## Unification Ontology without Plato

# Part 1: Retiring Plato

by

David Burton

As the first part of a book project

2017

Thank you to Dr. Jin and UTI for allowing me to participate in this project, and to Glenn Strait for help editing the content and graciously agreeing to present the paper for me.

## Introduction

One of the things that originally attracted me to *Divine Principle* was that a unification of religion and science has a definite place in the thought. The general introduction to *Divine Principle* is quite clear on this point

Religion and science, each in their own spheres, have been the methods of searching for truth in order to conquer ignorance and attain knowledge. Eventually, the way of religion and the way of science should be integrated and their problems resolved in one united undertaking; the two aspects of truth, internal and external, should develop in full consonance. Only then, completely liberated from ignorance and living solely in goodness in accord with the desires of the original mind, will we enjoy eternal happiness.<sup>1</sup>

More than just being a desirable outcome we can see here that the unity of religion and science is an essential goal. Their problems to be resolved in one united undertaking. Given this goal the question of course becomes how can we bring about such unity?

If you ask a religious person this question then the response is usually that it is science that needs to change, not their religion. It is science that is wrong, they say, because it does not accept the existence of God, or spirit, or perhaps any of a list of metaphysical things. There are attempts to try to move scientific explanation towards religious thought. Quantum mechanics in particular is a favorite target of such thinking. Yet if science were to accept this type of approach it would mean rejecting the need for experiment that lies at the heart of the scientific method. Metaphysics is inaccessible to experiment. All such attempts to change science in this way, to try move it more toward existing religious thought, results in some kind of damage to science itself. Taking ideas only from existing traditional religious thought is therefore insufficient to bring unity with science. If we are to truly unite the two areas into one undertaking we must do much more than just change science. We must change religious thought too. I

<sup>&</sup>lt;sup>1</sup> *Exposition of the Divine Principle* (Seoul: Sung Hwa Publishing Co., 1996) 20.

believe full consonance between science and religion, such as described in the passage from *Divine Principle*, can only come about with a common ontology shared and accepted by both areas.

The first part of this journey toward unity is then simply to identify the ontological root of the existing problem between science and religion. If we can identify the root difference then we can begin to build a solution. Identifying the problem is the task of this paper. Building a potential solution will be addressed in the book. The title gives a clue about what I see as the source of the problem, and to cut to the conclusion *Divine Principle* and *Unification Thought* provide the basis for the solution. In what follows here I try to make a case for the problem that needs to be addressed and give a preview of one of the chapters in the book.

## The Traditional Philosophical Paradigm

It is with good reason that Alfred North Whitehead characterized the whole Western philosophical tradition as footnotes to Plato. Although there were other Greek philosophers the ontological foundation of the Christian philosophical tradition as found in philosophical theism begins from the philosophy of Plato and its subsequent modification by Aristotle. In order to outline the existing religious and philosophical paradigm we must briefly revisit here their ontology here. Though their ontologies are not completely compatible both Plato and Aristotle started from the same point in regarding existing things to consist of form and matter. Form is the immaterial idea or pattern of a thing whereas matter is the "stuff" of the thing. Before a form is imposed on it matter on its own is an inert and formless stuff without structure. Note that even our language presupposes this ontology when something without shape is said to be form-less. This completely undetermined matter from which everything is made is often called prime matter to distinguish it from other concepts that developed later. Form is the active principle that gives shape, structure, even perhaps life and mind to prime matter. The combination of form and prime matter in existing beings provides the fundamental understanding of existence in the traditional paradigm. For Plato the form was paramount. For him the forms are eternal and timeless existing independently of prime matter in their own realm. Human beings have a soul, identified with mind, that preexisted in the realm of forms. In this pure state the soul and could perceive the forms directly. For Plato it is the soul's entering into the body that is the cause of disorder, loss of harmony, and an inability to perceive the forms clearly. The soul, like the forms, is distinct from the body and continues after the body's death. This concept of form and the realm of forms in Plato's thought is thus the first reference point for understanding the traditional paradigm. Particularly for its understanding of immaterial existence. Also Plato's thought leads to the presumption of a separation between mind and body, where body is somehow viewed with suspicion and must be subjugated by the mind.

Aristotle did not subscribe to the independent existence of forms and he emphasized matter. For him the human soul (mind) disappeared with the body at death. Neither could prime matter be found anywhere by itself independent of form. Nevertheless Aristotle proposed that there was something about an existing thing beyond that which we could experience of it through our senses. For Aristotle if you take away all the characteristics of an existing being that are observable with our senses then what you are left with is its substance or essence. We do not observe the substance of a being directly. The substance is then the material content of an existing being, its prime matter, plus universal aspects of its form. For example even though trees vary in size, shape, color, texture, etc., there is something universal to trees that we instantly recognize. That universal aspect of form is part of the substance of something when combined with prime matter. Substance means literally sub – below, and stance – standing. So the substance or essence is that which stands below what can be observed, and a major philosophical question in epistemology has been how we can know the substance or essence of something when we do not observe it directly with our senses? The concepts of prime matter and substance in Aristotle's thought are the second reference point for understanding our inherited paradigm.

From the religious perspective two people are of particular importance for combining Christian thought with the ontology of Plato and Aristotle. They are St. Augustine and St. Aquinas. Augustine was

Platonic. He transformed Plato's realm of forms into an explanation for God, and in a theory, or perhaps theories, of illumination also used an analogy with the role of light in vision. At the time the sense of vision was thought to require both illumination of an object by light from the sun and a ray of light coming from the eyes and touching the object in order to impress an image of the object into the sense. Using this model as an analogy allowed Augustine to provide an explanation for God's role in both cognition and the process of creation. Particularly relevant for this work was that he saw God's act of creation as having two components. Conceptually first was the *ex-nihilo* creation of prime matter, and second was a process of illumination whereby form was given to this unformed prime matter. The analogy with light in vision impressing an image onto the sense then describes impressing the form in God's mind into the prime matter, much as a seal ring creates an impression in wax.

Aquinas on the other hand was Aristotelian. Aquinas used Aristotel's unmoved mover as an explanation for God. More importantly for our story he also incorporated Aristotelian substances into theology and philosophy. This was of such importance that this substantive ontology became the cornerstone of understanding existence in classical theism. Traditional philosophical theism in many ways begins from Aquinas and the substantive ontology is still implicitly present in Christian doctrine. It informs even our contemporary religious intuitions and assumptions in the West. In this view all existing beings, including God, exist as a combination of substance and attribute. Substance here refers to Aristotelian substance of prime matter and universal aspects of the form, and attribute corresponds to the observable characteristics of the being. Attributes are said to inhere in the substance. This is a variation on the basic theme of form and matter. No two substances can occupy the same space. Therefore God as a substance must be completely separate from us. The culmination of this ontology in Western thought is found in Descartes dual substances of spirit and matter. Matter is a continuous (without discrete parts) substance that has quantity (mass) and spatial extension. As substance it is almost, but not quite, prime matter. In its mass and spatial extension it is somewhat determined and therefore has some universal

aspect of form. Whereas spirit is a substance that has quality (activity/life/thinking) and no spatial extension.

Though the predominant view from the time of Aquinas this ontology is not without issues of its own even without consideration of science. It is not completely logically consistent. Issues arise from a tension between the underlying Platonic and Aristotelian thought. The two are not completely compatible with each other despite both starting from form and prime matter. For Aristotle only substances can exist independently of each other, and substances contain prime matter. There is nothing immaterial with an independent existence in Aristotle's thought. On the other hand Platonic form, which is immaterial, does have independent existence. There is not one clear framework that combines both into one logically consistent whole. This leads to some inevitable ambiguity in Western philosophy and theology. This ambiguity is evident in the conception of spirit. Spirit is not quite Platonic form since it is regarded as a substance, but is also not quite Aristotelian substance as it is immaterial. So what is it? Throughout the centuries there have been numerous theologians and philosophers who have commented on and developed ideas based on these fundamental ontological concepts. Due to the underlying tensions between Platonic and Aristotelian thought there has arisen multiple slightly different variations on this basic theme. It is not necessary for this work to categorize all the variations and ideas, but just to note that at least up to and including Kant the fundamental ontology of form, prime matter, and substance was implicitly assumed and provided the fundamental ontology for pretty much all of Western thought. Kant's death in 1804 actually marks the point of transition to a new ontology as we shall see in the next section.

## Breaking the Paradigm 1: John Dalton

Chemistry began to be established toward the end of the eighteenth century. Antoine Lavoisier around 1780 found through meticulous experimentation that during chemical reactions the mass of the products was exactly the same as the mass of the reactants. He proposed a law of conservation of mass where mass is neither created nor destroyed in chemical changes. Following Lavoisier was Joseph Proust who proposed the law of definite proportions around 1800. Proust found that any pure sample of a chemical compound always contained the same ratio by mass of its constituent elements. In order to explain these laws John Dalton drew on a different root in Greek philosophy than that contained in Western philosophical theism. Modernizing the ancient Atomist doctrine he proposed a scientific version that explained the previously established empirical laws. This atomic theory laid the foundation for chemistry to develop as a quantitative science, and, because of its different ontological root, marks the actual point of separation between science and traditional theism.

Dalton's Atomic Theory was first published in 1804, though I have seen dates varying from 1804 to 1808 in chemistry text books. Dalton was not the first to consider a particle based approach to understanding existence. Both Galileo and Newton had toyed with the idea, but Dalton was the first to seriously propose a coherent scientific theory. Unlike the indivisible atoms of the Greek Atomists Dalton's atoms turned out to be divisible and composed of more fundamental elementary particles. However with this one exception Dalton's theory still holds true for chemistry today. Atomic theory represents a conceptual turning point that breaks the traditional substantive paradigm of prime matter shaped by form. Before Dalton we have essentially one ontology, though several variations, based on form, prime matter, and substance. Kant's death at almost exactly the same time Dalton published his atomic theory is somehow symbolic of the transition that Dalton initiates. After Dalton we have a scientific ontology based on particles and a separate religious and philosophical ontology of substances.

Since the time of Dalton this ontology of particles has come to be the underpinning of almost the whole scientific enterprise. Classical mechanics deals with particles and the forces between them. Thermodynamics statistically explains heat flow on the basis of the microscopic behavior of the constituent particles of things. Even quantum mechanics is most essentially an explanation for the behavior of particles in the Standard Model of particle physics. Our current best understanding of existence is represented by the Standard Model which combines quantum electrodynamics and quantum chromodynamics into one overarching explanation. This scientific ontology of particles has grave

consequences for traditional Western thought. This is because at its root it is incompatible with the ontology of Plato and Aristotle. Plato and Aristotle rejected the atomist position. Their thought requires a continuous matter shaped by an immaterial form, yet science shows no such continuous material existence. Consequently the entire edifice of traditional philosophical theism turns out to be a house built on sand. The foundation in form, matter, and substance has crumbled away leaving the house with no support.

Science thus shows us that we need to move beyond the traditional substantive ontology in a religious context. That the first ontological principles on which philosophical theism are based are fundamentally incorrect. There are additional implications of this. The dualism of form and prime matter is one theory of existence not a theory of immaterial forms and a separate theory of matter. Invalidating any part of the theory automatically invalidates the whole theory. Further the dualisms found in traditional thought, such as Descartes' spirit and matter or Kant's *noumena* and *phenomena*, are differing expressions of this dualism of form and prime matter. Like form and prime matter they also have an immaterial part and a material part that are similarly dual aspects of one theory. Demonstrating that form and prime matter is an incorrect explanation for existence invalidates the other traditional dualisms too. Since each dualism describes one theory neither can we retain just the immaterial aspects of each theory alone. Even the very concept of metaphysics itself becomes problematical because it too is derived from the ontology of form and prime matter.

I do not believe that the ramifications of atomic theory, or rather of an ontology of particles, have been clearly understood or explored in a religious context. This may be at least in part due to the length of time it took to experimentally demonstrate that atoms exist. Dalton had no experimental proof for atoms and it was scientifically possible to doubt their existence throughout the nineteenth century. It took one hundred years for experimental proof of atoms to be supplied by Albert Einstein in his analysis of Brownian motion in 1905.

## Breaking the Paradigm 2: Divine Principle

The ontology of Divine Principle also begins from an ontology of particles.

For example, subatomic particles, the basic building blocks of all matter, possess either a positive charge, a negative charge or a neutral charge formed by the neutralization of positive and negative constituents. When particles join with each other through the reciprocal relationships of their dual characteristics, they form an atom. Atoms, in turn, display either a positive or a negative valence. When the dual characteristics within one atom enter into reciprocal relationships with those in another atom, they form a molecule. Molecules formed in this manner engage in further reciprocal relationships between their dual characteristics to eventually become nourishment fit for consumption by plants and animals.<sup>2</sup>

That is *Divine Principle* in its foundational explanation of existence breaks from traditional philosophical theism in exactly the same way that science does. This is an important part of what makes it a "New Truth" and is what allows it to be potentially compatible with science. However *Divine Principle* adds something not explicitly described in science. The particles are in reciprocal relationships with each other. Existence then emerges from relationship both within and between discrete particles. This seemingly simple concept of relationship is an additional nail in the coffin of traditional substantive thought.

The concept of relationship with particles causes a profound shift of perspective. No longer are existing things continuous substances. Rather, existing beings, as described in the passage above, are composite beings that exist through connected layers of relationship among particles. Matter does not exist. There are no substances only elementary particles and layers of relationship. All our prevailing concepts of materialism become untenable. This is significant because religion often evades dealing with the consequences of science by dismissing it as materialistic and therefore atheistic. In the new ontology of *Divine Principle* this is no longer possible and it becomes necessary to learn to deal with the consequences of science in a religious context. Further, in its description of the spirit body and spirit

<sup>&</sup>lt;sup>2</sup> Ibid. 31. It should be noted that *Divine Principle* was written before the development of quantum chromodynamics so it does not address the threefold color charge of the strong nuclear interaction.

world, *The Principle of Creation* in *Divine Principle* gives additional explanation that goes beyond the substantive ontology. One more nail in the coffin of substantive theism.

 $\dots$  our innermost self is the spirit self which has an eternal nature. Our spirit self consists of the dual characteristics of spirit mind (subject partner) and spirit body (object partner).<sup>3</sup>

Where that spirit self inhabits a spiritual realm and interacts with that realm via a set of spiritual senses that mirror our physical senses

Corresponding to the human mind and body, the universe consists of the incorporeal world and the corporeal world, both of which are real and substantial. The incorporeal world is so called because we cannot perceive it through our five physical senses. Yet we can perceive it through our five spiritual senses. Those who have had spiritual experiences testify that the incorporeal world appears as real as the world in which we live. The incorporeal and corporeal worlds together form the cosmos.<sup>4</sup>

This view of a spirit body that inhabits a spirit realm is incompatible with traditional substantive ontology. Spirit does not exist either. To see the problem that a spirit body poses for traditional thought requires a consideration of the definitions of matter and spirit. Of particular concern here is that by definition matter has spatial extension whereas spirit does not. Body is a term only applicable to something that can be divided into parts, and for something to be divisible it in turn requires spatial extension. Matter has extension so can be divided, and the concept of a material body is perfectly acceptable. However spirit does not have extension so must be indivisible. Since spirit cannot be divided the term body cannot be applied to spirit. The concept of a spirit body is therefore ontologically impossible in traditional thought. More than that it means that for traditional substantive thought there can be no spiritual realm, which is clearly divisible into parts, such as described in Divine Principle.

Divine Principle therefore continues what science has started and further overturns substantive ontology. The substances spirit and matter do not exist. Form and prime matter do not exist. Traditional

<sup>&</sup>lt;sup>3</sup> Ibid. 55.

<sup>&</sup>lt;sup>4</sup> Ibid. 53.

substantive ontology cannot conceptually accommodate the relational structure of particles in Divine Principle or the idea of a spirit body and spirit realm. It simply does not have the terminology to do so. Further, terminology now becomes the basis for an additional problem in and of itself. There is no extant philosophical terminology to adequately describe the ontology of Divine Principle and consequently it uses many of the same words found in traditional theism. However it does so without clearly defining the differences in meaning and we end up interpreting Divine Principle through the lens of traditional substantive thought. This is also a key problem facing *Unification Thought*.

## The Task Facing Unification Thought

The ontological explanation in *Divine Principle* is very brief. It is just a few pages of the first chapter, but is a foundational part of the whole work. Everything else derives from it. Further the explanation is more instructional description rather than a systematic and complete academic work. We are presented with bare bones that are not sufficient in themselves and need fleshing out. *Unification Thought* is thus absolutely essential to provide additional theoretical explanation. On the surface it seems as if we should be able to apply *Unification Thought* to the problem of unity between religion and science as a direct extension of *Divine Principle*. However, as we dig into the thought a bit we uncover an additional problem that needs resolving first. Dr. Lee places *Unification Thought* into the context of traditional Western philosophical theism. So we have chapters on ontology, epistemology, axiology, etc. More than just using the context of Western philosophy, however, he also incorporates traditional substantive ontology into the first principles of his explanation.

For Aristotle (384-322 BC), substance consists of eidos (form) and hylē (matter). Eidos refers to the essence that makes a substance into what it is; and hylē refers to the material that forms the substance. Aristotle's eidos and hylē, which became two basic concepts in Western philosophy, correspond to sungsang and hyungsang in Unification Thought.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Sang Hun Lee, *New Essentials of Unification Thought* (Tokyo: Kogensha, 2006) 11.

Here Dr. Lee makes the explicit connection between *Unification Thought* and form and prime matter. This is a point of separation between *Divine Principle* and *Unification Thought*. He goes on to acknowledge problems with the traditional view, but resolves them in the context of traditional substances. He offers no statements that differentiate *Unification Thought* from traditional substantive ontology.

It is clear from the above discussion that the concepts of eidos (form) and hylē (matter), as well as spirit and matter, as held in Western thought, have presented a difficult impasse. These difficult problems have been resolved by the Unification Thought theory of sungsang and Hyungsang, namely, the theory that the Original Sungsang and Original Hyungsang are the two forms of expression of one and the same essential element.<sup>6</sup>

Further Dr. Lee regards God's Hyungsang as prime matter.

It is because water itself is shapeless and has the potential for a limitless number of forms that an accommodation into any shape is possible. In other words, water exists in countless shapes. In an analogous manner, God's Hyungsang has no specific form of its own, and yet it possesses the nature of adjusting itself to any image, or adapting itself to countless forms. Thus, the fundamental cause of the corporeal aspect of created beings has two characteristics: the material element and the potential for a limitless number of forms.<sup>7</sup>

In adopting prime matter as God's Hyungsang he describes creation in a way that is comparable to the explanation given by Augustine in his illumination of matter (see also below). Where, for Augustine, form is impressed into unformed prime matter. The similarity to Augustine arises from a similarity of fundamental concepts based on a form and prime matter ontology.

Dr. Lee is trying to resolve issues found in traditional philosophical thought, but in incorporating

substantive ontology he creates a different, though related, thought to Divine Principle. This has

<sup>&</sup>lt;sup>6</sup> Ibid. 12.

<sup>&</sup>lt;sup>7</sup> Ibid. 7.

ramifications all throughout *Unification Thought*. For example it also changes explanation of the dual characteristics of yang and yin.

 $\dots$  in the created world sungsang and hyungsang have the character of substance, while yang and yin are the attributes of sungsang and hyungsang;<sup>8</sup>

This is different to yang and yin in Oriental thought and *Divine Principle* which do not contain the philosophical concept of substance and attribute found in the Western tradition. Here Dr. Lee is also regarding sungsang and hyungsang in the created world as substances that are comparable to the created substances spirit and matter. This is a good attempt at resolving the problems of traditional substantive thought, but the net result is that there is an ontological gap between *Divine Principle* and *Unification Thought* that is almost identical to the ontological gap between science and philosophical theism. In fact it was uncovering this difference between *Unification Thought* and *Divine Principle* that lead me to identify the difference between science and religion presented here. This alters the nature of the problem and how to proceed in our task.

Rather than just directly addressing the relationship of religion with science in the context of *Unification Thought*, demonstrating unity between the two now becomes comparable to unifying *Divine Principle* and *Unification Thought*. That is in order to begin to develop a common ontology with science we need to first develop a common Unification Ontology in the context of *Unification Thought* that does not rely on traditional substantive philosophical theism. We need a Unification Ontology without Plato. Then we can explore more explicit connections to science. This then is the task of my book project, where I attempt to identify the effects of traditional substantive ontology in *Unification Thought*, then begin to build from first principles of dual characteristics and relationship in the context of an ontology of discrete particles.

<sup>&</sup>lt;sup>8</sup> Ibid. 14-15. This will also be addressed at more length in the book.

## Preview: Collision Theory

One of the areas in *Unification Thought* most affected by this approach is the description of change. Dr. Lee makes the distinction between identity maintaining and developmental quadruple bases in order to account for both permanence and change. This idea is a sound one and a very important insight. He gives the basic description of developmental bases in the context of the Original Image. The following passage is part of Dr. Lee's explanation of the outer developmental quadruple base in the Original Image.

Let me now explain concretely the give and receive action between Original Sungsang and Original Hyungsang that overlap in one position. It is the injection of pre-energy into the mold (spiritual mold) of the plan (Logos). As already explained, a mold of an idea (idea-mold), or a new idea with fine internal structure is formed in the first stage of give and receive action within the Original Sungsang, and when it is given life by the impulsive force of Heart, it becomes a completed plan. This completed plan is a living idea-mold, or, a living mold. In other words, an idea-mold with fine internal structure in the first stage, is given life in the next stage. However, as much vitality as it may have, and as fine an internal structure it may be, it is still only a mold (spiritual mold). In making an iron product, molten iron is injected into a mold which has a spatial structure. Likewise, in God, the material element of the Original Hyungsang (pre-energy), which corresponds to molten iron, is injected into an idea-mold which has a spatial structure.<sup>9</sup>

From this passage we can see that Dr. Lee's treatment of the developmental quadruple base derives directly from his use of form and matter ontology. Logos, as the immaterial form, has life, vitality, and structure. Original Hyungsang is the prime matter, here called pre-energy, without form. In the developmental outer quadruple base form is given to prime matter and the result is an existing being. This is similar to the illumination of prime matter as described by Augustine. In the context of the Original Image this works, but existing beings we observe do not consist of a continuous prime matter shaped by a form. This makes a direct application of this developmental structure to existing beings difficult.

Dr. Lee does acknowledge the importance of the developmental quadruple base to explain change in existing beings.

Every being has both unchanging and changing aspects. This is because every created being embodies the unity between the identity-maintaining four position foundation (static four position foundation) and the developmental four position foundation (dynamic four position foundation).<sup>10</sup>

In particular he suggests that human creativity follows the developmental pattern of the Original Image.

This [two stage] process of creation by God is manifested as the two-stage structure of creation in human artistic activities. First, a plan is made; and second, a work of art is made by substantializing the plan through the use of materials.<sup>11</sup>

Though this description seems analogous to the inner and outer developmental quadruple bases in the Original Image there is a discontinuity here that is not found in the Original Image. The discontinuity is that the materials are not the artist's hyungsang. There are other layers of relationship in between the artist's mind and the manipulation of the materials that have been left out of the explanation. Further this particular explanation is not a general explanation for change in existing beings. Beyond identifying that change does take place he is not able to offer a general description for how change takes place in all existing beings. I believe there to be an explanatory gap in the theory.

In chemistry the type of change we are primarily concerned with is chemical change. Chemical change is accompanied by a change in chemical composition. So, for example, when we add vinegar to sodium bicarbonate there is a lot a fizzing as carbon dioxide gas is produced. The composition of the products, sodium acetate, carbon dioxide and water, are different to the starting materials. The fizzing is a telltale sign of chemical change, and the acid-base properties of the acetic acid (the active compound in the vinegar) and the sodium bicarbonate are their chemical properties. In an extension to Kinetic

<sup>&</sup>lt;sup>10</sup> Ibid. 411

<sup>&</sup>lt;sup>11</sup> Ibid. 303.

Molecular Theory called Collision Theory all chemical change, such as this, is seen to occur through collisions between the molecules, ions, or atoms that are reacting. In our example it is hydrogen ions from the acetic acid and bicarbonate ions from the sodium bicarbonate that must collide in order for the chemical change to occur. Without collision there is no chemical reaction and therefore no change.

Collision Theory in chemistry gives us the conceptual basis for explaining change in the context of a particle ontology. We represent chemical change by a chemical equation. In this case acetic acid (CH<sub>3</sub>COOH) reacts with sodium bicarbonate (NaHCO<sub>3</sub>) to give sodium acetate (NaCH<sub>3</sub>COO), carbon dioxide (CO<sub>2</sub>), and water (H<sub>2</sub>O).

$$CH_3COOH(aq) + NaHCO_3(s) \rightarrow NaCH_3COO(aq) + CO_2(g) + H_2O(l)$$

In this chemical equation we have an initial state on the left, the reactants, characterized by their identity maintaining relationships, and a final state on the right, the products, characterized by different identity maintaining relationships. These two are connected by an arrow representing the direction of chemical change. The arrow represents the collisions where developmental interactions alter the patterns of relationship within the chemical compounds. This is where the change occurs. The developmental quadruple base thus primarily becomes a representation of the interaction in a collision. It is a different type of relationship than that found in identity maintaining relationship, and totally different to the giving of form to an unstructured prime matter. Developmental collisions alter identity maintaining relationships within the particles and connect an initial state to a different final state.

#### Conclusion

Plato's thought has reigned in the West for over two thousand years and has been immensely valuable for human development and religious thought, but in the last two hundred years our understanding of the universe has exponentially increased. Plato's ontology of form shaping an unformed prime matter we now understand does not correspond to how things exist. Consequently traditional philosophical theism is fundamentally flawed in its foundational ontology. We cannot rely on it to understand and interpret the ontology of Divine Principle. It is past time for Plato's ontology to retire from active participation in our contemporary discussion. What is needed is a completely new approach such as that provided by Divine Principle and science. An ontology based on particles overcomes inherent problems in philosophical theism and adding the concept of relationship between particles provides an explanation for existence and change that is continuous with scientific explanation. That change occurs through collisions between particles has applicability beyond chemistry. For science in general all change in existing things is seen to occur through collisions between particles. I believe that this ontology of relationship between particles can provide the basis for accomplishing the goal of Divine Principle to combine science and religion into one united undertaking.