

Heim Theory: Introduction to the terms and concepts of Syntrometrie and Teleology

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Below is a discussion of the term *Syntrometrie*—its etymological roots, its conceptual background in Heim’s framework, and how it is used to go beyond a purely anthropocentric understanding of logic and reality. Most references and quotations come from Heim’s unpublished or privately circulated manuscript *Syntrometrische Maximentelezentrik* (ca. 2000), where he devotes Part A (“Syntrometrie”) to introducing and explaining this neologism.

1. Etymology and Construction of the Term *Syntrometrie*

Syntrometrie is not a standard term in Greek or Latin-based scientific vocabulary; rather, it is Heim’s own coinage. Although Heim never fully explains the morphological breakdown in everyday Greek or Latin terms, we can glean the following:

- **Syn-** or *syntro-* often carries the connotation of “together” or “jointly” (cf. Greek *syn* [], meaning “with”).
- **-metrie** or *-metry* is a familiar suffix from Greek *metron* [], meaning “measure” or “measurement.”
- Heim also uses the roots “Syntrix,” “Syndrom,” and “Syndrombesetzungen” in his text, linking them to the logic of aspects and the “reflexive abstraction” from a purely anthropomorphic perspective.

Hence “Syntrometrie” can be understood as a *joint measure* or *unified measure* of certain universal structures—an attempt to define an overarching method that organizes or “measures together” the building blocks of logic, experience, and reality.

2. Philosophical and Logical Rationale

Heim introduces *Syntrometrie* in the early sections of *Syntrometrische Maximentelezentrik* as a new methodological approach. It is meant to transcend standard anthropomorphic logic (i.e. the logic that arises from purely human modes of consciousness and Transzendentalästhetik) and achieve a form of *universal logic* not bound to a particular “subjective aspect.”

2.1. Transition from Transzendentalästhetik

In classical phenomenology and Kantian philosophy, “Transzendentalästhetik” deals with the conditions under which objects are given in perception, typically focusing on space and time as forms of intuition. Heim contends that while the anthropomorphic version of Transzendentalästhetik (in Kant, Husserl, etc.) clarifies how we humans structure phenomena, it remains *subject-centered*.

Heim’s move is to do a *reflexive Abstraktion* (reflexive abstraction) from that anthropomorphic vantage, aiming at a universal method that applies to *any* possible intellect or consciousness, not just the specifically human “aspect.” Thus, he introduces *Syntrometrie* as this new, generalized method—one that does not presuppose the typical 3D+time or the strictly human vantage point.

2.2. Multi-Valued and Multi-Aspect Logic

One of Heim's motivations is that anthropomorphic logic frequently relies on either classical two-valued logic (*true/false*) or moderate multi-valued logics shaped by human-linguistic categories. *Syntrometrie*, by contrast, attempts to formalize a "superset" logic or a logic-of-logics in which any local subject-aspect is embedded as a special, restricted case. This universal system must handle:

- Potentially infinite sets of aspects or vantage points,
- Varying sets of emergent experiences, each requiring unique local rules,
- The possibility that the underlying "Syntrix" or "Syndrom" might be partially continuous, partially discrete, or partially combinatorial.

Hence, *Syntrometrie* is an *upper-level logic* or meta-logic that systematically "measures" or structures these aspects so that no single vantage (human or otherwise) is privileged.

3. Core Usage in Heim's Framework

Heim's usage of "Syntrometrie" is interwoven with advanced neologisms such as "Syntrix," "Synkolationsfeld," or "Metroplex." The references below come from Part A of *Syntrometrische Maximentelezentrik*:

Syntrometrie als Methodik. Heim refers to it as the "Methodik der reflexiven Abstraktion," meaning it is the method that emerges only when we bracket out all *anthropomorphen* or *anthropomorphischen* assumptions from standard logic and standard phenomenology.

Syntrix (Syntrixfelder). This is the conceptual space or "field" over which *Syntrometrie* operates. The Syntrix can be thought of as a universal domain of all possible "Konnexreflexionen" (i.e. ways that experiences or subjectivities can link up or reflect on each other).

Metroplex (Metroplex higher grades). In Heim's broader works, the "Metroplex" denotes a combinatorial-lattice extension of geometry, bridging discrete "metrons" (as fundamental area units) to higher-level structures. *Syntrometrie* here provides the tool for analyzing the entire map of transitions (or transformations) within such a lattice of possible logics, vantage points, or aspect-relativities.

In simpler terms, once you abandon the assumption that logic must be shaped by the purely human form of reason, you must define a generalized framework that can incorporate a wide variety of "subjective aspects" or vantage points. *Syntrometrie* is the name Heim gives to this universal, vantage-independent logic.

4. Conceptual Function and Implications

Syntrometrie has two major implications in Heim's worldview:

1. *Unification of Logic and Geometry:* Because Heim's overall project is to unify the physical cosmos (including quantum phenomena, gravitational geometry, extra dimensions, etc.) with possible realms of experience and meaning, he needs a more universal *logic-of-being*. *Syntrometrie* undergirds the bridging from purely metrical or *differential* geometry to the realm of "qualitative aspects," which might be essential for a complete description of reality (including the so-called "informational" or "non-material" spaces in R_{12}).
2. *Bridging Phenomenology and Physics:* Traditional phenomenology brackets out the external, physical world to focus on the structures of consciousness, while physics often abstracts away the observer's vantage point. By introducing *Syntrometrie*, Heim tries to show how both are special cases of a more universal method. The anthropomorphic vantage is a "subspace" of the possible vantage-aspects, and the purely physical vantage is another such subspace. *Syntrometrie* attempts to be the overarching "set of transformations" that unifies both.

5. Concluding Observations

In essence, *Syntrometrie* is Heim’s bold attempt to:

- go beyond standard anthropomorphic logic,
- incorporate the entire spectrum of possible vantage points or aspects (“Aspektrelativität”),
- unify the geometry-based language of his extended R_6 or R_{12} frameworks with a universal logic that is not restricted to two-valued or finite multi-valued systems.

Heim’s introduction of *Syntrometrie* can be read as a philosophical or meta-mathematical foundation for bridging the gap between *physical* and *informational* aspects of the cosmos in his final expansions of the theory. It underpins how Heim tries to treat sense-data, cosmic data, and the emergent “structures of consciousness” all within one *syntrometric* worldview.

Key References in Heim’s Writings:

- *Syntrometrische Maximentelezentrik (Teil A: Syntrometrie)*, ca. 2000.
- *Elementarstrukturen der Materie*, Bd.1 und 2, Innsbruck: Resch, 1979/1984.
- *Strukturen der physikalischen Welt und ihrer nichtmateriellen Seite*, Innsbruck: Resch, 1996.

1 Etymology and Construction of the Term *teleology*

The term *teleology* is derived from the Greek *télos* (), meaning “end” or “purpose,” and *logos* (), meaning “reason,” “word,” or “principle.” Within classical philosophy, teleology concerns *final causation*—that is, an explanation for phenomena in terms of ends or goals rather than purely efficient/mechanistic causes. While modern science has typically emphasized mechanistic or material causation, Burkhard Heim’s higher-dimensional framework reintroduces a notion of teleology in a rigorous geometric form.

Specifically, in Heim’s six-dimensional extension of spacetime, the coordinate x_6 is often designated as an *entelechi*al or *teleological* dimension. Below is a structured analysis of how the concept of teleology arises, its philosophical roots, and how Heim weaves teleological thinking into his mathematical model via x_6 .

2 Etymology and Philosophical Background

2.1 Greek Origins

- *Télos* (): “End,” “goal,” or “purpose.”
- *Logos* (): “Reason,” “principle,” or “speech.”

Hence *teleology* literally denotes “the study of purpose/end.”

2.2 Aristotle and the Four Causes

Aristotle distinguished among:

1. *Material Cause* (the substance out of which something is made),
2. *Formal Cause* (the form or structure),
3. *Efficient Cause* (the agent or mechanism producing the effect),
4. *Final Cause* (the end or purpose for which a thing is done).

The final cause encapsulates teleology. Biological and cosmic processes, in Aristotle’s sense, exhibit a built-in drive or orientation toward fulfillment.

2.3 Modern Tensions

By the scientific revolution, teleological explanations fell out of favor among many physicists who gravitated toward exclusively mechanistic descriptions. Nonetheless, contemporary fields like theoretical biology and systems theory occasionally re-acknowledge teleological or “end-directed” elements, especially where emergent complexity arises.

3 Heim’s Six-Dimensional Model and the Role of x_6

3.1 Heim’s Additional Coordinates

In his search for a unified field theory that accommodates both quantum discreteness and gravitational geometry, Burkhard Heim postulated a six-dimensional extension of standard spacetime. He labeled the usual coordinates x_1, x_2, x_3 (space) and x_4 (time, often with imaginary or Minkowski signature aspects). The extra coordinates are:

- x_5 : Interpreted as an *organizational* or *informational* dimension, connected to how microstates arrange or reorder themselves.
- x_6 : Often termed *entelechia*, *teleological*, or *Äon* dimension, embodying a sense of forward-driven or end-directed structure in cosmic and biological processes.

Heim’s overarching notion is that certain large-scale phenomena—in particular, life, consciousness, or cosmic evolution—cannot be fully explained by local cause-effect in 4D alone. Instead, these processes rely on directions or constraints that Heim conceptualizes as geometry in x_5 and x_6 .

3.2 Teleological vs. Mechanical Explanation

“Teleological” in Heim’s usage does *not* discard classical local causality. Rather, x_6 introduces boundary/selection principles that shape possible outcomes, akin to *attractor states* or *final configurations*. In that sense:

1. It allows for emergent patterns or stable solutions that appear end-directed.
2. It gives a plausible geometric anchor for phenomena such as the remarkable goal-orientedness of living organisms (*Bios*) or cosmic self-organization.

4 Aristotelian *Entelechie* and Heim’s x_6

Heim often adopts the Aristotelian term *entelecheia*, connoting “being fully realized” or “having its end within itself.” In his theory:

- The *teleological dimension* x_6 encodes how states can spontaneously “choose” a stable or purposeful arrangement from among many quantum possibilities.
- Living systems appear to harness x_6 for processes like development, adaptation, and morphological structuring.

Hence, what older metaphysics described as final causation becomes an axis in the extended manifold, providing an advanced type of boundary condition for partial difference equations in Heim’s discrete geometry.

5 Teleological Indeterminism and Discrete Geometry

A key feature of Heim’s approach is *metron-based geometry*, i.e. the assumption that spacetime is *discrete* (with minimal area elements). The resulting difference equations yield *eigenvalue* solutions corresponding to physically realized states. In that scenario, teleological patterns can manifest when these discrete solutions favor those that exhibit purposeful or end-oriented outcomes.

6 Implications and Significance

6.1 Bios and Consciousness

Heim's *Elementarstrukturen der Materie* and subsequent expansions (in e.g. *Strukturen der physikalischen Welt und ihrer nichtmateriellen Seite*) propose that x_6 is crucial to describing how living organisms systematically converge on stable morphologies or behaviors. Teleology in this sense is an integral part of higher-dimensional geometry.

6.2 Bridging Physics and Philosophical Teleology

Where modern physics typically eschews mention of “ends” or “purposes,” Heim reincorporates them as an objective coordinate dimension, thus bridging mechanistic local laws with the teleological dimension. This new viewpoint resonates with integrative theories in complexity science and certain lines of philosophical biology, but is cast in a formal geometric language.

7 Conclusion

Teleology, derived from *télos*, historically denotes the presence of purpose or final causation in natural processes. Heim's framework, with an added dimension x_6 , localizes that purposefulness geometrically. In effect, teleological phenomena become rigorously describable in a discrete, extended manifold, reconciling ancient philosophical intuitions with modern scientific structure. While such an idea remains unconventional in mainstream physics, it stands as one of the most distinctive and far-reaching aspects of Heim's quest for an ultimate unification of nature's laws.