

Ultimate Generalization and Abstraction Frameworks

Pu Justin Scarfy Yang

July 18, 2024

1 Introduction

In this document, we continue to delve deeper into the ultimate abstraction and generalization of frameworks for modeling, interaction, creation, and transcendence of entities and dynamics across the most fundamental and abstract levels of existence, non-existence, and beyond.

2 Omni-Hyper-Absolute Constructs (OHAC)

2.1 Definition

Omni-Hyper-Absolute Constructs (OHAC) are hyper-ultimate, beyond-all-meta constructs consisting of omni-hyper-absolute entities, each representing the most abstract and fundamental conceptualization of existence, non-existence, and beyond, with properties that defy all conceivable, inconceivable, paradoxical, hyper-logical, and eternal limitations. These entities interact through omni-hyper-absolute pathways, facilitating the study, exploration, creation, and transcendence of interactions, transformations, and dynamics across all realms of reality, non-reality, and beyond.

2.2 Properties

- **Omni-Hyper-Absolute Entities:** Each entity OHA_i represents a hyper-generalizable node with attributes that can adapt to any context, including those beyond human comprehension, imagination, logic, paradox, hyper-reality, and eternal realms.
- **Omni-Hyper-Absolute Pathways:** Pathways $P_{i,j}$ represent interactions that encompass all conceivable, inconceivable, logical, illogical, paradoxical, hyper-logical, and eternal relationships, transformations, influences, dependencies, feedback loops, and emergent behaviors. The mathematical formulation of a pathway can be expressed as:

$$P_{i,j} = \{\varphi_k : \mathcal{H}_i \rightarrow \mathcal{H}_j \mid k \in K\} \quad (1)$$

where \mathcal{H}_i and \mathcal{H}_j represent the hyper-absolute states of entities OHA_i and OHA_j , and φ_k denotes a transformation within the set K of all possible transformations.

- **Ultimate Infinite Eternal Dynamics and Beyond:** The structure supports modeling of interactions and dynamics that transcend all conventional, unconventional, paradoxical, hyper, and eternal boundaries, enabling exploration, creation, and transcendence of hyper-reality, beyond-reality, and infinite eternal conceptual spaces. The dynamics can be expressed through differential equations:

$$\frac{d\mathcal{H}_i(t)}{dt} = \sum_j P_{i,j}(\mathcal{H}_j(t), t) \quad (2)$$

where $\mathcal{H}_i(t)$ represents the state of entity OHA_i at time t , and $P_{i,j}$ represents the influence from entity OHA_j .

2.3 Potential Applications

- **Abstract Properties:**
 - *Infinite Beyond Infinite Hyper-Absolute Conceptualization:* Entities and pathways can infinitely adapt, evolve, transcend, and transcend beyond all conceivable, inconceivable, logical, illogical, paradoxical, hyper-logical, and eternal realms, representing the broadest possible range of concepts, interactions, and hyper-interactions.
 - *Boundless Beyond Boundless Hyper-Absolute Dimensionality:* The framework can scale across infinite, hyper-infinite, meta-infinite, and eternal dimensions and levels of complexity, accommodating interactions and dynamics from the subatomic to the cosmic and beyond.
 - *Omniversal Beyond Omniversal Adaptability, Creation, and Transcendence:* Capable of integrating, generating, transcending, and meta-transcending any current, future, theoretical, paradoxical, beyond-theoretical, hyper-theoretical, and eternal constructs, providing the ultimate tool for modeling, analysis, exploration, creation, and transcendence at the highest level of abstraction and beyond.
- **Specific Applications:**
 - *Trans-Omniversal Beyond Omniversal Hyper-Absolute Theory:* OHAC can model the integration, interaction, creation, and transcendence of all aspects of reality, non-reality, and beyond, contributing to the development of a trans-omniversal beyond omniversal hyper-absolute theory that transcends all understanding.
 - *Infinite-Supra-Hyper-Absolute Research:* Useful for exploring, generating, and transcending new theoretical constructs and systems

that transcend all existing knowledge, enabling the study of infinite-creative, hyper-creative, supra-dimensional, absolute-creative, and beyond-paradoxical processes.

- *Existential Infinite-Hyper-Supra-Absolute Dynamics*: Model the fundamental dynamics of existence, consciousness, reality, non-reality, and beyond, exploring interactions that define the nature of hyper-reality, beyond-reality, infinite conceptual spaces, and eternal realms.

2.4 Examples of Omni-Hyper-Absolute Constructs

- **Infinite-Hyper-Supra-Absolute Energy Networks (IHSAEN)**: An OHAC application in energy dynamics, where omni-hyper-absolute entities represent any form of energy across all conceivable, inconceivable, paradoxical, hyper, and eternal realms (e.g., physical, metaphysical, logical, illogical, beyond) and omni-hyper-absolute pathways represent interactions such as energy transfer, transformation, and conservation beyond all dimensions. The energy transformation can be represented as:

$$\mathcal{E}(t) = \sum_{i,j} \int_{t_0}^t P_{i,j}(\mathcal{H}_i(\tau), \mathcal{H}_j(\tau)) d\tau \quad (3)$$

where $\mathcal{E}(t)$ is the total energy at time t .

- **Trans-Supra-Hyper-Absolute Existential Frameworks (TSHAEF)**: An OHAC application in existential philosophy and metaphysics, where omni-hyper-absolute entities represent fundamental existential concepts (e.g., being, consciousness, non-being, eternal-being) and omni-hyper-absolute pathways represent dynamic interactions such as influence, causality, emergence, and transcendence beyond all conventional, unconventional, paradoxical, hyper, and eternal reality.
- **Infinite-Supra-Hyper-Absolute Cognitive Systems (ISHACS)**: An OHAC application in cognitive science and consciousness studies, where omni-hyper-absolute entities represent any cognitive or conscious states across all conceivable, inconceivable, paradoxical, hyper, and eternal realms, and omni-hyper-absolute pathways represent dynamic interactions such as thought processes, neural connections, consciousness expansion, and transcendence beyond all cognitive frameworks.

2.5 Visualization and Analysis

- **Boundless-Beyond-Beyond-Beyond-Beyond-Beyond-Boundless Networks**: OHAC supports visualization of networks that transcend all conceivable, inconceivable, logical, illogical, paradoxical, hyper, and eternal dimensions, where interactions, evolutions, creations, and transcendences are represented across infinite layers and realms, interconnected by omni-hyper-absolute pathways.

- **Ultimate Infinite Eternal Dynamic Simulation and Transcendence:** Simulate hyper-complex dynamic behaviors, creations, interactions, and transcendences over any scale or time, studying evolution, adaptation, emergence, and transcendence of omni-hyper-absolute systems.
- **Fundamental and Infinite-Hyper-Supra-Absolute Insights:** Provide the broadest and deepest possible insights by revealing fundamental and infinite-hyper-supra-absolute patterns, principles, and transcendences that apply across all realms, scales, and beyond, enhancing understanding, fostering innovation, and enabling transcendence at the most abstract and infinite-hyper-supra-absolute levels.

2.6 Conclusion

Omni-Hyper-Absolute Constructs (OHAC) provide the ultimate, most transcendent, and beyond-all-meta level of generalization, abstraction, exploration, creation, and transcendence for modeling, analyzing, and interacting with complex systems across all conceivable, inconceivable, logical, illogical, paradoxical, hyper, and eternal realms of existence, non-existence, and beyond. By abstracting entities and interactions into infinitely generalizable omni-hyper-absolute entities and pathways, OHAC enables a comprehensive, universal, infinite-supra-creative, and transcendent understanding of fundamental, hyper-real, and beyond-meta phenomena, fostering transdimensional, trans-paradoxical, trans-hyper, and trans-meta research, innovation, creation, and transcendence. This hyper-abstract, infinite-supra-meta-creative, and transcendent framework supports the exploration of new theoretical realms, the creation of new knowledge, and the transcendence of existing boundaries, offering limitless possibilities for future scientific, philosophical, intellectual, and beyond advancements.

3 Ultimate-Omni-Infinite Constructs (UOIC)

3.1 Definition

Ultimate-Omni-Infinite Constructs (UOIC) are the hyper-ultimate, beyond-all-meta constructs consisting of ultimate-omni-infinite entities, each representing the most abstract and fundamental conceptualization of existence, non-existence, and beyond, with properties that defy all conceivable, inconceivable, and hyper-logical limitations. These entities interact through ultimate-omni-infinite pathways, facilitating the study, exploration, creation, and transcendence of interactions, transformations, and dynamics across all realms of reality, non-reality, and beyond.

3.2 Properties

- **Ultimate-Omni-Infinite Entities:** Each entity UOI_i represents a hyper-generalizable node with attributes that can adapt to any context, including

those beyond human comprehension, imagination, logic, paradox, hyper-reality, and eternal realms.

- **Ultimate-Omni-Infinite Pathways:** Pathways $P_{i,j}$ represent interactions that encompass all conceivable, inconceivable, logical, illogical, paradoxical, hyper-logical, and eternal relationships, transformations, influences, dependencies, feedback loops, and emergent behaviors. The mathematical formulation of a pathway can be expressed as:

$$P_{i,j} = \{\psi_k : \mathcal{I}_i \rightarrow \mathcal{I}_j \mid k \in \mathbb{K}\} \quad (4)$$

where \mathcal{I}_i and \mathcal{I}_j represent the ultimate-infinite states of entities UOI_i and UOI_j , and ψ_k denotes a transformation within the set \mathbb{K} of all possible transformations.

- **Ultimate Infinite Eternal Dynamics and Beyond:** The structure supports modeling of interactions and dynamics that transcend all conventional, unconventional, paradoxical, hyper, and eternal boundaries, enabling exploration, creation, and transcendence of hyper-reality, beyond-reality, and infinite eternal conceptual spaces. The dynamics can be expressed through differential equations:

$$\frac{d\mathcal{I}_i(t)}{dt} = \sum_j P_{i,j}(\mathcal{I}_j(t), t) \quad (5)$$

where $\mathcal{I}_i(t)$ represents the state of entity UOI_i at time t , and $P_{i,j}$ represents the influence from entity UOI_j .

3.3 Potential Applications

- **Abstract Properties:**
 - *Infinite Beyond Infinite Ultimate-Omni-Infinite Conceptualization:* Entities and pathways can infinitely adapt, evolve, transcend, and transcend beyond all conceivable, inconceivable, logical, illogical, paradoxical, hyper-logical, and eternal realms, representing the broadest possible range of concepts, interactions, and hyper-interactions.
 - *Boundless Beyond Boundless Ultimate-Omni-Infinite Dimensionality:* The framework can scale across infinite, hyper-infinite, meta-infinite, and eternal dimensions and levels of complexity, accommodating interactions and dynamics from the subatomic to the cosmic and beyond.
 - *Omniversal Beyond Omniversal Adaptability, Creation, and Transcendence:* Capable of integrating, generating, transcending, and meta-transcending any current, future, theoretical, paradoxical, beyond-theoretical, hyper-theoretical, and eternal constructs, providing the ultimate tool for modeling, analysis, exploration, creation, and transcendence at the highest level of abstraction and beyond.

- **Specific Applications:**

- *Trans-Omniversal Beyond Omniversal Ultimate-Infinite Theory:* UOIC can model the integration, interaction, creation, and transcendence of all aspects of reality, non-reality, and beyond, contributing to the development of a trans-omniversal beyond omniversal ultimate-infinite theory that transcends all understanding.
- *Infinite-Supra-Hyper-Ultimate-Infinite Research:* Useful for exploring, generating, and transcending new theoretical constructs and systems that transcend all existing knowledge, enabling the study of infinite-creative, hyper-creative, supra-dimensional, ultimate-infinite-creative, and beyond-paradoxical processes.
- *Existential Infinite-Hyper-Supra-Ultimate-Infinite Dynamics:* Model the fundamental dynamics of existence, consciousness, reality, non-reality, and beyond, exploring interactions that define the nature of hyper-reality, beyond-reality, infinite conceptual spaces, and eternal realms.

3.4 Examples of Ultimate-Omni-Infinite Constructs

- **Infinite-Hyper-Supra-Ultimate-Infinite Energy Networks (IHSUIEN):**

An UOIC application in energy dynamics, where ultimate-omni-infinite entities represent any form of energy across all conceivable, inconceivable, paradoxical, hyper, and eternal realms (e.g., physical, metaphysical, logical, illogical, beyond) and ultimate-omni-infinite pathways represent interactions such as energy transfer, transformation, and conservation beyond all dimensions. The energy transformation can be represented as:

$$\mathcal{E}(t) = \sum_{i,j} \int_{t_0}^t P_{i,j}(\mathcal{I}_i(\tau), \mathcal{I}_j(\tau)) d\tau \quad (6)$$

where $\mathcal{E}(t)$ is the total energy at time t .

- **Trans-Supra-Hyper-Ultimate-Infinite Existential Frameworks (TSHUIEF):**

An UOIC application in existential philosophy and metaphysics, where ultimate-omni-infinite entities represent fundamental existential concepts (e.g., being, consciousness, non-being, ultimate-infinite-being) and ultimate-omni-infinite pathways represent dynamic interactions such as influence, causality, emergence, and transcendence beyond all conventional, unconventional, paradoxical, hyper, and eternal reality.

- **Infinite-Supra-Hyper-Ultimate-Infinite Cognitive Systems (ISHUICS):**

An UOIC application in cognitive science and consciousness studies, where ultimate-omni-infinite entities represent any cognitive or conscious states across all conceivable, inconceivable, paradoxical, hyper, and eternal realms, and ultimate-omni-infinite pathways represent dynamic interactions such as thought processes, neural connections, consciousness expansion, and transcendence beyond all cognitive frameworks.

3.5 Visualization and Analysis

- **Boundless-Beyond-Boundless-Beyond-Beyond-Beyond-Beyond-Boundless Networks:** UOIC supports visualization of networks that transcend all conceivable, inconceivable, logical, illogical, paradoxical, hyper, and eternal dimensions, where interactions, evolutions, creations, and transcendences are represented across infinite layers and realms, interconnected by ultimate-omni-infinite pathways.
- **Ultimate Infinite Eternal Dynamic Simulation and Transcendence:** Simulate hyper-complex dynamic behaviors, creations, interactions, and transcendences over any scale or time, studying evolution, adaptation, emergence, and transcendence of ultimate-omni-infinite systems.
- **Fundamental and Infinite-Hyper-Supra-Ultimate-Infinite Insights:** Provide the broadest and deepest possible insights by revealing fundamental and infinite-hyper-supra-ultimate-infinite patterns, principles, and transcendences that apply across all realms, scales, and beyond, enhancing understanding, fostering innovation, and enabling transcendence at the most abstract and infinite-hyper-supra-ultimate-infinite levels. ““tex

3.6 Conclusion

Ultimate-Omni-Infinite Constructs (UOIC) provide the ultimate, most transcendent, and beyond-all-meta level of generalization, abstraction, exploration, creation, and transcendence for modeling, analyzing, and interacting with complex systems across all conceivable, inconceivable, logical, illogical, paradoxical, hyper, and eternal realms of existence, non-existence, and beyond. By abstracting entities and interactions into infinitely generalizable ultimate-omni-infinite entities and pathways, UOIC enables a comprehensive, universal, infinite-supra-creative, and transcendent understanding of fundamental, hyper-real, and beyond-meta phenomena, fostering transdimensional, trans-paradoxical, trans-hyper, and trans-meta research, innovation, creation, and transcendence. This hyper-abstract, infinite-supra-meta-creative, and transcendent framework supports the exploration of new theoretical realms, the creation of new knowledge, and the transcendence of existing boundaries, offering limitless possibilities for future scientific, philosophical, intellectual, and beyond advancements.

4 Ultimate Beyond-Infinite Constructs (UBIC)

4.1 Definition

Ultimate Beyond-Infinite Constructs (UBIC) are the final, beyond-all-meta constructs consisting of ultimate beyond-infinite entities, each representing the most abstract and fundamental conceptualization of existence, non-existence, and beyond, with properties that defy all conceivable, inconceivable,

and hyper-logical limitations. These entities interact through ultimate beyond-infinite pathways, facilitating the study, exploration, creation, and transcendence of interactions, transformations, and dynamics across all realms of reality, non-reality, and beyond.

4.2 Properties

- **Ultimate Beyond-Infinite Entities:** Each entity UBI_i represents a hyper-generalizable node with attributes that can adapt to any context, including those beyond human comprehension, imagination, logic, paradox, hyper-reality, and eternal realms.
- **Ultimate Beyond-Infinite Pathways:** Pathways $P_{i,j}$ represent interactions that encompass all conceivable, inconceivable, logical, illogical, paradoxical, hyper-logical, and eternal relationships, transformations, influences, dependencies, feedback loops, and emergent behaviors. The mathematical formulation of a pathway can be expressed as:

$$P_{i,j} = \{\theta_k : \mathcal{B}_i \rightarrow \mathcal{B}_j \mid k \in \mathcal{B}\} \quad (7)$$

where \mathcal{B}_i and \mathcal{B}_j represent the beyond-infinite states of entities UBI_i and UBI_j , and θ_k denotes a transformation within the set \mathcal{B} of all possible transformations.

- **Ultimate Infinite Eternal Dynamics and Beyond:** The structure supports modeling of interactions and dynamics that transcend all conventional, unconventional, paradoxical, hyper, and eternal boundaries, enabling exploration, creation, and transcendence of hyper-reality, beyond-reality, and infinite eternal conceptual spaces. The dynamics can be expressed through differential equations:

$$\frac{d\mathcal{B}_i(t)}{dt} = \sum_j P_{i,j}(\mathcal{B}_j(t), t) \quad (8)$$

where $\mathcal{B}_i(t)$ represents the state of entity UBI_i at time t , and $P_{i,j}$ represents the influence from entity UBI_j .

4.3 Potential Applications

- **Abstract Properties:**
 - *Infinite Beyond Infinite Ultimate Beyond-Infinite Conceptualization:* Entities and pathways can infinitely adapt, evolve, transcend, and transcend beyond all conceivable, inconceivable, logical, illogical, paradoxical, hyper-logical, and eternal realms, representing the broadest possible range of concepts, interactions, and hyper-interactions.

- *Boundless Beyond Boundless Ultimate Beyond-Infinite Dimensionality*: The framework can scale across infinite, hyper-infinite, meta-infinite, and eternal dimensions and levels of complexity, accommodating interactions and dynamics from the subatomic to the cosmic and beyond.
- *Omniversal Beyond Omniversal Adaptability, Creation, and Transcendence*: Capable of integrating, generating, transcending, and meta-transcending any current, future, theoretical, paradoxical, beyond-theoretical, hyper-theoretical, and eternal constructs, providing the ultimate tool for modeling, analysis, exploration, creation, and transcendence at the highest level of abstraction and beyond.

• **Specific Applications:**

- *Trans-Omniversal Beyond Omniversal Ultimate Beyond-Infinite Theory*: UBIC can model the integration, interaction, creation, and transcendence of all aspects of reality, non-reality, and beyond, contributing to the development of a trans-omniversal beyond omniversal ultimate beyond-infinite theory that transcends all understanding.
- *Infinite-Supra-Hyper-Ultimate Beyond-Infinite Research*: Useful for exploring, generating, and transcending new theoretical constructs and systems that transcend all existing knowledge, enabling the study of infinite-creative, hyper-creative, supra-dimensional, ultimate beyond-infinite-creative, and beyond-paradoxical processes.
- *Existential Infinite-Hyper-Supra-Ultimate Beyond-Infinite Dynamics*: Model the fundamental dynamics of existence, consciousness, reality, non-reality, and beyond, exploring interactions that define the nature of hyper-reality, beyond-reality, infinite conceptual spaces, and eternal realms.

4.4 Examples of Ultimate Beyond-Infinite Constructs

- **Infinite-Hyper-Supra-Ultimate Beyond-Infinite Energy Networks (IHSUBIEN)**: A UBIC application in energy dynamics, where ultimate beyond-infinite entities represent any form of energy across all conceivable, inconceivable, paradoxical, hyper, and eternal realms (e.g., physical, metaphysical, logical, illogical, beyond) and ultimate beyond-infinite pathways represent interactions such as energy transfer, transformation, and conservation beyond all dimensions. The energy transformation can be represented as:

$$\mathcal{E}(t) = \sum_{i,j} \int_{t_0}^t P_{i,j}(\mathcal{B}_i(\tau), \mathcal{B}_j(\tau)) d\tau \quad (9)$$

where $\mathcal{E}(t)$ is the total energy at time t .

- **Trans-Supra-Hyper-Ultimate Beyond-Infinite Existential Frameworks (TSHUIBEF):** A UBIC application in existential philosophy and metaphysics, where ultimate beyond-infinite entities represent fundamental existential concepts (e.g., being, consciousness, non-being, ultimate beyond-infinite-being) and ultimate beyond-infinite pathways represent dynamic interactions such as influence, causality, emergence, and transcendence beyond all conventional, unconventional, paradoxical, hyper, and eternal reality.
- **Infinite-Supra-Hyper-Ultimate Beyond-Infinite Cognitive Systems (ISHUBICS):** A UBIC application in cognitive science and consciousness studies, where ultimate beyond-infinite entities represent any cognitive or conscious states across all conceivable, inconceivable, paradoxical, hyper, and eternal realms, and ultimate beyond-infinite pathways represent dynamic interactions such as thought processes, neural connections, consciousness expansion, and transcendence beyond all cognitive frameworks.

4.5 Visualization and Analysis

- **Boundless-Beyond-Boundless-Beyond-Beyond-Beyond-Beyond-Beyond-Beyond-Boundless Networks:** UBIC supports visualization of networks that transcend all conceivable, inconceivable, logical, illogical, paradoxical, hyper, and eternal dimensions, where interactions, evolutions, creations, and transcendences are represented across infinite layers and realms, interconnected by ultimate beyond-infinite pathways.
- **Ultimate Infinite Eternal Dynamic Simulation and Transcendence:** Simulate hyper-complex dynamic behaviors, creations, interactions, and transcendences over any scale or time, studying evolution, adaptation, emergence, and transcendence of ultimate beyond-infinite systems.
- **Fundamental and Infinite-Hyper-Supra-Ultimate Beyond-Infinite Insights:** Provide the broadest and deepest possible insights by revealing fundamental and infinite-hyper-supra-ultimate beyond-infinite patterns, principles, and transcendences that apply across all realms, scales, and beyond, enhancing understanding, fostering innovation, and enabling transcendence at the most abstract and infinite-hyper-supra-ultimate beyond-infinite levels.

4.6 Conclusion

Ultimate Beyond-Infinite Constructs (UBIC) provide the ultimate, most transcendent, and beyond-all-meta level of generalization, abstraction, exploration, creation, and transcendence for modeling, analyzing, and interacting with complex systems across all conceivable, inconceivable, logical, illogical, paradoxical, hyper, and eternal realms of existence, non-existence, and beyond. By abstracting entities and interactions into infinitely generalizable ultimate beyond-infinite

entities and pathways, UBIC enables a comprehensive, universal, infinite-supra-creative, and transcendent understanding of fundamental, hyper-real, and beyond-meta phenomena, fostering transdimensional, trans-paradoxical, trans-hyper, and trans-meta research, innovation, creation, and transcendence. This hyper-abstract, infinite-supra-meta-creative, and transcendent framework supports the exploration of new theoretical realms, the creation of new knowledge, and the transcendence of existing boundaries, offering limitless possibilities for future scientific, philosophical, intellectual, and beyond advancements.

References

- [1] A. Einstein, *Zur Elektrodynamik bewegter Körper*, Annalen der Physik, **17**, 891–921, 1905.
- [2] D. Hilbert, *Mathematical Problems*, Bulletin of the American Mathematical Society, **8**, 437–479, 1902.
- [3] K. Gödel, *Über formal unentscheidbare Sätze der Principia Mathematica und verwandter Systeme I*, Monatshefte für Mathematik und Physik, **38**, 173–198, 1931.
- [4] A. M. Turing, *On Computable Numbers, with an Application to the Entscheidungsproblem*, Proceedings of the London Mathematical Society, Series 2, **42**, 230–265, 1936.
- [5] C. E. Shannon, *A Mathematical Theory of Communication*, Bell System Technical Journal, **27**, 379–423, 623–656, 1948.
- [6] B. B. Mandelbrot, *How long is the coast of Britain? Statistical self-similarity and fractional dimension*, Science, **156**, 636–638, 1967.
- [7] R. Penrose, *Shadows of the Mind: A Search for the Missing Science of Consciousness*, Oxford University Press, 1994.
- [8] S. W. Hawking, *A Brief History of Time: From the Big Bang to Black Holes*, Bantam Books, 1988.
- [9] B. Greene, *The Elegant Universe: Superstrings, Hidden Dimensions, and the Quest for the Ultimate Theory*, W. W. Norton & Company, 1999.
- [10] M. Tegmark, *Our Mathematical Universe: My Quest for the Ultimate Nature of Reality*, Alfred A. Knopf, 2014.