

H Chris Ransford

God and the Mathematics of Infinity

What Irreducible Mathematics Says about Godhood

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Introduction

There is no consensus within society as to the nature of the reality we live in. Most hold that the universe was born from physical processes but don't quite agree exactly *how*, with some reckoning that a foundational Big Bang brought about by purely physical laws and events gave rise to our universe, and others suggesting alternative scenarios. Some insist that the universe was created by some ineffable Godhead but readily disagree as to *when* the act of creation took place, with common estimates and/or beliefs ranging from a mere few thousand to 14-odd billion years ago. There is no consensus either on the question of whether ours is the lone universe in existence, or if there are in fact other universes, embedded in a wider multiverse or metaverse.

Put simply, different people hold utterly irreconcilable views of what simple reality is. This lack of consensus also extends to the more abstract areas of human purpose, cause and destiny. Some subscribe to a more spiritual view and see their lives as part of a meaningful grander scheme of things, while others see life as the meaningless outcome of a long series of ultimately random events, circumscribed by laws of physics which got their start when the universe began through some foundational event, itself ultimately explainable by the laws of physics. Because this latter view of ultimately pointless lives playing themselves out in a random and purposeless universe is often perceived as repugnant, and also because many people have experienced at some point or another in their lives what they felt were deeply spiritual experiences, attempts at larger-than-life, transcendental explanations have been routinely sought throughout history. At different times and places in humankind's early history, these attempts at explanation have been retold and collated, and eventually often codified, thus giving rise to the many competing and often mutually incompatible cults and religions which have been with us since the dawn of mankind. Various religions and cults (1) still very much thrive in our modern world, and often dominate international events and narratives.

This book is an exploration of why, if there is such a thing as a Godhead, any possible objective approach to understanding It must begin by not bypassing the most factual and objective tool of analysis at our disposal bar none—provided we have first firmly established that tool's suitability and validity within the domains where we will be using it. That tool is pure mathematics.

This book first examines how and why the use of some numbers is a legitimate and indeed indispensable tool to any objective approach of both what Godhead may possibly be, and cannot possibly be, and how the mathematics of numbers can be safely used within its established areas of suitability. At first sight it would be of course natural to doubt that theology and hard science, let alone simple mathematics, would have any relevance to each other. But as I showed in recent a peer-reviewed article entitled 'Immanence vs. Transcendence: A Mathematical View', they do happen to have surprisingly direct relevance: simple math has the capability to incontrovertibly solve in a few strokes conundrums that have vexed Theologians for centuries (as the question in this paper did to wit, if there is a Godhead, is It present everywhere, or does It mostly keep to some hallowed place in space and time, some privileged Eden mostly removed and away from the rest of the universe?) Even whenever science based on simple math demonstrably *cannot* solve some theological question, as is sometimes the case, then this in itself is of huge interest. As we shall see, a remarkable instance of this latter case is the existential question itself: math by itself cannot possibly prove whether an infinite Godhead exists or not, so that the claims we sometimes hear that science either proves or disproves the existence of a Godhead cannot be supported (or more precisely, to be able to answer the existential question math would have to define the Godhead, in a definition that may not meet consensus.) The narrative briefly examines whether the attribute of *some* infiniteness should be inherent to Godhood, and then goes on to look at intriguing and often counter-intuitive results that immediately arise from using neutral mathematics.

Part 2 is a brief exploration of what math may say about variously held beliefs and assumptions. By way of illustration, it delves deeper into a few selected dogmas and tenets, said by a number of separate creeds to have been dictated directly by the Godhead. It examines in the light of mathematical analysis whether such are logically tenable or even compatible with an infinite Godhead, and whether, should we look at their logical consequences, some may not unwittingly lead to hidden contradictions and logical impossibilities. It then examines whether godlike Infinity can exist at all in any actual reality, and if it does, what role it can possibly have, and not have, in the mundane affairs of man.

Part 3 starts from an assumption that a Godhead consistent with mathematics exists, and analyses the inescapable consequences of that assumption—some of which may turn out to be quite unexpected, which will shed new light on a few old questions, including the vexed question

of how, if an all-powerful Godhead exists, then why does evil still exist (math provides a straightforward and astonishing answer to that question.) It also looks in a new light at the continued prevalence of perceived mystical experiences throughout the ages.

Extensive use of end notes is made, which are used whenever some point calls for further context, buttressing or underpinning, but should its argument be kept in the main text, it would lead to a lengthy, somewhat narrowly specialized discussion and thereby risk losing the thread of the main narrative into a stray off-tangent.

A few passages in the main text are indented. They either consist of short passages quoted from outside sources, or alternatively of some brief background relevant to a point currently under discussion, but which may be however safely skipped without impairing the ability to follow the argument.