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 involves exchange value, whereas spending for non-money involves the mechanism of price, and results in use value
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.
• TAUs represent both:
  • store of value (capital) and
  • value exchange (flow).

The “Warmoth Configuration”

Medium of Exchange

Store of Value
denominates

Unit of Account
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 relationships

recursive relationship
Known types and examples of TA units

- Legal tender
- Postage stamps
- Food stamps
- Coupons
- Green stamps
- Loyalty points
- Royalties
- Talley sticks
- Indulgences
- Truck system
- 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.)
- Sribd
- Discounts
- Mortgages
- Credit cards
  - Cash back
  - Teaser rate
- 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
  - Public space
    - Roadside
    - Vehicle outside
    - “inside (bus)
- Reputation points
- Favors
- Donations
- Pawn ticket
-Usufruct
- 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”
- MintChip
- Kilowatt hour
- Microshare
- Commodities
- Products
- Services
- Futures
- Virtual
  - Games, VW
  - Gloebit
  - Bitcoin
  - Qoin

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

TAU-form
interrelationship
instantiated by
templatized by
contributes to
comprises
spawns

TAU-manifestation

Agreement Details

TAU-function
TAU-system
Operations
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

- pegged to
- redeemed by
- denominated by
- backed by
- paired with
- exchanged with

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

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

Agreement Details

compatibility

played by

facet of

elaborate

enables

operates within

role played by

social entity
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 to Receiver
- Value adjustment types
  - Accounting system support
    - Membership fee
    - Transaction fee
    - Reporting fee
    - Incentive payment
  - Participant exchange adjustments
    - Interest
    - Collateral
  - Jurisdiction impositions
    - Demurrage
    - Tax
    - Seignorage
  - Mechanism cost
    - Storage
    - Security
TAU mechanisms

Exchange mechanism

- Deliver physical item
- Pay point
- Mobile device
- Shown ID

Storage mechanism

- Vault
- Refrigeration
- Warehouse
- Document

Physical

Intangible

- File transfer
- Smart phone app
  - M-Pesa
- Computer UI

- Database
- Mind
TAU media

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

Service
- Recipe
- Performance
- Generic performers
- Named performers
- Availability (days, hours, etc.)

Utilitarian
- Needed
- Desired
- Consumable
- Containment
- Calories
- Fine foods
- Shelter
- Fashion

Commodity / Product
- Grown
- Made
- Durable
- Perishable
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
- 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
- Applies to
- TAU-form to TAU-form relationships
- Spendability
- Operations
- Value adjustment
- Roleplayers

Agreement Types
- Inclusion
- Exclusion

Clauses
- Consist of
- Invariants
- Labels
- Variables
- Logic statements
- Parameters

Top

Back
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
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

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Example

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      • Demurrage
      • Tax
      • Seignorage
• Mechanism cost
  • Storage
  • Security

Example

Top Back
TAU mechanisms

Exchange mechanism
- Deliver physical item
- Pay point
- Mobile device
- Shown ID

Storage mechanism
- Vault
- Refrigeration
- Warehouse
- Document

Physical

Intangible
- File transfer
- Smart phone app
- Computer UI

Example
TAU media

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

**Utilitarian**
- Consumable
- Perishable

**Service**
- Recipe
- Performance

**Commodity / Product**
- Grown
- Made
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**Example**
Operations

- User processes
  - Create / Destroy units
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  - Accept units
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- Performed into circulation

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

Potential
- Time-based
- Results-based

Demonstrable
- Branded
- Generic
- Manufactured
- Grown

Example

Redeemed
- Demurraged
- Spend-once
- Hyperinflation
Accounting features and actions

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- Variables
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- Parameters
- Labels
- Logic statements

Example

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- Insurance premiums
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  - Turnstile
  - Vending
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- Grants
- Loans
- Micro-loans
- Crowd funding
- Rebates
- Library card
- Coffee card
- Condominium “week”
- Commodities
- Products
- Services
- Energy units
- Futures
- Virtual
  - Game
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