

# Cultural Blockchain Semiotics

by

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### Abstract:

From the influence semiotics had on its inventor Charles Sanders Peirce signical basement of scientific-methodologically faith-inspiration from beliefs, we derive the fundaments UNESCO uses in laic-compliant humanitarian peacebuilding cultural heritage safeguard.

The interfaith-basement role in crosscultural cybernetics diplomacy understandment and its creative industry accountable traceable blockchain verifiability jurisprudence allow us to stablish a transparent global standards compliance open-source governance.

Based on this we present the Ecumenic Creative Operations (<a href="https://ecumenic.github.io">https://ecumenic.github.io</a>) reliability engineering laic-compliant interfaith-based cultural blockchain development through deep-learning semantic algorithms of corpora across interoperable ontologies.

# 1. Cultural Heritage Faith-Inspiration Semiotics:

#### 1.1. Umberto Eco's "Theory Of Semiotics":

**1.1.1.** Semiosis: The semiolinguist author presents semiosis as a semiotics of semiology, analyzing the philosophical historiography of signical informational functionalities, in the pragmatical cybernetics limits of decision-making perceptual phenomenology. **1.1.2.** Semiology: Understanding Ferdinand De Saussurre signs as pragmatical decisions, the book signifies semiology as the significant of meaning-giving, their life relationships, the same way etymology directs cybernetics to the greek for steering-wheels of wills. **1.1.3.** Semiotics: To this, Charles Sanders Peirce adds the interpreter and its semantics, in a limitless complexifying signified object componential interpretations analytics, informing semiotics as a semiology of semiology, structurations of represented codings.

#### 1.2. Charles Sanders Pierce's "Fixation Of Belief":

**1.2.1.** Logics: Viewed as a relative science of experiences historic statistics in inferences, uncertainty of analytic elements details in dense volumes still allow verifiable properties, where long-range laws applied to found exceptions improve the scientific methodology. **1.2.2.** Belief: Reasoning from logics search for novelty in repeatable experiments validity, doubt acts as a next-steps decision-making cybernetics faith-inspiration compelling, inquirying until the fixation of a believable opinion according to its acquition procedure. **1.2.3.** Fixations: Tenacity from desire, sensorial aesthesia, to inclinations of ideology; consented or not individual, relational, or institutional endoctrinational authority; a priori methodic prejudices; and scientific reviewing may fixate inspiration in a belief.

### 1.3. UNESCO's "World Heritage Safeguard":

1.3.1. Laicity Faith-Inspiration: Semiotics basing beliefs scientific verifiable reviewing, analyzing contrary proofs through doubts' creation of improved accountable new beliefs, allowed the interfaith-basement of dignified crosscultural diversity laic inclusivity.
1.3.2. Humanitarian Diplomacy: The history of laic belief from world logistics to charity bases the United Nations Sustainable Development Goals regenerative ecology economy as well as the peacebuilding faith-inspired-agents and interfaith-basement ecumenism.
1.3.3. Cultural Heritage Safeguard: As Umberto Eco's pragmatical approach to semiotics and Charles Sanders Peirce's laic-compliant faith-inspiration scientific-methodology UNESCO bases sustainable humanitarian heritage safeguard in crossculturality semiosis.

# 2. Cultural Reliability Engineering Cybernetics:

#### 2.1. Cybernetic Semiotics's "Perceptual Culture Management":

2.1.1. Lucia Santaella's "Perceptual Theory": Stimuli subjective sensorial phenomenology basing environmental identitary signs historiographic sociopsychologic setting ecology signifies semiotics as an ontological categorial of mediated decision-making cybernetics.
2.1.2. Abraham Moles's "Sociodynamics Of Scientific Creativity Culture": From heuristics science's inventive method developed media technologies and their sociocultural juridics stablishing cybernetic bases for dignified inclusive accessibility solidary crossculturality.
2.1.3. Buckminster Fuller's "Spaceship Earth Operating Manual": Sociocybernetics bases world regenerativity praxis in Norbert Wiener's second-order iterative fractal recursivity, Marshall Mcluhan's semio-communicology, and Stafford Beer's management governance.

### 2.2. DevSecOps's "Collaborations Reliability Engineering":

**2.2.1.** Programming Linguistics DevSecOps: Computation roots in epistemology history, in technologies analogic-digital translation semiotics, as from acoustics to sound-sciences, stablished symbolic-numerical coding paradigms processing systems as a languages index. **2.2.2.** Open-Source Reliability Engineering: Continuous integration trust deployment risk-managing, as Donna Haraway's "Cyborg Manifesto", of systems social consequences based cultural collaborative, as the GNU FLOSS and Open-Science manifestos, responses. **2.2.3.** GitHub's Version-Controlled Collaboration: To foster startups businesses ecosystem the online integrated development environment is based on documents history archiving to allow ubiquitous collective editing and communitary features-request DevOps security.

### 2.3. Ecumenic Creative Operations' "Compliance Governance Art":

2.3.1. Cultural Development Governance: Applying semiotics's faith-based science logics to laic-compliant interfaith-basement cultural heritage safeguard and creative industry the enterprise develops open-source governance guidelines and cultural methodologies.
2.3.2. Communitary Standards Compliance: To base the ECO cultural collaborativity DevSecOps projects its community analyzes world compliance reliability methodologies from which a conduct code, collaboration guidelines, contract model are designed.
2.3.3. Laic-Compliant Interfaith-Based Policymaking: From this enterprise as artistry, semiotic cybernetics procedures were applied for an ecosystem agents curatorial analysis, an operatic ecomuseologic total-artscraft instructional program, and an ecoaesthethics.

# 3. Cultural Blockchain Semantics Data-Analysis:

#### 3.1. Cultural Blockchain's "Semiotic Cybernetics":

3.1.1. Blockchain Semiotic Definition: Undeleteable provenance and processes data signs distributed ledger indexes of coded information secured with hash cryptographic keys in archived step-by-step processing turing-completeness analytics protocols accountancy. 3.1.2. Cryptocurrency Accountability Economy: Based on the blockchain specificities, including its categorial ontology, vocabular corpora, and algorythmic syntax semantics, jurisprudential smart contracts processing are valued in yet other communitary ledgers. 3.1.3. Traceability Protocol Computation: Stamping of data's proof-of-work, net-routing, transaction timetables, agent signature, states transition, complex algorithm filtering, etc; networked certification processing computational dependencies are also valued in tokens.

### 3.2. W3C's "Big-Data Corpora Ontologic Semantic-Bockchain":

**3.2.1.** World Standards Semantic-Web: To stablish cultural databases accountable auditing requires the informatic computational and natural language processing semiolinguistics to structure global consensual dependencies merkle-tree compliance processes ontology. **3.2.2.** Vocabular Interoperability Ontology: Semiosis playing vital role in GDPR policy, structure overall analytics ontologies as BFO, categorial syntax mechanics as STITCH, and their algorithmic computation of databases corpora in natural-language-processing. **3.2.3.** Big-Data Deep-Learning Semiotics: These concepual ledgers require field analytics under proper recursive epistemic data-ethics in coherent representations aesthetically, as this blockchain-text asks for a Culturechain whitepaper (<a href="https://bit.do/culturechain">https://bit.do/culturechain</a>).

## 3.3. Culturechain's "Laic-Compliant Interfaith-Based Data-Analysis":

3.3.1. Ecologic Information-Science: The ECO practical expertise based theoric research constitutes a thoroughly refined starting point for both ontologic and corpora databases for scientific-methodic heritage safeguard standards and applications to be developed.
3.3.2. Ecumenic Data-Ethics: Laic-compliant interfaith-inspiring cultural interoperability blockchain-secure open-source apps as semiolinguistic translators, logistics traceable P2P, inclusive social-network, reputation certifications, and more may be operationalized.
3.3.3. Economic Data-Science: Its ecosystem database to be analyzed has extense support opportunities, financial and technical, and it has proved know-how to legally institute its interfaith-based platform, services, and products through culturechain semiocurrency.

# 4. Bibliography:

#### 4.1. Cultural Heritage Faith-Inspiration Semiotics:

UMBERTO ECO. "A Theory Of Semiotics". Indiana University Press, 1976.

CHARLES SANDERS PEIRCE. "The Fixation of Belief".

Popular Science Monthly No.12 November pp.1-15, 1877.

(https://www.bocc.ubi.pt/pag/peirce-charles-fixation-belief.pdf)

UNESCO. "World Heritage Information Kit". UNESCO World Heritage Centre, 2005.

(http://orcp.hustoj.com/wp-content/uploads/2016/03/UNESCO-World-Heritage.pdf)

MARK MAZOWER. "Governing The World: The History Of An Idea". Penguin Books, 2012.

BERRIDGE, G. K. "Diplomacy: Theory And Practice". Palgrave Macmillan, 2010.

UNITED NATIONS. "Sustainable Development Goals Knowledge Platform". United Nations Technology Information Labs, 2019. (https://sustainabledevelopment.un.org/resourcelibrary)

#### 4.2. Cultural Reliability Engineering Cybernetics:

LUCIA SANTAELLA. "Percepção: Fenomenologia, Ecologia, Semiótica". Cengage Learning, 2012.

ABRAHAM A. MOLES. "La Création Scientifique". Genève: R. Kister, 1957.

ABRAHAM A. MOLES. Sociodinâmica Da Cultura". Perspectiva, 1974.

R. BUCKMINSTER FULLER. "Operating Manual For The Spaceship Earth". Simon And Schuster, 1969. MARSHALL MCLUHAN. "Misunderstanding The Media's Laws". Technology And Culture Journal Vol. 17 No. 2 April p.263, 1976.

STAFFORD BEER. "Cybernetics And Management". English Universities Press p.150, 1959

VEIT ERLMANN. "Reason And Resonance: A History of Modern Aurality". Zone Press,2010.

BETSY BEYER, CHRIS JONES, JENNIFER PETOFF, NIALL RICHARD MURPHY. "Site Reliability

Engineering: How Google Runs Production Systems". O'Reilly Media, 2016.

(<a href="https://landing.google.com/sre/sre-book/toc">https://landing.google.com/sre/sre-book/toc</a>)

GITHUB. "Open Source Guides". GitHub, 2017. (https://opensource.guide)

TONY HSU. "Hands-On Security in DevOps". O'Reilly Media, 2018.

(https://www.oreilly.com/library/view/hands-on-security-in/9781788995504)

DONNA HARAWAY. "A Cyborg Manifesto: Science, Technology, And Socialist-Feminism In The Late Twentieth Century". Simians, Cyborgs And Women: The Reinvention Of Nature. Routledge, 1991.

RICHARD STALLMAN. "The GNU Manifesto". Free Software Foundation, 1985.

(https://www.gnu.org/gnu/manifesto.en.html)

RICHARD STALLMAN. "FLOSS And FOSS". Free Software Foundation, 2016.

(https://www.gnu.org/philosophy/floss-and-foss.en.html)

LESLIE CHAN, ANGELA OKUNE, REBECCA HILLYER, DENISSE ALBORNOZ, ALEJANDRO

POSADA. "Contextualizing Openness: Situating Open Science". Open And Collaborative Science In

Development Network, 2018. (https://ocsdnet.org/manifesto/open-science-manifesto)

SCOTT CHACON, BEN STRAUB. "Pro Git: Everything You Need To Know About Git". Software Freedom Conservancy, 2019. (https://git-scm.com/book/en/v2)

GITHUB. "Github Guides". GitHub, 2019. (https://guides.github.com)

IBRAHIM HADDAD. "Open Source Compliance In The Enterprise". Linux Foundation, 2019. (https://www.linuxfoundation.org/compliance-and-security/2018/12/open-source-compliance-in-the-enterprise)

USMAN W. CHOHAN. "The Decentralized Autonomous Organization And Governance Issues". SSRN, 2017. (https://ssrn.com/abstract=3082055)

ECUMENIC CREATIVE OPERATIONS. "Ecumenic Creative Operations Website". Ecumenic Creative Operations, 2018. (https://ecumenic.github.io)

ECUMENIC CREATIVE OPERATIONS. "Ecumenic Creative Operations Enterprise Guidelines".

Ecumenic Creative Operations, 2018. (<a href="https://github.com/ecumenic/project">https://github.com/ecumenic/project</a>)

#### 4.3. Cultural Blockchain Semantics DevSecOps:

SATOSHI NAKAMOTO. "Bitcoin: A Peer-to-Peer Electronic Cash System". Bitcoin.org, 2008.

(https://bitcoin.org/bitcoin.pdf)

VITALIK BUTERIN. "Ethereum Whitepaper". Ethereum, 2015.

(https://github.com/ethereum/wiki/wiki/White-Paper)

MELANIE SWAN. "Blockchain". O'Reilly Media, 2015.

(https://www.oreilly.com/library/view/blockchain/9781491920480)

EUROPEAN UNION. "General Data Protection Regulation". Portal Of The Publications Office Of The European Union, 2018 (https://eur-lex.europa.eu/eli/reg/2016/670/0j)

W<sub>3</sub>C. "Semantic Web 3.0". Massachusset Institute Of Technology, 2015.

(<a href="https://www.w3.org/standards/semanticweb">https://www.w3.org/standards/semanticweb</a>)

ROBERT ARP, BARRY SMITH, ANDREW D. SPEAR. "Basic Formal Ontology". Massachusset Institute Of Technologies, 2015. (http://basic-formal-ontology.org)

MARK JENSEN. "United Nations Sustainable Development Goals Interface Ontology (SDGIO)". GitHub, 2016. (http://aims.fao.org/activity/blog/sustainable-development-goals-interface-ontology-sdgio-support-united-nations)

LOURENS VAN DER MEIJ. "CATCH Vocabulary And Alignment Repository Demonstrator". Semantic Interoperability To Access Cultural Heritage, 2017. (https://www.cs.vu.nl/STITCH/repository)

MICHELE RUTA, FLORIANO SCIOSCIA, SAVERIO IEVA, GIOVANNA CAPURSO, AGNESE

PINTO, EUGENIO DI SCIASCIO. "A Blockchain Infrastructure For The Semantic Web Of Things".

Polytechnic University of Bari, 2018. (http://ceur-ws.org/Vol-2161/paper6.pdf)

PERNILLE TRANBERG, GRY HASSELBALCH, BIRGITTE KOFOD OLSEN, CATRINE

SONDERGAARD BYRNE. "Data Ethics". ThinkDoTank, 2018. (https://dataethics.eu/data-ethics-principles)

ECUMENIC CREATIVE OPERATIONS. "Ecumenic Ecosystem". Ecumenic Creative Operations, 2018. (https://bit.do/ecumenic-ecosystem)

ECUMENIC CREATIVE OPERATIONS. "Ecumenic Ecomuseology". Ecumenic Creative Operations, 2018. (https://bit.do/ecumenic-ecomuseology)

ECUMENIC CREATIVE OPERATIONS. "Culturechain". Ecumenic Creative Operations, 2019. (https://bit.do/culturechain)