

# Mass Dimensions<sup>1</sup>

## *An Extra-Dimensional Glimpse of the Mass*

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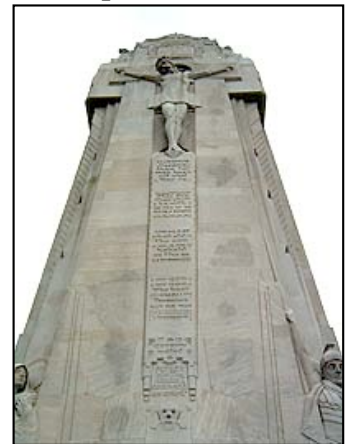
### Falling in Love with the Mass

My first months of being Catholic were highlighted by Mass each Sunday. Perhaps because I converted after 50 years as an Evangelical, each celebration revealed new and fascinating mysteries that filled me with awe. Soon I discovered meanings in the Mass that prompted my going more often. In my third year as a Catholic I found myself



attending nearly every weekday morning at the National Shrine of the Little Flower in Royal Oak, Michigan. Although the Shrine was directly on my way to work, once in a while I found my transit delayed and I would arrive across town late. Such was the case this day, Friday 22 September 2000.

As I drove the last few blocks toward the historic church on the corner of Woodward Ave. and 12 Mile Rd. in the northern suburb of Detroit, I considered driving past it and on to work. I was ten minutes late and surely by the time I found my way to a pew the Liturgy of the Word would be over. Being a former Sola Scriptura Evangelical, the ubiquitous and intense focus on Scripture in the Mass is a favorite of mine. I also disliked being late for anything, least of all worship. As I drove toward the intersection I looked up at the church's 90-foot Charity Crucifixion Tower and the striking 28-foot limestone crucifix. The suffering Christ looked down at me. Dedicated in 1929 the National Shrine of the Little Flower engulfs its surroundings. The art deco structure was built with Massachusetts granite, Indiana limestone, and roofed in copper now turned shallow green. The structure's exterior is rich with imbedded statuary, relief carvings, and Scripture passages. There are also quotes from former U.S. presidents. Interspersed between the larger stone blocks that make up the eight sides of the church are smaller blocks hewed from



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<sup>1</sup> This article was published in the Nov-Dec 2002 (v.34, n.6) print issue of FAITH, p. 23-27, sans pictures. (<http://www.faith.org.uk>). FAITH is a UK Catholic Journal whose motto is: *Jesus Christ is the master key to the meaning of the universe*—an apropos line for this essay. The subheads and paragraphing are courtesy of FAITH's editors. My thanks to friend Bill Murray in the UK for suggesting the submission. My thanks also to Jack Hoolehan, Shrine Development Director, for ensuring that my description of the National Shrine of the Little Flower is accurate, and to Rev. Monsignor William Easton, pastor of the Shrine, for his priestly inspiration. Photos of The Shrine by the author and courtesy of the virtual tour on The Shrine's website, (<http://shrinechurch.com>). Other pictures are from NASA's Hubble Telescope, and Fr. Gene Plaisted, OSC fabulous stock image collection from *The Crosiers*.

America's states and territories, each sculptured with the state's name and flower. When the Ohio block was installed in the wall, 25,000 from the Buckeye state showed up for its dedication.

### **Drawn to a Beautiful Church**

As a child our family would often drive by this edifice. Being Evangelical Protestant at the time, we would never have been caught dead in a Catholic church with its idols and cultic blood



practices. Decades later I would bury my mother and father in the cemetery across the street from Shrine, as the locals refer to the church, never imagining that one day I would long to walk through its ornate doors every morning for worship and prayer. But now, as a Catholic, having put behind me such misunderstandings, the church draws me ever toward it. I pass the intersection, speeding toward work. Suddenly my foot is mystically pulled from the accelerator and pushed hard against the brake pedal. The car slows quickly and I safely turn the corner. The parking lots are full, but I find a spot on the curb not far away. Fifteen minutes later, I walk briskly in the nearest of the several entrances surrounding the church's perimeter.

A quick peek into the naïve doorway reveals that Monsignor Easton is in the midst of his homily, the Liturgy of the Word being over. He likes to walk behind the circular communion rail, facing us, entreating us with the meaning of the day's Scripture. He does it well, his voice always filled with compassion and his words with substance. There's a side door to a seating area behind the main naïve's entrance. I entered it and sit in the front pew of this back section that is slightly raised above the main floor and behind a low stone wall. This is farther back than I like to be. Normally I like to sit near the front of the central pews that are arranged in concentric circles around the sanctuary and altar. But the view is enticing. From this new vantage point I can see everything at once and have a greater sense of the whole.



In the center of the circular building, behind Monsignor Easton, is the altar of the most pure white Italian marble available in the world, a favorite of Michelangelo. The church brochure says that the altar is the largest monolith of its kind in the United States. The solid block of Carrara marble was brought from Mt. Cavalla and weighs in at 18 tons. Relics (or bone fragments) of St. Timothy, St. Theopolis and St. Thérèse were placed inside before it was installed. This morning my eyes are



drawn to the altar's front and the detailed relief carving of two Peacocks drinking from a fountain, an early Christian symbol of everlasting life. The altar's elevated 3 by 5 by 12-foot presence, flooded with light, dominates the sanctuary and easily draws my eyes and soul. Above the altar hangs a 30-inch wooden crucifix with ivory corpus, similar in design to the 28-foot limestone version outside on the tower. The inside crucifix hangs from a large 12-foot square Baldacchino, or canopy made of oak



with gold leaf symbols of the Gospels and stained glass representing the flames of the Holy Spirit.



Centered above the canopy on the ceiling a sunburst is frescoed. Its rays reach out toward the high leaded glass windows that surround the room. The morning sun bursts through the far window and falls directly on my face, warming it from the briskness of the air outside. As the Mass proceeds, these windows act like a giant sundial, the sunbeam cascading across pews until the next window picks up the eternal light continuing its heavenly glow across the people.

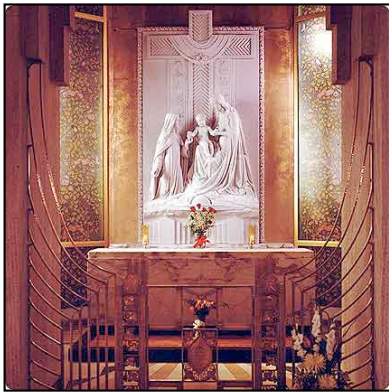
### Homilies in Stone and Paint

As I sit there trying to get into the Monsignor's homily (I can't be late again) I'm struck by how the entire church is resplendent with visual symbols and stories of our ancient Christian beliefs and how the symbols, stories and beliefs apply to our lives today. Built into four of the walls of the church are four chapels dedicated to saints Mary, Joseph, Perpetua and Sebastian; each features a delicately carved half-scale marble statue which stands on an altar styled after the church's central altar. The chapel and statue across from me this morning is St. Joseph, protector of the holy family and laborer. He stands erect resting slightly on the butt end of a long handled adze. On the altar below him the engraving reads, "Saint Joseph, Her Most Chaste Spouse." Surrounding him in brilliantly colored oils and gold are six paintings, on volets, representing the flow of labor and capital. The pictures in order represent Agriculture, Trade, Finance, Mining, Industry, Mechanics, Commerce and Service—each feeding the next with the words: "Capital cannot do without labor. Labor cannot do without capital." What a great reminder that the work I would soon go to, no matter how boring and unmeaningful I found it, was sacred to God.



## A Cloud of Witnesses

To the left of St. Joseph's chapel are the broad, bronze gates that lead to the chapel of the Blessed Sacrament. The ceiling of the chapel is cut through the floor of the balcony above, as if cutting through a dimension of reality, and connecting temporal Earth with eternal Heaven. This allows light from the chapel to flood the balcony's ceiling where a large white dove sculpture looks down on the whole congregation and the Blessed Sacrament. To the left of the Blessed Sacrament Chapel light emanates from the Blessed Virgin's chapel. Someone had placed a beautiful vase of fresh flowers before her that morning as thanksgiving for her prayers to her Son on our behalf.



Across from the Blessed Sacrament chapel is the entrance to the shrine chapel of St. Thérèse of the Child Jesus. Behind where I sat is the larger than life size statue of St. Jude; and across from St. Jude behind another large seating area is a larger-than-life size colored marble statue of the risen Christ. His hands showing nail scars are held up in prayer welcoming those that would come to him.

## Cosmic Dimensions of the Mass

The homily is over and Monsignor invites us to pray but I cannot lower my eyes.

The visual reminders of God, His historic church and His promises that circle the altar are too grand. The saints' prayers for us seemed to be propelled out from their chapels, weaving through the congregation, across the communion rail to the altar, turning purposefully up to the crucifix, through the canopy with its gold leaf and flames of the Holy Spirit, across the ceiling's sunburst fresco, to the windows and the waiting sunlight...testifying of the connectedness of the church to God's extended reality.

For beyond this somewhat ornate building, its sandstone walls and leaded windows, was Earth, outer space, the galaxies beyond and then, perhaps, the nearest reaches of the eternal majesty of God. That was when I began to see what the Mass is really all about.

We're now at the high point of the Mass. Monsignor walks from his chair to the altar and begins the Celebration of The Eucharist. The gleaming whiteness of the altar with it's intricate carvings remind me of our

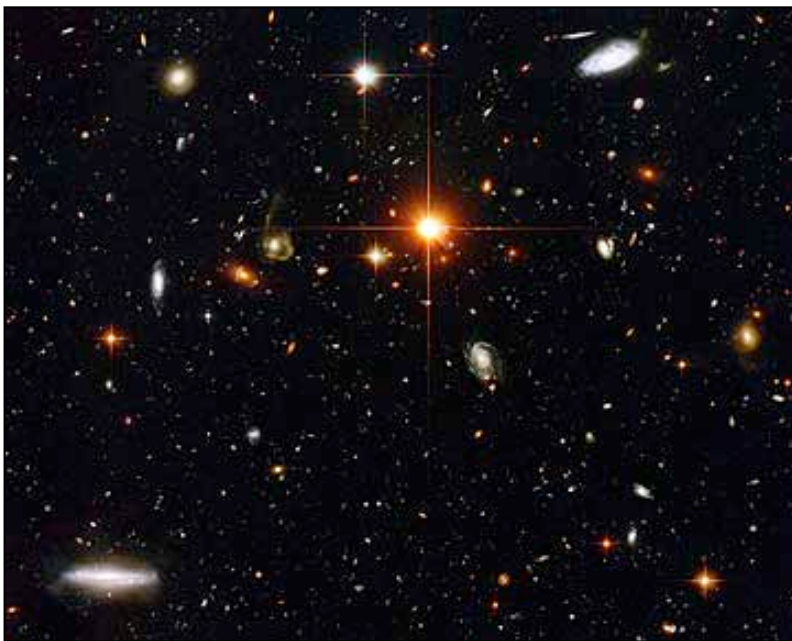




Milky Way and the billions of stars that must make it up, only one of which is the our Sun that even now warms the room and illuminates our faces. Until recently, astronomers and cosmologists calculated that there were perhaps two or three billion galaxies in the universe, having trained their land-based telescopes on the deepest reaches of space. For me, since I was a young lad cutting out newspaper articles about the first man-made satellites—Sputnik and Explorer—this was enough to declare the presence of a God.

### **The Heavens Proclaim the Glory of God**

The heavens indeed do declare what our hearts long for. But, recently, a scientist was granted a tenday experiment with the orbiting Hubbell Space Telescope. He focused it on the darkest part of space known to astronomers and made one long, ten-day



exposure. Was anything there? Or were we finally seeing the edge of space, the abyss of creation? What he found set astronomers back on their heels. Here, in this dark cavity of man's observable extremes, were thousands of previously undetected galaxies each containing millions of stars. Overnight the estimate of the number of galaxies in the universe rose from 3 billion to over 50 billion.<sup>2</sup> Man's ability to describe just the size of the observable universe was humbled. That, in part, is what the Mass is all about.

We now begin the Eucharistic prayer and I kneel in front of the wall, inhaling the scent of the candles expanding outwards from the four points of the altar and upwards into space. And expanding is just what the universe continues to do. Cosmologists tells us that every galaxy in the known universe, even those on the edges of our perception, are moving away from each other at an astonishing rate. Galaxies have been doing that from the moment of the creation event—the Big Bang. Of course, the first question I had upon hearing about the ever expanding universe was, where's the center? Where in space is or was the origin of the explosion? The answer cosmologists gave me was unexpected and unnerving. The origin of the Big Bang is in the 4th and perhaps 5th dimension of space, a place we cannot possibly observe.<sup>3</sup> So much for philosophical materialism. These extra dimensions really do exist.

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<sup>2</sup> 10 day Hubbel experiment

<sup>3</sup> Ross, Hugh (1996). *Beyond the cosmos: the extra-dimensionality of God*. Navpress: Colorado Springs, pp. 35-36.

The string theory of cosmology suggests that at least ten different dimensions were created at the Big Bang. Within the first moments of the event however six of those dimensions were stripped away and the remaining four became our observable universe of space and time.<sup>4</sup> Some scientists have even conceived experiments that allow us to observe the “shadows” of the lower of these extra dimensions. If we as Christians doubt all of this, we only have to turn to the pages of Scripture to discover them. For these are the extra dimensions that allow miracles. Adding a 4th physical dimension, for instance, makes it easy for Christ to walk through the walls of the Upper Room<sup>5</sup> or for Philip to be translated to Azotus.<sup>6</sup> Of course, that doesn’t make it less of a miracle for us. Understanding some aspect of something we can not observe, to me, makes Christ all the more glorious and confirms His authorship of creation. In part, that is what the Mass is all about.



### Time and Eternity Intersect

I am still mulling this over in my mind, befuddled at the majesty of God when we begin to sing the Sanctus. Scriptures suggest that these are the words that the holy angels, unhindered by criticism of vain repetitions, repeat continuously and eternally before the Almighty’s throne: *“Holy, holy, holy Lord, God of power and might, heaven and earth are full of your glory. Hosanna in the highest. Blessed is He who comes in the name of the Lord. Hosanna in the highest.”* While most people think of the creation of the Universe as the moment when all matter took form, what is even more astonishing is that the *space* that those things occupy and *time* itself emanated from that same nearly infinite point of extreme density—the singularity.<sup>7</sup> In other words, not only did everything that we can see and touch, including the stars and galaxies, come from a nearly infinitely small point, but the space that things occupy and time itself also

were created in the same event and emanated from the same source. Now, imagine, at that point in “time” just before the Big Bang, when nothing existed, not even space as we know it, the angels swirling around the throne of God in dimensions unobservable and chanting those glorious, humbling words: *“Holy, holy, holy Lord, God of power and might, heaven and earth are full of your glory.”* That is, in part, what the Mass is all about.

<sup>4</sup> Ross, pp. 25-31.

<sup>5</sup> John 20:19

<sup>6</sup> Acts 8:38-39

<sup>7</sup> Hawking, Stephen, and Penrose, Roger. *The Singularities of Gravitational Collapse and Cosmology*, Proceedings of the Royal Society of London, series A, 314 (1970), pp. 529-548.

## Access to the Divine

We kneel and begin the long Eucharistic prayer, a prayer frightening in its claim: *"We come before you Father...through Jesus Christ..."* Each time we begin this prayer, we are like Peter in the storm-tossed ship who reaches out and asks the Christ who is walking on the water, *"Lord,...tell me to come to you on the water."* Peter's request isn't proof that God gives us access to these extra dimensions, but Peter's *walking on the water* is. Moments later we pray, *"Father, accept this offering...Grant us your peace in this life...save us..."* We are saying, in effect, "Let us enter into the dimensions in which you only can operate." Like Peter we are being brave enough to



enter that nearest of "holy" space, the 4th dimension of space. Much later, when Christ says to Peter and his companions *"Whatever you bind on earth will be bound in heaven; and whatever you loose on Earth shall be loosed in heaven";*<sup>8</sup> and then later *"If you forgive the sins of any, they are forgiven, and if you retain the sins of any, they are retained";*<sup>9</sup> Christ is saying to Peter, "I give you power to reach into the dimensions in which only the Trinity can operate and effect the dimensions of reality that no other man can touch. You are my church and you will have power even over the "gates of hell." In part, that's what the Mass is all about.



## Elevation in Time and Space

Monsignor Easton takes the bread, elevates it slightly, and continues the prayer: *"The day before He suffered, He took bread in His sacred hands and looking up to heaven, to you, His almighty Father, He gave you thanks and praise."* I kneel and pray with the Monsignor. I recall how some scientists call these 3 dimensions (3D) of space and 1 of time the 4 dimensions of our reality. But there's a difference in my thinking between a dimension of space and a dimension of time. The various points along a single dimension of space, say the length of a line or string, can be observed simultaneously. But the dimension of time, which has no length, is only a point. Because of this I would rather

think of our "4" dimensions as really 3D plus zero-T (3D+0T). The 0T (zero-T) refers to a dot or a point of a dimension rather than a line as in 1-dimension, or a plane as in 2-dimensions, or space as in 3-dimensions. This is an important distinction for me in my worship of our *eternal* God.

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<sup>8</sup> Matthew 16:17-18

<sup>9</sup> John 20:22-23

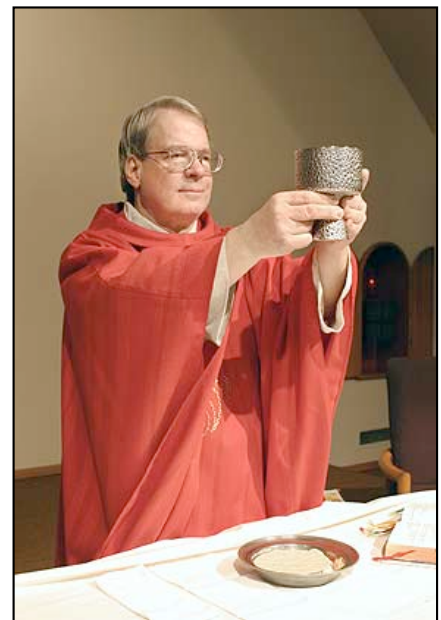


Take a physical dimension like length. In fact, pickup a 12 inch ruler for a moment. The line that creates the straight-edge of the ruler represents a single full dimension of space. If you were to measure this dimension, this perfectly straight line, it would have no width, no height, just length. It is, in fact, a string of infinitely small dots packed so close together as to form a solid line. Now, all the dots along the line that constitute this one dimension can be observed simultaneously from your 3-dimensions of space. You can look down on the ruler's edge and be simultaneously aware of all that is taking place along that line. If there are two ants walking along the ruler's edge, you can see both at the same time. This is not astonishing to you because you are used to living in 3-dimensions. But, what if you were a single dot in that locus of dots that made up the solid line, and there was not a way for you to get out of line to get around the dot in front or behind you, nor was there a way for you to even see to either side of your dot, or above or beneath you? You would only be able to see, hear and experience your one dot of existence. Such a situation would constitute a zero-dimension (0D) of space even though all the other dots together create a 1-dimension line.



### **A Covenant for All Time**

All of that whizzes through my mind as the Monsignor lifts the cup and says, *"When supper had ended He took the cup...this is the cup of my blood, the blood of the new and everlasting covenant. It will be shed for you and for all so that sins may be forgiven. This do in memory of me."* Monsignor Easton lowers the cup from its 3rd dimension of elevation and puts it back on the 2-dimension plane of the altar. I think back to the 1-dimension of the ruler's edge. I could see both the 1-inch and the 12-inch ends simultaneously. Amazing what 1 or 2 more dimensions can do for our perception isn't it? I can take my finger and place it on the 6-inch mark and then at will move it toward either end. Not only can I see both ends of the ruler at the same time, but I can move at will from one end to the other. This is not a difficult thing to grasp in our reality. In fact, we constantly move not in just that 1-dimension of length, as if we could only perceive our own dot, but also in the full dimensions of height and width as well, a full 3-dimensions.



The dot, of course, can represent the limit of our perception of time. For in our zero-dimension of time we can only directly perceive the present dot, if you will. When we



open history books we often will come across a “time line” – a drawing that helps us perceive the linear dimensional effect of history. On that time line, somewhere, is our “present”. It’s represented by a single dot. That’s our zero-dimension of time. And in it, we cannot *see* the past or the future, nor can we *see* to either side, or up or down as if time had a 2nd or 3rd dimension. Likewise, we cannot *move* around the time dot in front of us. We are stuck in a zero-dimension of time.

## The Mystery of Faith

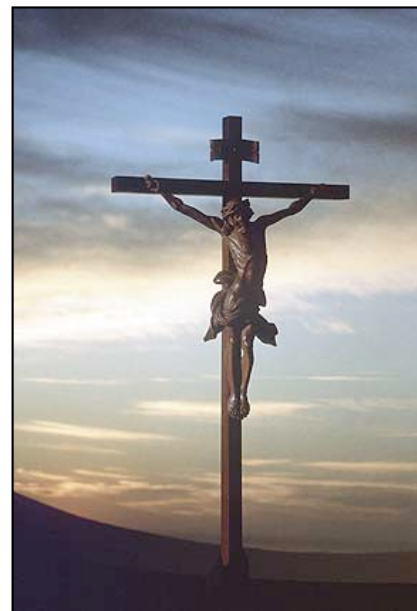
We stand and proclaim the *mystery* of faith: “*Christ has died, Christ is risen, Christ will come again.*” To us, this is the past and the present mystery of Christ in our time line. Time, by some divine design marches forward with nerves of steel, unflinching about what the next second may bring to pass. The rich have no more of this valuable resource than the poor. Even museums, try as they might, can not accumulate, collect or display time. A point in time is here one moment and gone the

next. Unlike length upon which we can see and move along its line, time moves us in one direction and prevents us seeing or moving forward or backwards at any rate other than its own divine beat. Time is the heart beat of the perceivable universe, but the universe is much more than we can perceive, for *God moves freely along time lines as if it was our ruler’s edge.* Insofar as each of us has our own time line, our combined lives are like a thousand rules stacked and packed together on a table, the edges of our time lines facing up to the face of God looking down.

## An Eternal Offering

Cosmology suggests that there are multiple dimensions of time that can mean that God looks down on all time for each of us “simultaneously.” Imagine God looking down on a table of time-rulers on edge. Not only can He place His finger on any one point on any one rule, but He can place two fingers “simultaneously” on two different rulers or time lines...at the “same time.” Eternity means that God looks “simultaneously” on all time rulers from their beginning to their end. If He wanted, God could place His metaphysical hand atop multiple rulers, across multiple points of time, and lay them flat.

This is what it means when we say that God exists in eternity, that He’s eternal, that He has no beginning and no end. These phrases do not mean simply that He exists on a single time line (or single linear dimension) that has no beginning and no end. Oh, it means that, but so much more. It means that God sees all lives and all time and all places “simultaneously.”



God is a being that created the 10 dimensions we've discussed and thus exists and operates in at least 11 dimensions of space, time and morality. He is transcendent. As we can look down on a table of ruler edges and see and touch them simultaneously, so God looks down on our lives and all of history. This, in part, is what the Mass is all about.

### Through Him, with Him, in Him

The church has always taught that when we celebrate the sacrifice of the Mass we do not recreate, or re-sacrifice Christ, but rather we are translated back in time, or time rushes up from the past, and we celebrate and actually participate in *the original* sacrifice of Christ on Calvary. Thus, the Eucharist re-presents or "makes present" and real in us Christ's atoning work.<sup>10</sup> In a very crude way the Mass is about time travel. But it's possible because God exists in eternity and He invites us to temporarily walk, with Peter, on the water of the other dimensions of this present and our future reality.



As I kneel behind the stone wall I take all of this in. The deepest reaches of space collapse and come screaming in with the burst of sunlight heating my face and blinding my eyes. There in front of me, reflecting the sun was the radiant white marble altar of our Lord. Monsignor elevates above his eyes the cup of blood and above it the body of



our Lord and proclaims the great mystery of the Eucharist: *"Through Him, with Him, in Him, in the unity of the Holy Spirit, all glory and honor is Yours, almighty Father, for ever and ever. Amen."* Those are the words Monsignor says, but instead I hear: *"Through Him in all time, with Him in all places, in Him and momentarily He in me through the Eucharist, in the unity of the Holy Spirit and the extra dimensions of God's reality, all glory and honor is yours, almighty Father as You see and touch all history and all lives simultaneously for ever and ever, for You perceive time as we perceive space. Amen."*

### At the Centre of Centres

The Eucharist is the center of reality for it brings together all of reality. It allows the extra dimensions in which God operates to touch our humble universe and demonstrate that it is all one, a whole that cannot exist separately. The sacrifice of Jesus Christ is made for all creation, all time, all places, and particularly for us, now, here. It is celebrated daily on this altar and on tens of thousands of other altars around the world. It is celebrated throughout heaven, continuously, eternally, simultaneously. If this is vain repetition what should we tell the angels who continuously and eternally give God

<sup>10</sup> Catechism of the Catholic Church (1994, 1997), 1362-1366.

praise? What we experience in the Mass is not just a symbol, but is the absolute center of all time and space. It is the representation of eternity, of those dimensions of time, space, morality and whatever else that's cut off from our physical senses. *The Eucharist raised to God is the singularity of the Big Bang.* It is the meaning of all creation. The body, blood, soul and divinity of our Lord, sacrificed for the salvation of the world. As Monsignor Easton finishes the consecration he lifts the body and blood of our Lord ever higher toward the crucifix, toward the canopy, toward the frescoed sunburst, toward the windows, toward the sun, toward the solar system, toward the galaxy, and toward the deepest reaches of the universe known and unknown.



This is absolute. This is mystery. This is truth.

