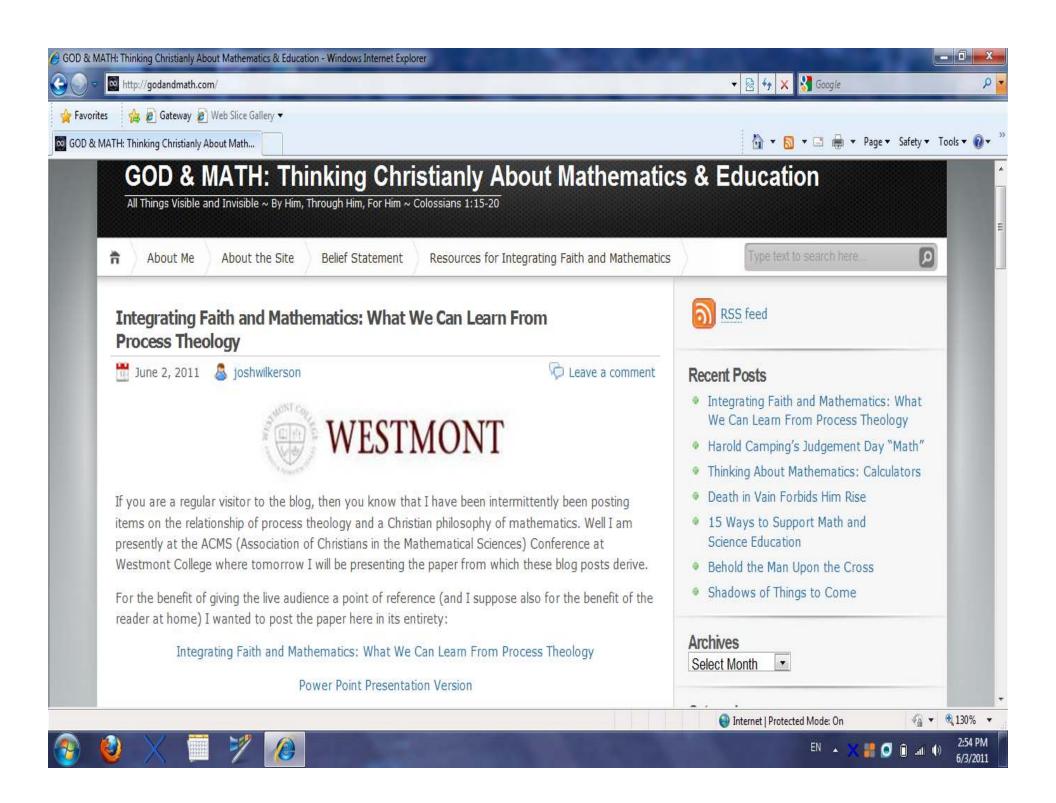
Integrating Faith and Mathematics: What We Can Learn From Process Theology

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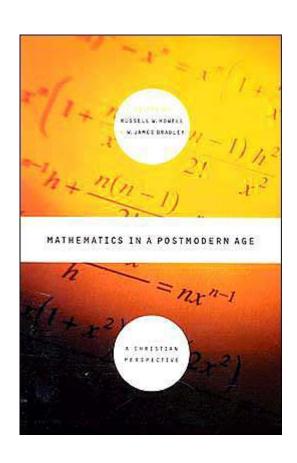
Overview

- My background / the motivation for the paper
- Relationship of Process Theology (PT) to Mathematics
- Brief intro to PT and its founder Alfred North Whitehead
- Critiques of PT
- Charge for Christian Mathematicians

My Background

- B.S. in Mathematics from Texas A&M University (2005)
- Certified teacher in secondary mathematics
- Th.M. in Historical Theology from Dallas Theological Seminary (2010)
- M.S. in Mathematics Teaching from Texas
 A&M (Presently Pursuing)

Math in a Postmodern Age



Motivation for the Paper

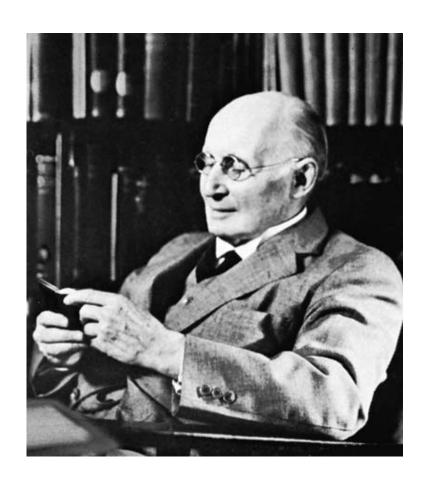
- James Bradley and the inaugural issue of the ACMS journal
- Suggests 14 areas needing to be addressed by Christian Mathematicians (#11):
 - Some thinkers (perhaps influenced by process theology) have asserted the idea that God's creation is not a finished work but that he creates new mathematical objects through mathematicians
 - Is this idea theologically sound?
 - Is it helpful for our understanding of mathematics?

• Approach:

- Determine the theological validity of the process movement
- Examine its influence on an understanding of mathematics

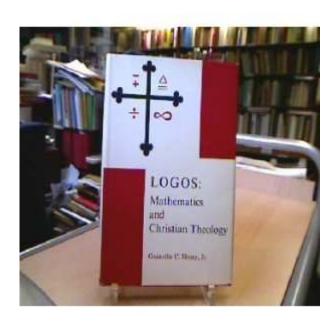
A.N. Whitehead

- Logicist known for work with Russell
- Sought a unifying theory of mathematics based on logic and arithmetic
- Spiritual man and nominal Christian
- Facing challenge of Gödel's Incompleteness Theorem
- Wrestling to harmonize
 mathematical advances with
 the canons of the historical
 Christian faith in an attempt to
 make Christianity relevant to
 modern, intellectual society



- Any traditionally conceived understanding of God has as a consequence, by and large, a platonic understanding of mathematics
 - Mathematical structures and relationships exist independently of man's construction of them and are there existing in some way or some form to be discovered
 - If nothing else than because of the assumption that God knows and understands mathematical relations, thereby giving them some kind of existence independent of man's creation
- It has been proposed by process thinkers that this understanding of standard mathematics conditioned the doctrine of God's immutability
- O Therefore the interpretation of contemporary nonstandard mathematics (Gödel's theorem points out that the structures of knowing cannot all be formalized mathematically) relaxes any restrictions, at least from mathematics itself, of requiring God to be strictly immutable

- O To the proponents of process theology it is the most important development in Christian thought since the first century because the movement gives sophisticated moderns an intellectually and emotionally satisfying reinterpretation of Christianity that is compatible with late-twentieth century ways of thinking
- One major attraction of Whitehead's thought is that it offers a way in which the *seemingly* disparate branches of modern learning can be reintegrated, such as the areas of science and religion



- Process theology was (and still is) seen as a systematic philosophical perspective that can solve problems in science and theology and relate them in an integrated manner
- PT is a clear historical example of how theological foundations have significant impact on the practice mathematics (and vice versa)

Beliefs of Process Theology (Intro)

- Heraclitus: You can't step in the same river twice
- The river (and everything else) is constantly changing or *becoming*
- Emphasis on becoming over being, events over substance, and relationships over essence
- O Does this go against experience?
- Logos (reason) is the principle of stability which gives the appearance of permanence

Beliefs of Process Theology (God)

"Process theology conceives the world to be a social organism, an interdependent and interrelated whole, growing towards its satisfaction through a network of mutual influences, among which are the persuasive aims of God; in this process, God is affected by the world as well as affecting it."

~ Paul Fides ~

- O God is viewed as the one keeping the rules of the process (the organizing principle of growth itself -Logos)
- Concentrates on the nature of God's activity, redefining omnipotence in terms of persuasion
- Redefines omniscience as God's perfect knowledge of both possibility and actuality without equating the two
 - In other words, God knows all things that are actual at present and all things that are possible in the future, but he does not know which possibilities will become actuality

Beliefs of Process Theology (Scripture)

- Just as God's omnipotence is redefined in terms of persuasion, so too is the authority of Scripture
- From the perspective of radical empiricism language is limited and ambiguous in its description of God
 - Thus process thought accepts the notion that God is in some sense revealed through scripture
 - But it also insists on interpretation in which readers are given considerable freedom in the shaping of meaning
- O By viewing the world as a process, an emphasis must be placed on the <u>continual transformation</u> of historical traditions

Beliefs of Process Theology (Christ)

- For PT, God is present or immanent in Jesus because God is believed to be immanent in *every* event whatsoever (a view we might refer to as panentheism)
- The question then arises: how do process theologians see Jesus as a unique individual?
 - Jesus is unique in that he exhibits the *optimal response* to God's calling He was given a unique mission and he responded with great faithfulness.
- What does it mean to say that Jesus was God incarnate?
 - The *Logos* was maximally revealed in Jesus, but is also present in the whole of creation
- What does it mean to say that Jesus was the Christ?
 - Because Jesus brought about and continues to bring about changes and because he mobilizes us for God's plan, he is the supreme Christ, but other people endowed with analogous powers and other Christ-like actions manifest themselves in the world, in several different religions
- Notice PT uses phrases orthodox Christians would affirm, but they mean something very different by them

Beliefs of Process Theology (Sin)

- o In traditional Christian theology, an understanding of human sin and spiritual lostness is vital for appreciating the salvation that is found through Christ and his work on the cross
- O PT denies the traditional doctrine of original sin that due to the failure of Adam and Eve, the first humans, all of humanity has inherited a corrupt and sinful nature because process adherents believe that all humans are part of a great evolutionary process
- The cross does not represent vicarious sacrifice, but the revelation that God is with us even in our deepest pain Jesus reveals that the sins of all humans affect God
- At the crucifixion Jesus died *because* of sin, which is different than saying that Jesus died *for* sin

Beliefs of PT Summary

- God and the world are an evolving process
- The Bible is no longer seen as truth and authoritative, it is rather a historical religious account that we can learn from
- O God is no longer presented as Trinity; at best he is presented as duality: having a nature which effects change and a nature which experiences change
- This God is no longer immutable, impassable, omnipotent, or omniscient
- Christ is no longer fully God and fully man, but rather a man who demonstrated ideally what it is like to be in tune with the desires of God
- O His crucifixion and resurrection only have salvific effects in that they demonstrate how much God is with us in our sufferings and how he will always provide a way out

- Divine Revelation
- God as Trinity
- Person and Work of Christ

Divine Revelation

- The process school comes to the theological task with a low view of scripture modern study precludes accepting all that is written therein as true (such as miracles and the supernatural)
- If God does not supernaturally intrude from without the natural order, divine revelation is by definition excluded
- With the elimination of divine revelation, process theology takes its stand as a natural theology shaped from human materials alone
- Contra 2 Tim 3:16: "All Scripture is God-breathed and is useful for teaching, rebuking, correcting and training in righteousness" (NIV translation)
- Once the authority of Scripture is discarded, the door is open to modify any other doctrine in a way we see fit

God as Trinity

- Because of the process belief that entities are constituted by relatedness to other entities or persons, and thus their repudiation of a substantial ontology, the creedal formations of Nicaea and Chalcedon are no longer relevant
- These formulations were worked out within a world view that is alien to the modern mindset
- Contra Ephesians 1:3-14

Ephesians 1:3-14 (NAU)

Blessed be the God and Father of our Lord Jesus Christ, who has blessed us with every spiritual blessing in the heavenly places in Christ, just as He chose us in Him before the foundation of the world, that we would be holy and blameless before Him. In love He predestined us to adoption as sons through Jesus Christ to Himself, according to the kind intention of His will, to the praise of the glory of His grace, which He freely bestowed on us in the Beloved.

In Him (the Beloved = Christ) we have redemption through His blood, the forgiveness of our trespasses, according to the riches of His grace which He lavished on us. In all wisdom and insight He made known to us the mystery of His will, according to His kind intention which He purposed in Him with a view to an administration suitable to the fullness of the times, that is, the summing up of all things in Christ, things in the heavens and things on the earth. In Him also we have obtained an inheritance, having been predestined according to His purpose who works all things after the counsel of His will, to the end that we who were the first to hope in Christ would be to the praise of His glory.

In Him, you also, after listening to the message of truth, the gospel of your salvation-- having also believed, you were sealed in Him with **the Holy Spirit of promise**, who is given as a pledge of our inheritance, with a view to the redemption of God's own possession, to the praise of His glory.

God as Trinity

- The Christian doctrine of trinity, viewed as three related persons in one substantial unity, provides demonstration of the classical philosophical problems of the relation of the one to the many and of being to becoming
- It is unacceptable for Christians to dismantle the traditional view of Trinity in order to philosophically resolve these lingering tensions

- Person and Work of Christ
 - Since the Whiteheadian *Logos* is not a discrete person within the Godhead, it hardly can be reconciled with the historic Christian explication of the eternal pre-existence of the second person of the Trinity (Isa 9:6; John 1:1-2; Rev 21:6)
 - PT denies that the incarnation involves the eternal second person of the godhead entering space and time and becoming man for us and for our salvation (John 1:1, 14; 2 Cor 8:9; Phil 2:6-8; 1 Tim 3:16)

- Person and Work of Christ
 - The process claim that two natures cannot relate except by displacement prompts PT to insist that the orthodox belief in Jesus' deity necessarily vitiates his authentic humanity (Docetism)
 - "For many deceivers have gone out into the world, people who do not confess Jesus as Christ coming in the flesh. This person is the deceiver and the antichrist!" (2 John 7)
 - The full humanity of Christ must be maintained (Matt 13:55; John 1:14, 19:5; 1 Tim 2:5; Heb 2:14)

- Person and Work of Christ
 - The process belief that Jesus was simply the supreme example of responding to God's calling moves in the other direction and seems to deny his complete deity (Adoptionism or Arianism)
 - Jesus is both fully man and fully God (John 1:1, 18; 10:30-33; 20:28; Rom 1:3-4; 9:5; 1 Cor 15:45-49; Phil 2:6-8; Titus 2:13; Peter 1:1)

- Person and Work of Christ
 - Belief in the divinity of Christ is a prerequisite of salvation (Rom 10:9; 2 Peter 1:3)
 - If Jesus is not God, then he does not have the power to fully reveal the Father, and he does not have the power to save sinners
 - Soteriology demands that he be both true God and true man in order to redeem (1 Tim 2:5)
 - He must be man to represent us (Heb 4:15) and he must be God to save us (Heb 7:24-25).

Person and Work of Christ

- Ultimately, we as Christians must confess the mystery of the hypostatic union (dual natures)
- "Beyond all question, the mystery of godliness is great: He appeared in a body, was vindicated by the Spirit, was seen by angels, was preached among the nations, was believed on in the world, was taken up in glory" (1 Tim 3:16)
- We as Christians are also called to do one thing that process theology does not allow for, and that is the worship of Jesus Christ (Matt 2:2, 11; 14:33; Phil 2:10-11; Heb 1:6)

- The list goes on...
 - Rejection of human sinfulness (Pelagianism)
 - Self salvation vs. cross of reconciliation
 - Denial of bodily resurrection
 - Etc.

- O Process theology thus denies, as biblically and historically understood, Christ's eternal pre-existence, incarnation, virgin birth, sinlessness, deity, atoning death, resurrection, ascension, and second coming, as well as the Trinity of God
- Process theology then does simply fall into a certain heretical category in its doctrine of Scripture, God, or Christ, rather it samples from *many* heretical beliefs
- The philosophical assumption of process thinking is that reason working on the data of lived experience is judged competent to lead the mind into all truth
- This by definition is the very root of sin (Gen 3:6; Rom 1:18-32) and Christians cannot proceed with this underlying presupposition

So What?

Distinctly Christian Mathematics

- O It is clear that while many process beliefs arose out of a sincere wrestling with elements of the Christian faith, the results of this wrestling fall beyond the bounds of Christian orthodoxy
- As Christians, it is important that in developing a philosophy of mathematics we maintain the convictions of our faith
- The ideas put forward by process thinkers such as the human creation of eternal mathematical objects, must be examined through Christian lenses These lenses see the Bible as inerrant and authoritative, God as Trinity, Jesus Christ as fully God and fully man, humanity as sinful and in need of redemption, and salvation as coming by grace through faith in Jesus

Distinctly Christian Mathematics

- O While the mathematical concepts put forward by process thinkers may be intriguing, ultimately we cannot accept them because of the assumptions process thinkers use to make their conclusions
- Even though a philosophical result is put forward that appears useful and eases tensions in the field of study, this does not warrant our overlooking the flawed methodology and thinking which led to the result
- As Christians pursuing mathematical inquiry, we must always proceed with distinctly Christian presuppositions
- Where we come from (our background in Christ) is integral to our work as mathematicians

Closing Thoughts

- Though the reasoning of Whitehead seems outlandish, we must ask ourselves:
 - Are we in any different a position as Whitehead before his time of crisis?
 - If we are not in any different position, are we any less likely to succumb to similar temptations?