# Cybertheology from a Theoretical Approach: Conceptual Considerations and Proposals

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## ABSTRACT

*Apps, Artificial Intelligence (AI), internet, Internet of Things (IoT), metaverses, social networks, and virtual assistants are changing our faith, ecclesial communities, pastoral actions, religious experiences, and theology, especially accelerated by the corona-virus pandemic. Although the emergence of a new discipline that studies the mediation of faith in digital technologies and its pastoral impacts is widely accepted, a systematized reflection on it is still lacking. However, in recent years, cybertheology approach is emerging in the Catholic academic field to explain all these phenomena; and for this reason, researchers are developing its object of study as well as concepts or methodologies of this new subject.*

*In this article, cybernetics science is proposed as a significant epistemological basis for cybertheology because it facilitates dialogue with other disciplines for building conceptual knowledge. In particular, it is relevant in two main issues: first, cybernetics has biblical, ecclesial, communicational, epistemological, philosophi-cal, and scientific bases. Second, cybernetics is a well-funded inter-transdisciplinary science. With both of these topics, it is possible to study the complex relationships between God, believers,*

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*communication, and technologies. In this paper, the concept of the noosphere proposed by Teilhard de Chardin is appropriated for modeling all these complexities in a critical, ethical, and prophetic standpoint.*

## 1. Introduction

From a Catholic approach, Karl Rahner (1978) defined theology as the *"science of the faith"* that processes revelation in an epistemological, rational, and systematic construction to make it comprehensible (transmissible) to believers. However, for Gustavo Gutiérrez, theology is a "second act," because first is the commitment (praxis), and later, the rationality of this praxis into a community (1982, 82). This shows that theology is not closed, isolated, or static from its geographical, historical, social, technological, and cultural settings; it is in constant development and in dialogue with other sciences and contexts. In this, since the advent of computers, internet and social networks, God's experience, faith celebration, and theological thinking have been fully transformed. In this sense, researchers recognize the emergence of a new academic field that explores the relationship between theology and communication technologies. However, there has been no consensus on a common name or methodology. Examples of this are: *teología de la comunicación* (Martínez 1994), cybertheology (Herring 1997; Marroquín 1999; Spadaro 2010); cyberspace theology (Cobb 1998), digital theology (Steinhart 2012), (Sadiku et al. 2022, 2070); internet theology (Bennet 2012), online theology (Byers 2013), networked theology (Campbell and Garner 2016), media theology (Blondheim and Rosenberg 2017), *teología comunicativa* (Felton 2017; Amaro 2021); AI theology (Kruger and Braconnot 2017), *teologia conexial* (Puntel and Sbardelotto 2017), theology of the digital age (Schmidt 2020), *tecno-evangelización* (Gargevcich and Olivera 2021), postdigital theologies (Savin-Baden 2022), or techno-theology (Ugboh 2023).

In all these academic proposals, cybertheology and digital theology are the most advanced as seen in books, conferences, courses, publications, social networks, and postgraduate studies. Cybertheology is known in the Catholic arena (Mediterranean-Europe, Latin-America), while Digital theology is more prevalent in Anglo-Saxon non-Catholic contexts (Amaro 2021).

## 2. A Brief History of the Study of Technology and Theological Thinking

The study of the impacts of technologies on faith and theology was noticed early in *God and Golem, Inc.* by Norbert Wiener (1964). In this book, Wiener presented a cybernetic approach to the control and communication processes of human purposes and religious ethics, and he asserted that computers would ease communication between religions. In the same year, Pope Paul VI was amazed at how technology had digitalized the Bible and Thomas Aquinas' *Summa Theologica.* The Pope (1964) mentioned:

> Science and technology, twinned once again, have offered us a wonder […] the fact of observing how this very modern service is made available to culture […] how the mechanical brain comes to the aid of the spiritual brain; and the more it is expressed in its own language.

> In those years, propelled by the Second Vatican Council reforms, theologians dialogued with others social sciences (anthropology, behavioral sciences, cybernetics, political sciences, sociology) to understand the organization and mission of the Church (Phan 2001, 60). In this context, sister Mary Virginia Orna stated that technological advances would develop a "cybernetic era," with serious repercussions on culture, society, and the Church, which computers would realize major changes in theological works, so theologians should pay more attention to this (1969, 147). William Everett (1972) approached cybernetics to understand the symbolic analogy of the body applied to the Church. For him, ecclesial corporation is a living system, which self-regulates, hierarchizes, and seeks homeostasis to conserve and survive.

> The first theologian that systematically studied the Church by a cybernetic approach was the Benedictine Patrick Granfield. In his essay, "Ecclesial Cybernetics: Communication in the Church," he defined

ecclesial cybernetics as "the science of communication of the Church" (1968, 678). He modeled the Church as an open system to understand how it communicates their dogmas, documents, and rites among believers, hierarchy, media, and the world. Also, he analyzed how the Church maintains its union (communion) and balancing its doctrinal development with pastoral and ecumenical tasks.

Later years, Granfield published his masterwork, *Ecclesial Cybernetics*: *A Study of Democracy in the Church*, which investigated the organization and governance of the Church, "…understanding the problem of communication and control in church is basic to its future, maintenance and development" (1973, 5-6). Therefore, he studied the history of synods, councils, and conferences from a cybernetic perspective to understand communication-control mechanisms in the Church. Likewise, he considered that the electronic computer would be "an invaluable instrument of research and analysis" (1973, 43) to communicate the Church's teachings and practices, and perhaps would facilitate the realization of a *consensus fidelium* in next decades in controversial topics such as birth control, female ordination or priest celibacy, matters that the Second Vatican Council could not gain consensus.

Decades later, William Gibson introduced the neologism "cyberspace" in the novel *Neuromancer* to describe an experiential reality generated by neural-computational interconnections (1984, 69). In the rise of the internet and hypertext, the terms "cyber" and "cyberspace" have been popularized in entertainment, media, culture, and science. Theology was not an exception. For this reason, D. O. Berger questioned, "…if the electronic media and related rhetorical devices radically alter the way we communicate, even think, how they affect the way theology is done" (1996, 195). Then, Debbie Herring (1997) addressed the term "cybertheology" for the first time in academia:

> …Theology cannot ignore the internet, nor can it assume that cyberspace is just an extension of normal life […] You must devise a cybertheology with a digital hermeneutic that can address the complexity and the subtlety of computer mediated communication in its own terms.

In Latin America, Enrique Marroquín analyzed webpages and chatrooms about theology. Even though those sites were not as advanced as current theological social networks, he intuited that the internet would be the main "place" for theological discussion. He posited, "Could it be thought that the internet would be gestating a new secular religious

discourse? Could we talk about an incipient 'popular cybertheology'?" (1999). Both Herring and Marroquín were the first to name this new field as cybertheology, even though they did not define its epistemological and methodological scope. Jennifer Cobb discussed the impacts of cyberspace and computers on the way of doing theology, including its language and methodologies (1999, 11-15). Margaret Wertheim asserted that interactions in cyberspace are changing experiences and thinkability of faith, which surpass a "physicist" theology, as has been done for centuries (1999, 217-218). In the following years, Pope Benedict XVI (2011) inquired:

> If the new languages have an impact on the way of thinking and living, this in some way also concerns the world of faith and the understanding and expression of it. According to a classical definition theology means the understanding of faith and we know well that understanding, perceived as reflective and critical knowledge, is not alien to the cultural changes that are under way […] what challenges does "digital thought" pose to faith and theology?

Likewise, Antonio Spadaro discussed the topic of cybertheology at the 2010 Italian Bishops' Conference and defined it as the "theological reflection to understand digital technologies" (Amaro and Gripp 2021, 138). In 2012, Spadaro published *Cybertheology: Thinking Christianity in the Times of the Network,* the first book on this issue in academia. Hereupon, cybertheology has developed as an emerging discipline. While it does not have a unanimous definition, four main dimensions are clearly recognized:

A. **Cyberspace.** Since the beginning of this field, the term cyberspace was suggested as its *locus.* For example, Herring proposed cybertheology as "the study of theology in cyberspace, theology of cyberspace and theology for cyberspace" (1997), which means how theology understands media phenomena and validates theological knowledge in cyberspace as sites, groups, or forums of the web (Spadaro 2014, 23).

B. **Experience.** This pertains to how technologies impact the development of spiritualities, phenomenology, and transcendental interactions in media. For Aupers and Houtman, cybertheology is a new spirituality expressed in and through the internet (2005, 81-88).

George understood it as "phenomeno-logical map of the presence of the religious on the internet" or "how to trawl the Web, is understood as a place with spiritual capacities" (2006, 182). Spadaro defined it as "the study of the faith experience or spirituality expressed through internet and networks" or "reflection on the change in the relationship with God and with transcendence" (2011). Finally, Arboleda suggested that cybertheology is not only religious content or media, but rather the theological reflection about the experience of faith in cyberculture (2016; 2017).

**C. Techno-communication.** This dimension refers to theological/ faith content processed by technology: "Theology of technology" (Formenti 2000, 59); "The theology of the meanings of social communication in the era of the Internet and of advanced technologies […] pastoral reflection on how to communicate the Gospel through the Web's own capacity" (George 2006, 182); "The study of ways in which God can be revealed and represented in cyberspace […] how Theology can adapt, express itself and make itself more present on the internet" (Estrella 2016, 575); and "reflection of the revelation that occurs in human action through virtual platforms" (Velásquez 2021, 8-9).

**D. Theology-faith.** This is perhaps the best defined conception, which studies the reflection of faith (theology) and its transmission through media technologies: "the intelligence of faith in the cybernetic age" (Singh 2009); "…the intelligence of the faith in the era of the Internet, that is, reflection on the thinkability of the faith in the light of the Web's logic" (Spadaro 2014); "the systematic reflection on the transformative impact of the digital age on the various dimensions of one's faith life and his/her response to this ever changing milieu" (Le Duc 2015, 140). "The theological field that provides the basis for reflection on the impact of the Internet on our way of living, teaching and communicating the faith […] that dialogues, inculturates and builds relationships with a society immersed in the digital culture" (Amaro and Gripp 2021, 140). According to Spadaro, cybertheology is a new/emerging branch of theology, not mere sociological or communicative reflection (2014; 2016). From a Latin American perspective, cybertheology stands out

as "critical reflection of faith in the digital environment" (Rosolino and Rosales Busch 2022, 511).

## 3. The Main Foundations for Cybertheology

The term "cyber" is not a "fashion" or "fad" word. Unfortunately, cyber/ cybernetics is misinterpreted as synonym for computer, engineering, internet, robotics, or technology, which they are not. Perhaps this confusion began when Gibson's "cyberspace" neologism became popular. However, as show, cybernetics has four main foundations for constructing an epistemological basis of cybertheology:

### 3.1. Philosophical

Cybernetics originates from the Greek prefix "cyber" (*Κυβερνήτης-kibernétes*), meaning to navigate, pilot, or steer a ship. In ancient times, a navigator's knowledge and experience were indispensable: he had to understand the routes, ports, weather, seasons, stars, winds, ocean currents, crew, and cargo weight. His knowledge and leadership skills were crucial for navigating the sea. These cybernetic skills influenced Mediterranean cultures, particularly Greek and Latin. Epic literature, such as Homer's *Odyssey* and Apollonius Rhodius' *Argonautica*, portrays the captain's heroism and tenacity to lead his crew through adversities (gods, kings, monsters, naval armies, storms) to achieve his goals. These works also exemplified ideals of virtuous manhood (*paideia*) (Werner 1995, 22).

Philosophically, Plato defined cybernetics as the "technique and art of the helmsman" (1985; 1988) or "the art of governing sailors" (1987; 1988). Aristotle similarly referred to cybernetics as "the art of navigation," linking practical wisdom expressed in prudence, rectitude, and moderation to a virtuous life (1985). This cybernetic concept extended to Latin philosophers like Seneca, who emphasized purposeful living and appropriate conduct (1989), or the stoic Marcus Aurelius, who advocated for virtue and rectitude in life (1977). Nonetheless, in Plato's *Republic*, the meaning of leadership is used as an analogy for the government of the *polis*. The philosopher-king, like a pilot, steers the city toward peace and justice through wisdom and morality. Plato argued that not everyone possesses the requisite political skill to lead and could lead to the city's downfall (1988). From this Platonic conception, *kybernetes* evolved into the word *guberno,*

or *gubernare* in Latin, which means to govern or rule in current modern languages.

## 3.2. Biblical

In the Old Testament, particularly in the Septuagint, derivatives of *kibernétes* appear in the Book of the prophet Ezekiel, who presents an allegory of Tyre's fall as a ship carrying treasures that sinks into the sea (Eze. 27:8, 27, 28). Similarly, Proverbs describes steering life through wisdom, prudence, and intelligence, gifts from God enabling a righteous life (Prov. 12:5; 23:34; 24:6). The Wisdom of Solomon further employs the cybernetic concept for a life guided by wisdom and justice. This book depicts God as the helmsman of the ship (human life), which sails despite high waves and storms (vicissitudes), but finally reaches safe harbor (security). These meanings convey that the believer's life is guided by God, as with Noah and Job's salvation from flood and storm (Wis. 10:4; 14:3, 6).

In the New Testament, the apostle Paul uses *kybernésis* to refer to church leadership, direction, or government: "Some people God has designated in the Church to be, first, apostles; second, prophets; third, teachers; then, mighty deeds; then, gifts of healing, assistance, administration, and varieties of tongues" (1 Cor. 12:28). This shows how the Platonic cybernetic concept came to early Christianity. In those times, Christian churches were pluralistic, and divisions and persecutions occurred. A hierarchy was then necessary to lead the community (1 Tim. 3:1-13). Paul considered this leadership a Holy Spirit charism serving the community, not for personal gain, as all are united in Christ (1 Cor. 12:12).

## 3.3. Ecclesial

The Church Fathers continued Plato's cybernetic notion. Ignatius of Antioch exhorted Polycarpus to be like "the pilots who steer through tempest" (persecutions/divisions) (1991). Clement of Alexandria taught that authentic philosophy leads us toward God's image and divine guidance (2018). John Chrysostom equated the pilot-ship analogy to the shepherd-leader role in the local church (2002). Pope Gregory the Great compared bishops and priests as shepherds/pilots guiding the community with intellectual and moral values (2001). In his sermons, homilies, and letters, Augustine of Hippo employed the Platonic piloting metaphor extensively.

For example, in Sermon 252, he equated the ship's tempestuous journey to believers' struggles against world temptations (1983). Basil the Great compared believers to brave martyrs and calm pilots, emphasizing endurance through persecutions (2007). Gregory of Nyssa likened Christians to sailors correcting their course with divine guidance, like a ship using landmarks (1993). Gregory Nazianzen (1995) wrote that every Christian must know how to head toward God, just as a good sailor who knows how to navigate the seas and avoid errors (heresy).

The Desert Fathers and Mothers such as Abba Poemen, Abba Theodore, John the Dwarf, and Mother Syncletica also adopted this cybernetic concept, comparing the spiritual journey to steering a ship through storms, using fasting, prayer, and penance (*The Sayings of the Desert Fathers*, *The Alphabetical Collection,* 1975). This widespread use of the navigation analogy in the Patristic tradition reveals a rich understanding of Christian life as a guided journey. This early Christian cybernetic conception is a valuable treasure for cybertheology.

### 3.4. Scientific-Communicative

This foundation has its roots in the ideas of Ampère, Maxwell, and Couffignal on the regulation and control of machines and the rise of "thinking machines" that make their own decisions (Barbosa 2015, 175). However, the recognition of cybernetics as an empirical science began with Arturo Rosenblueth, Julian Bigelow, Manuel Sandoval Vallarta, and Norbert Wiener (Wiener et al. 1943, 19-22), who studied feedback mechanisms and behaviors between the environment, living organisms, and electronic machines (computers). Wiener named this new field cybernetics (known as first-order cybernetic approach) and defined it as "the entire field of control and communication theory, whether in the machines or in the animal" (1948, 11; 1989, 17).

This new interdisciplinary field required diverse approaches from anthropology, communication, computer science, philosophy, physics, engineering, mathematics, neurology, psychology, robotics, sociology, and zoology, thanks to remarkable works from Ashby (1957), von Newmann (1958), Beer (1959), Pask (1961), Shannon and Weaver (1964), Bertalanffy (1968), among others. Consequently, cybernetics gained recognition as a science in the academic world (Correa 2008, 11-14).

Furthermore, a new epistemological construction began, known as second-order cybernetics approach or "cybernetics of cybernetics,"

propelled by von Foester (2003). Here, the observer studies complex systems while recognizing their own role within the system. This gave rise to new cybernetic branches such as anthropology (Mead 1968), psychology and psychotherapy (Bateson 1972), biology—autopoiesis or self-organization (Varela and Maturana 1973), social cybernetics or socio-cybernetics (Luhmann 1995), and complex thinking (Morin 2008). Cybernetics was subsequently recognized as a valid science in sociology in 1994 (Maas et al. 2012, 26-28).

The emergence of third-order cybernetics or "metacybernetics" has been discussed in recent years, focusing on the complex interplay of behavior, knowledge, and consciousness within systems involving multiple agents. At this level, intentionality and actions are crucial for creating, maintaining, or destroying parts of or entire systems (Yolles 2021; Mancilla 2021). Recent advances in AI and metaverses are rapidly expanding this cybernetic level (chatbots, face recognition, smart assistants) and increasing the intricacy of communication and decision models between agents and machines.

## 4. A Cybertheology Proposal

Having presented the four main foundations of cybernetics, it is possible to define cybertheology as *the art and knowledge of how to steer inside-outside the noosphere*. In this sense, the central theme of cybertheology is not just the technology or communication: is *how to steer* through the complex interactions between God, believers, messages, and technologies that occurred inside-outside the noosphere. To defend this position, four conditions for cybertheology are presented below:

### 4.1 Transversal: Inter-Transdisciplinary

It can be argued that if cybertheology is a new field in theology, it could be another contextual theology alongside Black, decolonial, ecological, feminist, Indian, liberation, or queer theologies. According to Stephen Bevans, there are six contextual models of theology: 1) Translation or inculturation; 2) Anthropological; 3) Praxis; 4) Synthetic; 5) Transcendental; and 6) Countercultural (2004, 66-67). However, it is a fact that AI, IoT, or metaverses transcend spatial, cultural, and social contexts worldwide. Herring agreed that cyberspace exceeds Bevans' "physical" or

"situated" contextual model and called for a new theological model for virtual environments (2005). This argument is supported by Mújica (2016), Le Duc (2016), and most strongly, Spadaro, who remarked:

> [It] is not sufficient to consider cybertheological reflection as one of the many cases of contextual theology [because] the context of the network tends not to be (and will be less) isolable as a specific and determined context; but it also tends (and will do so more) to integrate into the flow of our ordinary existence. (2016, 14)

Similarly, from a Latin American standpoint, even though cyber-theology has a global character, "it cannot exclude specific socio-cultural contexts of each region." Hence, cybertheology has an ethical commitment to its social and ecclesial reality, not only to "stay" in networks (Rosolino and Rosales Busch 2022, 515). Therefore, it is essential that theological knowledge emerging from the web impacts social, cultural, and ecclesial locations.

Because the relationships among God, believers, technologies, and messages cannot be reduced to a single paradigm, cybertheology surpasses Bevans' contextual model. While cybertheology can be considered a certain type of inculturated theology in digital media, this inculturation has limitations because of the complexity of lithosphere-biosphere-noosphere interactions. Therefore, cybertheology is not merely contextual but a transversal model, resembling neural networks with intricate connections (Puntel and Sbardelotto 2017) as modeled in third order cybernetics.

Therefore, cybertheology is both interdisciplinary and transdisciplin-ary, depending on the complexity of the model. First, it is interdisciplinary because it connects theology and cybernetics. Second, it is interdisciplinary when modeling the noospheric relations holistically from other fields, in particular, systems theory, epistemology, and philosophy of science. Notably, "interdisciplinary" and "transdisciplinary" are not interchange-able. It is not a simple fusion of knowledge or a jigsaw puzzle of all fields; interdisciplinary involves epistemic integration of ideas, methods, and approaches from disciplines with common ground, such as biochemistry or biophysics. Conversely, transdisciplinary transcends disciplinary barriers to study complexity holistically and make ethical decisions (Paoli 2019, 351-354), as "truth to be scientific, has to become praxis, and therefore, ethics" (Martínez 2018, 98).

For this inter-transdisciplinary field, it is recognized that no single discipline, point of view, or logic can fully exhaust all distinct levels of

reality and its complexity. According to Nicolescu, "the transdisciplinary attitude therefore presupposes both thought and interior experience, both science and consciousness; effectivity and affectivity" (2002, 87-88). This implies a genuine dialogue between disciplines, not merely exchanging opinions, as it involves a sincere search for truth and knowledge (Charter of Transdisciplinarity 1994), (Martínez 2018, 96-97). Ultimately, the challenge of cybertheology is to build these inter-transdisciplinary bridges, enabling advancements in its epistemological status, methodologies, and approaches in the future.

## 4.2 Object of Study: Steering in the Noosphere

One of the greatest epistemological difficulties facing cybertheology is defining its object of study because many definitions focus on technology, communication, or faith as its *locus theologicus* (Barga 2022, 524). Thus, a broader object of study encompassing these areas is required. A transversal category linking biblical, ecclesial, philosophical, scientific, and communicative frameworks is Teilhard de Chardin's "noosphere," proposed as a level of consciousness, communications, thoughts, and knowledge, all interconnected as a single brain. The noosphere is a third emergent stage of life and intelligence evolution, encircling the planet and is preceded by the lithosphere (energy-matter layer) and the biosphere (plants, animals, human life). As a scientific, theologian, and mystic, Chardin suggested the noosphere is continually evolving due to the *amorization* and perhaps, it is developing a new stage that englobes all: the theosphere (divine sphere), where the "Omega Point," the Parousia of Risen Christ will assume the ultimate unification of matter, life, spirit, and consciousness. This is the Total Synthesis for cosmic, evolutionary, and eschatological history of salvation (cf. Col. 1:15-20 and Eph. 1:9-10), (1967a, 206; 1967b, 103; 1974, 290-292).

While considering the noosphere for cybertheology is not new in academia (Cobb 1998; Friesen 2009; Spadaro 2014, 101-103), this proposal goes beyond mere description to position cybertheology as the art and science of navigating within and beyond the noosphere (and its interactions with the lithosphere and biosphere). Also, the noosphere as object of study transcends the offline/online dualism that other approaches struggle to overcome.

Therefore, cybertheology is a know-how approximation, a *techné* that encompasses knowledge, art, and experience with direction (Aristotle

1994). This is not only rational-intellectual but also emotive-volitional, expressed in decisions and actions, and transformed into epistemological, mathematical, or narrative models. An outstanding example is spiritual discernment in Church Tradition, which can be understood as a cybernetic approach because steering is necessary to make correct decisions that align with God's will. This includes listening and accompaniment, whether media or personal interaction (Velásquez 2021; Dicastery for Communication 2023, nos. 41-44).

## 4.3 Critic-Prophetic and Praxis

Cybertheology not only studies the complexity of theology and media in the noosphere but also, building on the steering meaning (Plato, Aristotle, St. Paul, Church Fathers, Wiener, Foester, Yolles, and others), pursues how to make decisions (ethical choices) for a correct navigation within and beyond the noosphere, particularly regarding valid knowledge construction from chats, social networks, forums, and online meetings (Marroquín 1999; Puntel and Sbardelotto 2017).

As a branch of theology, cybertheology possesses critical, prophetical, and praxis interest, in addition to systematic or methodological concern. At this stage, if theology disdains critical and prophetic perspectives, it risks becoming ideological or alienated (Francis 2015). Furthermore, the task of theology is to preserve awareness of the past, be sensitive to the present, and offer hope for the future through continuous discernment and denunciation of everything that is not evangelical (Le Duc 2023). At this point, cybertheology converges with digital theology, providing ethical guides for theological and technological research (Phillips et al. 2019).

Admittedly, the noosphere hosts non-evangelical activities, including hidden interests, rampant consumerism, the digital divide, trafficking, gory violence, espionage, the dark web, and recently, AI-generated fake news (Francis 2021; Francis 2024ab). Given this reality, cybertheology cannot be impartial or neutral because it must side with truth and justice. Considering Chardin's thought, everything against humanity and the natural environment is incompatible with God's project. Thus, cybertheology extends beyond technology or media to also include a commitment to social, ecclesial, and environmental transformation according to the Gospel (Francis 2019). This ethical principle is imperative and facilitates visibility for excluded sectors in the noosphere, as media is

not merely a tool but a means for transforming situations (Caldas 2014; Rosolino and Rosales Busch 2022).

## 4.4. Cybernetic Orders in Cybertheology

To construct a cybertheology with epistemological bases, it is necessary to consider the three cybernetic orders:

| Cyber-netic order | Cybernetics object of study | Cybertheology focusses | Approximations | Example |
|---|---|---|---|---|
| **First** | Systems | Know-how steer of contents, messages, and technologies inside-outside noosphere | Digital theology Digital inculturation Pastoral theology | The Pope Video |
| **Second** | Systems and observer | Know-how steer of the experience of God and believers inside-outside noosphere | Midiotheophanies | Rezando voy app |
| **Third** | Intentions and agreements between observers and systems | Know-how steer of Complex relationships between God, believers (not believers) and AI inside-outside noosphere | Complex communication, Inter/transdiscipli nary metamodels, rules & agreements. Discernment-Ethics | Rules in social network, forums. Church Synod 2021-2024 processes |

Chart 1. Cybernetics and cybertheology levels.

The first level of cybertheology is interested in communication-feedback mechanisms among God and believers (even non-believers) expressed by contents/messages (audio, image, video, virtual) in technologies (apps, devices), both inside and outside the noosphere. An example of this level is The Pope Video, which uses audio, video, and images to share the Pope's monthly prayer intentions and encourages feedback. This exemplifies digital inculturation: embedding a religious message within digital culture to resonate with all audiences (Conferência do Bispos do Brasil 2014). The challenge here is to avoid confusing evangelization with proselytism or apologetics within the noosphere. The

goal is to simultaneously adapt, preserve, and discern the evangelical kerygma through messages and media technologies.

Only at this first and second cybertheological level can cybertheology be considered an inculturated theology, but the feasibility of this at the third level is unclear due to the complex philosophical-epistemological modeling of the noosphere and its relation to other sciences. This proposal includes communication pastoral theology and digital theology within the first cybertheological level because both focus on media and pastoral issues representing a subset of the broader communication modeling complexity (Sutinen and Cooper 2021, 61-90). Research methodologies at this stage draw from computer science (quantitative techniques, data mining or AI analysis), qualitative methodologies (digital ethnography, surveys, and questionnaires), and theological processes (see-judge-act; exegesis, or hermeneutics), among others.

A current debate centers on whether to name this new discipline "digital theology" or "cybertheology." While both may share pastoral objectives and pursue similar goals (Sutinen and Cooper 2021, 1,13), their philosophical and epistemological foundations differ (Barga 2022, 525). Fundamentally, since the origins of cybernetics at the Macy Conference from 1946 to 1953, the conceptual definition of "digital" (from the Latin *digitus,* fingers) emerged as the processing of discontinuous signals based on the binary code used by electronic computers (McCulloch 2016, 719-725). [2] If restricted to the digital realm, digital theology must focus exclusively on communicative devices and machines (Sutinen and Cooper 2021, 1,13-16).

While digital theology's contributions are undeniable, full development, especially in epistemological construction, necessitates incorporating philosophy (classical and scientific), the Bible, Church Tradition, cybernetics, empirical and social sciences, and both theory and practice. Consequently, further arguments, investigations, and clarifications between cybertheology and digital theology are needed in academia. This discussion remains open to future dialogues across various fields and social-ecclesial contexts worldwide.

The second level of cybertheology focuses on experiences of God in the noosphere through interactions (audio, image, video, immersive

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[2] From an engineering approach, analog is the opposite of digital. Analog processes continuous signals such as radio.

sensations) termed "midiotheophanies" (Sbardelotto 2016). Believers widely engage with these spiritual experiences through platforms and social networks, particularly in online celebrations, prayers, rosaries, online Eucharistic adorations, and masses, even religious experiences within metaverses. At this cybertheological level, describing the experience of faith (phenomenologically) is insufficient. Equally important is how believers live, interpret, and share their religious experiences, especially young digital natives. The Rezandovoy app exemplifies this level, applying inspirational music, images, biblical text, and narration to cultivate a spiritual atmosphere (Riezu 2015).

One challenge at this cybertheological level is building mature faith and a robust God-image while fostering engagement with the ecclesial community, as some believers remain in devotional, intimate, and subjectivist "religiosity" without a social commitment, potentially leading to fanaticism, hate, superstitions, and neo-conservatism (Francis 2019). John Laracy proposes Lonergan's Generalized Empirical Method as second-order cybernetics for this level, focusing on the interactions between information, actions, and observer's insight in constructing theological knowledge (Laracy et al. 2019). He also links Gilson's Thomistic realism with the second-cybernetic level, especially in epistemological constructivism for cognitive processes (Laracy and Laracy 2021). At this stage, research methods such as computational AI analysis, phenomenography, case studies surveys, and semiotics could be employed in future research projects.

The third level of cybertheology turns out to be the most complex. First, it seeks to define clear mechanisms and rules facilitating plural communication and understanding among agents connected within and beyond the noosphere. Second, it studies the construction of metamodels with other sciences and humanities. Here, each agent-node connects within an extensive network converging in ecclesial communion. Third, it explores how these metamodels guide decisions, processes, and ethical actions (know-how steering).

As noted, the main challenge for this cybertheological step is to distinguish between opinions and perceptions from truly theological arguments, which preserve the faith core and Church fraternity. Examples include rules governing dialogue, feedback, and knowledge construction in blogs or Facebook groups. The current Church Synod (2021-2024) can be understood as a third-order cybernetics process because its internal rules

and peer listening between bishops, theologians, and laity can be modeled transversally as neural networks, surpassing classical top-down or bottom-up epistemic construction. This Synod demonstrates the complexity of ecclesial communication and communion, necessitating novel approaches.

This complex level integrates methods of previous cybertheological levels and from other sciences, such as AI analysis, engineering signal processing, learning machines, multi-agent systems, and psychotherapeutic techniques for communication (e.g., active listening). Remarkably, interreligious, ecumenical, and intercultural dialogue also offers valuable methodologies for this third cybertheological level. Incorporating these inter-transdisciplinary approaches will enrich cybertheology and its conceptual and practical production in academia and the Church.

## 5. Conclusion

We are transitioning from a "textual theology" (originating with Gutenberg's press in the 16th century) toward cybertheology, constructed through blogs, chats, hashtags, video calls, podcasts, Zoom meetings, YouTube videos, and AI like ChatGPT. Theology is no longer controlled by "experts" found in such things as the *imprimatur*, the *nihil obstat*, peer-reviewed literature, classrooms, official texts, cathedrals, or encyclicals. Similarly, universities no longer hold an exclusive monopoly on knowledge generation due to the proliferation of free discussion networks. This signifies that theology and experiences of God are now being shaped by laypeople in a horizontally networked environment. The appointment of a layperson like Paolo Ruffini as Prefect of the Dicastery for Communication in the Church, along with several Brazilian cybertheologists, confirms this assertion. All these examples validate Marroquín's idea that laypeople will create significant theology across the web.

In particular, researchers must advance to clarify, compare, and differentiate cybertheology, digital theology, and other proposals in theory and practice to build a robust epistemic foundation for this new field in the coming years, also building bridges between academic and ecclesial sectors. This article contributes to constructing this dialogue with a cybernetic approach: it is not only a field of knowledge but a know-how steering, with a praxis and ethical commitment to transforming reality, both inside and outside the noosphere, with a critical and prophetic attitude. It is

essential not to remain solely within digital media or networks; it is truly urgent to transform the world with the impulse of the Gospel.

*This paper is dedicated to Fr. Manuel Myvett, SVD (1931-1997) Belizean missionary that brought social cybernetics approach to Mexico and applied it to pastoral and ecclesial fields. Unfortunately, his writings have been lost.*

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