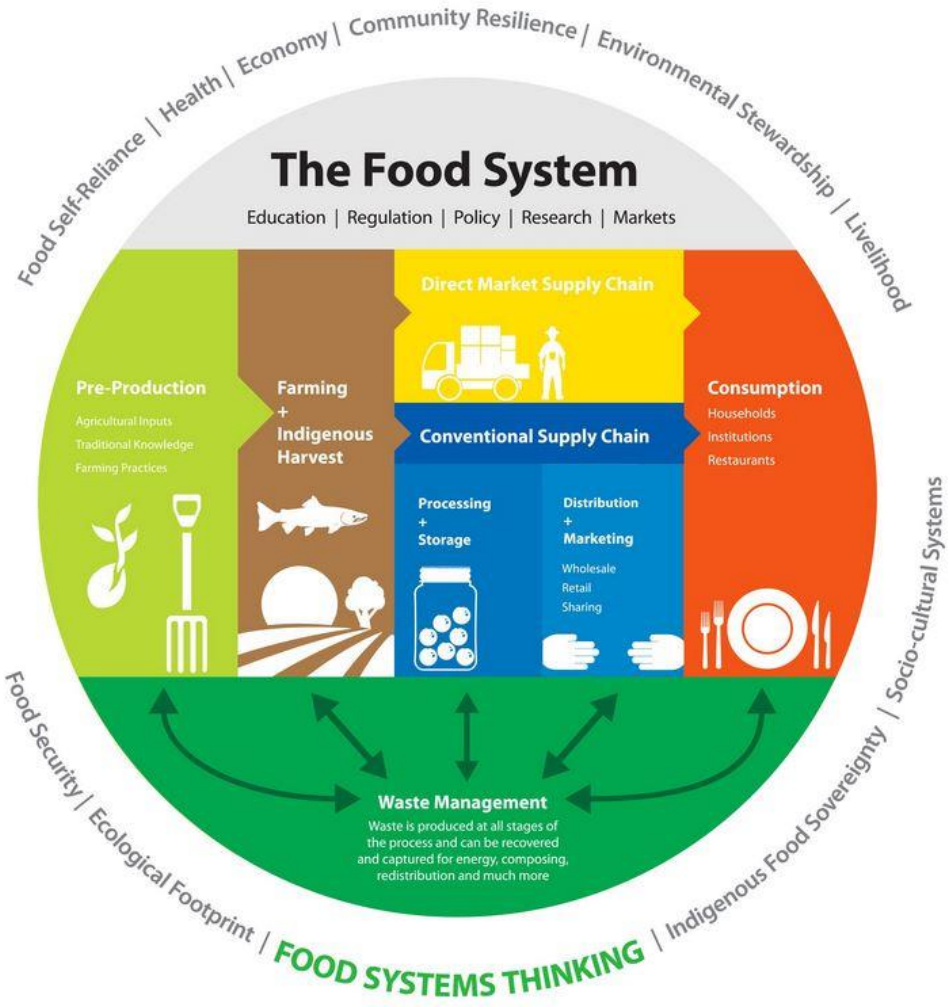
Critical Overview of Global/Local Food Systems and Diverse Economies



Quick Review: Food Systems and Cycles



Figure 1. Food System Sectors


Food Self-Reliance | Health | Economy | Community Resilience | Environmental Stewardship | Livelihood
The Food System
Education | Regulation | Policy | Research | Markets
Pre-Production
Agricultural Inputs
Traditional Knowledge
Farming Practices
Farming
+
Indigenous
Harvest
Direct Market Supply Chain
Conventional Supply Chain
Processing
+
Storage
Distribution
+
Marketing
Wholesale
Retail
Sharing
Consumption
Households
Institutions
Restaurants
Waste Management
Waste is produced at all stages of the process and can be recovered and captured for energy, composing, redistribution and much more
Food Security | Ecological Footprint | FOOD SYSTEMS THINKING | Indigenous Food Sovereignty | Socio-cultural Systems

Discussion

What cycles and relationships sustain food systems, and how do they shape the ways we produce, distribute, and consume food?



Ecological Cycles

Ecological Cycles

- Seasonal cycles and planting calendars
- Plant growth and reproduction
- Water cycles, irrigation, and conservation
- Nutrient cycling, decomposition, and soil regeneration

Ecological Relationships

- Pollination and beneficial insects
- Soil microorganisms and plant relationships
- Biodiversity, balance, competition, and cooperation

Agricultural Practices

- Seed saving and sowing
- Succession planting and crop rotations
- Polycultures and ecological pest management
- Composting, soil building, harvesting, and regeneration

Growing resources: Montreal Planting Calendar | West Coast Seeds Planting Charts

Polycultures

How to create polycultures

Adapted from Toby Hemenway, Gaia's Garden

Diversity and planting

- Seed several varieties of each species
- Do not sow seeds too thickly
- Mix plant families, not just species
- Include fast-growing, shallow-rooted species

Harvest and succession

- Begin harvesting early
- Overlap harvests and harvest whole plants when useful
- Save a few plants for seed

Observe and adapt

- Avoid root and light competition
- Examine the polyculture every day

Designing an Ecological Garden

Observe and assess

- Soil, water, sunlight, biodiversity, and seasonal patterns

Envision

- Ecological, productive, and community goals

Design and plan

- Plant relationships, spatial patterns, materials, and resources

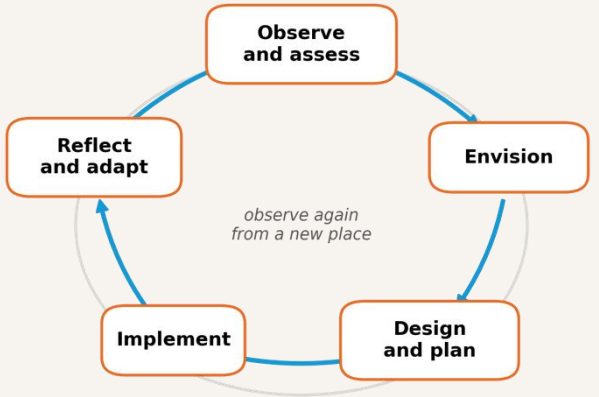
Implement

- Build, plant, and establish the system

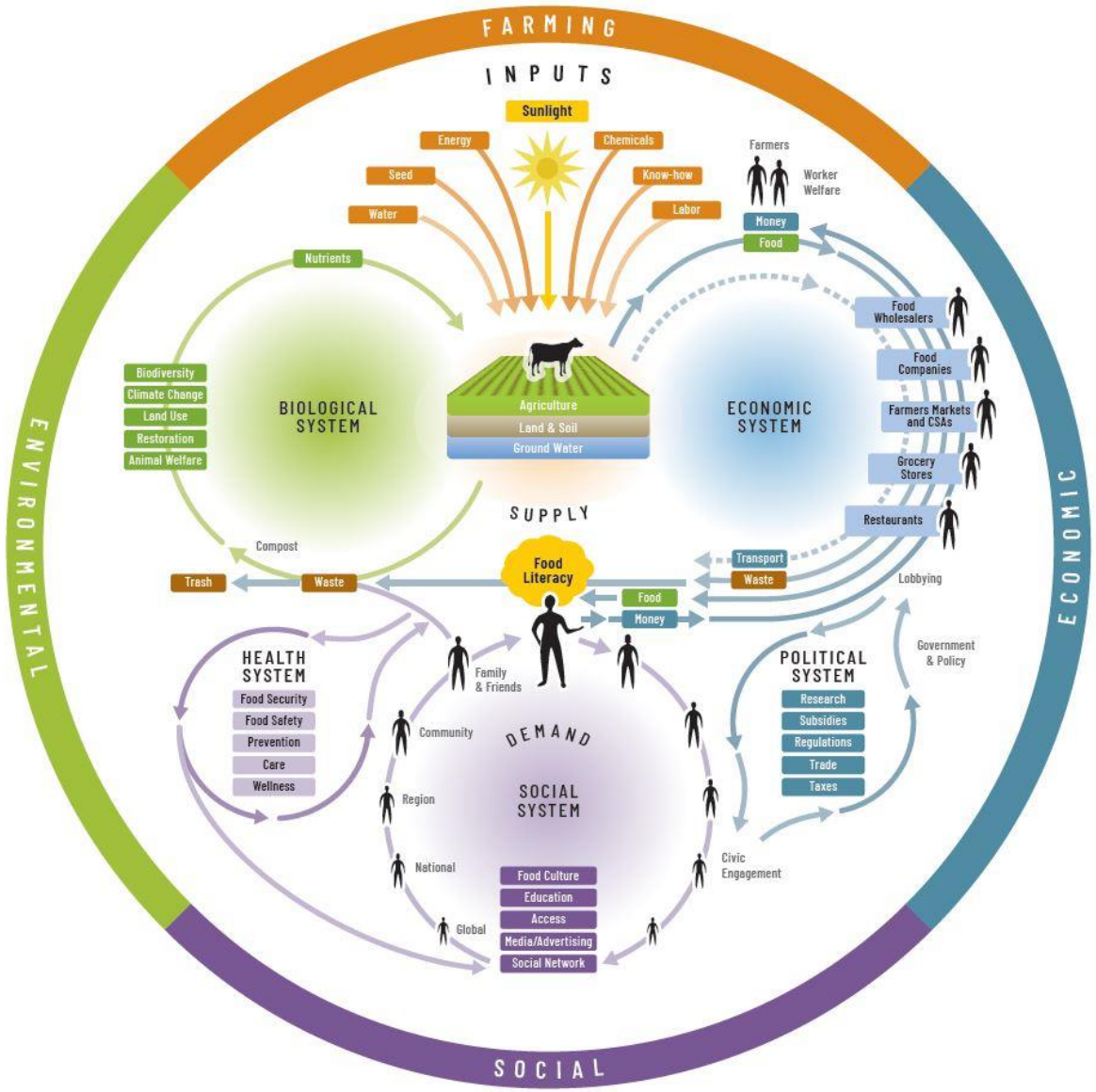
Monitor, reflect, and adapt

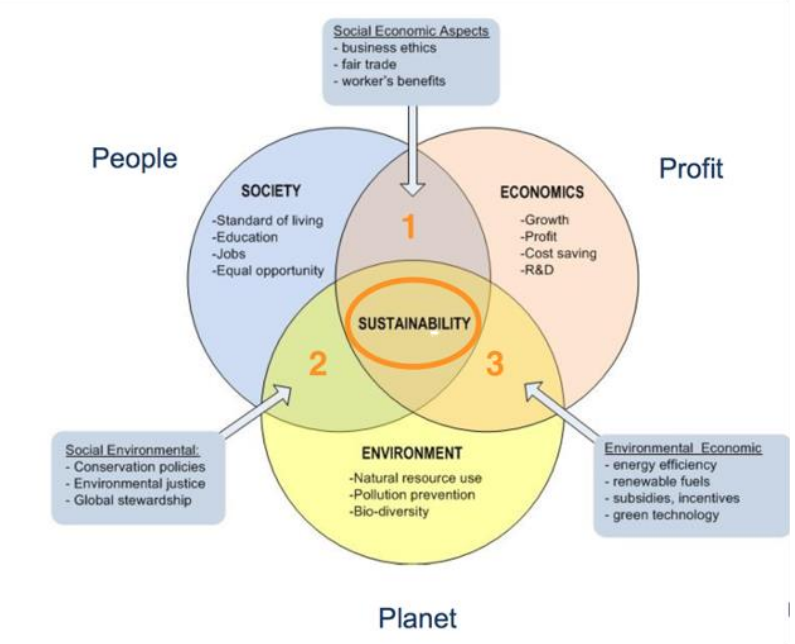
- Observe changes and revise practices over time

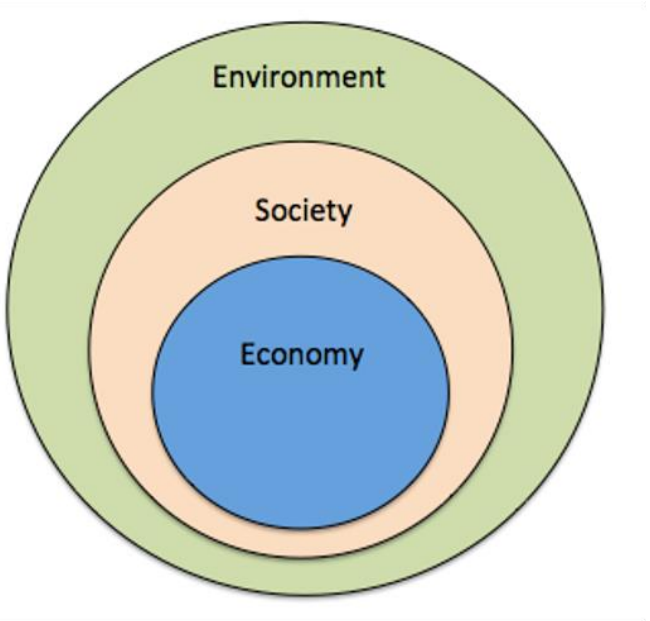
Design as an ongoing cycle

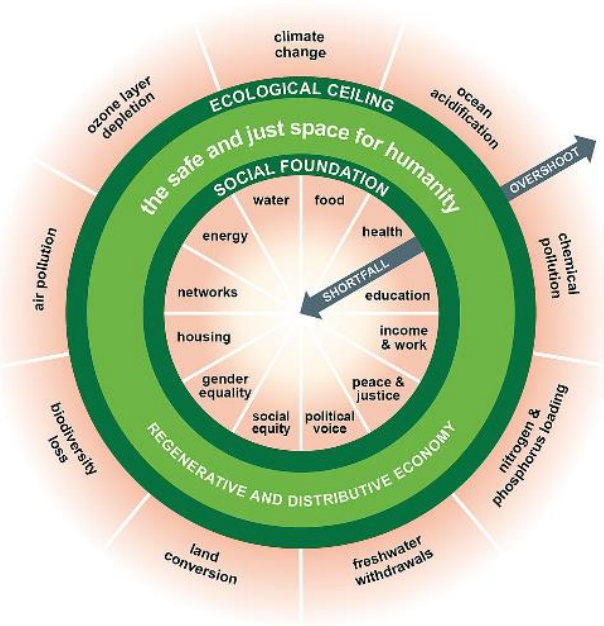


Informed by permaculture design principles and Hemenway's polyculture practices.


FARMING
INPUTS
Sunlight
Energy
Chemicals
Seed
Know-how
Water
Labor
Nutrients
Farmers
Worker Welfare
Money
Food
Biodiversity
Climate Change
Land Use
Restoration
Animal Welfare
BIOLOGICAL SYSTEM
Agriculture
Land & Soil
Ground Water
ECONOMIC SYSTEM
Food Wholesalers
Food Companies
Farmers Markets and CSAs
Grocery Stores
Restaurants
SUPPLY
Compost
Trash
Waste
Food Literacy
Transport
Waste
Food
Money
Lobbying
Government & Policy
HEALTH SYSTEM
Food Security
Food Safety
Prevention
Care
Wellness
Family & Friends
Community
DEMAND
Region
SOCIAL SYSTEM
National
Global
Food Culture
Education
Access
Media/Advertising
Social Network
POLITICAL SYSTEM
Research
Subsidies
Regulations
Trade
Taxes
Civic Engagement
ENVIRONMENTAL
ECONOMIC
SOCIAL







From Weak Sustainability to Food Sovereignty

What is an Economy?

Diverse Economies

KATHERINE GIBSON INTERVIEW PLAYLIST



Aristotle

Aristotle in 23 Volumes, Vol. 21, translated by H. Rackham. Cambridge, MA, Harvard University Press; London, William Heinemann Ltd. 1944.

Chrematistics – art of acquisition – limitless accumulation unnatural and problematic

Oikonomia – management of the household – true form of an economy

Karl Polanyi

Polanyi, K. (2001) The Great Transformation; The Political and Economic Origins of Our Time, Beacon Press

- Types of economic practices:
  - Markets (exchange)
  - Household economy
  - Redistribution
  - Reciprocity

Take back the Economy

Gibson-Graham, J.K., Cameron, J., Healy, S. (2013) Take Back the Economy: An Ethical Guide for Transforming Communities, University of Minnesota Press

LABOR	TRANSACTIONS	PROPERTY	ENTERPRISE	FINANCE
Wage	Market	Private	Capitalist	Mainstream Markets
ALTERNATIVE PAID Self-employed Reciprocal labor In-kind Work for welfare	ALTERNATIVE MARKET Fair trade Alternative currencies Underground market Barter	ALTERNATIVE PRIVATE State-managed assets Customary (clan) land Community land trusts Indigenous knowledge (Intellectual Property)	ALTERNATIVE CAPITALIST State owned Environmentally responsible Socially responsible Non-profit	ALTERNATIVE MARKET Cooperative Banks Credit unions Community-based financial institutions Micro-finance
UNPAID Housework Volunteer Self-provisioning Slave labor	NON-MARKET Household sharing Gift giving Hunting, fishing, gathering Theft, piracy, poaching	OPEN ACCESS Atmosphere International Waters Open source IP Outer Space	NON-CAPITALIST Worker cooperatives Sole proprietorships Community enterprise Feudal Slave	NON-MARKET Sweat equity Family lending Donations Interest-free loans

You are an urban planner looking to create pockets of urban agriculture. How can we learn from a diverse economies framework to help create and establish and sustain pockets of urban agriculture?

LABOR	TRANSACTIONS	PROPERTY	ENTERPRISE	FINANCE
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Types of Urban Agriculture

- For-Profit
- Not-For Profit
- Subsistence Farms
- Cooperatives
- Hobby Farms
- Squat Gardens
- Edible Foraging
- Community Gathering Places
- Edible Landscapes

Market Farm Practices

- Direct sales
  - CSA
  - Farmers market
  - Other markets
- Wholesale
  - Distributers
  - Restaurants
- Other sales
  - Transformed goods
  - Compost and other values
  - Education

- Contradictions
  - Labour vs food price
  - Soil regeneration time vs market readiness
  - Growing time vs productivity
  - Food donations vs sales
  - Farmers markets vs increased labour
  - Food waste!
- Market Secrets
  - Cash crops
  - Reduce inputs
  - Reduce labour necessities
  - Holistic approach

Non-Market Farm Practices

- Volunteer labour
- Community involvement
- Foraging
- Soil building
- Incorporating animals
- Funding sources

- Contradictions
  - Free labour vs viability
  - Free food vs revenue
  - Community involvement vs community interest
  - Soil building vs time
  - Animals vs care
  - Funding sources vs stability
- Non-Market Secrets
  - Sweat equity
  - Stable funding
  - Improved community space
  - Building a sense of community

Alternative Market Farm Practices

- Cooperative ownership
- Different types of membership
- Hybrid of markets and non markets
- Ethical principles (social economy)
- Fair treatment of employees
- Rooted in community
- Market viability and non-market advantages

- Contradictions
  - Community value vs profit
  - Volunteers and paid workers
  - Markets vs donations
  - Internal conflicts

- Alternative Market Secrets
  - Community support
  - Can take positive elements of both
  - More resilient to market failures
  - Provides community benefits

Take back the Economy

Gibson-Graham, J.K., Cameron, J., Healy, S. (2013) Take Back the Economy: An Ethical Guide for Transforming Communities, University of Minnesota Press

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Using Diverse Economies Frameworks to Map and Empower Local Communities

Mapping Community Food Systems				
PRODUCTION	PROCESSING	DISTRIBUTION	WASTE MANAGEMENT	SUPPORT
Food	Cook	Market	Compost - Soil Building	Funding
Tools	Prepare	Redistribution	Water saving - Irrigation	Space
Knowledge	Ferment	Reciprocity	Seed Saving - Seed Sewing	Labour
Social Capital	Preserve	Self/community provisioning	Re-purpose food	
	Transform			
	Freeze/store			
	Dehydrate			
	Can			

Snap-Shot of the Student-Run Food System at Concordia

NOVEMBER 2018

SUPPORT & ADVOCACY

- Sustainable Concordia
- Sustainable Action Fund
- Concordia Student Union
- Graduate Student Association
- Concordia Food Coalition
- Centre for Gender Advocacy
- Q-PIRG Concordia
- Food Autonomy Campaign

PRODUCTION

FOOD

GROWING FOOD ON CAMPUS

- Concordia Greenhouse
- City Farm School
- Campus Potager
- HydroFlora
- People's Potato Garden

GROWING FOOD OFF CAMPUS

- *City Farm School (Green Club) ***
- *Hudson Land Trust Project ***

FORAGING

- Sensorium

KNOWLEDGE

EDUCATIONAL ACTIVITIES

- Concordia Greenhouse
- City Farm School
- Season Jars
- HydroFlora
- Coop les brasseurs illuminés
- le Frigo Vert
- Waste Not, Want Not Compost
- Sprouting Minds
- Cooking at Concordia

CONFERENCES

- Bite Me! Food Week
- Concordia Transitions

PROCESSING

FOOD TRANSFORMATION

- Cooking at Concordia
- People's Potato
- Hive Café Solidarity Coop
- Hive Free Lunch
- Reggies Coop
- Season Jars
- Coop les brasseurs illuminés
- Mother Hubbard's Cupboard
- Food Against Fascism
- *Burritoville **

DISTRIBUTION

CAFÉ / RESTO / CAFETERIA

MARKET BASED

- Hive Café Solidarity Coop
- Reggies Coop
- *Café X **
- *G Lounge **
- *Burritoville **

NON-MARKET BASED

- People's Potato
- Hive Free Lunch
- Hive Café (pay it forward)
- Mother Hubbard's Cupboard
- Food Against Fascism

PRODUCE / GROCERY OUTLETS

MARKET BASED

- Greenhouse (Seedling sale)
- City Farm School Market
- Concordia Farmers' Market
- Campus Potager Pop-Up Market
- le Frigo Vert

NON-MARKET BASED

- Greenhouse (seedling donations)
- People's Potato (food bank)
- Mother Hubbard's (vouchers)
- City Farm School (NDG Food Depot)

WASTE MANAGEMENT

INITIATIVES

EDUCATION / COMPOSTING

- Waste Not, Want Not Compost
- City Farm School
- Concordia Greenhouse
- Vermicycle

REUSABLE DISHES

- R4 Dish Project
- People's Potato
- Hive Free Lunch
- Hive Café Solidarity Coop
- Mother Hubbard's Cupboard
- Concordia Greenhouse
- Food Against Fascism

COMPOSTABLE PACKAGING

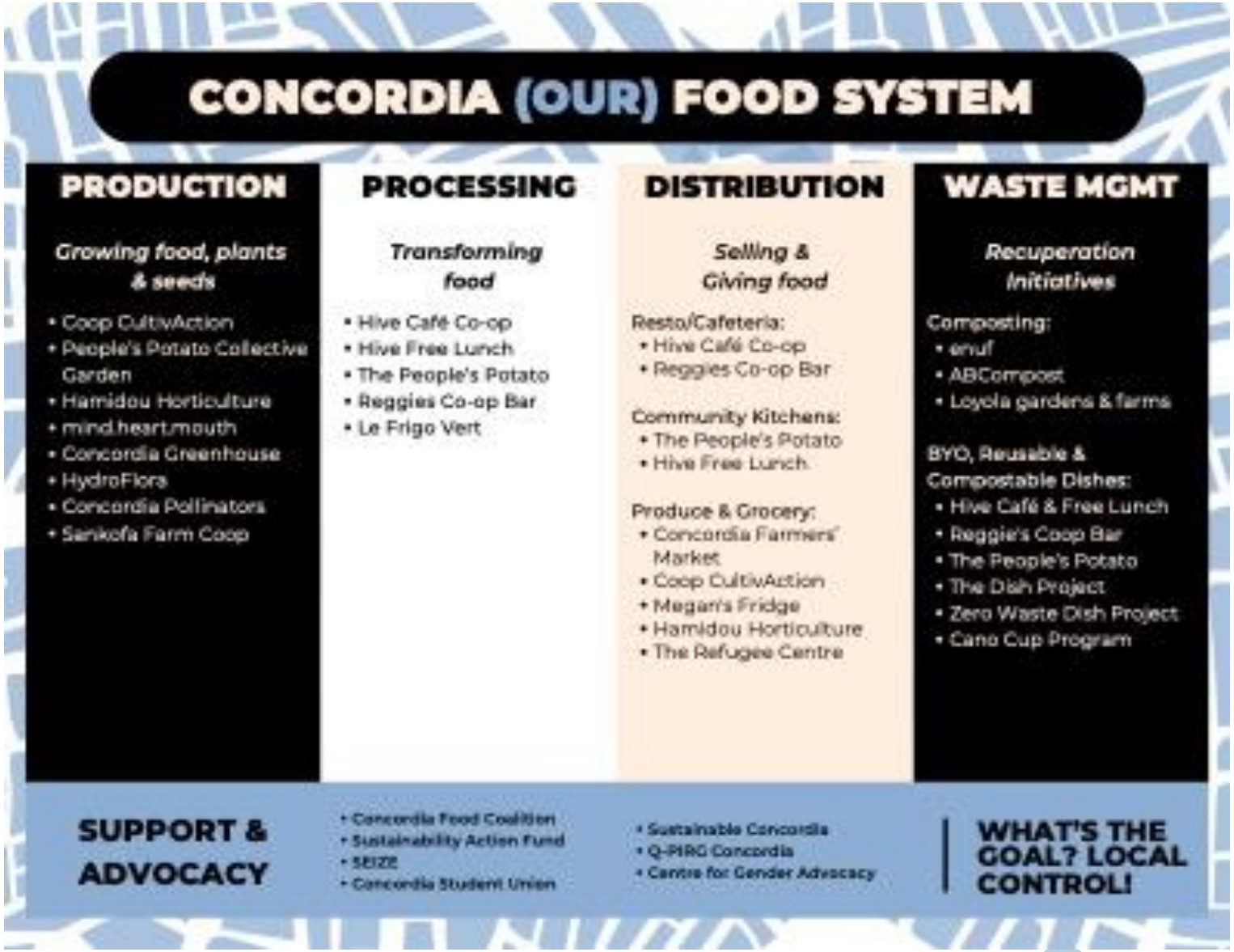
- Hive Café Coop

B.Y.O. DISH INCENTIVES

- People's Potato
- Hive Café Solidarity Coop
- Waste Not, Want Not Compost
- le Frigo Vert
- Food Against Fascism

** No longer in operation*

** * Now independent community project*


CONCORDIA (OUR) FOOD SYSTEM
PRODUCTION
Growing food, plants & seeds
• Coop CultivAction
• People's Potato Collective Garden
• Hamidou Horticulture
• mind.heart.mouth
• Concordia Greenhouse
• HydroFlora
• Concordia Pollinators
• Sankofa Farm Coop
PROCESSING
Transforming food
• Hive Café Co-op
• Hive Free Lunch
• The People's Potato
• Reggies Co-op Bar
• Le Frigo Vert
DISTRIBUTION
Selling & Giving food
Resto/Cafeteria:
• Hive Café Co-op
• Reggies Co-op Bar
Community Kitchens:
• The People's Potato
• Hive Free Lunch
Produce & Grocery:
• Concordia Farmers' Market
• Coop CultivAction
• Megan's Fridge
• Hamidou Horticulture
• The Refugee Centre
WASTE MGMT
Recuperation Initiatives
Composting:
• enuf
• ABCompost
• Loyola gardens & farms
BYO, Reusable & Compostable Dishes:
• Hive Café & Free Lunch
• Reggie's Coop Bar
• The People's Potato
• The Dish Project
• Zero Waste Dish Project
• Cano Cup Program
SUPPORT & ADVOCACY
• Concordia Food Coalition
• Sustainability Action Fund
• SEIZE
• Concordia Student Union
• Sustainable Concordia
• Q-PIRG Concordia
• Centre for Gender Advocacy
WHAT'S THE GOAL? LOCAL CONTROL!

The Communal Lunch Project

- Campus Food Group Events
- DevOur Campus
- National Food Survey
- Mapping George Brown College
- National Food Coalition
- National Campus Mapping Exercise



George Brown College Campus-Community Food Systems Map

Production

FOOD

GROWING FOOD ON CAMPUS
- SNAP Community Garden
- Sustainability Squad (Growing Grounds)
- Second Nature Apiary
- CHCA Café
- Chefs' House Restaurant

PROCURING FOOD ON CAMPUS
- CHCA Café
- Chefs' House Restaurant
- SNAP

PROCURING FOOD OFF CAMPUS
- Communal Lunch Program
- Good Food Market
- CHCA Café
- Chefs' House Restaurant
- Chef on the Run (via ICC)
- Second Nature Apiary
- SNAP
- Organic Campus Project (via ICC)

PRODUCING EQUIPMENT TO GROW FOOD
- CHCA Café
- Chefs' House Restaurant
- Second Nature Apiary

GROWING FOOD OFF CAMPUS
- Enactus

GLEANING
- SNAP Community Garden

KNOWLEDGE

EDUCATIONAL ACTIVITIES
- Communal Lunch Program
- Good Food Market
- CHCA Café
- Chefs' House Restaurant
- Chef on the Run
- Second Nature Apiary
- Sustainability Squad
- SNAP
- SNAP Community Garden
- Organic Campus Project

SOCIAL CAPITAL
- Communal Lunch Program
- Good Food Market
- CHCA Café
- Chefs' House Restaurant
- SNAP
- SNAP Community Garden

Transformation

FOOD TRANSFORMATION
- Communal Lunch Program
- Good Food Market
- CHCA Café
- Chefs' House Restaurant
- Chef on the Run
- Enactus
- Second Nature Apiary
- Sustainability Squad
- SNAP

Distribution

CAFÉ/RESTO/CAFETERIA

MARKET BASED
- CHCA Café
- Chefs' House Restaurant
- Chef on the Run

NON-MARKET BASED
- Communal Lunch Program
- Sustainability Squad

PRODUCE/GROCERY OUTLET

MARKET BASED
- Good Food Market
- Second Nature Apiary

NON-MARKET BASED
- SNAP
- SNAP Community Garden
- Enactus

Waste Management

INITIATIVES

EDUCATION
- Sustainability Squad

REUSABLE DISHES
- Communal Lunch Program
- Good Food Market
- CHCA Café (beginning Fall 2024)
- Second Nature Apiary

COMPOSTABLE PACKAGING
- Communal Lunch Program
- Good Food Market
- CHCA Café
- Second Nature Apiary

RE-PURPOSE FOOD PACKAGING
- Good Food Market
- SNAP

FOOD LOSS/WASTE REDUCTION
- Good Food Market
- SNAP
- CHCA Café
- Chefs' House Restaurant
- Chef on the Run
- Enactus (food waste into new products)
- Second Nature Apiary

SEED SAVING
- Second Nature Apiary

Support & Advocacy

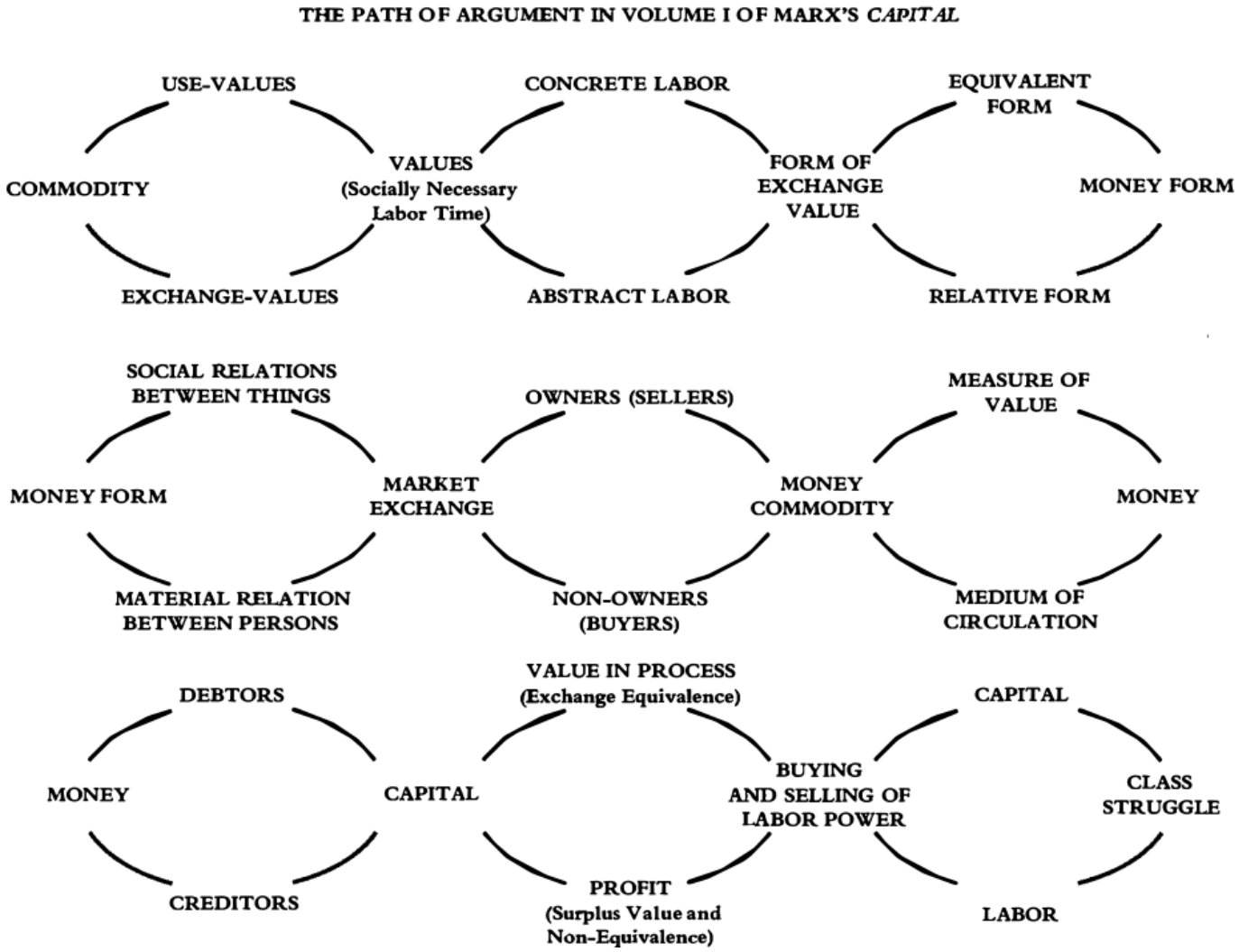
- Good Food Market)
- Enactus
- Sustainability Squad

COMMUNAL LUNCH PROJECT

What is Value?

Marx Dialectic From Capital Volume 1





Marx Dialectic From Capital Volume 1

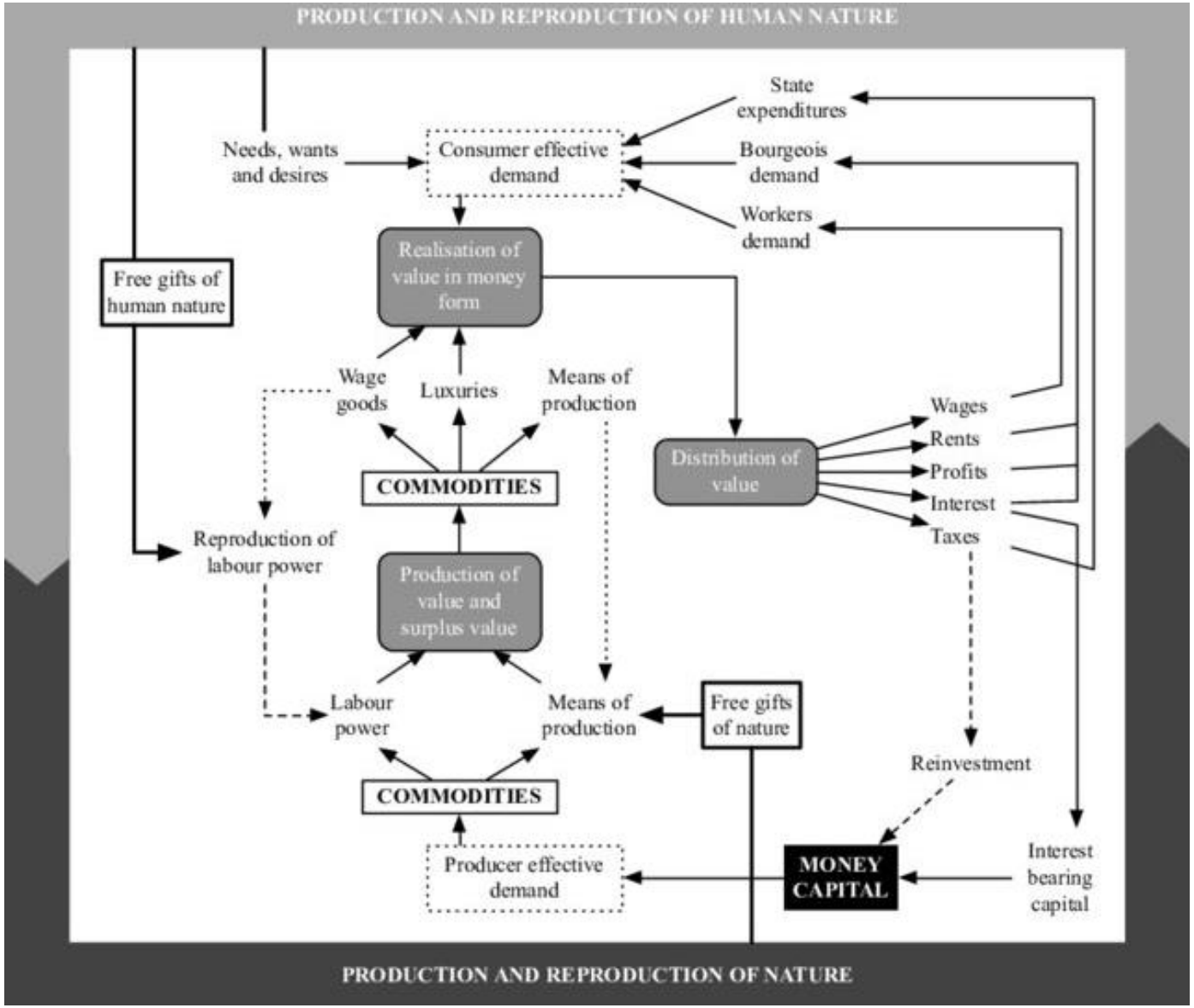
Limitless Accumulation

- C-C
- C-M-C
- M-C-M’
- M(LP-MP-RM)-C-M’
- M-M’

Marx Dialectic From Capital Volume 1



Rammelt, Crelis. (2019). The Spiralling Economy: Connecting Marxian Theory with Ecological Economics. Environmental Values. 29.



Many Types of Value

- Social capital
- Financial capital
- Living capital
- Intellectual capital
- Experiential capital
- Spiritual capital
- Cultural capital

- Roland, E.C., Lanuda, G. (2013) Regenerative Enterprise. Optimizing for Multi-Capital Abundance

You are an urban planner working to create and sustain pockets of urban agriculture. How could a diverse economies framework inform your approach?

How could you help create food commons that prioritize social, living, intellectual, experiential, spiritual, and cultural forms of value?

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Thanks!

Questions, Concerns, Comments?