

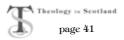
Evolution and the sacred: The evolutionary theology of John Haught in relation to Daoist philosophy

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In the dialogue between modern biology and theology, the following questions raise salient issues: Does science rule out a personal God? Does evolution exclude God's existence? Was the universe created? Does the universe have a purpose? From my own perspective, I think the most important and pressing challenge is whether the evolutionary process is or should be regarded as *sacred*.¹ Even though this process may seem to be adequately understood in a scientific fashion, there are ways in which the creative power of God is, in fact, intrinsic to the divine work in creation.

This article will examine how God works in the evolving world by comparing Christian evolutionary theology² and Daoist philosophy. The ideas of evolutionary theologians vary, of course, so this paper will focus on one prominent scholar, John Haught. Haught is one of the most significant and prolific of those thinkers who have worked on the borderlines of Christian theology and evolutionary biology over the past decade. Turning to Daoism, I will draw mainly on the *Daodejing* and the *Zhuangzi*, which are thought to have been written by the founders of Daoism, Laozi and Zhuangzi. Written around the 6th century BCE and 3rd century BCE respectively, these are the two founding texts of so-called 'philosophical Daoism'.

The main aim of this paper is to discuss how we can describe the universe in terms of the sacred expression of divine values, accepting at the same time the evolutionary accounts of natural science. I will first explain how the world has its sacred origin, that is, how the evolving world is created by God, in a comparison of the divine creation as a 'letting be' and the Daoist notion of *ziran* (spontaneity). Next, I will argue how a continuously evolving cosmos is not contradictory to



divine participation in creation by comparing conceptions of the divine work as kenosis and *wuwei* (non-action). Finally, in Haught's view, God's work is revealed as the operation of 'information' especially at the level of life and mind. I will focus on this notion of information in Haught, and will develop his idea by comparing it to the Daoist idea of *qi* (vital energy).

In undertaking this comparative study, I would first like to outline my methodology. This is based on Jonathan Smith's four steps of comparative work and Francis Clooney's comparative theology.³ First, I will describe the evolutionary theology of Haught and Daoist thought separately according to each topic. Second, I will point to the similarities between these two fields to show how the ideas of evolutionary theology and Daoist philosophy can, in fact, be stated using the same terms. Finally, I will explore the differences between these two fields, and examine how Christian evolutionary theology can be developed further through the utilisation of concepts derived from Daoism. The purpose of this is to develop Christian evolutionary theology in the light of the comparison with Daoism.

Divine creation: 'letting be' and ziran

To understand the relation of sacredness to the evolving world (by which I mean inherent value in virtue of being created by God) we first need to know how God created the world or the universe. How does the universe have its divine origin, and what is the nature of creation? How can God's creating the universe be explained properly without conflict with the scientific explanations of creation?

According to Haught, if God is intimately related to the world, we should expect an aspect of randomness or indeterminacy in nature. The reason is that love typically operates not in a coercive but in a persuasive manner. Love refuses to impose itself upon the beloved (all creatures in this context), but instead allows the beloved to freely remain itself.⁴ This evolutionary portrait of nature implies that God somehow intends the world to 'become itself'.

God's creation as 'letting be' is understood by Haught to be God taking the risk of allowing the cosmos to exist in relative liberty.



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The random variations or genetic mutations that compose the raw material of evolution are living proof of the world's inherent freedom.

For Haught, the Christian God is One who wishes to share the divine creative life with all creatures. Such a God declines to adopt any strict control over the process of creation from the start, and regards all creatures as creative partners. Such a gracious selfdenying love would be quite consistent with a world open to all the surprises in the process of evolution, and in the suffering and struggle of life as it evolves. God cannot be anything other than a love that honours the freedom and spontaneity of the whole world.

We may question why natural selection – an important means of creation 'letting be'–works blindly, indiscriminately and impersonally. Haught asks what life would be like today if evolution had preferred weak organisms rather than strong ones.⁵ If this had been the way evolution proceeded, life would have gradually disappeared from the earth long ago, and humans surely would not exist. In other words, there are no alternatives better than the law of natural selection.

Besides, Haught argues that, if God insisted on being in total control of things, the world would be a pallid and impoverished world. It would be devoid of all the drama, adventure, diversity, and intense beauty that evolution has actually produced. To quote:

A world of human design might have a listless harmony to it, and it might be a world devoid of pain and struggle, but it would have none of the novelty, contrast, danger, upheaval, and grandeur that evolution has brought about over billions of years.⁶

In other words, a world devoid of pain and suffering would, in many ways, be incomplete. However, it must be noted that for Haught, pain and struggle are not to be compared with the novelty and grandeur that evolution has been able to bring about. We must not isolate the pain and suffering that are intrinsic to evolution, but rather take them as necessary ingredients of the whole. This idea seems to be in similar to Leibniz's idea of the best of all possible worlds. However, people who are experiencing suffering may find little comfort in the explanation that this present state of the universe with all its pain and suffering



for its inhabitants is a necessary constituent for its overall beauty or harmony.

Haught's notion of creation as a 'letting be' can be explored more meaningfully through a comparison with Daoist thought on creation as ziran. Ziran is a very important concept, as is wuwei (non-action), in explaining the creation brought about by Dao. Zi literally means 'from ...' or 'self-...', and ran means 'like this'.⁷ Ziran is generally understood as 'spontaneity', 'nature', 'self-becoming', or 'being so of itself', but each English translation does not contain the exact meaning of ziran.⁸ I think that the reason ziran is interpreted as both nature (noun) and self-becoming (gerund) is rooted in the Daoist understanding of nature. For Daoists, 'nature' is 'becoming itself' 'spontaneously'. In other words, all things in the cosmos exist *spontaneously*, and they are becoming themselves. The best example of ziran is the operation of Dao. For Laozi, '[Dao] produces the One. The One produces two. Two produces three. Three produces the myriad creatures'.9 In Daoism, all creatures came from Dao, and Dao is the origin of all things. Dao not only created all creatures but also maintains them. Dao maintains and recreates all creatures spontaneously. Laozi says, 'Man models himself after Earth. Earth models itself after Heaven. Heaven models itself after Dao, and Dao, in turn, models itself after [ziran]'.¹⁰ For Laozi, people have to ultimately live according to what is natural, which means to comply with Dao. Dao follows spontaneous order, and therefore, spontaneity is the way that Dao works. Laozi repeatedly says in the *Daodejing* that '[Dao] produces without possessing; it acts with no expectation of reward; it leads without lording over'.¹¹ For Laozi, Dao continuously creates and leads all creatures, but it does not rule them

This idea of Laozi is similar to Haught's idea that God reveals his true love to the whole world in the way that He creates and maintains the world as a 'letting be'. For Haught, if God is truly love, then this love would persuade the cosmos to reach beyond itself toward new modes of being rather than compel it to do so.¹² A demand for a perfectly ordered universe is indirectly a demand that God should exercise a coercive kind of power over creation. Therefore, in both Haught and Laozi, the universe was created by the persuasive power of Ultimate Reality.



Haught's concept of creation as 'letting be' could possibly be regarded as a sort of deism. The general idea that God refrains from direct intervention or direct providential ordering of the world in order for nature to be creative on its own course of evolution is seemingly identical to deistic notions of God and his relation to creation. In this theory, God does not intervene with the functioning of the world but rather permits it to operate according to autonomous laws of nature. Haught, however, demonstrates that God is not like the unnecessary and remote 'first cause' of deism because, for Haught, it is out of a personal eagerness to relate deeply to the world that God foregoes any direct presence to the world.¹³ Paradoxically, for him, God's withdrawal is not due to apathy but rather a most extreme form of involvement.¹⁴ Haught, however, defends himself from accusations of deism by saying that 'The divine Spirit is poured out into the world and is interior to the process of creation'.¹⁵

It is my recommendation, however, that we try to understand divine action and the providential ordering of the universe differently: evolution itself is the process of God's continuous creation, the laws of nature being understood as channels whereby God is always creating. This does not contradict the idea of creation as letting be. This not only emphasizes God's intervention in creation but is also consonant with evolutionary biology.

To turn once again to Laozi on the transcendence and immanence of Ultimate Reality, Laozi says, '[...] talk about [Dao] – how insipid and without relish it is! Look for it and it cannot be seen; Listen for it and it cannot be heard; but use it and it will never run dry!'¹⁶ For Laozi, Dao is transcendent, it cannot be seen or heard, but it is also immanent, so people can use it forever. Laozi also says, 'How expansive is the great [Dao]! Flowing to the left and to the right. The myriad creatures rely upon it for life, and it turns none of them away'.¹⁷ Dao is so expansive that it flows everywhere. When Zhuangzi discusses the omnipresence of Dao with his disciple Dongguozi,¹⁸ Zhuangzi teaches that Dao exists everywhere. He gives some examples to enlighten his disciple about the omnipresence of Dao. According to Zhuangzi, Dao exists in the ants, in the barnyard grass, in tiles and bricks, and even in excrement. This conversation explains Dao's property of omnipresence well.



The idea about the undivided relationship between the transcendence and immanence of Dao can help towards a better understanding of the evolutionary theology of Haught. God can be immanent in all creatures without abandoning his transcendent nature. In short, God's creation as 'letting be' provides the sacred origin of all creatures without conflict with evolutionary biology, and this understanding of creation will be more persuasive when compared analogously with the Daoist idea of *ziran*.

Continuous divine work: kenosis and wuwei

If the nature of divine creation is explained through the concepts of a 'letting be' and *ziran*, how might the divine work be continuously revealed in the process of evolution? How can we say that God still works in the world when we seem to be able to both understand and control or manipulate significant aspects of it through science? If God still does his sacred work, how is it manifest in the world? To answer these questions, I will now turn to a comparison of the ideas of kenosis and *wuwei*.

Haught is interested in how the sense of God 'as operative in actual religious awareness' is consonant with recent scientific views. In other words, discourse about God's relation to the world must be closely related to the connotations of actual religious experience. This would imply seeking to understand the evolving world in the light of the outpouring of compassion and world renewal associated with the 'Christ-event' – the crucified and risen Christ.¹⁹ Christians perceive the kenosis of God in the Christ-event as Paul explains it: 'who, though he was in the form of God, did not regard equality with God as something to be exploited, but *emptied himself*, taking the form of a slave, being born in human likeness' (Phil 2:6–7).

Haught argues that Christian theology should attempt to understand the rationality of evolution as it exists in a universe formed by God's kenotic compassion. He believes that 'only the notion of God as selfemptying love makes sense after Darwin',²⁰ and many scholars in science and religion have supported this view.²¹ This is the God who suffers along with all creatures and saves them by taking all of their evolutionary pain and triumph into the continuous divine compassion.



The struggle and pain in evolution are in consonance with a Christian interpretation of the world with regard to the cross of Christ. Haught claims that this is not a God that evolutionary theology created just to accommodate Darwin. This is the empathetic God revealed in the Bible: the God of Israel who shared the pain of the oppressed in Egypt, the God who identifies with the crucified Jesus, and the God that Christian faith trusted in long before scholars discussed the story of the evolutionary birth pains of nature.²²

One of the merits in the theory of divine kenosis for Haught is that he regards it in relational terms. For Haught, God's kenosis is relational, not coercive, power. Haught's view is that God, by his nature, does not intrude into the world by way of dictatorial power. Neither God's kenosis nor his *power* (which can only be properly understood in reference to his *love* and kenosis) are to be judged according to exhibitions of brute power (as with Christ controlling the Sea of Galilee). Rather, for Haught, to talk of God's power is to talk of 'relational power'. This relational power is positive rather than negative, and is clearly implied by the central Christian doctrines and narratives of finding freedom in slavery to God, and life in death. Kenosis, then, is not to be confused with weakness. For Haught, God's deep relationship with the cosmos implies that God is also affected by everything occurring in the world.

Sophisticated as it is, Haught's conception of divine kenosis is open to criticism. First, the concept of kenosis does not entail the Creator's self-limitation in allowing nature to thrive 'red in tooth and claw'. According to Ted Peters, 'Divine identification with the unfit' is the core that unlocks the door to eternal life.²³ Celia Deane-Drummond also claims that the authentic image of God is as a co-suffering creator who identifies with the victims of evolutionary processes rather than the process itself.²⁴ However, Haught's use of kenosis tends to directly connect suffering and evil in creation with God's suffering. As Peters and Deane-Drummond argue, divine kenosis is better understood, without contradicting Christian doctrine, when it is understood as a divine participation in creaturely suffering, rather than God's acceptance of suffering as the inevitable consequence of evolution. Haught, of course, does not directly regard divine kenosis as a permission of suffering, though he might well have made his



position clearer to avoid identifying kenosis as merely the capacity to permit suffering in creation.

Now, if God relates to creatures in virtue of divine kenosis, how does God build a relationship with the fittest, those who survive without suffering in the natural world? If evolution is a theory and narrative of the fittest creatures surviving best and 'God's creative Spirit [as] the ultimate explanation of evolution',²⁵ we may infer from this that the fittest are the ones intended by God to maintain and perpetuate the progress of God's creation. How, then, are the fittest and the God-whowas-crucified-and-resurrected for the unfit related? It could be argued that since God is a continuous creator through the process of evolution, his salvific designs should focus on the fittest that adapt themselves to the process rather than the unfit. Many evolutionary theologians, not just Haught, have overlooked this contradiction. The Christian God, of course, is a saviour for the whole world, and it is natural that the unfit have a place in God's salvific mission. But then what does his crucifixion and resurrection mean for the fittest? If we primarily apply the Christ-event only to God's suffering with and for the unfit, we may overlook matters related to the salvation of the fittest.

However, creation as kenosis is, perhaps, better understood through comparison with the Daoist idea of *wuwei*. *Wuwei*, literally 'non-action', 'non-striving', or 'without doing', is a central concept of Daoist philosophy. The simplest explanation is that *wuwei* means 'acting spontaneously', 'creating nothingness', and 'flowing with the moment'. *Wuwei* does not mean literally inactivity but rather 'taking no action that is contrary to Nature'.²⁶

In Daoism, Dao works in concealment and with no action. Laozi says, '[Dao] invariably takes no action [*wuwei*], and yet there is nothing left undone. If kings and barons can keep it, all things will transform spontaneously'.²⁷ Laozi points out that Dao's action is not revealed externally – that is the hiddenness of Dao. Also, like evolutionary theologians, Laozi accepts that all things come from Dao's action, saying 'there is nothing left undone'. According to another expression of Laozi, '[Dao] is hidden and nameless. Yet it is [Dao] alone that skillfully provides for all and brings them to perfection'.²⁸ In short, Dao is described as hidden since Dao takes care of all creatures secretly. *Wuwei* is the way of Dao's operation as the kenotic God who



hides his face from creatures on purpose to show his great love.

However, there are many unexpected events in the world and most conceptions of the universe involve what we call 'chance'. Chance in the cosmos does not seem to be related to God's continuous creation. The emergence and evolution of life in evolutionary biology seem to be intrinsically unpredictable. How can this 'indeterministic chance' or 'cosmic uncertainty' harmonize with the continuous creation of God?

In Daoism, an unpredictable incident is said to be 'at night a strong person'. Zhuangzi says:

To hide a boat in a ravine and to hide a fishing-net in a swamp can be said to be safe enough. But at night a strong [person] might come and carry them off on his back while the owner who is fast asleep knows nothing about it. To hide something small in something large is reasonable enough, but there is always the possibility of losing it. Hide the world in the world and the world will never be lost – this is the eternal truth.²⁹

'The strong person at night' is the hidden power to maintain the world. The phase 'hide the world in the world' means not to try to hide anything because that behaviour is foolish and meaningless. In other words, the world looks unpredictable, but it is maintained by a hidden strong power. Similarly, for Laozi, Dao's action is not powerful or strong. He says, 'Weakness is the function of [Dao]'.³⁰ As Dao works by non-action, Dao's action is described as weak. At the same time, Laozi insists, 'Heaven's net is indeed vast. Though its meshes are wide, it misses nothing'.³¹ In short, Daoism accepts indeterminism and chance in the cosmos, but it understands that chance is only a part of Dao's operation generally.

The notion that the transcendent Creator operates in the cosmos through chance does not seem to be persuasive because chance – in other words, randomness of events – seems to break the fundamental rules of nature – i.e. constancy or regularity – that the Creator has instituted in his creating nature. For this reason, evolutionary theologians focus on finding God's plan or purpose in an *apparently* unpredictable world. The plan or purpose of God in a world that



seems unpredictable is compatible with the apparently unpredictable processes of biological evolution on Earth. Perhaps we might think about chance as under the control of God, on the analogy of the operation of Dao in Daoism. From the perspective of Ultimate Reality, chance cannot, strictly speaking, be chance, but rather a normal ordered and ordering process with metaphysical intelligibility. In other words, if we accept that there is *no* chance from the perspective of the divine, demonstrating God's work or manifestations of God's work in what *we* perceive as an unpredictable world becomes easier.

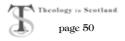
Levels of evolution and the sacred: information and qi

The previous section outlined how God works in the evolving world. If the creative work of the divine is regarded as kenosis and *wuwei* for all creatures, how did life and mind originate from inanimate matter and how do they occupy or possess special positions in creation in contrast to inanimate or lifeless matter? This is in direct connection to the question, 'Are human beings *special* in some sense?'

The process by which life emerges from inanimate matter has also been a formidable challenge to Darwinian theory. Darwin speculated that 'all the conditions for the first production of a living organism ... [could be met] ... in some warm little pond with all sorts of ammonia and phosphoric salts, light, heat, electricity, etc. present'.³² Evolutionists infer that the building blocks of self-replicating life began to coalesce by an improbable chain of accidents about 3.8 billion years ago.

This biological conjecture may seem completely hostile to the ageold Christian conviction that God is the origin of life as its creator. In Genesis 1, God is usually regarded as creating all kinds of living beings as well as the whole world in the 'beginning'.

How can these sudden changes, including the emergence of life, be understood without conflict between religion and science? It is useful at this point to bring in Haught's idea of 'hierarchy', which he draws from the classical Greek tradition. Based on the Greek roots of the notion of hierarchy, Haught focuses on the idea that all things have their origin of being (*arche*) in the field of the sacred (*hier*). According to him, hierarchy is necessary if some phenomena like life and mind



are to be regarded as more valuable than others. For him, hierarchical thinking means that lower levels of creation can be quietly informed by the higher, and it is essential here to state the fundamentally religious intuition that reality and human values have a sacred origin beyond what biology can perceive and/or describe.³³ In other words, if religious and ethical arguments do have an irreducible basis and permanent importance in our world, hierarchy should not be removed altogether, given its ontological and epistemological explanatory power.

To explain hierarchical thinking without conflict between science and theology, Haught focuses on a study of how information works. Haught proposes one way of understanding God's powerful but scientifically undetectable influence on the world by using the analogy of the way 'information' in semiotics works.³⁴ To paraphrase, as you read a book you are looking at blotches of black ink fixed onto a white page. If you do not know how to read, all you see would be unintelligible black marks, missing the informational content embedded within it. Information, however, emerges in ways that cannot be explained simply by ink and paper. For Haught, the dynamics of information and information processing can lead us to an understanding of how a hierarchical meaning can be brought to an evolving universe.

Haught's analogy explains how God can create life without violating the laws of physics and chemistry. Evolutionary biology and biochemistry cannot detect what we might call a 'deeper informational' level that might be present in the universe from an ultimate origin of meaning. The emergence of life and conscious beings can be actualized without their informational content ever showing up at the level of physical or chemical analysis. Their emergence does not require the violation of scientific laws, in the same way that the inscribing of information in a book does not violate the chemistry of ink and paper.³⁵

Haught understands 'information' in a broad and general sense: 'the overall ordering of entities – atoms, molecules, cells, genes, etc. – into intelligible forms or arrangements'.³⁶ According to him, although it is neither energetic nor massive, information is quietly stationed in nature, and it powerfully orders subordinate natural elements into hierarchically distinguishing fields.



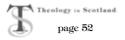
Based on this informational understanding of life, Haught thinks that God could be regarded as 'the ultimate source of the novel informational patterns'³⁷ available to evolution.

Information subtly weaves the world into patterns, then gathers these into still more comprehensive wholes, and always slips silently out of our grasp. It hides itself, even while performing its integrative and hierarchical chores. We murder it whenever we dissect it.³⁸

Haught suggests that information can structure the universe, and endow it with hierarchically distinguished features in a non-invasive manner. In other words, information enables and operates all of this without interrupting the successive continuum occurrences of basic elements at atomic and subatomic levels from a scientific perspective. In short, Haught's informational conception of life and mind allows for the fact that life and mind emerged from the evolutionary process and, at the same time, that they hold a more sacred position than inanimate matter in their being specially created by God with design and purpose.

Similarly, Dao's creation has several levels. To understand Dao's creation, we first need to know about the Daoist notion of *qi. Qi* literally means the breath of life, which signifies physical energy, vital energy or the essence of life.³⁹ Zhuangzi explains the emergence and subsequent stages of development of life: 'In the midst of the jumble of wonder and mystery, a change took place and *qi* emerged. The change of *qi* generated a body [shape]. The change of a body [shape] generated a life'.⁴⁰ In other words, some mysterious change – such as what we might call a Big Bang – brought about the emergence of *qi*, and *qi* in turn generated inanimate matter, and next, animate life. Life and death for human beings is thus determined by the operation(s) of *qi*: 'The birth of a man is the convergence of *qi*, which in turn forms life. The breaking up of *qi* causes death'.⁴¹

As information works imperceptibly in the levels of evolution, Dao's operation literally cannot be articulated in a certain way: 'The [Dao] that can be told of is not the eternal [Dao]. The name that can be named is not the eternal name'.⁴² But Dao's operation in the world



can be explained by qi. If, for Haught, information is the medium of the emergence of life in the world, in Daoism qi is the medium of it.

Haught's explanation of the emergence of life and mind via information operating throughout evolutionary levels allows the endowment of animate life and human life in particular with the sacredness that Christianity demands, without conflict with evolutionary science, but I want to further supplement his ideas about information with the Daoist idea of qi.

Over two thousand years ago, Zhuangzi seems to have some conception of evolution in mind.

Among the various species, there is a microorganism which propagates in water. It becomes moss on the water margin and it becomes plantain on the highlands. [...] The *yangxi* grass lives with the bamboo that no longer sprouts, which gives birth to an insect by the name of *qingning*, which in turn gives birth to the leopard, and which again in turn gives birth to the horse, which again in turn gives birth to the man. The man, in his turn, reverts to the microorganism. Everything in the world comes out of a microorganism and goes back to it.⁴³

Zhuangzi's idea of evolution seems to be a very early precursor to that of modern science, but for him, evolution is not straightforward but cyclical. In other words, human life is not the final stage of evolution, and human life reverts back to the form of a microorganism. Although the evolutionary process seems to have levels of development of complexity, all things return to the form of microorganisms and 'Everything in the world is attributed to the same vital energy (qi)'.⁴⁴ To be specific, in Daoism, evolution has different levels through the operation of qi, and these levels do not mean or exhibit hierarchy as discussed earlier. In this cyclical structure, the final level or stage of evolutionary development returns to the first.

Haught's idea of information offers a unique and special status to life and mind, theologically speaking. Thinking of evolution in the more *straightforward* way, we may suppose that there will be a further stage of development of life over and above that of mind or singular



consciousness. Indeed, theories abound concerning such a hypothesis. The continuous operation of information may yet generate something higher than individualised consciousness in human beings. This may also mean that the human mind is not special as such, as it could be regarded as just another stage or level for the next stage in the development of life in general.

In contrast, according to the Daoist cyclical structure as exhibited in Zhuangzi, postulating a higher stage in the development of life than human consciousness is meaningless. If we interpret Haught's informational understanding of life and evolution by comparison to the Daoist idea of qi, therefore, the sacredness of the evolving world is revealed more fully.

Conclusion

The evolutionary theology of Haught allows us to acknowledge God's creation and perceive his continuous work without contradicting evolutionary science. Thus we can retain both evolution and the Christian sense of the sacred in the world. However, Haught's ideas can be supplemented and expanded with the help of Daoist thought.

The argument of this paper is that the evolving world which was and is created, can be better understood by comparing divine creation as a 'letting be' and *ziran*. An evolving cosmos need not be contradictory to divine participation in the world, if we approach it through a comparison of divine work as kenosis and *wuwei*. The interpretation of information used by Haught as an organising and dynamic of life and evolution, may be further developed by comparing it to the Daoist notion of qi.

Although there is a time interval of more than two thousand years between Haught and Laozi and Zhuangzi, a comparative study between different times or cultures may lead us to open up new avenues in the science and religion debate generally and the development of evolutionary theology more specifically. The conversation between science and religion could include other religions, especially East Asian religions, which have thus far been neglected. Certainly, Western evolutionary theology would benefit from an engagement with Daoist philosophy. At the same time, Daoist philosophy could be



seen in a new light through dialogue with the evolutionary theology of Haught and, indeed, evolutionary science in general.

Notes

- ¹ In this paper, I will use the word 'sacred' to mean that something is related to or operated by God or more generally the divine, as opposed to mere mechanistic laws, and it thus has special value.
- ² I will use the term 'evolutionary theology' when I refer to theological responses to Darwin's evolutionary biology as a way of engagement rather than opposition or separation.
- ³ Smith suggests the following four moments of comparative work: description, comparison, redescription and rectification. He puts the same premium on similarities and differences between religions. Meanwhile, Clooney puts stress on Christian identity, and also thinks Christianity should be open to other religious traditions. He calls his methodology 'including theology', which means he brings what he learns from another tradition into his reconsideration of Christian identity. [Jonathan Z. Smith, "The 'End' Of Comparison: Redescription and Rectification", in *A Magic Still Dwells: Comparative Religion in the Postmodern Age* (ed. Kimberley C. Patton and Benjamin C. Ray; Berkeley: University of California Press, 2000), 293; Francis X. Clooney, *Comparative Theology: Deep Learning Across Religious Borders* (Malden, Mass.: Wiley-Blackwell, 2010), 16.]
- ⁴ John F. Haught, *Science and Religion: From Conflict to Conversation*, 2nd ed. (New York: Paulist Press, [1995] 2008), 61.
- ⁵ John F. Haught, *Responses to 101 Questions on God and Evolution* (New York: Paulist Press, 2001), 104.
- ⁶ Haught, *Science and Religion*, 62.
- ⁷ Qingjia Wang, "On Lao Zi's Concept of Zi Ran", *Journal of Chinese Philosophy* 24 (1997): 292.
- ⁸ Qingjia Wang points out several problems of common English translations of *ziran*: 'First, the translation of *"ziran"* as "nature" may misread it as a noun which refers to an entity rather than



to a process of growing and becoming; second, the translation of "spontaneity" may miss the "active" meaning of the term "*ziran*"; third, "self-so-ing" or "self-becoming" may mislead our understanding of the term to fall into some egoistic trick, i.e., to make the naturalistic process "personalized". (Ibid., 312.) I think that 'spontaneously becoming' is the best translation, but I will translate it as 'spontaneity' or 'being so of itself'.

- ⁹ Laozi, *Daodejing*, chap. 42. (Translated by P. J. Ivanhoe and B. W. Van Norden, *Readings in Classical Chinese Philosophy*; 2nd ed.; Indianapolis; Cambridge: Hackett, 2006, 183).
- ¹⁰ Ibid., chap. 25. (Translated by Wing-tsit Chan, *A Source Book in Chinese Philosophy*, Princeton, N.J.: Princeton University Press, 1969, 153).
- ¹¹ Ibid., chap. 10, 51. (Ivanhoe & Van Norden, 167). [Editorial note: To be consistent with usage in the text of the essay, the spelling and forms of the terms Dao, *wuwei*, *ziran* and *qi* have in some cases been adapted when used in direct quotations.]
- ¹² Haught, *Responses*, 127.
- ¹³ John F. Haught, *God After Darwin: A Theology of Evolution*, 2nd ed. (Boulder, Colo.: Westview Press, 2008), 122.
- ¹⁴ Similarly, Polkinghorne says, 'Modern science, properly understood, in no way condemns God, at best, to the role of a Deistic Absentee Landlord, but it allows us to conceive of the Creator's continuing providential activity and costly loving care for creation'. [John Polkinghorne, *Belief in God in an Age of Science* (New Haven: Yale University Press, 1998), 75.]
- ¹⁵ Haught, *Responses*, 119.
- ¹⁶ Laozi, chap. 35. (Ivanhoe & Van Norden, 180)
- ¹⁷ Ibid., chap. 34. (Ivanhoe & Van Norden, 179)
- ¹⁸ Zhuangzi, chap. 22. (Dongguozi asked Zhuangzi for advice, saying, 'People all talk about Dao, but where on earth does it exist?' Zhuangzi replied, 'Dao exists everywhere in the world'. Dongguozi said, 'Please name a place where it does exist'. Zhuangzi replied, 'It exists in the ants'. 'How comes that it exists in such a low place?' 'It exists in the barnyard grass'. 'How comes that it exists in the a low place?' 'It exists in tiles and bricks'. 'How comes that it exists in even lower places?' 'It exists in



excrement'. Translated by Wang Rongpei, *Zhuangzi*, Changsa, China: Hunan People's Publishing House, 1999, 373).

- ¹⁹ Haught, God after Darwin, 117f.
- ²⁰ Haught, *Responses*, 124.
- ²¹ For example, Barbour, Peacocke, Southgate, Dean-Drummond, Rolston III and Moltmann maintain the kenotic love of God. [Ian G. Barbour, "God's Power: A Process View", in *The Work of Love*, ed. John Polkinghorne (Grand Rapids, Mich.; Cambridge: Eerdmans, 2001); Arthur Peacocke, "The Cost of New Life", in ibid.; Christopher Southgate, *The Groaning of Creation: God, Evolution, and the Problem of Evil* (Louisville, Ky.: Westminster John Knox Press, 2008); Celia Deane-Drummond, *Christ and Evolution: Wonder and Wisdom* (Minneapolis: Fortress Press, 2009); Holmes Rolston, "Kenosis and Nature", in Polkinghorne, ed., *The Work of Love*; Jurgen Moltmann, *The Crucified God: The Cross of Christ as the Foundation and Criticism of Christian Theology* (trans. R. A. Wilson and John Bowden; Minneapolis: Fortress Press, 1993).]
- ²² Haught, *Responses*, 124.
- ²³ Ted Peters, "Constructing a Theology of Evolution: Building on John Haught", *Zygon* 45 (2010): 933.
- ²⁴ Celia Deane-Drummond, Creation Through Wisdom: Theology and the New Biology (Edinburgh: T&T Clark, 2000), 236.
- ²⁵ Haught, *Responses*, 119.
- ²⁶ Wing-tsit Chan, A Source Book in Chinese Philosophy, 136.
- ²⁷ Laozi, chap. 37. (Chan, 158)
- ²⁸ Ibid., chap. 41. (Chan, 160)
- ²⁹ *Zhuangzi*, chap. 6. (Wang, 95)
- ³⁰ Laozi, chap. 40. (Chan, 160)
- ³¹ Ibid., chap. 73. (Chan, 173)
- ³² Charles Darwin, Letter to J. D. Hooker, 1 February 1871. Quoted in Ernst Mayr, *What Evolution Is* (New York: Basic Books, 2001), 44f.
- ³³ Haught, God after Darwin, 78.
- ³⁴ Haught, *Responses*, 94; Haught, *God after Darwin*, 78–81.
- ³⁵ Haught, *Responses*, 94.
- ³⁶ Haught, God after Darwin, 74.



- ³⁷ Ibid., 77.
- ³⁸ Ibid., 81.
- ³⁹ Paula Hartz, *Daoism*, 3rd ed., *World Religions* (New York: Chelsea House Publishers, 2009), 140.
- ⁴⁰ Zhuangzi, chap. 18. (cf. Watson, 143)
- ⁴¹ Ibid., chap. 22. (Wang, 363)
- ⁴² Laozi, chap. 1. (Chan, 139)
- ⁴³ *Zhuangzi*, chap. 18. (Wang, 295)
- ⁴⁴ Ibid., chap. 22. (Wang, 363)

