor (token) on. Software would prevent private transfers between accounts, so that there is no circulation (and no black markets).
         iv. All this is based on the assumption that

the economy can be planned to balance the expenditure of labor against the allocation of tokens for labor. This can be done by planning in physical terms and in working hours.

3. Deleted: When someone buys a product or an activity. Is the token (credit) deleted upon usage (i.e., is it deleted after one purchase)? The token is deleted from the buyers account, and the purchased object becomes their:
   i. Personal property (in market-State).
      1. It is possible to sell "your" personal private property for up to its cost, or even gift it. Can property bought with the token be resold?
   ii. Personal access (in community).
      1. It may be possible to gift "your" personal property, but it is not possible to sell personal access[ing] items. Where any item personal item or personal credit can be sold, there is the potential for debt and accumulation.
4. Delete or bank tokens:
   i. Delete the spent token (no more purchasability, and token does not circulate).
   ii. Bank and re-spend (token circulates, and can be used for future purchases).
      1. If the purchase was made at a token authority owning "State" store, then it could keep the full value of the sale.
5. Tax trades:
   i. Tax some portion of the purchase price, and take a percentage of the tokens, to be:
      1. re-spent, or
      2. deleted.

4. **What method determines how laborers are paid in tokens (credit, labor vouchers)?**
   A. **Subjectively**, based on market conditions and an owner's personal decisions (in proportion to the revenue of the business and the owner's choice).
   B. **Objectively, in proportion to a task:**
      1. In proportion to a task's formal [assembly] complexity and the associated laborer's role/accountabilities, using a formula. All products in an economy are assemblies with assembly complexity steps. The assembly index (ai) formula can order products based upon their assembly complexity and provide a statistical account of a solutions scaled complexity.
      2. In proportion to the education complexity required of the role.
      3. In proportion to what some voting population feels the complexity of the task and accountability is worth in compensation.
      4. In proportion to the labor dis-likability/safety (difficulty in staffing)?
   C. **Objectively, in proportion to a duration of work time** (most commonly, the hour, but could also be years):
      1. In proportion to the number of hours worked? Service-objects in the habitat centers (i.e., "communal stores") are marked with the number of hours of social work that went into them. The same amount of labor s/he gives to society in one form s/he receives back in another. The tokens can be redeemed for final consumer (user) items that take an equivalent amount of labor to produce. Laborers are paid in the number of hours worked per some time period (e.g., a week, in hours, etc.) on a complex socio-technical societal service assembly. Labor vouchers are earned based on hours worked and are spent at a store where things are priced according to hours. Labor vouchers (tokens, points) are given because of actual labor. Individual labor is a direct component part of the total social labor and is calculated into the price of service-objects. The social working day consists of the sum of the individual hours of work; the individual labor time of the individual worker is the part of the social working day contributed to by his/her share of it. In this case s/he receives a digital (or paper) certificate from society that she has furnished such-and-such an amount of labor, directly into his/her account (to be deleted upon usage or circulated after usage). Here, it makes no difference whether the math (Read: adding of working hours to identity and subtracting working hours after purchase) is done digitally in a database or recorded in a written booklet. The important point here is the cancellation of the token's "existence" so that there is no circulation. Summarily, working people are credited with hours worked.
         i. The process/method of calculating out work-hour plans is commonly called "labor-time" planning (a.k.a., socially necessary labor time planning, socially necessary planning, etc.). Are workers getting the full value of their work, providing a rational basis for socially coordinated contribution-type actions. It is possible to imagine money for labor being

replaced by time vouchers (time-labor certificates). Goods/services (habitats) are marked at the public warehouse with their time content included. Labor time input serves to measure the portion of the common labor borne by each individual, and of the laborers share in the part of the total product destined for individual consumption. The social relations of the individual producers, with regard both to their labor and to its products, are in this case perfectly simple and intelligible, and that with regard not only to production, but also to distribution. (Marx, 1867)

ii. In concern to planning, the socially necessary [amount of] labor (in hours of work) allocated to a branch of production depends on demand. Suppose it takes 1 hour to make a shirt; then, the shirt will be marked in the public stores at 1 hour. But, if that style of shirt is no longer wanted, the stocks will not sell. The State shops may have to sell them at 30 minutes or even 10 minutes instead of 60 minutes. Under these circumstance, the planners can see that some goods are selling:
   1. Below their labor part content, in which case the planners decide to make less of them.
   2. At their labor content, in which case the planners decide to make more of them.

5. **What can tokens be redeemed for? What options does the token give the owner? What can the tokens purchase? What specifically can the token buy?**
   A. Essentially, anything (service or good).
      1. Globally anything.
      2. Regional habitat network anything.
      3. Local habitat anything.
   B. Only specific services:
      1. Only leisure (luxury) items/services.
      2. Only excessive usage of power and/or data.
      3. Specific habitat services.
      4. Only specific businesses. In the market-State only, the "coin" can only be spent with the specific business that distributed it in the first place (i.e., a store "credit", a closed-loop, specific-business digital currency).
   C. Only life-phase appropriate service fulfillment.
      1. Nurturing.
      2. Educating services.
      3. Contribution services.
      4. Leisure services.
   D. Intermediary products (means of production). The means of production may be bought by buying wage labor and production assets.
   E. Final user products. Here, there is user-consumer organizational level tokens and prices. There are two potential categorizations of final products that can be purchased:
      1. Any final product in the whole market.
      2. Only leisure service-objects specifically.
6. **What is acquired back from society; because of laboring for society? Is the same amount of labour which someone has given to society, received back in another form?**
   A. **Token money:** Labor tokens with the ability to purchase products produced by other laborers.
   B. **Free access:** Access to all that society has to offer based on life-phase access categories. Here, there is life phase optimized and intelligent access to service-objects.
7. **Who is a product being purchased from when the tokens are exchanged/deleted?**
   A. **A competitive-spectrum (for-profit) business** an investor-/debt-ownership, profit-taking model.
      1. The economy is composed of many competing organizations, each of which internally has two competing classes, the capitalist employer (owner) and the waged employee (laborer).
         i. Global market supply chains and stores (i.e., geopolitics; international market-State).
         ii. National market supply chains (i.e., industrial-State businesses) and stores.
         iii. Local business supply chains (i.e., local businesses) and stores.
   B. **A cooperative-spectrum (for-profit) business** a co-ownership, profit-sharing model.
      1. The economy is composed of many competing organizations, each of which is internally cooperative. There are global, national, and local cooperatives.
   C. **A State (no-profit) business** a co-[un-]ownership and labor sharing model. Trade with State supply chains and stores.
      1. The economy is composed of one cooperative, unified organization.
8. **Where can labor tokens be redeemed? Where is the point of sales, purchase and acquisition?**
   A. Interface location:
      1. Physically, at a physical store tokens can be traded and objects can be received.
      2. Online, tokens can be traded, and then, users can pick-up items or have them distributed to their location.
9. **What data is the price of any given object/ service composed of? What is the total, final**

purchase price of an object/service linked to?

A. Directly to the capital-expense that went into its production.
   1. More of a cooperative-profit model. Here, the link is the marginal cost.
B. To market forces and consumer drives.
   1. More of a investment-profit model. Here, the link is more profit.
C. Directly to the labor-hours that went into its production.
   1. More of a labor-time accounting (socialist) model. Here, the link is the number of hours of work that went into a product. It is mathematically possible to tokenize (as an "options" token) the number of labor-hours that go into something.
      1. Is the purchase price fully made up of labor assembly working hours?
      2. Is the purchase price partially made up labor assembly working hours?
      3. Do laborers get the full working hours labor in the price of what they purchase? Here, what is described is a direct link between the number of hours worked and what any worker can equally, though possibly dependent upon life age, buy. There is a unity between work and output.

10. **What is the formula (method, procedure, process) for distributing tokens, and what is it based on?**
    A. Subjectivity (want and opinion): The market where some agents demand and others have tradeable availability (i.e., the demand and supply of products/commodities):
       1. of themselves (employees),
       2. of material availabilities,
       3. of capital (means of production),
       4. of production rates and labor sufficiency, and
       5. of final product availabilities.
    B. Objectivity (objects and concepts):
       1. Rarity (scarcity, difficulty) of accessing a required resource or a scarce service (e.g., leisure, luxury).
       2. Benefit / harm usage caued to humanity and to ecosystems.
       3. Mathematics, including linear [algebra, production logistics] and statistical [intelligence, Pareto efficiency].
       4. Coordinated administrative access: A user access system where tokens are cryptographic tokens, keys and identities for controlling access per agreement. These are "cryptographic" tokens, and not, "trade" tokens (like the rest of the tokens discussed in this list).

11. **Is there a token (monetary) cost to producers of the tokenization system (and tokens within it, and records within it)?**
    A. Token producers: Is there a cost to produce the tokens?
    B. Token users: Is there a cost to users of the tokens?
    C. Actual habitat production: Is there a cost to usage of land, tools and labor to produce habitat and working group services as producers?
    D. Is quantity of final product units and intermediary technical units decoupled from consumer token "price" by an algorithm?

The most common types (functions) of tokens are:

1. **Identity tokens (a.k.a., membership tokens, membership identity tokens, cryptographic identity tokens, authentication non-fungible tokens, authentication NFTs)** membership to an organization (e.g., identity "key" token). An identity token is akin to a personal key/address for having an account in the system. Accounts, accessed through an identity token, always has [set] permissions (based on user-identity and a central protocol). Accounts in an identity accounting system may or may not have a "wallet" attribute where "tokens" are "held" on a public/private ledger. "Wallets" enable ownership within accounts. Conversely, permissions enable access by accounts. There are two types of "wallets" or "treasuries" (a.k.a., account-based, persistent token inventories) here:
   1. **Non-fungible "wallet"** - for holding non-fungible tokens in a:
      i. Personal account ownership. Here, decisions about the account are taken by the single owner; the single owner is in control of their account of NFTs.
      ii. Public account (a.k.a., distributed autonomous organization account ownership, DAO). Here, decisions about the account are taken by a group of owners following some central protocol. Here, the distributed owners are in control of their account of NFTs.
   2. **Fungible "wallet"** - for holding fungible tokens in a:
      i. Personal account ownership. Here, decisions about the account are taken by the single owner; ; the single owner is in control of their account of FTs.

ii. Public account (a.k.a., distributed autonomous organization account ownership, DAO). Here, decisions about the account are taken by a group of owners following some central protocol. Here, the distributed owners are in control of their account of FTs.

2. **Utility tokens (a.k.a., purchase tokens, access tokens, utility non-fungible token, utility NFT, access NFT)** required to access or use the product, services, or platform. A standard cryptographic token that authenticates a user is a type of utility token (i.e., its utility is securing the authentication of a valid user). A utility token is a token that grants/gives access.
   A. **Show/trade one unique token for access:** Must show/trade one unique token for access.
      1. If, have to show only one unique token, then it is a non-fungible token (NFT; specifically, a non-fungible utility token).
      2. After showing, token holder:
         i. Gives token to seller for future use (non-fungible circulating token; circulating NFT).
         ii. Token is deleted by the system (non-fungible non-circulating token; non-circulating NFT).
         iii. Token is kept by token holder (personal non-fungible, non-circulating token). This is the type of token most closely associated with the idea of a cryptographic identity control token and token system.
   B. **Show/trade many tokens of the same unit for access:** Have to (or not) have sufficient amount of the tokens before access to a product or service is possible? Have to (or not) trade a sufficient amount for access to a product or service?
      1. If, have to have sufficient amount, then it is a fungible token (FT, fungible utility token).
   C. Is (or not) deleted upon use?
3. **Residency tokens (a.k.a., community and habitat tokens; residency non-fungible token, residency NFT, residency access NFT, residency identity token)** possibility for residency in community and/or a habitat (e.g., habitat agreement tokens, community residency tokens).
   A. Pay fiat to get community access token.
   B. Pay fiat to get habitat access token.
   C. Pay fiat to get governance "voting" rights.
   D. Gifted a residency.
   E. Gifted voting rights.
4. **Decision tokens (a.k.a., governance tokens, voice tokens, vote tokens, decision NFT)** provide a data-point contribution to community decisioning. These are tokens used to take decisions.
   A. Habitat using member decision tokens (a.k.a., user vote tokens).
   B. InterSystem Team member decision tokens (a.k.a., team vote tokens, tokens representational of work reputation + enrolled position in work organization).
      1. Communications among teams and groups of motivated individuals who have the skills, knowledge, and tools.
      2. Decisions among teams and groups of motivated individuals who have the skills, knowledge, and tools.
5. **Governance tokens (a.k.a., voice tokens, control tokens, voting tokens, ballot tokens, decision tokens, decisioning tokens, trust tokens)** enabling token holders to govern/control the organization. These are decision participation tokens; only those with the tokens can participate in taking and approving decisions. A governance ("voice"/"vote") token is a token that grants/gives access to decisioning. A decision control token is something to give "voice" to someone during a time of decisioning.
   A. Market presence:
      1. Can the governance tokens be purchased and sold [on-ward to another agent]? if so, the market is present.
         i. For example, buy into a residency program where users get access to the ability to submit issues for habitat residency alignment standards decisioning, and they get the ability to vote on the next iteration of the agreements list.
      2. The governance tokens cannot be purchased or sold [on-ward to another agent], only "earned"; then, the market is not present.
   B. Used to:
      1. Distribute decision control to experienced contributors.
         i. For example, only contributors can voice votes and objectives under the coordination of the contribution service system.
      2. Distribute and track the efforts of contributors as they contribute in a myriad of ways.
6. **Trade tokens (a.k.a., product purchasability tokens, options tokens, money, trade fungible token, trade FT, finance tokens, financial tokens, etc.)** provide possibility for (option to) purchase products (objects and services).
   A. Products meet needs (and have a token price).
   B. Products meet preferences (and have a token price).

C. Products are luxuries (and have a token price).

7. **Payment tokens (a.k.a., finance tokens, native tokens, currency tokens, crypto-currency tokens, price fungible token, price FT, etc.)** are tokens used to pay for transactions. These are tokens that are fractioned, and the fractions owned by many people. These may (or may not) be traded for other payment tokens or for products and services. For example, crypto-currencies. Currencies (physical and digital) and assets (physical and digital) represented on the ledger as something of supposed real-world "value" (as represented by one or more tokens).
   A. Deferred interests units (D) as staked tokens (token stakes).
      1. Stakes (temporarily released ownership.
         i. For interest.
         ii. For others benefit, no interest.
   B. Profit interests units (P) as tokens.
      1. After capital expenses are taken from revenue, from production sales intake.
   C. Can token be purchased and sold?
      1. For example, a digital currency, Bitcoin and Etherium.
   D. The token cannot be purchased and sold.
      1. For example, a piece of land in a contractual land trust.
   E. May be re-cycled, temporarily stored, or deleted after use.
8. **Securities tokens (a.k.a., ownership tokens, share tokens, equity tokens, real property tokens, real-estate tokens, property-ownership token)** traditional assets (e.g., stocks and shares, actual contractual ownership) represented by digital tokens on the blockchain.
   A. **Structured as non-fungible tokens (NFTs):** If the ownership of a single real estate asset is divided among multiple tokens, these could represent fractional shares of the property. Each share would be fungible within its class (all shares representing the same fraction of the same property), but the property as a whole would still be a unique, non-fungible asset. The key difference lies in whether the token represents ownership of a unique asset in its entirety (making it non-fungible) or a fraction of it (potentially fungible within the asset's shares).
   B. **Structured as fungible tokens (FTs):** Real estate/property tokens can be structured as non-fungible tokens (NFTs) if each token represents a unique piece of property or a distinct portion of it with specific characteristics that cannot be interchanged. In this case, a single NFT would correspond to a unique asset, such as a particular piece of land or building, and would carry the property's unique information, like its location, size, and legal details. This makes it non-fungible, as no two real properties are in the exact same location.

Other types of tokens include, but are not limited to:

1. **Pollution [indicating] tokens** (a.k.a., "carbon offset tokens") these are tokens that represent pollution category events.
2. **Benefit [indicating] human and ecological tokens** (a.k.a., regeneration tokens, "net-benefit rewards", education tokens, etc.) these are tokens that represent beneficial (to humans or the ecology) events.

Tokenization design for transition to a community-type configuration of society is likely to include:

1. **Producability (creatability, issuability, supply):** How are the tokens created? What is the supply of tokens? How will the tokens be created? Is there a supply fee (a.k.a., "gas" fee, price for miting. The tokens are created when/through:
   A. **Project labor (project "contribution")** contribution occurs; to reciprocate contributions (a.k.a., contribution payment). Note that contribution is in quotes, because if there is token creation/exchange for work, then it is not true contribution.
   B. **Proposal approval** a proposal is approved.
   C. **Project assets** new assets are acquired.
   D. **Project access** new access is created.
   E. **Project products and services** the project economy grows, new tokens are minted.
   F. **Treasury liquid assets** assets increase, more tokens may be issued.
   G. **No new tokens** [can be created].
2. **Transferability (a.k.a., circulatability):** Can token be transferred in any way? Can the token be transferred to someone else?
   A. If tokens can be transferred, may someone treat them as assets or utilize them as investment vehicles?
   B. How can tokens be transferred?
      1. Gifted.
      2. Inherited.
      3. Traded (traded on secondary market).
      4. Sold (re-sellable).
   C. Is there a transfer/minting fee ("gas" fee, transfer recording price) If this token can be traded then where do the transfer recording fees go to?
      1. To computer for energy use.