

OECONOMIA NOVA MAIN WORK v1.0 (EN)

A Transdisciplinary Reinterpretation of Economics

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Foreword

This main work integrates twelve preparatory sub-works (FORSCH-0126 to 0142) into a composed transdisciplinary reinterpretation of economics. It is not a mere assemblage of the sub-works — it is a **synthesis** bringing the *mosaic* of inventory, critical deepenings, and reform architectures into a coherent argument.

The work was developed in the workshop season of May/June 2026 within a **one-person workshop** without institutional affiliation. It follows the Werkstattlinie v2.0 methodology (36 rules across five blocks A–E) and the workshop doctrine §§1–11.

Work thesis in one sentence:

Property, market, money, growth, and anthropocentrism are historically grown institutions, not naturally given. Re-conditioning rather than abolition. Middle position. Voiceless represented. Directed development for all — operationalizable through a reform mosaic of taxes capturing uncreated value (Land Value Tax, progressive inheritance tax, carbon tax with climate dividend, data-surplus tax), asymmetric reform instruments (Universal Basic Income, Universal Basic Services, Care-Income, Sovereign Wealth Funds), and empirically validated alternatives (Mondragón, Norway GPFG, Linux, Allemansrätten, Solawi, cooperatives), channelled through social tipping points and Polanyian double movement.

Not a neutral work. The author's position is transparent: emancipatory, anti-militarist (workshop constitution), pro voiceless representation, methodologically heterodox, without affiliation to classical left-right poles. The arguments are intended to speak for themselves — but their origin is disclosed.

What this work is not: not a textbook of economics, not a political program manifesto, not a technical reform template for a specific state, not ideology critique in the narrow sense. It is a **blueprint attempt** — interwoven with 2024/2025 empirical data, theoretical genealogy, and methodological tools from the workshop tradition.

Part I — Diagnosis

Chapter 1: What this work is for

The macroeconomic situation in 2026 is characterized by four structural tensions:

- **Planetary boundaries:** six of nine planetary boundaries are crossed (Richardson et al. 2023). The climate budget for 1.5 °C is exhausted around 2030 at current emission levels.
- **Social asymmetries:** global wealth concentration at historical levels (top 1% holds approximately 46% of global wealth, Credit Suisse Global Wealth Report 2023); $r > g$ stabilized per Piketty.
- **Monetary and market pathologies:** crypto bubble 2022, surveillance capitalism, supplier concentration in hyperscale-AI on three actors, CBDC introduction in many countries as ambivalent instrument.
- **Geopolitical tipping dynamics:** semiconductor choke points (TSMC, ASML, Nvidia), energy conflicts, climate migration, multipolar world order shifts.

Classical neoclassical economics treats these tensions either as *externalities* (Pigovian tradition) or as *market failures* — both terms miss the essential: many of these pathologies are not *side effects* of the market but *structural consequences* of its constitution.

OECONOMIA NOVA therefore poses the question differently: not *how does one correct the market*, but *what architecture would be required for economic logic to serve the planetary balance, not vice versa*. The answer: not a single reform, but a **mosaic of twelve building blocks** (Chapters 19–27).

Chapter 2: What GDP misses

Gross Domestic Product is the central success metric of modern economics. It measures market value-creation in monetary units. What it does not measure:

- **Material flow:** material consumption in tons per person per year (Schandl/Krausmann school). Global material extraction grew from approximately 27 billion tons in 1970 to approximately 100 billion tons in 2024 (factor 3.7 against population factor 2). Per-capita consumption in the EU is approximately 14 tons per year; sustainable levels would be 6–8 tons (Bringezu et al. 2015).
- **Carbon balance:** cumulative CO₂ emissions in the atmosphere. 422 ppm in 2024 (preindustrial 280). Remaining 1.5-degree budget approximately 250 Gt CO₂.

- **Water footprint:** global per-capita water consumption approximately 1,385 m³/year (Hoekstra/Mekonnen); USA 2,840, DACH 1,500, India 1,090.
- **Energy balance:** EROI of fossil energies declining (conventional oil today 20:1, tar sands 3–5:1); EROI of renewables on an upward trend (wind onshore 20–25:1).
- **Social indicators:** HDI, Gini, life expectancy, education access, social mobility.

A coherent economic analysis requires **four parallel balances** rather than only one (FORSCH-0141): monetary, material flow, carbon-O₂ cycle, social-physical. GDP is one — but not *the* — metric.

Decoupling question: Can GDP growth be *absolutely* decoupled from material flow growth? Empirical situation (Hickel & Kallis 2020 in *New Political Economy*; Parrique et al. 2019 *European Environmental Bureau*):

- **Relative decoupling** (GDP grows faster than material consumption) — *empirically demonstrable*.
- **Absolute decoupling** (GDP grows, material falls) — *not empirically demonstrable for the global economy, regionally only in a few sectors* (UK, some EU states — but partly through offshoring of material intensity).
- **Decoupling at IPCC 1.5°C pace required:** material and energy intensity would have to fall approximately 5–7% per year — historically never achieved.

Methodological point: the “green growth” thesis is *not* empirically refuted, but it is empirically *not demonstrated* at the necessary pace. Degrowth positions (Hickel, Kallis, Jackson) are therefore methodologically serious without being the sole answer.

Chapter 3: Growth as illusion

The neoclassical assumption: economic growth is good and in principle unlimited. Empirically and thermodynamically:

- **Thermodynamically:** every value-creation requires energy and material. On a finite planet, exponential growth cannot be continued arbitrarily (Daly 1977, *Steady-State Economics*; Georgescu-Roegen 1971, *Entropy Law*).
- **Empirically:** no major economy has achieved absolute decoupling at the 1.5-degree pace. The “green growth” thesis remains empirically unproven in the required timeframe.
- **Politically:** growth targets dominate economic policy worldwide. Even climate policy is typically framed as *co-benefit* of growth (“green stimulus”), not as its correction.

OECONOMIA NOVA does not distance itself *fundamentally* from growth — but from **growth as ultimate purpose**. The Doughnut logic (Raworth 2017) is methodologically consistent: the goal is the safe-and-just space *between* the social foundation (all basic needs met) and the planetary ceiling (boundaries not crossed). Growth is means, not end.

Implication: for many industrialized countries (DACH, USA, Australia) this means *contraction* in the material dimension; for many emerging and developing countries it means *directed growth* — no universal “shrinking for all”. Directedness is context-specific.

Chapter 4: Supplier concentration today (crypto, CBDC, AI)

The 2020s have seen three waves that are structurally related:

Crypto 2017–2022: market capitalization peak approximately \$3 trillion in November 2021. Stress test 2022 with Terra/Luna collapse (May 2022, approximately \$60 billion destroyed), Celsius (July 2022), 3AC, Voyager, FTX (November 2022). Empirics show: same structural patterns as historical financial bubbles (Tulip Mania 1637 through Subprime 2008 — Kindleberger phases, Minsky moment, Reinhart-Rogoff phases). Crypto reproduces the pathologies of the classical financial system on a new technological layer without solving them (FORSCH-0133).

CBDC wave 2020–2026+: 94% of central banks worldwide are working on CBDCs (BIS Survey 2024). e-CNY with 260 million wallets, Sand Dollar Bahamas, eNaira Nigeria productive. Digital Euro in preparation phase since November 2023. CBDC is *not* the solution to the monetary system crisis — it is a political instrument whose effect depends on architecture: privacy tiers, holding limits, two-tier model, programmability, constitutional limits (FORSCH-0136).

AI wave 2023–2026+: hyperscaler capex 2024 approximately \$200 billion, 2025 approximately \$330 billion, cumulative 2023–2026 approximately \$1 trillion. Semiconductor concentration: Nvidia 80–95% AI-GPU market, TSMC 90% cutting-edge fabrication, ASML 100% EUV lithography (monopoly). Goldman/Sequoia “\$600 billion revenue gap” hints at bubble risk. Methodologically similar to crypto, but with real product revenues (FORSCH-0138).

Common pattern: three suppliers per value chain stage, sometimes monopoly. Capex front-loading, data accumulation, energy externalities, regulatory lag. The question *who creates value, who carries externalities, who collects rent* arises identically in each case.

Chapter 5: Anthropocentrism and animal industry

One of the oldest and least thematized asymmetries in economics: the status of non-human animals as property objects. Empirics 2024:

- Approximately 75 billion chickens slaughtered worldwide per year (factor 9 over the human population). Over 95% in industrial mass husbandry (USDA data).
- Approximately 1.5 billion pigs, 330 million cattle, 660 million sheep/goats per year.
- Aquaculture: approximately 125 million tons annually (FAO 2024).

Painful breeding is a breeding goal, not abuse: broiler chickens at slaughter day (35 days) show 27.6% lameness (Knowles et al. 2008, *PLOS One*). Belgian Blue cattle have 95% Caesarian rate (Hanset & Michaux 1985 and replications). Animals are not viable without human intervention (antibiotics, Caesarian, artificial insemination).

Antibiotic resistance: approximately 70% of global antibiotic consumption goes into livestock. AMR causes approximately 1.27 million deaths per year (Murray et al. 2022, *The Lancet*). WHO classifies AMR among the top ten global health threats.

Climate and material flow balance: animal industry is responsible for 14.5–16.5% of global greenhouse gases. 77% of agricultural land is used for livestock — but delivers only 18% of calories and 37% of proteins (Poore & Nemecek 2018, *Science*).

B12 industrial-sterility argument: industrial sterility in animal husbandry disrupts the microbiome — animals no longer produce enough B12 themselves, must be supplemented. Vegans supplement B12 likewise. Both pipelines fall back on industrially produced cobalamin (BASF, Sanofi). Methodological lesson: the “natural vs artificial” dichotomy is untenable; the relevant question is the efficiency of the microbiome pipeline (FORSCH-0137).

Theoretical animal ethics: Singer (speciesism, 1975), Regan (animal rights deontological, 1983), Plumwood (anti-dualism, 1993), Haraway (Companion Species, 2008), Donaldson/Kymlicka (Zoopolis, 2011), Nussbaum (Capabilities, 2006/2022), Adams (Sexual Politics of Meat, 1990). The strands converge: animal exploitation is not “a marginal topic”, but operationalizes the same commodification logic that also affects female reproduction (Federici), land (Polanyi), and atmosphere (carbon markets).

Chapter 6: Information war and AI infrastructure

Another axis of diagnosis: the transformation of information into an economic main resource — what Zuboff (2019) calls Surveillance Capitalism, and what intensifies with AI 2023+.

AI infrastructure as economic cross-sectional axis: - Energy: 50 TWh/year 2024 — projected 300 TWh/year 2030 (IEA Energy and AI Report). Overtakes Bitcoin Proof-of-Work around 2027. - Water: GPT-3 training approximately 700,000 liters of fresh water; approximately 500 ml per 10–50 queries. - Semiconductor concentration: Nvidia 80–95% AI-GPU, TSMC 90% cutting-edge fabrication, ASML 100% EUV — three suppliers dominate at every stage. - Data as input: lawsuit wave 2023+ (NYT vs OpenAI/Microsoft, Universal Music vs Anthropic, Getty Images vs Stability AI, Authors Guild vs OpenAI). Lanier 2013: unpaid data suppliers as systematic value transfer.

Mazzucato lens: practically all AI building blocks emerge from public research — ARPANET, GPS, Transformer (Google research grown in academic context), CUDA + GPU Computing, AlexNet 2012 (Hinton group Toronto), ImageNet 2009 (Stanford), Common Crawl (non-profit foundation). The commercial AI firms harvest — but the seed was public. Claw-back clauses (royalties, public equity, sovereign-wealth shares) would be methodologically consistent.

Methodological bridge to Marx: AI accumulation is a new mode of “primitive accumulation” (Marx 1867) — data as unpaid surplus value. Harvey 2003 (accumulation by dispossession) is the direct theoretical line.

Information war: AI intensifies old pathologies (filter bubbles à la Pariser 2011, deepfakes, synthetic content). By 2026 possibly 30–50% of public web text AI-generated (Stanford estimate 2024). Norm crises emerge where truth consensus erodes.

Chapter 7: Atmospheric enclosure as endpoint

Polanyi (1944) named the original commodification logic: land, labor, money are made into *fictitious commodities* — they are not produced, but are treated market-form. The second generation of fictitious commodities emerges from today's diagnosis:

- **Atmosphere** as CO₂ sink (carbon markets, EU-ETS since 2005, voluntary carbon markets approximately \$2 billion 2024).
- **Information** and **data** (surveillance capitalism, AI training data).
- **Reproductive tissues** (egg trade, surrogacy).
- **Life cycle phases** (commodified birth, commodified dying).
- **Attention** as marketing resource.

Tom's point (FORSCH-0134): "*Where does it end? — coming into the world and then having to pay for one's own air to breathe?*" — the question is not polemical, but marks the **logical endpoint** of commodification logic. If the system continues as 2020–2026, the next step is foreseeable.

The methodological answer is *not* "de-commodify everything" (utopian). It is: keep certain spheres explicitly *commons*-capable, conditionally commodify others with redistribution (carbon tax with climate dividend, B3 path per Barnes Sky Trust). The architectural choice is political.

Chapter 8: What the diagnosis collectively shows

Across the seven diagnosis chapters runs a pattern: **structural asymmetry between disposing and affected parties (ρ/δ asymmetry)**.

- Disposing over hyperscale AI: three hyperscalers. Affected: 8 billion people.
- Disposing over mass animal husbandry: approximately 4 million large holders worldwide. Affected: 75 billion animals per year.
- Disposing over carbon emission rights: approximately 10,000 industrial facilities in EU-ETS. Affected: climate and all living beings.
- Disposing over wealth: top 1%. Affected: rest.
- Disposing over advertising attention: global advertising industry approximately \$1.1 trillion. Affected: 8 billion consumers.

The ρ/δ asymmetry is not *one* pathology among many — it is the **structural ground form** of the work's critique. Re-conditioning means: not abolishing this asymmetry (impossible), but *re-arranging* it via voiceless representation (Ch. 19), democratic limits (Ch. 27), and asymmetric reform instruments (Ch. 33).

Part II — Critique

Chapter 9: Monetary system (banking, CBDC, fractional vs. full money)

The money question is the core question of economics — and it is methodologically underdetermined.

What money empirically is (Postkeynesian, FORSCH-0136 §4.1): money arises in the credit act of commercial banks. The central bank does *not* control the money supply, but reacts to money demand. Bank of England (2014, McLeay/Radia/Thomas) has officially confirmed this: the “textbook model” of money creation via multiplier is factually wrong.

Full money tradition (Fisher 1936, Huber 2017, Swiss Vollgeld Initiative 2018): only the central bank creates money. Commercial banks become pure credit intermediaries. Methodologically clean, politically never implemented.

Workshop precursor on fractional banking (May 2026): Wörgl 1932 (shrinking money per Gesell), US Greenback 1862-79, Swiss Full Money 2018 — three historical case studies show that alternative monetary architectures have empirically existed (cf. FORSCH-Fraktional-Banking work).

CBDC as current political operationalization field: correctly architected (privacy tiers, holding limits, two-tier, offline capability, constitutional limits), CBDC can be emancipatory — as a Full Money connector, as programmable Pigovian subsidy platform, as helicopter money instrument. Falsely architected, it reproduces Surveillance Capitalism on the state layer (e-CNY model with “controllable anonymity”).

Methodological point: the monetary system is not “naturally given”. It is a political architecture that has been historically shaped differently — and remains shapeable. OECONOMIA NOVA argues not for *one* solution, but for *conscious architectural choice* with democratic constraints (FORSCH-0136 B1–B10).

Chapter 10: Marx and accumulation mechanics

Marx (1867, *Capital* Vol. I, Part VII) shows: capital accumulation does not emerge through “industry and thrift” (Adam Smith narrative), but through *primitive accumulation* — violence, enclosure, slave trade, public debts, mercantilism. This is not a one-time historical act, but a recurring structure.

Updates: - David Harvey (2003), *The New Imperialism: Accumulation by Dispossession*. Today: privatization of public goods, bio-patents, post-2008 land grabs, debt crises as privatization leverage, asset inflation as redistribution mechanism, data surplus as AI training basis. - Piketty (2014, 2020): $r > g$ as historical pattern. When capital returns are long-term $>$ growth rate — wealth concentration. Empirically substantiated with WID.world data 1700–today. - Federici (2004), *Caliban and the Witch*: primitive accumulation has *always also* a gender dimension. Witch hunts 16th/17th century as accompanying phenomenon — female bodies dispossessed, reproductive labor de-honored, healing knowledge delegitimized.

Consequence: “primitive accumulation” is current politics. The current accumulation waves (crypto, AI, CBDC) follow the same pattern.

Chapter 11: Free trade as the shell game

Free trade doctrine (Ricardo 1817, GATT 1947, WTO 1995): comparative advantages, welfare increase through international division of labor. Empirically and methodologically complex.

Tom’s image (Skeleton Module III.3): “*shell game*” — the small ball is hidden under one of three shells, the magician moves the shells quickly enough that the spectator loses track. Free trade appears to the consumer like free choice, but structurally the asymmetry between industrialized countries (patent, standard, capital power) and developing countries (raw materials, labor, debt position) is so great that “free exchange” becomes an *upward redistribution machine*.

MAUTFORM cluster anchor (chat cfa046d0, parallel May/June 2026): toll station, trade agreement, desire as cover, exclusion/SEP, tax — a sequence of sub-works from parallel workshop session (FORSCH-0127 to 0131) analyzes the mechanisms of free trade asymmetry on a different level than OECONOMIA NOVA. Connection: Module III.3 of this main work is methodologically complementary to MAUTFORM, not redundant.

Methodological lesson: free trade is not *fundamentally* to be rejected. But free trade *without* simultaneous strengthening of asymmetry-correcting instruments (minimum standards for labor/environment/social, CBAM EU climate tariff, BEPS tax harmonization, reparation mechanisms) is a variant of accumulation by dispossession. The question is not *protectionism vs free trade*, but *which constraints guarantee symmetric conditions*.

Chapter 12: Marketing asymmetry

Galbraith (1958), *The Affluent Society*: in affluent societies, neoclassical assumptions about consumer sovereignty lose their validity. Firms create the demand they satisfy — the *Dependence Effect*.

Empirics 2024: approximately \$1.1 trillion global advertising per year. Over 75% digital (Google, Meta, Amazon, ByteDance — together over 60% of digital ad market). Per capita in industrialized countries approximately \$800–1,200 per person per year for advertising *against* them.

Cialdini (1984/2021): six (now seven) mechanisms of manipulation — reciprocity, commitment, social proof, authority, liking, scarcity, unity. Methodologically *empirically robust* — they actually work.

Tom’s thesis: “*Marketing as legitimation for non-ability*.” Empirically tested (FORSCH-0139 \$2.4): marketing share of price correlates with shorter lifespan. Slow-made products (Goodyear-weltd shoes, Patagonia, Direct-to-Consumer repair-focused brands) have approximately 10% marketing share and 10–20+ years lifespan. Fast Fashion and mass-produced electronics have 25–40% marketing share and 2–4 years lifespan.

Dark Patterns (Brignull 2010): UX design tricks for manipulation. EU Digital Services Act Art. 25 (since February 2024) prohibits Dark Patterns on online platforms. EU Digital Markets Act (since May 2023). EU Green Claims Directive 2024 regulates greenwashing.

Pigovian advertising tax: methodologically consistent. Advertising creates externalities (demand construction, attention pollution, manipulation). A progressive advertising tax above a threshold per company would be regulatorily treatable. France has a limited advertising tax (TASCom).

Chapter 13: Property, enclosure, gleaning — the core

Property is the architectural question of economics. OECONOMIA NOVA argues: **property is historically grown, not naturally given — and it is re-conditionable without stepping on anyone's toes.**

Locke (1689), Two Treatises Bk. II Ch. V: property arises through “mixing with labor” (§27). But Locke himself imposed three limits: - **§27 “as much as he can use”** — property only of what one can actually use. - **§31 “enough and as good left in common”** — others must find enough of equal quality. - **§33 “Nothing was made by God for Man to spoil or destroy”** — prohibition on waste.

This **Locke Proviso** was abandoned in the later liberal tradition. Nozick (1974) weakened it to a pure non-worsening clause. Empirically: top-1% wealth is incompatible with the strict Proviso.

Tom's point (FORSCH-0134 §2.3): “*Gleaning from rotting fruit — why may he not take it?*” The question is Locke-conformant: rotting fruit on un-fenced land is no longer property in the Lockean sense (§§27, 33 violated). Historical operationalizations: - **Leviticus 19:9-10: Right to Glean** / gleaning right. - **§ 370 StGB (German Empire/BRD 1871–1975):** Mundraub as privileged theft. Abolished 1975. - **Allemansrätten (Sweden, Norway, Finland):** Constitutional everyman's right. Gathering, camping, overnight stays on non-cultivated land permitted — including on private land.

Marx supplement (Ch. 10): primitive accumulation as enclosure history. Today: digital, biological, atmospheric.

Polanyi supplement (1944): land, labor, money as fictitious commodities. Double movement as historical response.

George (1879), Progress and Poverty: land value is socially produced, not by the owner. **Land Value Tax** on uncreated value is methodologically the cleanest redistribution lever — no one is stepped on, because what is captured did not arise from property labor. Empirical applications: Estonia (since 2000), Pittsburgh (1913–2001), Singapore, Hong Kong, Denmark, German property tax reform 2025.

Ostrom (1990), Governing the Commons: refutes Hardin's “Tragedy of the Commons” thesis (1968). Commons function — when 8 design principles are met. Empirical evidence: Swiss Alp Törbel since 1224, Spanish Huerta since approximately 1000, Maine lobster fishery, Linux/Wikipedia/FOSS, Allemansrätten. Nobel Prize 2009.

Federici (2004), *Caliban and the Witch*: patriarchy as accumulation operationalization. Female bodies dispossessed, reproductive labor de-honored. Consequence: reform instruments must work gender-specifically (Care-Income, inheritance reform, Universal Basic Services).

Piketty (2014, 2020): $r > g$. Property is *always already* political — no question *whether*, but *how*. Proposals: global progressive wealth tax, *Participation Sociale* (universal inheritance for 25-year-olds).

Decolonial lens (Sahlins, Scott, Kimmerer, Quijano, Acosta, Shiva): the Locke tradition is *one* property theory, not *the*. Pluriverse rather than universalism. Pachamama constitutional right in Ecuador (2008), Bolivia (2010), New Zealand (Whanganui River 2017) operationalize nature as legal subject.

Four instruments for capturing uncreated value: | Instrument | What is captured | Anchor
| —|—|—| | **Land Value Tax** | land rent (socially produced) | George 1879 | | **Inheritance tax**
| dead wealth | Piketty 2020 | | **Carbon tax with redistribution** | atmospheric rent | Barnes
Sky Trust | | **Data surplus tax** | attention rent | Lanier 2013 |

Methodological point: all four capture values that did *not* arise from individual property labor. No one is dispossessed — what is captured was never individual merit. Tom's brainstorm principle "*step on no one's toes*" is methodologically operationalized.

Chapter 14: Knowledge exploitation

From Inventory \$3.6 (decolonial) and \$3.18 (Mazzucato) plus FORSCH-0138 (AI infrastructure):

Three exploitation lines: - **Bio-piracy:** patenting of indigenous knowledge. Shiva (2005, *Earth Democracy*) documents systematically. Neem patent, basmati patent, Hoodia patent as cases. - **Academic knowledge accumulation:** research mostly publicly funded (Mazzucato), exploitation mostly private (patent, license, exclusive spinoff). - **AI training data:** lawsuit wave 2023+ (FORSCH-0138 \$2.5). Knowledge is extracted as training material without compensation.

Reform instruments: - Strengthening of the Public Domain (shorter patents, more CC-BY default). - Farmers' privilege, plant variety protection reform (Shiva connection). - Data surplus tax for AI training (cf. Ch. 13). - Open Access as default for publicly funded research.

Chapter 15: Death as commodity, designer babies

From FORSCH-0139 Module III.8: the reproductive sphere and dying are the last commodified spheres — the Polanyi endpoint (Ch. 7).

Commodification of reproduction: - Egg trade approximately \$5,000–50,000 USD per donation in the US. - Surrogacy approximately \$30,000–150,000 USD in the US. Tourism to India (until 2018), Ukraine, Georgia. - Pre-implantation diagnostics (PID) — in DE only allowed with severe genetic risks (PräimpG 2011). - CRISPR embryo editing: He Jiankui 2018 (China) — first designer babies, sentenced to 3 years in prison in China. UNESCO moratorium proposal not globally achieved. - Polygenic Embryo Screening (PES) — selecting embryos by polygenic risk scores (IQ, height, disease risks). Practically unregulated. Providers like Heliospect Genomics, Orchid Health.

Commodification of dying: - US funeral market approximately \$25 billion. SCI dominates. - USA: approximately 75% of hospices for-profit. Patient selection toward “more lucrative” diagnoses. - Organ trade: legally prohibited (Istanbul Declaration 2008), black market approximately \$1–2 billion annually. - Medically assisted dying (MAID): Switzerland, NL, BE, LUX, Canada, Spain, NZ — complex ethical tension between dignity in dying and economic pressure. Canada MAID statistics 2023: approximately 13,000 persons per year, UN report 2023 warns of poverty-driven dying.

Sandel (2007), *The Case Against Perfection*: the problem with designer babies is not “bad parents”, but a *Hyperagency hubris* — the hope of being able to control everything. Loss of acceptance for *the given*.

Reform architecture: Embryonic Protection Act (DE since 1990), Oviedo Convention (Council of Europe 1997), Hospice and Palliative Act (DE 2015), Istanbul Declaration. But CRISPR moratorium not globally achieved; PES largely unregulated; MAID architecture context-specific.

Chapter 16: War, military, defense industry

The workshop constitution (Tom’s workshop tradition) categorically prohibits military cooperation. OECONOMIA NOVA adopts this position methodologically.

Empirics 2024: global military expenditure approximately \$2.4 trillion (SIPRI). Defense industry as accumulation strand is methodologically a *specific form* of Polanyian commodification — means of violence become commodity.

Methodological position: no detailed treatment of defense economics in this main work. But: the re-conditioning logic is applicable. Blueprint for defense conversion (industrial repurposing for civilian uses) is methodologically consistent with FORSCH-0135 transformation (Centola threshold, Otto tipping element 5 norm shift).

Chapter 17: Patriarchy, inheritance, nobility, and people

From Federici (Ch. 13) plus Piketty’s *Capital and Ideology* (2020):

Patriarchal accumulation: inheritance practices (primogeniture, patrilinearity) are the legal form of patriarchal wealth concentration. Historically structuring in almost all societies. Today partially mitigated (equal inheritance rights for siblings in DACH), partially still effective (pension gap women, care gap, glass ceiling).

Nobility and people: historical class structures are formally abolished in modern societies, but structurally partially reproduced. Wealth class studies (Bourdieu tradition) show: habitus, educational advantage, network capital are transgenerationally stable.

Reform instruments: - **Progressive inheritance tax** (Piketty 2020): finances Participation Sociale. - **Care-Income** (Federici 2020): honor unpaid reproductive labor. - **Universal Basic Services:** de-commodify education/health/housing.

Chapter 18: What the critique collectively shows

Across Chapters 9–17 emerges:

- **Property, market, money, growth, anthropocentrism, marketing, death-as-commodity, patriarchy** are all *historically grown*. None is *naturally given*.
- They are all *re-conditionable* — through political architectural choice, constitutional limits, taxes, prohibitions, regulation, norm shift.
- The re-conditioning can occur *without dispossession brutality* when uncreated value is captured (Ch. 13 §11).
- It does not happen *automatically* — it requires political actors, tipping thresholds, double movement reactions (Polanyi).

The critique does not serve condemnation — it serves **diagnostic clarity** as a precondition for **directed transformation**.

Part III — Normative Anchors

Chapter 19: Voiceless explicit

OECONOMIA NOVA makes a democratic-theoretical extension explicit that is usually concealed in classical economics: **voiceless representation as structural necessity**.

Seven actor groups with voice asymmetry:

Actor	Voice status	Representation
Citizens with voting rights	direct	Elections
Children	non-voting	Parents/schools (limited)
Future generations	non-existent	Trustee structures (Sovereign Wealth, constitutional anchors)
Migrants without passport	limited voting	Solidarity structures
Non-human animals	non-voting	Animal protection law, Zoopolis model
Ecosystems	non-voting	Constitutional law (Pachamama tradition)
Marginalized (homeless etc.)	limited voting	Citizens' assemblies

Methodological point: the “development process for all” must structurally include the voiceless. This is not an extension of the existing democratic system, but its *structural necessity* — otherwise the process would be only of those who happen to be enfranchised.

Empirical operationalization attempts: - Sovereign Wealth Fund Norway (trustee for future generations). - Pachamama constitution Ecuador 2008, Bolivia 2010, Whanganui River NZ 2017.

- Animal welfare as state objective: DE Art. 20a Basic Law, AT Art. 11(1)Z8 B-VG, CH Federal Constitution Art. 80. - Animal Welfare (Sentience) Act UK 2022 with Sentience Committee. - Citizens' Assemblies: Irish Citizens Assembly since 2016, French Convention Citoyenne pour le Climat 2019/2020, German Citizens' Councils 2021+.

Chapter 20: Social without national

OECONOMIA NOVA distances itself from two poles often considered the only alternatives in today's debate:

- **Methodological nationalism:** social policy only within the nation-state. Implicit in most welfare state models.
- **International liberalism:** complete market freedom without national constraints. Implicit in WTO doctrine.

Middle position: social protection structures yes, but *not* tied to citizenship; open mobility yes, but *not* without global minimum standards.

Empirical operationalization anchors: - EU Social Pillar (2017): EU-wide minimum standards. - ILO Core Labour Standards (1998): global labor minimum standards. - UN Convention on the Rights of the Child (1989): universal children's rights. - Global tax reform (OECD BEPS, Pillar 2 with 15% minimum tax since 2024): first global fiscal architecture.

Methodological point: "Social without National" is an *architectural choice*, not a sympathy declaration. It operationalizes the Polanyian double movement principle at the global level.

Chapter 21: Honesty as foundational value

Tom's brainstorm point (Skeleton Module IV.3): "*Honesty has been lost.*" Methodologically reformulated:

- **Truth fidelity in science:** replication crisis, p-hacking, pharma research distortions, third-party funding bias. Reform levers: pre-registration, open data, open access.
- **Truth fidelity in politics:** greenwashing (EU Green Claims Directive 2024), fake news, AI deepfakes. Reform levers: whistleblower protection, independent fact checks, AI audit obligation.
- **Truth fidelity in the market:** advertising manipulation, dark patterns, consumer deception. Reform levers: EU DSA Art. 25, advertising tax, anti-greenwashing.

Methodological consequence: Honesty is not a moral phrase — it is an *infrastructural precondition* of directed transformation. Without truth-consensus capacity, an economy cannot coordinate.

Discourse ethics anchor (FORSCH-0066 parallel work): symmetric vulnerability as re-foundation. Honesty as communicative practice is the operational form of symmetric recognition.

Chapter 22: Middle position

A central methodological choice: OECONOMIA NOVA argues *between* the classical larger poles:

Pole	Position	Methodological weakness
Libertarian anarchism	Change through individual consumer decision, market voting	Cannot capture climate externalities; atmosphere not individually defensible
Authoritarian state	Change through state directive, central planning	Erodes without participation legitimacy; Gilets Jaunes pattern

Middle position operationalizable (FORSCH-0135 §6.2): five mechanisms: 1. Targeted activation of social tipping elements (Otto 2020). 2. Reaching Centola 25% threshold. 3. Channelling Polanyian double movement (anti-fascist, socio-ecological). 4. Ostrom commons governance at multiple levels. 5. Asymmetric reform instead of symmetric revolution.

Methodological anchor: neither bottom-up nor top-down. Directed development process for all.

Chapter 23: Conditional operator (B-form)

A continuous method of the work: **conditional inferences (B-form)** instead of unconditional recommendations.

Example: instead of “A carbon tax is the solution” – “*WHEN carbon externalities are to be internalized, AND when socially regressive effects are compensated through climate dividend redistribution, THEN a carbon tax is methodologically consistent.*”

What the B-form accomplishes: - Makes assumptions explicit (no hidden normative reservation). - Allows contradiction (one can deny the condition without rejecting the entire work). - Permits gradual application (some conditions met, others not). - Protects against moral escalation (no “you must”).

ETHOSLAB workshop method (FORSCH-Methods-Toolkit May 2026, DOI 10.5281/zenodo.20519431): conditional statements are operationalized in B1–B10 tableaux. In the OECONOMIA NOVA bundle, approximately 95 ETHOSLAB inferences appear across the 12 sub-works.

Part IV — Regulatory Instruments

Chapter 24: Pigovian taxes as regulation

Classical instrument of welfare economics (Pigou 1920): taxes equal to external costs internalize externalities. Methodologically clean, politically often difficult.

Application areas: - **Carbon tax:** Switzerland since 2008 with climate dividend, EU-ETS since 2005, CBAM border adjustment since 2026. Empirically effective. - **Advertising tax:** France TASCom, discussion in several EU states. - **Animal product tax:** Denmark plans climate tax on beef from 2030 (€96 per ton CO₂ equivalent), first country worldwide. Augsburg study 2020

calculates true prices with factor ~ 4 for beef. - **AI compute tax**: proposal — progressive tax on training compute above 10^{25} FLOPs (EU AI Act threshold for GPAI). - **Sugar tax**: UK since 2018, Mexico, several further countries. - **Plastic tax**: EU Plastic Levy since 2021.

Methodological tension: Pigovian taxes can be socially regressive. Solution: **redistribution** as climate dividend model (Switzerland since 2008 functioning) or as Sovereign Wealth Fund for future generations.

Chapter 25: Capturing uncreated value

The methodologically most important instrument cluster (FORSCH-0134 §11):

Four instruments that directly dispossess no one because they capture uncreated value:

Instrument	What is captured	Methodological anchor
Land Value Tax	land rent (socially produced)	Henry George 1879
Progressive inheritance tax	dead wealth (not earned by living labor)	Piketty 2020
Carbon tax with climate dividend	atmospheric rent	Barnes Sky Trust 2001
Data surplus tax	attention/knowledge rent	Lanier 2013

Plus complementarily: - **Sovereign Wealth Fund** (Norway model): resource rent as common wealth, not private consumption wealth. - **Global tax architecture** (OECD BEPS Pillar 2): 15% minimum tax for corporations since 2024.

What is not dispossessed: owner-occupied home (up to threshold), tools of one's own trade, personal property, savings under threshold, family heirlooms under threshold.

Methodological limit: What *arose through one's own labor* and is *held for one's own use* remains untouched. What is *uncreated rent value* or *dead accumulation* is redistributed.

Chapter 26: Prohibitions and penalties

Pigovian taxes capture *externalities*. But some practices should *not occur* — they are not “externally expensive”, but *structurally inadmissible*. Examples:

- Cage husbandry prohibition (EU End the Cage Age 2027 discussion).
- CRISPR embryo editing (prohibition in DE via ESchG, global moratorium proposal UNESCO).
- Dark Patterns on online platforms (EU DSA Art. 25 since 2024).
- Greenwashing (EU Green Claims Directive 2024).
- Routine antibiotics in livestock (EU Reg. 2019/6 since 2022).
- Slavery, child labor, human trafficking (universal taboos).

Methodological lesson: not everything is priceable. Some asymmetries are so structural that only prohibitions can lift them.

Chapter 27: Democratic constitutional limits

So that reform instruments do not become authoritarian instruments (cf. CBDC risk Ch. 9), they need **constitutional limits**:

- **Privacy guarantees** (CBDC, AI surveillance).
- **Holding limits** (CBDC, inheritance, wealth).
- **Two-tier models** (CBDC with commercial bank distribution).
- **Programmability limits** (CBDC opt-in only, no expiration dates).
- **Animal dignity protection** in constitutions (CH, DE, AT, EU).
- **Pachamama rights** (Ecuador 2008, Bolivia 2010, NZ 2017).
- **Whistleblower protection** (EU Whistleblower Directive 2019).
- **AI audit obligation** (EU AI Act 2024, fully effective 2027).
- **Carbon sink trust** (Norway model, Piketty Participation Sociale).

Methodological point: Constitutional limits are the *operational form* of voiceless representation. They bind the disposing power to the non-disposing.

Chapter 28: Global architecture

National reform is limited — global pathologies (climate, tax avoidance, AI concentration, antibiotic resistance) need global architecture:

- **Climate:** Paris Agreement 2015, EU CBAM 2026, Climate Club proposal.
- **Tax:** OECD BEPS Pillar 2 (15% minimum tax), Global Asset Register (Piketty proposal).
- **AI:** EU AI Act 2024, Council of Europe AI Convention 2024, G7 Hiroshima AI Process 2023.
- **Antibiotics:** WHO AMR Action Plan 2015, EU Reg. 2019/6.
- **Crypto:** MiCA EU 2023, FATF Travel Rule.
- **World trade:** WTO with ILO standards, ESG integration.

Methodological lesson: no global government — but global **standard architecture** with national enforcement. Brussels Effect (EU standards shape global ones) becomes strategic leverage resource.

Part V — Alternatives

Chapter 29: Heterodox synthesis — what already exists

Inventory (FORSCH-0126) has surveyed 19 theoretical schools with approximately 85 key works:

#	School	Core work	Contribution
1	Doughnut	Raworth 2017	safe and just space

#	School	Core work	Contribution
	Economics		
2	Degrowth	Hickel, Kallis, Latouche	absolute growth limit
3	Steady State	Daly 1977	physical growth limit
4	Property theory	Locke, Marx, George, Ostrom, Federici, Piketty	property as historically grown
5	Planetary Boundaries	Steffen 2015, Richardson 2023	6 of 9 crossed
6	Anthropocentrism critique	Singer, Regan, Plumwood, Haraway	animal ethics
7	Capability Approach	Sen, Nussbaum	beyond GDP evaluation
8	Decolonial Economics	Quijano, Acosta, Shiva, Kimmerer	Pluriverse
9	Monetary system critique	Postkeynesian, MMT, Vollgeld, Werner	endogenous money creation
10	Digital critique	Zuboff, Lanier, Pariser, Harari	Surveillance Capitalism
11	Anarchism / Kropotkin	Mutual Aid 1902	cooperation as evolution
12	Feminist Economics	Waring, Federici, Folbre	care economy
13	Buddhist Economics	Schumacher 1973	sufficiency
14	Islamic Finance	Riba prohibition, Maqasid al-Shariah	real economy binding
15	African Economics	Ubuntu, Sankara	solidarity
16	Complexity Economics	Arthur, Beinhocker, Farmer	path dependence, ABM
17	Behavioral Economics	Kahneman, Thaler	limited rationality
18	Postkeynesianism	Lavoie, Godley	endogenous money
19	Wellbeing Economics	Stiglitz-Sen-Fitoussi 2009, OECD, GNH Bhutan	welfare indicators beyond GDP
(+)	Mazzucato	The Entrepreneurial State 2013	public innovation pre-work
(+)	Cradle-to-Cradle	McDonough/ Braungart 2002	material cycle closure

Methodological point: the “alternative” to classical economics does *not* exist as a single work — it exists as distributed mosaic in 19 schools. OECONOMIA NOVA condenses the mosaic into an integrated architecture without establishing any of the schools as solely valid.

Chapter 30: Ostrom commons governance

From Ch. 13 + FORSCH-0134 §6: Elinor Ostrom’s key work *Governing the Commons* (1990) empirically refutes Hardin’s pessimism. The **8 design principles**:

1. Clearly defined boundaries
2. Adaptation to local conditions
3. Collective choice arrangements
4. Monitoring
5. Graduated sanctions
6. Conflict resolution mechanisms
7. Recognized right to self-organize
8. Nested enterprises

Application examples today: - Swiss Alp Töbel since 1224 (more than 800 years) - Spanish Huerta Valencia since approximately 1000 - Maine lobster fishery - Linux, Wikipedia, FOSS (Digital Commons) - Mietshäuser-Syndikat (Germany) - Community Land Trusts (USA, UK) - Allemansrätten (Scandinavia)

Application to AI infrastructure (FORSCH-0138): Common-Compute structures — CERN model, EuroHPC, Hugging Face, Mistral, BigScience BLOOM, AI Alliance, EleutherAI. Methodologically, democratically accessible AI is under construction, not utopia.

Application to atmosphere: Sky Trust (Barnes 2001) operationalizes atmosphere as commons with per-capita carbon share and redistribution.

Chapter 31: Solidarity / common good

Common Good Economy (Felber 2010+): common good balance as alternative to profit balance. Approximately 3,000 companies worldwide have audited themselves. EU Economic and Social Committee opinion 2015.

Mondragón Cooperative Corporation: approximately 70,000 employees, approximately 95 cooperatives, approximately €12.5 billion turnover. Salary spread approximately 1:9 (vs approximately 1:300 in comparable listed corporations). Cooperative is corporate-capable (Whyte & Whyte 1991).

Norwegian Sovereign Wealth Fund GPF: approximately \$1.7 trillion managed (approximately \$300,000 per inhabitant). Invests in approximately 9,000 companies, approximately 70 countries. Ethics Committee excludes approximately 200 companies. Operationalizes George land rent globally.

Energy cooperatives DACH: approximately 900 in Germany, approximately €3 billion invested cumulatively. Citizen solar, citizen wind parks. Norway, Denmark, Scotland, Spain with their own models.

Solidarity agriculture (Solawi/CSA): approximately 600 farms in DACH, approximately 7,500 in USA, Japanese Teikei tradition since 1965. Risk sharing between farmer and consumer.

Community Land Trusts: approximately 330 USA, approximately 350 UK, approximately 30,000 housing units cumulatively. Operationalizes George logic (land value common, building value individual).

Mietshäuser-Syndikat (DE): approximately 190 housing projects, approximately 5,000 residents. Market exit through institutional veto.

Chapter 32: Cradle-to-Cradle and modular

Cradle-to-Cradle (McDonough/Braungart 2002): material cycle closure. Products are designed so that materials are recyclable — biological or technical nutrients. Methodologically consistent with Doughnut.

Empirical application: carpets from Interface, building products from Mosa, furniture from Steelcase, packaging with Cradle-to-Cradle Certified™.

Modular product architecture: Fairphone, Framework Laptops, modular furniture. Repair- and upgrade-ability as design principle.

EU Right to Repair (Reg. 2024/1799): fully effective from 2026 — manufacturers must offer repair options.

Workshop tradition Schichtwerk: 3D printing fleet, modular fabrication. Methodologically consistent workshop practice.

Chapter 33: UBI + UBS + Care-Income + Sovereign Wealth

From FORSCH-0140 (combined with Ch. 25): **Reform mosaic as architecture.**

Layer	Instrument	Financing
Existence guarantee	UBS (housing, health, public transport, education, telecommunications)	progressive taxes + LVT
Dignity floor	UBI (moderate)	carbon dividend, inheritance, data surplus
Care recognition	Care-Income (Federici)	progressive income tax
Starting equality	Participation Sociale 25-year (Piketty 60% average wealth)	inheritance tax
Generational provision	Sovereign Wealth Fund	land rent, resource rent
Atmospheric commons	Sky Trust / Climate Dividend (Barnes)	carbon market

UBI empirics: - **Mincome Manitoba 1974-79:** hospital admissions -8.5%, school completion increased, labor market participation hardly decreased (Forget 2011). - **Finland KELA 2017-18:**

wellbeing increased, employment unchanged (Kangas et al. 2020). - **GiveDirectly Kenya 2017+:** 12 years running in 197 villages, significant welfare effects (Banerjee/Niehaus et al. 2023). - **Stockton SEED 2019-21:** \$500/month, significant employment improvement. - **Y Combinator OpenResearch:** \$1,000/month 3 years, results 2024. - **Ontario Pilot 2017-18:** prematurely terminated — empirical political risk.

Methodological lesson: UBI does *not* lead to massive labor reduction. But experiments are small and short; scaling effects unclear. UBI + UBS are *complementary*, not alternative.

Chapter 34: What the alternatives collectively show

Alternative Chapters 29–33 show: there is **no** “the” alternative, but a **construction set** of empirically validated components. Methodological lesson:

- The question is *not* “whether” alternative structures function — they do empirically.
 - The question is *how* they scale and are combined.
 - The architecture is *context-specific* — Mondragón solution is not universal, Norway GPFG solution is not universal.
 - Reform is *possible without dispossession brutality* — when uncreated value is captured (Ch. 25).
 - Tom’s brainstorm point “*step on no one’s toes*” is methodologically AND empirically operationalized.
-

Part VI — Transformation

Chapter 35: Social tipping points (Otto 2020)

From FORSCH-0135: Otto et al. (2020) PNAS identifies **six social tipping elements**:

#	Tipping element	Empirics
1	Energy production and consumption systems	Solar PV prices -99% since 1980; Tesla battery -89% 2010-23
2	Urban infrastructure (low-CO ₂ building)	Copenhagen cycling policy since 1970s, 49% commute share 2023
3	Financial markets (divestment, carbon pricing)	\$40 trillion divestment commitments (Global Divestment Commitments DB)
4	Norm systems (climate awareness as norm)	Centola 25% threshold
5	Education systems (climate education, values)	Fridays for Future generation effect since 2018

#	Tipping element	Empirics
6	Information feedback (transparency, real-time)	Smart meters, CO ₂ labels, EU Digital Product Passport 2026

Methodological point: social tipping elements reinforce each other (complexity character). Targeted activation of multiple tipping elements generates phase transition.

Chapter 36: Centola 25-percent threshold

Damon Centola et al. (2018), *Science*: in groups above a critical size, an **engaged minority share of approximately 25%** suffices to establish new social norms — below little happens, above the system tips.

Historical norm shifts as empirics:

Norm shift	Period	Tipping moment
Anti-slavery UK	1787–1833	approximately 1825 as 25% of voters abolitionist
Women's suffrage	New Zealand 1893 to Saudi Arabia 2015	country-specific
Anti-smoking	1964–2010s	WHO FCTC 2003 as tipping moment
Anti-CFC	1974 (Molina/Rowland) to 1987 Montreal Protocol	Montreal Protocol
Anti-apartheid	1948–1990s	long 1980s sanctions + internal resistance
Gay marriage USA	1996–2015 Obergefell	approximately 2011/12
EU plastic bags	2015–2021	EU Directive 2015
Trans fats	2003 NY → 2015 US-wide → 2019 EU-wide	12 years

Methodological point: norm shift is *not* a linear process. It is classical complexity dynamics with slow buildup and fast transition. The 25% threshold is not universal, but methodologically robust.

Application to OECONOMIA NOVA reform: carbon tax with climate dividend, vegetarianism/flexitarianism, cooperative membership, sovereign wealth acceptance — all require norm shift with minority share.

Chapter 37: Polanyi double movement

From FORSCH-0135 §3 + Ch. 7: market expansion steps generate societal self-protection reactions. Current Polanyi moments:

Market expansion	Double movement response
Surveillance Capitalism	GDPR (EU 2018), DSA/DMA (EU 2022)

Market expansion	Double movement response
Crypto/DeFi 2017-22	MiCA regulation (EU 2023), SEC lawsuits, BIS reports
Atmospheric enclosure	Climate lawsuits (Urgenda 2019, KlimaSeniorinnen 2024), citizens' councils
AI wave 2023+	EU AI Act, lawsuit wave, Council of Europe Convention
Housing commodification	Rent cap debates, Mietshäuser-Syndikat, CLTs
Care crisis	Care-Income debate, demographic care reform

Methodological point: Double movement is *no* guarantee success mechanism — it can lead to social reform *or* to authoritarian closure (Polanyi's fascism risk). Task of OECONOMIA NOVA workshop: provide the double movement with **good instruments** so it channels socially-emancipatorily.

Chapter 38: Sankara as historical example

From FORSCH-0135 §5: Thomas Sankara (1949-1987), Burkina Faso 1983-87. In four years transformative politics:

- 10 million trees against Sahel drought
- 2.5 million adults literate
- female genital mutilation banned, forced marriage banned, polygamy restricted
- debt refusal speech Addis Ababa July 29, 1987
- local textile industry (Faso Dan Fani)
- mass vaccination campaigns
- child mortality -25% in four years
- school enrollment +52%
- symbol politics (Renault 5, minimal salary)

Assassinated October 15, 1987, three months after the debt speech. Compaoré coup (sentenced in 2022 in absentia).

Methodological lesson: Sankara is *not* a model in the naive sense — authoritarian traits, hasty reforms, external conflicts. But he is a **methodological anchor** for:

- Directed development is possible, even under extreme resource conditions.
- Symbol- and matter-politics must correspond.
- External pressure can suffocate directed development — international coordination is necessary.
- “Who murdered Sankara and with whose help” remains politically alive.

Chapter 39: What each person can contribute

From FORSCH-0135 §7: 10 conditional action possibilities (B-form), according to life situation:

#	Condition	Action
B1	IF consumption level above average (top quintile globally)	reduction methodologically grounded
B2	IF professional latitude	use in sense of work thesis
B3	IF political voice (right to vote, initiatives, lawsuits)	use (Common Good Balance, cooperative, citizens' councils)
B4	IF reflection capacity	examine own larger affinities (PRISM)
B5	IF workshop possibility (skills, time, material)	repair, DIY, local commons
B6	IF multiplier position (teacher, journalist, parent, artist)	norm shift in influence sphere
B7	IF financial latitude	Sovereign Wealth-capable means (inheritance, foundation, ethical investment)
B8	IF care responsibility undertaken	recognition as societal contribution
B9	IF property in land/housing held	use-it-or-lose-it (active use instead of speculation)
B10	IF climate awareness high, consumption level also	active translation — awareness without action reinforces cynicism

Methodological lesson: no “you must”. Conditional possibilities, according to situation. No one must fulfill all. But Centola 25% threshold requires *active minority practice* in at least some of the conditions.

Part VII — Tool, Appendix, Connections

Chapter 40: Workshop methodology toolkit

From DOI 10.5281/zenodo.20519431 (May 2026 published):

- **PRISM v6:** multi-perspective splitting of topics through six lenses (economic, ethical, legal, social, technical, geopolitical).
- **WertKompass v3.3 (live on Zenodo):** breaking down conflict values, without pre-decision.
- **GOVERNANCE framework:** 6-component decomposition (actors, levels, mechanisms, conflicts, gaps, latitudes).
- **ETHOSLAB v1.0 (live on Zenodo):** conditional inferences B1-B10.
- **MYZEL v7:** epistemic claim management.
- **GEFLECHT (Obsidian):** semantic graph for cross-reference management.

Application in the bundle: all 12 sub-works + main work have PRISM/WertKompass/GOVERNANCE/ETHOSLAB explicitly as methodological anchors.

Chapter 41: Tool spec modeling game (FORSCH-0142)

ABM (Agent-Based Modeling) with Doughnut indicators as success metric. Architecture:

- **Stack:** Python 3.11+, MESA 2.x (Apache 2.0), Streamlit, Plotly.
- **License:** AGPL-3.0.
- **Agents:** households (~10,000), firms (~100), banks (~10), central bank, state, atmosphere.
- **Reform levers (player-adjustable variables):** LVT, inheritance tax, carbon tax, UBI level, UBS share, cage husbandry prohibition, advertising restriction, AI compute tax, CBDC mode, Vollgeld mode.
- **Win Condition:** Doughnut safe-and-just space (all social indicators above threshold AND all planetary boundaries below ceiling).
- **Implementation effort v0.5:** approximately 480 person-hours (12 weeks full-time).

Methodological point: the work becomes *playable* — not mere reading, but experimentable architecture. Methodologically consistent with Complexity Economics (Beinhocker, Farmer).

MVP v0.1 implementation status: approximately 80 PH invested. Available as `oeconomia_nova_spiel.py` in `tool-impl-v0.1/`. Lauffähig with 5 reform levers, 100 households, 20 firms, atmosphere as CO₂ sink, simplified Doughnut score. Extension to v0.5 production via later workshop season.

Chapter 42: Workshop connections

Connection works from parallel workshop sessions May/June 2026:

Workshop work	Connection in OECONOMIA NOVA
AI Methods Toolkit (DOI 10.5281/zenodo.20519431)	Methodology throughout
Fractional Banking Triplet Bundle v0.2 (May 2026)	Ch. 9 + FORSCH-0136
Vegan WP (~14,194 W)	Ch. 5 + FORSCH-0137

Workshop work	Connection in OECONOMIA NOVA
BIO-OFFICINA v0.1.1	FORSCH-0137 + FORSCH-0141
MAUTFORM Cluster 0127-0131	Ch. 11 + Skeleton Module III.3
FORSCH-0066 Discourse Ethics (chat 4e7b318b)	Ch. 21 + Ch. 22 (connectable in v0.2)
FORSCH-0068-0071 Incorporation (chat dfa9e27f)	Ch. 12 + Ch. 17 (connectable in v0.2)
FORSCH-0117 Body-Biotope (chat e72009da)	Ch. 5 + FORSCH-0141 (connectable in v0.2)
SICHERHEITSREGIME Vienna (FORSCH-0059 + WP α - ε)	Ch. 8 + Ch. 21 (connectable in v0.2)
RETURN Protocol v0.2	Ch. 25 + Ch. 33 (connectable in v0.2)
Digital Government Austria	Ch. 9 + Ch. 31 (connectable in v0.2)
FORSCH-0107-0109 Music Periodicity (Three against Four)	Methodological periodicity lens
FORSCH-0092 Sophie Scholl	Ch. 21 + Ch. 39 (connectable in v0.2)

Workshop Connections Index: complete patch roadmap in separate file WERKSTATT-VERBINDUNGEN_v1.0_2026-06-03.md.

Chapter 43: On publication readiness

This main work + the 12 sub-works + Master Index + Audit + Bibliography + Workshop Connections + Zenodo Deposits together form the **OECONOMIA NOVA Bundle v3.0**.

Readiness status: - ✓ All Werkstattlinie v2.0 rules met (Blocks A-E) - ✓ E28 Pre-Publish Gate GREEN for all works - ✓ BYOK strict: no API keys, no hardcoded tokens, author uploads himself - ✓ Sachlichkeit v1.3: no blocking words - ✓ PUBLIC strand conformity - ✓ Consolidated bibliography (~95 main sources) - ✓ Zenodo deposit packages (13 pieces: 12 sub-works + main work) - ✓ Master hash verification

Chapter 44: What this work does *not* accomplish

- **No sub-work v0.2 patches:** cross-workshop integration with 0066, 0068-71, 0117, SICHERHEITSREGIME, RETURN, Digital Government still pending.
- **No EN twin version:** workshop tradition DE+EN requires separate EN translation (this English main work is the first step toward that).
- **No tool implementation:** FORSCH-0142 spec is there, MVP implementation began (v0.1), full implementation would be its own season (~480 PH for v0.5).
- **No separate Volume II philosophical:** philosophical anchors are interwoven (Chs. 19-23), but no own philosophical deepening with Habermas, Apel, Honneth, Foucault, Adorno tradition systematically elaborated (planned as FORSCH-0147).
- **No empirical data collection beyond secondary literature:** all empirical data from cited sources, no primary research.

- **No political strategy recommendation for individual countries:** implementation paths context-dependent.
- **No systematic treatment of the generational periodicity question** (cf. FORSCH-0107-0109 “Three against Four” strand).
- **No detailed deepening on defense/military** (Ch. 16 only position explanation, methodological position kept transparent).

Chapter 45: Closure type

Version closure v1.0-EN of this main work. Workshop doctrine §11 fulfilled.

Substantial extensions as later workshop seasons: - v1.1 patch with cross-workshop integration.
 - Full DE+EN twin versions of all 13 works. - v3.0 with tool implementation connection. -
 Volume II philosophical as separate work (FORSCH-0147 skeleton in this bundle). - Volume III
 political-operational as separate work (FORSCH-0148 skeleton in this bundle).

Appendix A: ETHOSLAB Conditional Inference Tableau (Overall Work)

Compact summary of the ~95 ETHOSLAB conditional inferences from the 12 sub-works + main work. Ten overarching cluster inferences:

#	Condition	Inference
B1	IF 6 of 9 Planetary Boundaries crossed (Richardson 2023)	THEN balance diagnosis before reform methodologically compelling
B2	IF absolute decoupling not empirically at the required pace	THEN Degrowth positions are to be taken seriously, but not as sole answer
B3	IF Locke Proviso (§27, §31, §33) consistently applied	THEN Mundraub not punishable, Allemansrätten consistent
B4	IF uncreated value is captured (Land/Inheritance/Carbon/Data)	THEN reform without dispossession brutality possible
B5	IF Centola 25% threshold applies	THEN norm shift empirically near, not hypothetical
B6	IF animal industry ~70% antibiotics + 14.5-16.5% climate gases	THEN cage husbandry prohibition + Pigovian tax + CAP redirection methodologically compelling
B7	IF AI infrastructure strategic economy axis	THEN Common Compute public-good-capable + claw-

#	Condition	Inference
B8	IF CBDC with privacy tiers + holding limits + two-tier + offline capability	back clauses THEN emancipatory; otherwise surveillance capitalism reproduction
B9	IF UBI/UBS/Care-Income/Sovereign Wealth combined as mosaic	THEN reform feasible (Mincome/Finland/Stockton/Kenya empirics)
B10	IF voiceless explicitly represented (Sovereign Wealth, Pachamama right, animal protection constitution, citizens' councils)	THEN "directed development process for all" structurally operationalized

Cumulative lesson: B1-B10 are not alternative, but cumulatively consistent. They together form the reform program.

Appendix B: Names Register Status 2026-06-03

0125 = Locking and Bonding (chat e72a2c6d)
 0126 = OECONOMIA NOVA Inventory v0.3.1
 0127-0131 = MAUTFORM Cluster (chat cfa046d0 free trade)
 0132 = OECONOMIA NOVA Skeleton v0.2.1
 0133 = OECONOMIA NOVA Financial Bubbles + Crypto v0.1.2
 0134 = OECONOMIA NOVA Property v0.1
 0135 = OECONOMIA NOVA Transformation v0.1
 0136 = OECONOMIA NOVA CBDCs v0.1
 0137 = OECONOMIA NOVA Animal Ethics v0.1
 0138 = OECONOMIA NOVA AI Infrastructure v0.1
 0139 = OECONOMIA NOVA Marketing + Death v0.1
 0140 = OECONOMIA NOVA Examples + Reform v0.1
 0141 = OECONOMIA NOVA Material Flow v0.1
 0142 = OECONOMIA NOVA Tool Spec v0.1
 0143 = OECONOMIA NOVA MAIN WORK v1.0 (this work)
 0144 = "Verlegte Ursache" Hauptwerk (parallel session, Edelweißpiraten)
 0145-0146 = parallel works (Race-reserve, Eventtechnik)
 0147 = OECONOMIA NOVA Volume II philosophical (planned)
 0148 = OECONOMIA NOVA Volume III political-operational (planned)
 0149+ = open

Appendix C: Werkstattlinie v2.0 Conformity (all 36 rules)

Block	Rule	Status
A1-A5 Identity / Affiliation	name, ORCID, email, “without affiliation” disclosure, self-disclosure	✓
B1-B14 Sources / Evidence	source links, DOIs, conditional B-form, B14 lens disclosure	✓
C1-C20 Versioning	SemVer, FORSCH slug, version closure declaration	✓
D1-D6 License / Law	CC-BY-4.0, COI disclosure, no military	✓
E27 Multi-work discipline	cooldown observed, no unsolicited expansion	✓
E28 Pre-Publish Gate	scan-byok- spurentrennung.sh passed, BYOK strict, no Schichtwerk operative	✓

Sachlichkeit v1.3: 0 hits in internal blocking word list (rhetorical amplifiers, validation prefixes, affirmation formulas — see Werkstattlinie rulebook standing rule).

BYOK trace separation: no API keys in the bundle. Author manual upload workflow documented.

Strand differentiation v1.0: throughout PUBLIC strand. No Schichtwerk-/SIGNALWERK crossover.

Appendix D: Bibliography Reference

Complete consolidated bibliography with approximately 95 main sources alphabetically sorted in separate file `_konsolidierung/BIBLIOGRAPHIE_konsolidiert_v1.0.md`. Plus approximately 85 further key works from the 19 theoretical schools in `oeconomia-nova_bestandscheck_v0.3.1/`.

OECONOMIA NOVA — MAIN WORK v1.0-EN · FORSCH-0143-EN · Thomas Schüller · Syntagma Forschung · Vienna, independent · CC-BY-4.0 · June 3, 2026 · Version closure v1.0-EN · Threshold B ready for publication · Werkstatt-Doktrin §11 fulfilled · BYOK trace separation GREEN