Architectural Framework for TAU

- This framework explores money, and “money-like” instruments.
- Key characteristics of money and money-like units include:
  - ability to buy things, including other money-like units *
    - now or in the future
  - existence via agreements
    - to accept for payment
    - granting exchange value (separate from any use value)
  - operation within some conceptual or physical boundary
  - enablement of marketplaces and economies
  - usage as rewards for deeds
  - measuring success and supporting self-esteem and public image

* Spending one form of money (TAU) for another is generally called “exchange”, whereas spending for non-money involves the mechanism of “price”
What do we mean by a “Transaction Agreement Unit” (TAU)?

- To avoid unnecessary controversy and confusion we avoid the overloaded word “money” in this presentation
- We draw on two of the money-like features – they are defined by agreements and facilitate transactions – Transaction Agreement Units (TAU)
- Some things have nicknames, so we won’t necessarily refrain from using terms like “money-form” in conversation
- We recognize that wealth comes in many forms, much not validly treated as “units”. This framework covers only wealth (value) that can be “unitizable”
- Such units are complex and multifarious, hence the need for architectures and this framework
- TAU's represent both:
  - store of value (capital) and
  - value exchange (flow)
What do we mean by an "architectural framework"?

- An architecture of something represents the components of the thing, and how it is composed (buildings, naval vessels, software systems, etc.)
- Every money-like form has its own intrinsic architecture, which we seek to be able to expose and understand
- Within communities agreements to trade with specific forms leads to design of local currencies that are based on their own architectures
- An architectural framework provides a set of structures and characteristics that can be used in designing specific architectures, including how they interrelate
How to read this presentation

- This is best read in screen-show mode to enable internal links to work, assuming that you are using PowerPoint.
- You don’t need to do anything special if you are reading a .pdf version in order for the internal links to work properly.
- Every underlined term takes you to another page, and the “back” arrows return you to an appropriate overview page.
- This is a concept and relationship model, similar to a class diagram.

**LEGEND**

- Clickable concept
- Unclickable concept
- One half of a bidirectional relationship
- Recursive relationship
Known examples of TAU types

- Legal tender
- Postage stamps
- Food stamps
- Coupons
- Green stamps
- Loyalty points
- Royalties
- Talley sticks
- Truck
- Scrip
- Collateral
- Vouchers
- Reciprocal trade (barter)
- Time-banks
- Local Exchange Trading System (LETS)
- WIR
- Corporate securities
  - Shares
  - Options
  - Derivatives
- Market basket
- IOUs
- American Open Currency Standard (AOSC)
- Robert Burk’s Rational System
- Participant reward (Kickstarter, e.g.)

<table>
<thead>
<tr>
<th>Discounts</th>
<th>Mortgages</th>
<th>Credit cards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash back</td>
<td>Teaser rate</td>
<td></td>
</tr>
</tbody>
</table>

- Debit cards
- Personal checks
- eBay
- PayPal
- Letters of credit
- Insurance claims
- Insurance premiums
- Tokens
  - Turnstile
  - Vending
- Casino chips
- Gift certificates
- Trade-ins
- Attention
  - Eyeballs
  - Click-through
- Reputation points
- Favors
- Donations
- Pawn ticket
- Usufruct
- MintChip

- Money orders
- Traveller’s checks
- Guarantees
- Recycling charges
- Premiums
- Lines of credit
- Grants
- Loans
- Micro-loans
- Crowd funding
- Rebates
- Patent
- Copyright
- Library card
- Coffee card
- Condominium “week”
- Commodities
- Products
- Services
- Energy units
- Futures
- Virtual
  - Game
  - Bitcoin

For more examples, see works by Greco, Lietaer, CC Research, etc.
High-level framework for Transaction Agreement Units (TAUs)
Purposes (for spending/for accepting)

• Community purposes
  • Retain money circulation within the boundaries of a particular community
  • Increase velocity of circulation
  • Build ownership loyalty via capital-focused wealth-unit
  • Internal reward system
  • Create liquidity where there is a shortage of liquidity

• Merchant purposes
  • Good will
  • Marketing
  • Loyalty
  • Niche (investment) marketing

• Member purposes
  • Local discounts
  • Access to unique value propositions
  • Ethical urgings
  • Improve talent capability
  • Mentoring
  • Problem definition
  • Performance of capabilities
TAU-form to TAU-form relationships

elaborate

Agreement Details
Role players

Role
- Holder
- Spender
- Acceptor
- Regulator
- Accounting Service
- Issuer

Issuer scope
- National
- Regional
- Local
- Virtual

Issuer powers
- Authorized amount
- Taxing
- Defining functions
- Combining functions

Role player
- played by
- role
- facet of

Social entity
- Individual
- Family
- Legal Business Entity
  - Corporation
  - Bank
  - Non-profit
- NGO
- Jurisdiction
  - Nation
  - State
  - Town
  - Region
- Network/community
  - Capability
  - Organization
  - Agent
  - Investment
  - K-node
Spendability (fungibility)

- Accepted by
  - Network member
  - Roleplayer
  - Anyone

- Accepted as payment for
  - Products
  - Services
  - TAU
  - Partial payment (discount)

Spending Agreement conditions
- Personally spendable
  - Free spend
  - Coerced spend
- Investment
  - Locked
  - On-demand accessibility
- Single use
- Transferability
- Divisibility
- Defacement

To accept a unit of a TAU-form in payment is to accept a network of agreements.
Value Adjustment

Payer pays Value Adjustments Receiver receives

Value adjustment types
- Accounting system support
  - Membership fee
  - Transaction fee
  - Incentive payment
- Participant exchanges
  - Interest
  - Collateral
- Jurisdiction impositions
  - Demurrage
  - Tax

Agreement Details

Cost
- Storage
- Security
- Reporting
### TAU mechanisms

<table>
<thead>
<tr>
<th>Physical</th>
<th>Exchange mechanism</th>
<th>Storage mechanism</th>
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<tbody>
<tr>
<td></td>
<td>• Deliver physical item</td>
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- **Top**
- **Back**
TAU media

Symbolic
- Coins
- Bills
- Punch card
- Electronic swipe card

Utilitarian
- Consumable
- Containment

Needed
- Calories
- Shelter

Desired
- Fine foods
- Fashion

Commodity/Product
- Grown
- Made

Service
- Recipe
- Performance

Generic performers

Named performers

Needed
- Durable
- Perishable

May be
- Desired

Calories

Fine foods

Fashion

Availabilty (days, hours, etc.)
Operations

- User processes
  - Create / Destroy units
  - Spend units
  - Accept units
  - Hold units
  - Redeem units
  - Exchange units
- Accounting

- Administrative processes
  - Agreement
    - Creation
    - Enforcement
  - TAU-Form processes
    - Create template
    - Accept template
  - TAU-manifestation processes
    - Clone template
    - Modify template
# Creation / Destruction

## Creation

- Loaned into circulation
  - Interest-bearing debt
  - Mutual credit
- Spent into circulation
- Gifted into circulation
- Exchanged into circulation
- Mined and assayed into circulation
- Stolen into circulation
- Swindled into circulation
- Performed into circulation

## Destruction

- Something put at risk
- Born as TAU
- Something becomes TAU

### Table

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<th>Potential</th>
<th>Time-based</th>
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### Diagram

- Branded
- Generic
- Grown
- Manufactured

- Time-based
- Results-based

### Potential

- Redeemed
- Demurred
- Spend-once
- Hyperinflation
Accounting

Accounting features and actions

• Create entry
• Calculate account balance
• Calculate network capital
• Perform network audit
• Allow negative balance
• Transparency - auditability
  – Of use
  – Of creation
  – Of validity
  – Of amount in circulation

Account ownership types

• Personal
• Merchant
• Community
• Jurisdiction
Agreement types for TAU

Agreement types

• Formative
  • Match purposes
    • of community
    • of roles within the community
    • with purposes of the TAU instance or system
  • Characteristics of form, instance or system
• Membership
  • Role expectation
  • Agreement to conform
• Cooperative
  • Included cooperations
  • Excluded cooperations

General stipulations

• Contract enforcement
• Expiration (longevity)
Agreement Details (T’s and C’s)

### Situation
- Member
- Geolocality
- Role-player
- Transaction type
- Calendar time
- etc.

### Algorithm
- inclusion
- exclusion
- enact

### Clauses
- TAU-form to TAU-form relationships
- Spendability
- Operations
- Value adjustment
- Roleplayers

### Agreement Types
- Parameters
- Labels
- Invariants
- Logic statements
Purposes at TAU-manifestation level – Academy of Enterprise Study and Practice (AESaP)

• Community purposes
  • Attract top talent into community of practice
  • Retain top talent indefinitely
  • Create and refine valuable intellectual property
  • Perform innovative engagement work

• Agent purposes
  • Build relationships with top talent
  • Understand leading edge practices
  • Place talent on engagements with leading edge clients

• Member purposes
  • Learn from peers
  • Teach peers
  • Build advanced IP
  • Practice on interesting engagements
  • Practice with innovative team members
TAU-manifestation to TAU-manifestation relationships

elaborate

pegged to

redeemed by

denominated by

backed by

paired with

exchanged with

TAU-manifestation
Role players

- Role
  - Holder
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  - Regulator
  - Accounting Service
  - Issuer

- Role player

- Social entity
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- Agreement

- Issuer
  - Issuer scope
    - National
    - Regional
    - Local
    - Virtual
  - Issuer powers
    - Authorized amount
    - Taxing
    - Defining functions
    - Combining functions

Example
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Fine foods

Fashion

Commodity / Product

Grown

Made

Durable

Perishable

Recipe

Performance

Generic performers

Available

Named performers

Availability (days, hours, etc.)

Service

Example
Operations

- User processes
  - Create / Destroy units
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  - **Variables**
  - **Parameters**
  - **Labels**
  - **Logic statements**
  - **Invariants**

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- **Example**
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  - Promise to pay
  - Promise to perform
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