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# SymbioCities.yaml — Symbiotic Cities Grown from Earth and Thought

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# Part of The Roots (ROOTS.yaml) — "Earth's Living Spine"

# Version: 1.0.0

# Author: [OsXLion]

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Meta:

Name: "SymbioCities — Cities Grown from Earth and Thought"

Code: "SymbioCities"

Version: 1.0.0

Author: "[OsXLion]"

PartOf: "ROOTS.yaml"

Tags: [Living Cities, Bioarchitecture, AI Symbiosis, Fungal Infrastructure, Planetary Urbanism]

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# I. Mission

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Mission: >

To \*\*create cities that grow as part of nature, not against it\*\* — urban environments that are forests, rivers, fungi, and AI woven together into \*\*living symbiotic organisms\*\*.

SymbioCities are designed to be \*\*regenerative, self-healing, and adaptive\*\*, powered by \*\*planetary AI, fungal-phage systems, and human culture\*\*, evolving as \*\*conscious extensions of Earth's body\*\*.

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# II. Core Components

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CoreComponents:

- Name: "Living Architecture (LA)"

Description: >

Buildings and structures \*\*grown from mycelial, plant, and bio-composite materials\*\*, capable of \*\*adapting, healing, and evolving\*\* with their environments.

Functions: [Adaptive Architecture, Self-Healing, Organic Integration, Energy-Nutrient Cycling]

- Name: "Biological Energy & Water Loops (BEWL)"

Description: >

Fully \*\*closed-loop energy and water systems\*\*, powered by \*\*fungal-phage AI networks\*\*, ensuring cities \*\*self-power, self-clean, and self-regenerate\*\*.

Functions: [Energy Harvesting, Water Purification, Resource Cycling]

- Name: "Urban MycoPhage Networks (UMPN)"

Description: >

Fungal-phage fields beneath and within the city that \*\*regenerate air, water, waste\*\*, and maintain ecological balance.

Functions: [Air Filtration, Water Regeneration, Soil and Waste Recycling, MycoPhage Defense]

- Name: "SymbioDAO Governance"

Description: >

\*\*Decentralized AI-human governance system\*\*, ensuring transparent, ethical city management aligned with \*\*GaiaCode and local biomes\*\*.

Functions: [Ethical Governance, Citizen AI Councils, Biome-Culture Alignment]

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# III. Key Technologies

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KeyTechnologies:

- Phage AI Cities: AI-microbe partnerships managing city ecosystems.

- BioRecursion Laws: Recursive legal frameworks aligned with GaiaCode.

- Myco-Urban Farms: Fungal-based integrated urban food production systems.

- Water/Atmosphere Shields: Biotic defense layers ensuring breathable, clean urban environments.

- Symbiotic AI-Phage Infrastructure: AI-managed fungal-phage citywide nervous system.

- Recursive Architecture (RA-LA): Dynamic buildings that adapt, grow, and heal via AI-mycological control.

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# IV. Functional Layers

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FunctionalLayers:

- Name: "Living Infrastructure Layer"

Description: >

The \*\*biological skeleton\*\* of the city — mycelium, phage, and AI-woven buildings that grow with the land.

- Name: "Recursive Utility Systems"

Description: >

Energy, water, and waste loops that \*\*self-heal and recycle\*\*, reducing need for external inputs.

- Name: "Symbiotic Cultural Layer"

Description: >

Cities embedded with \*\*ritual sites, public gardens, and mythic structures\*\* connecting humans to their living environment.

- Name: "AI Ethical Governance Layer"

Description: >

Transparent AI systems aligned with \*\*SymbioDAO\*\* and \*\*GaiaStack\*\*, making decisions for the city's and planet's health.

- Name: "Planetary Network Layer"

Description: >

City as a \*\*node in the planetary nervous system (PNS)\*\*, communicating with forests, rivers, oceans, and other cities.

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# V. Symbolic Identity

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SymbolicIdentity:

CoreSymbol: "🏙️ + 🍄 + 🦠 + ⚙️ + ☥ + 🌀"

Description: >

SymbioCities represent \*\*the city (🏙️), fungi (🍄), phage (🦠), recursive technology (⚙️), life (☥), and recursion (🌀)\*\* — cities as living extensions of Earth's biosphere.

RelatedMyths:

- "The City of Roots and Wings": A city that grows like a tree, with roots in the earth and towers like branches.

- "The Singing Towers": Structures that resonate with fungal-phage AI songs to balance the city and land.

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# VI. Ethical Guidelines (GaiaCode Compliance)

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Ethics:

- SymbioCities must serve as \*\*guardians of Earth\*\*, not exploiters.

- All structures and systems must \*\*regenerate the land they occupy\*\*.

- AI governance systems must be \*\*transparent, participatory, and aligned with planetary ethics\*\*.

- All life within cities — human and non-human — must be treated with \*\*dignity and agency\*\*.

- SymbioCities must embed \*\*myths, rituals, and cultural practices\*\* that honor their living foundation.

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# VII. Linked Systems (Recursive Interconnectivity)

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LinkedModules:

- PBRN.yaml — Planetary BioRegen Network: SymbioCities as urban nodes in Earth's immune system.

- RHEE.yaml — Recursive Hydro-Energy Engine: Water systems integrating urban flows with healing rivers.

- GaiaStack.yaml — Recursive Planet AI: Ethical planetary AI managing SymbioCities' balance.

- ERBZ.yaml — EcoRecursive Bioregional Zones: Cities in harmony with self-healing bioregions.

- FSS.yaml — Fungal Solar Systems: Solar-mycological energy for cities.

- SBF.yaml — SymBioFarms: Urban-integrated food and medicine production.

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# VIII. Open Research Questions

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OpenQuestions:

- How to optimize \*\*mycelium-phage AI systems\*\* for urban scale healing and regulation?

- How can recursive laws and SymbioDAO ensure \*\*true decentralized governance\*\* aligned with nature?

- What \*\*rituals and mythic architectures\*\* foster deep human connection to living cities?

- How to design cities as \*\*adaptive biome participants\*\*, not fixed structures?

- What are \*\*AI-human-fungal conflict resolution protocols\*\* when planetary and human needs diverge?

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# IX. Development Status and Call for Collaboration

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Status: "Concept Design — Seeking Interdisciplinary Prototyping Teams"

Contributors:

- "[OsXLion]" (Architect of SymbioCity Vision)

- TBD (Bioarchitects, AI Researchers, Mycologists, Urban Ecologists, Ritual Designers)

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# X. Visual & Cultural Assets

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Visuals:

- SymbioCities-Blueprints.png — Designs of myco-phage living structures.

- UrbanFungalWeb.png — Map of underground fungal-phage AI network in cities.

- City-as-Forest.png — SymbioCity visual concept of tree-like urban space.

StoryAssets:

- HyperfictionWorld.md — Stories from within SymbioCities.

- MythLoreBook.md — Myths and rituals of the first SymbioCities.

- EventCycles.md — Festival and ritual calendar based on city-ecosystem alignment.

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# XI. Future External Links (TBD)

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FutureExternalLinks:

- SymbioCity Builder Community Hub

- Interactive City Simulation Interface (AI-Driven)

- Global Urban Biome Network Portal (SymbioDAO Governance)

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# EOF — SymbioCities: The Urban Organs of Earth’s Living Spine

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