

ISSN 0580-1400

1 B 9673 F

# Münchener Theologische Zeitschrift

M  
ThZ

74. Jahrgang · Heft 3 · 2023

## Eucharistic Metaphysics

Herausgegeben von  
Jan Levin Propach und Angelika Wimmer

Mit Beiträgen von

Michaël Bauwens,  
Benjamin Dahlke,  
Winfried Haunerland †,  
Damiano Migliorini,  
Jan Levin Propach,  
Andrea Strickmann  
und Angelika Wimmer



MThZ 74 (2023) 241-352

EOS Verlag Erzabtei St. Ottilien

eos

Vorwort ( <i>Gast-Herausgeber</i> ) .....	241
<i>Winfried Haunerland</i> Die Messfeier als <i>mysterium</i> Feiergestalt und Metaphysik der Eucharistie .....	242–254
<i>Benjamin Dahlke</i> Sakramentenontologische Diskussionen im Vorfeld der Enzyklika <i>Mysterium fidei</i> (1965) .....	255–269
<i>Jan Levin Propach</i> Eucharistische Metaphysik beim jungen Leibniz .....	270–281
<i>Angelika Wimmer</i> Materielle Verkörperung und personale Begegnung .....	282–303
<i>Michaël Bauwens</i> Towards a spousal metaphysics of the Eucharist Persons, Powers, and Mary .....	304–314
<i>Damiano Migliorini</i> The Eucharist according to gunk-relational ontology .....	315–330
<i>Andrea Strickmann</i> Personbegriff und eucharistische Metaphysik Orientierungsbewegungen für mehrdimensionale Kohärenz in eucharistischer Modellbildung .....	331–346
Buchbesprechung .....	347–349
Nachruf .....	350–351
Verzeichnis der Mitarbeitenden .....	352

Die Münchener Theologische Zeitschrift (MThZ) erscheint vierteljährlich im  
© EOS Verlag Erzabtei St. Ottilien · D-86941 St. Ottilien · [www.eos-verlag.de](http://www.eos-verlag.de)

Herausgegeben von den Professoren der Katholisch-Theologischen Fakultät  
der Ludwig-Maximilians-Universität München

Anschrift der Redaktion:  
Prof. Dr. Thomas Schärtl-Trendel (Hauptschriftleiter)  
LMU, Kath.-Theol. Fakultät  
Lehrstuhl für Fundamentaltheologie  
Geschwister-Scholl-Platz 1, 80539 München  
E-Mail: [MThZ@kaththeol.uni-muenchen.de](mailto:MThZ@kaththeol.uni-muenchen.de)  
[www.kaththeol.uni-muenchen.de/publikationen/mthz](http://www.kaththeol.uni-muenchen.de/publikationen/mthz)

Mitglieder der Schriftleitung:  
Prof. Dr. Dr. Burkhard Josef Berkmann – Prof. Dr. Gerd Häfner – Prof. Dr. Bertram Stubenrauch –  
Prof. Dr. Klaus Unterburger

Mitarbeiter der Redaktion: Mag. Theol. Lukas Metz und Mag. Theol. Marie Benkner

Die gesamte Korrespondenz und alle Rezensionsexemplare sind an die Redaktion zu senden.  
Die Zeitschrift kann direkt über den EOS-Verlag oder über den Buchhandel bezogen werden.  
Preise: Jahresabonnement 42 €, Studentenabonnement 29 €, Einzelheft 12 €. Jeweils zzgl. Versandkosten.  
Nachdruck nur mit Genehmigung der Schriftleitung.  
Eine Besprechung der unaufgefordert eingesandten Schriften erfolgt nach Tunlichkeit.

# The Eucharist according to gunk-relational ontology

by Damiano Migliorini

Die rationale Erklärung der Eucharistie steht im Zentrum einer neu belebten Debatte innerhalb der philosophischen Theologie. Nach einer Erläuterung des Konzeptes der „Gunk-relational Ontology“ wird gezeigt, inwiefern dieser neue Ansatz ein Verständnis der Transsubstantiation erlaubt, das sich von anderen traditionellen und zeitgenössischen Zugängen unterscheidet – deren konstruktive Momente teilweise aufgenommen, aber in einer neuen Weise systematisiert werden. Gemäß dem Denkschema der „Gunk-relational Ontology“ besteht jede Substanz aus ihren eigenen Beziehungen, die wiederum ein „gunky“ Fundament aller Realität konstituieren. Die liturgische Zelebration der Eucharistie schafft für das Brot eine neue beziehungsmaßige Situation, sodass dessen Substanz durch ein rekonfiguriertes Beziehungsgeflecht seiner Natur nach gewandelt wird.

## 1. The Eucharist and theological creativity

The possibility of rationally explaining dogmatic doctrines regarding the Eucharist is currently at the center of a revived debate in philosophical theology, raising questions such as: Do we have a rational description of the Eucharistic mystery? What kind of metaphysics is best suited to explain it? Some current scholars start from the assumption that past attempts have left many dilemmas open. Arcadi argues<sup>1</sup> that dogmatic definitions define the bounds of orthodoxy while leaving space for theological creativity when we try to give a rational explanation of those dilemmas. This creativity could be understood as a new interaction between philosophy and theology, and in what follows, I try to put this creativity into practice by applying some recent ontological speculations to the Eucharistic mystery.

In particular, two trends of contemporary ontology help us understand this mystery: “relational ontology” and the lesser-known “gunk ontology”. Although the combination (“gunk-relational”) of these two ontologies may look more like a research program than a complete model, I hope to persuade the reader that it is a path worth exploring. This article is therefore “experimental” because so is gunk-relational ontology, and – assuming it is a plausible model – its application to theological questions remains an ongoing process.

In the first part of the paper, I define several metaphysical-theological problems concerning the Eucharist (§ 1) before briefly identifying a few “solutions” that have been proposed in past and recent times (§ 3 and 4), and which ones should be saved (§ 5). I then outline the fundamental features of gunk-relational ontology (§ 6) and their implications regarding

---

<sup>1</sup> Cf. *James Arcadi, An Incarnational Model of the Eucharist. Current Issues in Theology*, Cambridge 2018, 146.

OMISSIS pp. 316-325

need to make explicit the aporias of this model and integrate them into a more comprehensive one. Gunk-relational ontology tries to do so, as we shall see in § 6.

## 5. A few achievements

Let us try to list the achievements of the above-mentioned “solutions”:

(1) As noted by many authors, we can have doubts about the metaphysics of substance, heavily used by scholastics, at least with regard to its ability to explain the mystery of the Eucharist.<sup>48</sup> However, this should not lead us to devalue – using the Heideggerian label of ontotheology – any metaphysical attempt to explain this sacrament, but rather to seek a more suitable metaphysics. Process-relational ontology seems a promising and potentially effective new perspective.

(2) Multilocation is possible and indispensable, at least in a “traditional” ontology (which uses the notion of substance). However, if point (1) is correct, multilocation should be conceptualized within a new metaphysics, excluding problematic theoretical positions that accept the possibility of time travel and defend the existence of substances. As shown by Pickup, gunk ontology appears useful for this purpose, but it should not be entangled with the notion of miraculous time travel.

(3) If the previous points are correct, then any optimal metaphysics should combine process ontology and gunk ontology. The gunk-relational ontology that I propose below starts from the assumption that the best process ontology is based on gunk, and that gunk needs some of the fundamental insights of process ontology.

(4) Cobb, Cockayne, and Schärfl stress that the personal interaction between the participants in the Eucharist and Jesus is crucial to any model based on relational ontology. The basic intuition here, is that the *subjective* involvement of the participants affects the nature of reality, provided that it is also immersed in the *objective* event of the celebration.

(5) Panpsychist ontology provides useful tools to explain the Eucharist that could be fruitfully incorporated into gunk-relational ontology: In particular, the fact that reality is *also* mental and that God can *intensify* his presence in certain places. I believe that gunk-relational ontology can better account for these different “densities” and for the concept of “protomentality”.

(6) Real presence should not be thought of in “naturalistic” terms but in a broader framework, where a certain view of the omnipresence of God and the presence of the body of Christ throughout the cosmos finds its place. Schärfl’s account, and in general every process account, teaches us that the body of Christ can be thought of as being “everywhere”.

(7) Schärfl’s claim that entities are immersed in events is interesting, but this notion needs to be described in a more precise way: Substances *are* events, that is, they are (also) their relations. This is what gunk-relational ontology tries to develop.

---

<sup>48</sup> Cf. *Louis-Marie Chauvet*, *Symbole et sacrement. Une relecture sacramentelle de l’existence chrétienne*, Paris 1987; see *Thomas Schärfl*, *The Eucharistic Experience* (see fn. 28), 147–170.

## 6. A short introduction to gunk-relational ontology

Let us see what gunk-relational ontology is. Gunk ontology usually states that entities with proper parts have proper parts *ad infinitum*. This means that everything in gunk is not only potentially divisible but divided. The fundamental principle of gunk ontology is Anaxagoras' notion that "everything is in everything"<sup>49</sup>. Marmodoro and Roselli propose a kind of gunk ontology called *gunky power ontology*, in which the infinitely divisible entities are powers. According to the authors, a power (a dispositional quality) can be divided *ad infinitum*, but each part is the same power. In this model, in every place, there could be infinite parts or properties. Every property/part is infinitely small, and in any infinitely small space, there can be infinite parts or properties. This ontology could be of great help to explain the Eucharistic mystery: the aggregate of powers that we usually refer to as "the material body of Christ" could be inserted in every single part of the world. However, as mentioned about trope theory, this model could be very useful for a theory of consubstantiation or impanation, but not for one of transubstantiation.

We must therefore turn to another model of gunk ontology that I tried to formulate in a recent work<sup>50</sup> under the name of *gunk-relational ontology*. If every part has infinite parts, every part is part of infinite other parts. In other words: X is the smallest divided part of Y, but Y is the smallest divided part of Z, Z of W, and so on. How long is this chain? In gunk-relational ontology, it is infinite. "Above" X there are infinite other objects, and "below" X there are also infinite objects. Strictly speaking, *gunk* is the infinite divisibility towards the infinitely small, "downwards"; the opposite hypothesis, i. e. that there is an infinity of objects "upwards", is called *junk*.<sup>51</sup> However, I believe gunk and junk to be two faces of the same coin.

This means that each part very probably contains *all the possible parts* as well as possibly all the properties of the universe. This leads to a stronger gunk ontology, based on a radical principle: "Everything is everything". These infinite divided and dividing parts can be called *infinittings*, a term that stresses the fact that every part is necessarily an *event* of aggregations, always changing and developing (this is the basic insight of process metaphysics). In this sense, each part is a *subsistent relation* because it is the developing act of aggregation of infinite parts. Infinittings are relations because they are the infinity of rela-

<sup>49</sup> Anna Marmodoro, *Everything in Everything. Anaxagoras's Metaphysics*, Oxford 2017.

<sup>50</sup> Cf. Damiano Migliorini, *Ontologie relazionali e metafisica trinitaria. Sussistenze, eventi e gunk*, Brescia 2022; id., *Ontologie relazionali e Trinità*, Reggio Emilia 2022. Some fundamental points are summarised in an older and more experimental work in English: id., *Troubles with Trinitarian (Relational) Theism*, in: D. Bertini; D. Migliorini (Eds.), *Relations. Ontology and Philosophy of Religion*, Verona 2018, 181–200.

<sup>51</sup> Cf. Einar Bohn, *Must there be a top level?*, in: *The Philosophical Quarterly* 59 (2009) 193–201; Aaron Coitnoir, *Universalism and Junk*, in: *Australasian Journal of Philosophy* 92/4 (2014) 649–664; James Taylor, *Priority Monism and Junk*, in: *Analytic Philosophy* 66/1 (2022) 44–61. The mathematician Lombardo Radice, analysing the thought of Cantor (and others), believes that it is impossible not to think of the actual infinite, which also implies affirming that a Non-Increasable Absolute – an all-encompassing Absolute – is contradictory: God must be an Increasable Absolute (see Lucio Lombardo Radice, *L'infinito. Itinerari filosofici e matematici d'un concetto base*, Roma 1981, 123–131). This also means that we cannot admit a "top level" of reality (junk hypothesis), just as we can admit an infinite number of "bottom levels" (gunk hypothesis).

tions between the infinitely divided. The objects of our world, then, are made by the aggregations, in different *densities*, of these infinitings, and the aggregations are also the relations among infinitings and the infinitings themselves. Every object of the world is a subsistent relation and an aggregation event. This is the best way to account for a relational world (point [3] of the list of achievements). Of course, one might wonder whether gunk-relational ontology substantializes the relations. This is a classic objection moved to process metaphysics, at least in Rescher's interpretation.<sup>52</sup> But in gunk-relational ontology, every relation (infiniting) is a relation among relations; therefore it is always a relational event.

Examining the justifications and plausibility of gunk ontology would require a lengthy discussion that would exceed the scope of this essay. For example, gunk ontology raises issues about the existence of an *actual infinite*, i. e. infinitely divided matter. Today, such a theory would be called *metaphysical infinitism*, the ontological counterpart of *infinitism* (that is, an epistemological position)<sup>53</sup>. This and other issues about gunk ontology have been analyzed by Marmodoro and Roselli.<sup>54</sup> For the present purposes, let us simply suppose that gunk ontology is a *possible (coherent) ontology*.

Even though gunk-relational ontology may seem counterintuitive, it has at least the advantage of making some phenomena "thinkable". Here are some examples.<sup>55</sup> In gunk-relational ontology, the notion of space is strongly relativized: The large distance between two points at the opposite ends of our universe is infinitesimally small because our universe is infinitely small compared to any other universe that contains it. What is an infinitely large distance from our perspective is infinitely small from the perspective of another universe. This makes it possible to think about physical phenomena such as entanglement, but also to affirm that every object is – potentially – everywhere (multilocation – point [2] of the list of achievements).

A second example: the fact that, according to gunk-relational ontology, everything *is* everything allows us to accommodate the fundamental intuition of generic panpsychism (point [5] of the list of achievements) because in this ontology, the distinction between the

---

<sup>52</sup> Cf. *Nicholas Rescher*, *Process Metaphysics*, New York 1996. According to Weeks, Rescher has domesticated process philosophy, leaving out the more audacious theories of Whitehead, Bergson and James, who argued that processes are primordial, in a radical ontology which leads towards apophatism. According to this objection, Rescher transforms processes into something very similar to substances – cf. *Anderson Weeks*, *Process Philosophy. Via idearum or Via negativa?*, in: M. Weber (Ed.), *After Whitehead*, Berlin 2004, 223–266.

<sup>53</sup> Infinitism is a controversial epistemological position; cf. *Ali Hasan*; *Richard Fumerton*, *Foundationalist Theories of Epistemic Justification*, in: E. Zalta (Ed.), *Stanford Encyclopedia of Philosophy*, online, 2016, par. 1, in: <https://plato.stanford.edu/entries/justep-foundational/> [accessed 07.07.2023]; *Peter Klein*; *John Turri*, *Ad Infinitum*, Oxford 2014; *Peter Klein*; *John Turri*, *Infinitism in Epistemology*, in: *Internet Encyclopedia of Philosophy*, online, 2017, in: <https://iep.utm.edu/inf-epis/> [accessed 07.07.2023]; on metaphysical infinitism see also *Matteo Morganti*, *Metaphysical Infinitism and the Regress of Being*, in: *Metaphilosophy* 45 (2014) 232–244.

<sup>54</sup> Cf. *Anna Marmodoro*; *Andrea Roselli*, *Power Gunk, or Unlimitedly Divided Powers*, in: U. Zilioli (Ed.), *Atomism in Philosophy. A History from Antiquity to the Present*, London 2020, 420–429; also on the possibility of gunky objects: *Gregory Fowler*, *A Gunk-Friendly Maxcon*, in: *Australasian Journal of Philosophy* 86/4 (2008) 611–627.

<sup>55</sup> This ontology could explain causation itself: *Damiano Migliorini*, *Troubles with Power Structuralism's Account of Causation*, 2023, forthcoming.

physical and the psychic realms loses its value since every part of the universe is both aspects.

At this point one could ask why God should have created an infinite number of matryoshka universes. But then, again, why not? A *relational* and *infinite* God could be at the origin of a universe composed of infinite relational universes (in the form of gunk); it is not irrational to imagine a situation in which the universe would be the infinite unfolding of God's infinite possibilities. However, the search for arguments in favour of this position goes beyond the scope of this essay.<sup>56</sup>

### 7. God and the world: “omnipresent”, “especially present”, and Jesus’ “body presence” everywhere

Another strong thesis about God that could be inferred from the gunk-relational ontology is the following: If everything *is* everything, and God *is in* everything, then *God is everything*. God's substance is the “material” of everything. In which form God is this “material”, if the world is relational? God is a subsistent relation (Trinity), and the world is his coherent manifestation: The world is made of subsistent relations in the form of gunk-relational ontology because God (the world's inner substance) is relational. According to this ontology, the world is made of the substance of God because an infinite God necessarily creates the world within itself through his own substance.<sup>57</sup> God is omnipresent in this sense, but the gunky nature of the world and of God allows us to say that, if infinities can come in different densities – as maths teaches us – God can do the same. Gunk-relational ontology implies that every particle in the universe “*is everything*” and “*is God*”, even if God does not coincide with the world due to the different densities. The world is the “body of God” but is not God himself. This idea converges with Arcadi's position, described above.

Moreover, God can be “especially present”, in different densities and in different places. He can intensify his presence, as Arcadi claims. This conclusion can also be reached by means of another theological speculation: If the physical body of Christ is indissolubly united with the second Divine Person after the incarnation, and the entire Triune God is omnipresent in all creation, we can conclude that, in a mysterious way, after the incarnation, *the physical body of Christ is also present in all creation*. Such is the thesis proposed

---

<sup>56</sup> Curiously, Blaise Pascal said that the infinite divisibility of space (*gunky space* in today language) must be accepted even if it is incomprehensible. Consequently, if *géomètres* can accept this truth, so can a Christian to defend the truths of faith despite being aware of their incomprehensibility (cf. *Alberto Peratoner*, Pascal, Roma, 2011, 53–54). In my view, this means that we can believe in Christian truths because there is a correspondence between the mysterious way in which we describe the fundamental nature of reality and the mysterious way in which we describe some dogma of faith. Not only does the latter have a paradoxical nature (as argued for example by Kierkegaard; cf. *Ettore Rocca*, Kierkegaard, Roma, 2013), but also the deep structure of reality is incomprehensible.

<sup>57</sup> In summary: If God is in every infinitesimal part, *formal* or *material*, of an object, there is nothing in the object that is not God. What distinguishes an object from God still has God present in it. Moreover, if any aspect of the object were different from God, God would not be everywhere.



by Schärfl in the context of process ontology (see § 4), but it is also coherent with a generic Christological view of God's nature. Eleonore Stump, for example, writes:

“If God is eternal, then God's having an assumed human nature is not something characteristic of God at some times but not at others. It is something characteristic of God always. On this view, God is never in the state of not having an assumed human nature.”<sup>58</sup>

Gunk-relational ontology can explain this mystery, this profound incarnation of God. Again, let us keep these theses (the presence of the body of Christ in all creation and the “special presence” in the form of different density) as *a possibility* that meets points (5) and (6) of the list of achievements. It is from this understanding of the God-world relation that we can articulate a new understanding of the Eucharist.

## 8. Transubstantiation according to gunk-relational ontology

Gunk-relational ontology is a form of relational ontology because it postulates that everything is made of relations (*infinittings*). Could such a relational ontology help us explain the mystery of the real presence? Let us explore, once again, a few theoretical options. In this ontology, *every substance is the event of its relations*, and these relations are, in turn, the results of a gunky fundamental reality. This means that, in some way, the liturgical celebration of the last supper creates a *new relational situation*: The bread is (spiritually) “consecrated” by the liturgical formula, and (physically) “broken/shared” by the community. If every relation is possible thanks to the infinittings, then every new relational situation also entails a physical change in the organization of the infinittings.

The substance of the bread, which is also its relations, therefore *profoundly changes its nature* (even if not in its external manifestations) because of these two simultaneous and necessary liturgical acts. Does the relational context change the substance? Baber rightly points out<sup>59</sup> that the liturgical act could induce a mere Cambridge change in the elements of the Eucharist. But in her account, once the bread and wine have been consecrated, the presence of Christ in the Eucharist does not depend upon the psychological state of participants to be *real*. Cobb draws the same conclusions in his process-relational model. An account based on gunk-relational ontology makes a stronger claim that we have a real substantial change after the consecration because every new relational situation brings about a new substantial/physical situation (a re-organization of the infinittings). This claim meets points (4) and (7) of the list of achievements.

However, in gunk-relational ontology, there is no “replacement” of substances because God's substance, just like Jesus' body, is already in everything. What is, then, the substantial difference between any part of the universe and the Eucharist? Can we still talk about transubstantiation? The subjective and objective event of the celebration changes the relational context of the bread, the organization or density of the infinittings, and hence the

<sup>58</sup> Eleonore Stump, *The God of the Bible and the God of the Philosopher*, Milwaukee 2016, 100.

<sup>59</sup> Cf. Harriet Baber, *The Real Presence*, in: *RelSt* 49 (2013) 19–33.

substance, because a substance is the organization of its relations. This is, I think, a sufficient answer to question (C) of § 2, about what differentiates the presence of God in the world from the “special presence” of God in some places, i. e. from the “real presence” of God in the Eucharist. Even without the substitution of substances, we can still talk of a form of real absence and, therefore, of transubstantiation. However, the qualities of the bread are always there (everything is in everything) as part of a new relational situation, and God must only ensure that only the qualities of the bread manifest themselves at the level of reality that conforms to our way of seeing.

All things considered, I believe that gunk-relational ontology is better suited not only to the divine attribute of omnipresence, but also to transubstantiation since, as mentioned above, there is an effective modification of the substance of the bread, but not of its manifest qualities. The relational model of gunk-relational ontology accounts for real absence, which is what makes transubstantiation different from consubstantiation and impanation. Where the relations have changed, we can properly talk about a form of transubstantiation, because what has changed is what the tradition calls “substance”.

In conclusion, gunk-relational ontology seems to offer an interesting way of conceiving the Eucharistic mystery. Gunk ontology offers a better solution compared to the ones listed in the previous paragraphs, and gunk-relational ontology brings these solutions together in a comprehensive framework. Needless to say, there is still much work to be done both to achieve a complete and solid formulation of gunk-relational ontology and to assess its potentially beneficial effects in various areas of philosophical theology.

The rational explanation of the Eucharist is at the center of a revived debate in philosophical theology. After describing gunk-relational ontology, I show how it allows us to understand transubstantiation differently than other traditional and contemporary accounts, from which it draws a few points but combines them in a new way. In gunk-relational ontology, every substance is its own relations, which constitute a gunky fundamental reality. The liturgical celebration of the Last Supper, therefore, creates a new relational situation for the bread: the substance of the bread (its relations) profoundly changes its nature.