

The Orthodox Worshiping Experience: The Encounter of the Spatial and Temporal Dimension of Corporeality with Immaterial Reality

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1. Prologue

Our motive for the present study has been the realization that nowadays, in an ever increasing and faster manner, through the inevitable introduction of the new digital reality technologies, the physical and, consequently, the spiritual content of the cultic life is alienated. We will focus on the sacred buildings –the churches– and their relationship with the new technologies.

Firstly, we will explore the relationship between space and worship rituals. We will then briefly review the history of the evolution of the media, in order to understand that this relationship can be dated back to the philosophical relationship between technique and experience. This view derives from the positions of F. A. Kittler (1943-2011), a German media theorist and literary critic, regarding the ontology of media; as a transposition of a Heideggerian History of the Being, it studies the epochal raptures in the history of media¹.

By placing our reflections in the context of media philosophy, we will, on the one hand, reveal the origins of our possible negative beliefs, and, on the other, will indicate “areas” in which we can intervene in order

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1. Chr. Raptis, *Poe-Lacan-Derrida: Συνδεσμολογίες*, Smili Publications, Athens 2013.

to creatively incorporate new technologies into the design of sacred spaces and, consequently, intensify the worship experience. Therefore, our concluding remarks are intended to bring up for discussion the conditions for integrating new digital technologies as innovations in the design of places of worship and not as necessary consequences.

2. Introduction

The relationship between body and soul is described and defined by St. Gregory of Nyssa through the analogy of the *seal* (*σφραγίς*) and the *imprint* (*ἐντύπωμα*)². The idea of the wax copy was used earlier by Aristotle to describe the nature of empirical data and, much later, by Freud –in the Magic Notebook– to describe the relationship between memory and experience³. In these cases, the technical element, initially used as an aid to the depiction of the world, constitutes ultimately the necessary condition for its interpretation⁴.

If theology attempts to interpret in place and time the manifested divine Revelation, then in the relation of divine Worship to spatial installations and ritual performances we can safely trace an example of the interpretation of divine Revelation as a spatial and temporal experience.

By now, our experience with technological inventions through history has shown that the scepticism and fear of them is often followed by their adoption. The denial of technology seems naive, since it cannot prevail. Nevertheless, when we recall the invention of the printing press, the introduction of the electric light bulb, the invention of the phonograph, the use of loudspeakers, etc., let us bear in mind Nietzsche's view that "the tools of writing are the tools of our thoughts"⁵. All these new techniques, which, upon their first appearance, were blamed for the loss of the

2. Gregorios of Nyssa, *Περὶ κατασκευῆς τοῦ ἀνθρώπου*, transl. Archim. P. Brousalis, Tertios Publications, Katerini 1992, p. 227.

3. S. Freud, «Σημείωση γιὰ τὸ "Μαγικὸ σημειωματοῦν"», *Ἀλήθεια/Alitheia* 4-5 (2010 / Ἀφιέρωμα: Ψυχανάλυση καὶ Θεωρίες τῶν Μέσων), pp. 44-48.

4. J. Derrida, *L'écriture et la différence*, Éditions du Seuil, Paris 1967.

5. F. Kittler, *Γραμμόφωνο, Κινηματογράφος, Μουσική*, transl. Toula Sieti, Nisos Publications, Athens 2005.

material they replaced, were later incorporated into worship –for example in spatial constructions– and modified our respective experiences; they affected our bodily responses to spatial and temporal stimuli.

St. Maximus the Confessor, referring to the relationship between body and space, in particular the relationship between Church and Temple, likens the temple to the human body, the sacred step to the soul and the sacred altar to the mind. The Church is in the image and likeness of man, because man is in the image and likeness of God⁶. Thus, according to this linguistic metaphor, the body is the vector between the Church and the temple⁷. In all its manifestations, the worship of God presupposes the two terms of transport, i.e. the temple and the Church, as well as the material carrier of the transport, i.e. the body.

3. Methodologies

a. Correlation of the Fixed Spatial Structure of the Temple with Living Worship

It is argued that the spatial arrangement has ultimately influenced the design of the worship experience. From the earliest times, the spatial constitution of temples was associated with the rituals of divine worship. The temple was initiated by the idea of inserting a new function into an earlier building type, that of the Roman basilica, i.e. of a new meaning to an existing composition, in this case the architectural ground plan.

This correlation was evolved and, on certain occasions, reached the point where the spatial constitution also determined the worship performed. The Church of St. Sophia in Thessaloniki is a typical example of it; the particular movements of the priesthood during the services have been recorded, and are directly related to the architectural plan and the position of the important objects of worship in the space⁸.

6. St. Maximus the Confessor, *Μυσταγωγία*, transl. Ign. Sakalis, Apostoliki Diakonia tis Ekklesias tis Hellados Publications, Athens 1997.

7. P. De Man, *Ἡ ἐπιστημολογία τῆς μεταφορᾶς*, transl. K. Papadopoulos, Agra Publications, Athens 1990.

8. J. Darrouzès, «Sainte-Sophie de Thessalonique d'après un rituel», *Revue des études byzantines* 34 (1976), pp. 45-78.

Another familiar example is the now destroyed Church of the Virgin of the Pharos in Constantinople, where the most important relics of Christianity, i.e. those related to the martyrdoms of Christ, were kept. Therefore, we have many testimonies about a series of rituals and services directly linked to their location and significance, i.e. their importance⁹.

In modern times, the absence of evolution of the naodomy prescribes or results from the corresponding simplification and consolidation of the processes of the worship experience.

b. Technological Achievements Have Always Been Adopted by the Spatial Structures and Installations of Temples and, in General, Worship-Related Places. They Ultimately Modified the Worship Experience itself.

Technological developments have not left the above process unaffected. With the great technological achievements of the 19th century, such as the typewriter, the gramophone, the cinema and everything directly related to them, for the first time in history, the impossible became possible: the recording, storage and reproduction of the experience data. Until then, the main way of storing was symbolic, predominantly based on writing¹⁰.

These great discoveries not only affected the way we understand the world – we could manage to see and hear what has been impossible until then; they ultimately determined to a great extent even the characteristics of our worship life (examples of electricity, printing, sound installations, video recording and reproduction of all these processes). Even our relationship with the sacred relics, the bodies of the saints, was mediated through photography and reproductions¹¹. We were thus led to a peculiar materialization and autonomy of elements (images), which, at the symbolic level, had until then been intangible¹².

9. A. Lidov, “Hierotopy. The creation of sacred space as a form of creativity and subject of cultural history”, in: A. Lidov (ed.), *Hierotopy. Creation of Sacred Spaces in Byzantium and Medieval Russia*, Progress-tradition, Moscow 2006, pp. 33-58.

10. F. Kittler, *Γραμμόφωνο, Κινηματογράφος, Μουσική*, *op.cit.*

11. J. Baudrillard, *Simulacra and Simulation*, transl. S. F. Glaser, The University of Michigan Press, Ann Arbor 1994.

12. J. Baudrillard, *The intelligence of Evil or the Lucidity Pact*, transl. by Chris Turner, Berg, Oxford – New York 2005.

c. The Current Technological Revolution will Inevitably Affect the Worship Experience; The Question is How?

This question will be answered through the investigation of the relationship between technique and experience. Nowadays, all the precedents tend to be abolished. We are able not only to store our empirical data in real time but also to modify and reconstruct reality in real time.

Consequently, our spatial and temporal experience can now be designed not only through spatial assemblages and temporal sequences but mainly through processes. Such are the applications of augmented reality.

The question concerning us here is whether the manifestations of divine Worship, for example the Divine Liturgy, can be perceived as similar processes; that is, as processes which are mediated by technique and therefore they are open, i.e. not fully controlled by us. The *machine learning* example can further illuminate the previous propositions: *machine learning* is defined as the ability of computers to learn without being explicitly programmed to do so¹³. But what does *learning* mean? A program is perceived as learning from experience, with respect to a class of tasks, when the performance of the program is improving with experience. Thus, in any mediation of our experience by technical means there now exists this “risk” or “possibility”.

d. Historical Overview of the Relationship between Technique and Experience

In fact, technological achievements have always been intended to immerse believers into the divine worship. Consequently, the caution with which they are often treated, although it is deductive (relating to their original role and purpose, the age of technical means is also the age of technological wars), is also due to the fact that they are often seen as the external complement of the inner and, therefore, only true experience of faith. But how did we manage to arrive at this view?

d.1. Spirit/Mind: a. Reflection/Contemplation; b. Meaning

In our case, a brief review of the relationship between spirit and matter is very enlightening. In modern philosophy, *spirit* was associated

13. Ar. Samuel, “Some Studies in Machine Learning Using the Game of Checkers”, *IBM Journal of Research and Development* 44, 1-2 (January 2002), pp. 206-226.

with the concept of *reflection / contemplation*, with emphasis given on its mental version and with the concept of meaning as it is expressed not only in religion but also in art and science.

From the point of view of contemplation, the spirit refers to fields of knowledge that have been recognized as psychological empirical data. From the point of view of meaning, the spirit focuses on the symbolic cultural systems that include texts and images. The relationship between the two traditions was manifested as a relationship between materiality and non-materiality.

“Contemplation and meaning behave towards the contemplated body and the text as the spirit behaves towards the letter”¹⁴. Apostle Paul, in his *Second Epistle to the Corinthians*, says: “for the letter kills, but the Spirit gives life” («τὸ γὰρ γράμμα ἀποκτεννεί, τὸ δὲ πνεῦμα ζῶοποιεῖ»)¹⁵. According to this view, it is implied that the Spirit is the soul’s immaterial substrate, whereas whatever is given in space and time is reduced to an inanimate medium and external agent.

d.2. Undermining the Basic Dipole

The first –and strong enough– of the two members turns out to presuppose the second, which thus emerges as the strongest among them.

d.2.a. 1st Subversion (of the Meaning)

Language determines the understanding of the world and writing determines the discourse. The idea of the immaterial spirit has been undermined in the 20th century in many ways. A first subversion was attempted via the linguistic sciences; it has been argued that our language determines the way we understand and comprehend the world. After the 1960s, the idea of the intangible spirit has been further deconstructed through the association of orality with literacy, ultimately defined as the relationship between language and writing. Writing and the recording of any kind was seen as the “technical medium” that constitutes a precondition of knowledge and, ultimately, of experience. In this way, a primacy was given to the material medium, which, in its

14. F. Kittler, *Γραμμόφωνο, Κινηματογράφος, Μουσική*, *op.cit.*, p. 358.

15. 2 Cor. 3, 6.

turn, led to explorations of the materiality of spirit and the spirituality of matter.

Nowadays, in the era of digitality, the focus has been shifted from the relation of meaning to matter, with which it is expressed, to the concept of information, i.e. the data transfer through their digital encoding and subsequent translation into whatever we want through the process generally referred as *mapping*.

Technical means are no longer necessary for the transmission of signs but for the formation of meaning.

d.2.b. 2nd Subversion (of the Reflection/Contemplation)

The physiology of the brain and nervous system determines the subject's ability for reflection. The second major subversion has been through research into the physiology of the brain and the latter's viewing as the site of the emergence and formation of meaning.

d.3. Contemporary Abolition of the Spirit-Matter Dipole or a Reversal

It seems that in our age we are moving away from these views, which consider technical media as extensions of the human body and man as their subject, or –to be more precise– we are entering into a new paradigm, as T. S. Kuhn would have argued¹⁶, which better explains reality, or –to put it differently– we are confronted with a new medium that includes all the previous ones. The Media theorist Friedrich Kittler, developing McLuhan's view that “the medium is the message”, has argued that “the media determine our situation which (despite or precisely because of this) is worth describing”¹⁷. Apart from that, in McLuhan's quote, Kittler detects yet another capacity of each new medium – relating to and describing the revolutionary aspects of the technological developments.

But we are called upon to look at an interesting inversion: we are constantly seeking and striving for the preservation of materiality, the concept that has always been considered the secondary and weakest part of the *spirit-matter* dipole.

16. T. S. Kuhn, *Η Δομή των Επιστημονικών Επανάστασεων*, transl. G. Georgakopoulos, V. Kalfas, Sygchrona Themata Publications, Athens ¹¹2008.

17. F. Kittler, *Γραμμόφωνο, Κινηματογράφος, Μουσική, op.cit.*

The storage, processing, and transmission of the real through the mediation of new media leads to the destruction of the symbolic or the re-negotiation of the term on the basis of differences like *art - technical tools*.

The sciences and arts, and by extension their applications, such as spatial, artistic constructions and installations, are nowadays increasingly dependent on technical infrastructures that are opaque and invisible. These are *recording systems* that specify what is considered as data and therefore storable. These storage forms –codes, not languages–, are inaccessible to human perception and consciousness, unless decoded with the support of technical means. Let us recall here the Heideggerian phrase: “the technique itself prevents any experience of its essence”¹⁸.

4. Conclusion

a. Identifying our Perspective

As architects and artists, by focusing on spatial installations, we are orienting our reflections on the terms of introduction of new digital art forms (intangible art forms) as artistic expressions of the orthodox faith.

Our first spontaneous reaction to a new technological achievement is fear and disbelief. These negative emotions are initially related to our inability to control the new medium due to our lack of knowledge. On a second thought, however, we are able to understand that our fears are mainly concerned with the possible alteration of what has been known so far, the transferring of the meaning of things in other directions and, ultimately, the possibility that truths we have deemed as all-powerful will acquire a new meaning.

b. The Origins of the New Media

The consequences of the media are related to their deductive characteristics. But should technological inventions scare us? What are the reasons for technological inventions? What is the original desire to

18. M. Heidegger, *Holzwege*, Vittorio Klostermann, Frankfurt am Main 1950.

initiate their research and ultimately lead to their invention? What is the necessity and which is the source of this “order”?

Unfortunately, in order to answer this question, we have to turn our attention to the dark side of human nature. We now know that all familiar and important cutting-edge technological inventions (electricity, telecommunications, photography, video and audio recording systems, internet, mobile phones, satellite imaging and communication systems, drones, 3D printers, etc.) had all been custom-made by the “defense” industry. The reason they had been ordered was to be used as weapons to control and hit the enemy. Once they have fulfilled their brief role, thus becoming known to the enemy, they are then moving on to their next use – their wide circulation as consumer goods. From then onwards, the whole effort is for this technology to be used for the benefit of humanity – that is, the use in the best and safest way possible, by limiting the negative characteristics that these inventions carry from their origins; because of these, they are directly related to enforcement, distortion and control.

But how can we reduce these original sins? In his book *Towards a Philosophy of Photography*, Vilém Flusser refers to the autonomous power of the camera medium (the analogue camera), demonstrating “that there is no place for human freedom in the space of the automatically programmed and programmable device”¹⁹. Thus, the solution is for someone to intervene in the device itself and the initiatives it takes. Experimental photographers, he says, “seem to be aware of the fact that the ‘image’, the ‘device’, the ‘program’, and the ‘information’ are the main problems with which have to cope. They are consciously trying to produce unpredictable information – to extract something from the device and put it into an image, which is not foreseen by the program of the device”. We could therefore say that, when we are unconditionally accepting and using the new media, then the negative characteristics do not disappear.

19. V. Flusser, *Πρὸς μία φιλοσοφία τῆς φωτογραφίας*, transl. E. Papaioannou, I. Duennebier, University Studio Press Publications, Thessaloniki 1998, p. 73.

But what does unconditional acceptance and use mean? The adoption of new technologies has undoubtedly often solved various practical issues by modernizing the spatial facilities. At the same time, however, it has created and continues to create hidden and creeping problems.

c. Examples and Implications of the Unplanned Introduction of Technology in Churches

The use of new technologies by non-specialists (artists or craftsmen) has often led to misunderstandings that weakened a series of qualitative conditions of the space, necessary for the spiritual upliftment of believers. For example, the illogical introduction of electric lamps led to:

- to the death of the living shadows, that is, the trembling shadows;
- to the disappearance of the underlit sacred mystery places;
- the shift of interest to the bodies of the faithful over the frescoes, icons, and priests;
- the disappearance of the trembling movement of light on the mosaics, where the figures of the painted saints came to life through the glow of the golden tiles;
- the disappearance of the rays of light that were entering into the sacred space at sunrise, suddenly illuminating the incense and giving sacred substance to the empty space.

Similarly, the invention of the phonograph led to the death of the echo, while the use of loudspeakers weakened the embodied central source of sound, the priests and cantors.

The filming and editing, i.e., the stitching of the shots during the Mass, conveyed a completely different experience, a different narrative to the faithful.

By now, we should have realized that every medium has its own rules. Any recording of a Mass must be planned as a new ritual. We may refer to a retransmission; in essence, though, with the intervention of the medium, we have the creation of a new ritual.

Let us recall the transmission of the Sunday Mass: the place where it takes place is a room in our house (living room, bedroom, kitchen). The Divine Liturgy is not the prime subject of attention, since the spectator, not the believer, can do something else at the same time. If we now move

on to the transmission itself, then we will easily see that the montage of shots creates a completely different cinematic narrative “about the subject”. The stitching together of fragmentary shots: a close up to the priest reading to the icon of the Virgin Mary, the faithful lighting her candle, the general view of the interior of the church, two faithful talking to each other, an elderly woman leaving the church – all these together, the one after the other, create a new narrative, in cinematic terms, that has nothing to do with the event of the Mass itself. Considering that in this example the primary material comes from within the temple and is pre-designed, then we could easily imagine what distortions can be produced through applications of augmented reality.

So, should we forbid or reject the introduction of new media? No, we should allow them, but after a careful consideration: otherwise, the media are imposing their own rules.

5. Possible Suggestions to be Discussed

Through the new digital images and environments, we are nowadays leading to a de-materialization process. An example is the use of new artificial materials in spatial constructions, which replace the original materials by creating artificial images of them (digital prints, projections of materials and styles). This augmented reality, based on the creation of illusory environments, is more than real. Technical images define our view of the world but possibly also our hope in God and the future to come.

Thus, the view that “technique is the way in which modern problems are created and, at the same time, the method for solving them” can be understood under the idea that “the medium is the message”, or that technique actually precedes and determines not only *how* we perceive the world but also *what* of the world we can perceive. Therefore, in this long succession of technological revolutions and developments such as that of writing and language, each new achievement –hieroglyphic writing, the alphanumeric code, digital language–, incorporates the previous ones, describing and defining our world in better ways.

What it seems, though, to be a prerequisite in the unfolding of all the above is our embodied experience. It can be altered or modified, but it is always a *sine qua non* for our immersion into Worship. Let us remember here that the existence of the soul presupposes the existence of the body. Possible alterations of the received spatial and temporal experience can thus function as instruments of its evolvment, bringing us closer to the object of our worship rather than the other way around.

During the passage from classical art to the Christian one, the focus was shifted from the expression of the *beautiful* to the expression of the *sublime*²⁰. As an aesthetic category, the sublime is initially associated with sensations activated by our contact with situations transcending human capacities. In architecture, this expression has technical characteristics²¹. We can discern the anxiety of creators to express the sublime by resorting to the use of the most advanced knowledge of their time – knowledge that they will generously donate in turn as thanksgiving and praise to the divine.

In any other form of art expression, when the creators stand in front of their work in progress, they are guided by their personal desires and ambitions in combination with the aim of the work. But when the work concerns / aims at the divine, the *sacred*, then the aforementioned attitudes, as derivatives of vanity, recede, giving way to the desire for expressing love for the divine. It is an expression that forces the creators to recall all their knowledge and powers, by manifesting all possibilities. Indeed, considering that until relatively recently art was mainly or exclusively sacred, the Church has acted as mentor of artistic and technological innovators. In architecture, construction was at the technological forefront. The different artistic expressions –frescoes, portable icons, mosaics and decorations–, precisely because they were born out of a supreme need, have been the most innovative expressions of their time.

20. P. Michelis, *Αίσθητική Θεώρηση της Βυζαντινής Τέχνης*, National Technical University of Athens, Athens 1977.

21. V. Charisis, *Υπόδειγμα ὀρθόδοξης ναοδομίας κατὰ τὸν Ἅγιο Γρηγόριο Νύσσης*, Arxeio Paraleipomenon Hellinikis kai Europaikis Hetaireias Publications, Athens 2003.

If we accept that in our age, the most advanced human knowledge has to do with the new technologies and the intangible reality, then the Church could be the place where all this accumulated knowledge will find a creative and social outlet. Through the Church, which aims at creation as an expression of love, new technologies could acquire a true meaning.

As it has already been mentioned, the problem of technological achievements lies in their origins. Therefore, the possibility of the Church assuming the role of mentor and protagonist in research and development is an optimistic prospect – after all, the crucial question is *who orders something and for what purpose*.

Imagine, then, an investigation that will have as its starting point the Orthodox faith, questioning the expression of divine worship and its relation to modern technologies. Such a will could aim very far. After all, faith involves imagination. The next stage will focus on the search for social groups that can translate the will into creation - groups of artists, students, university researchers, etc. In their turn, they will communicate it to technical teams. From all this fermentation, a fruitful reflection will emerge in many layers of our society, through multiple conferences and competitions. The whole process will certainly be a lengthy one. Obviously, the first attempts might even fail; still, we believe that the dissemination of the reflection and the exploration of desires and possibilities will eventually bear fruit that would be acceptable to all sides.