

## Antithesis, Analogy, and Understanding Coleridge's Scale of Life

I no more confound magnetism with electricity, or the chemical process, than the mathematician confounds length with breadth, or either with depth...<sup>1</sup>

Reading Coleridge's philosophical writing – especially his 1817 *Theory of Life* and those of the decade following – provokes questions about his views on how to best conceive of the scale of life. In particular, Coleridge gives an ambiguous impression of his view on the value and extent of analogical reasoning to understand natural entities.

1. He very often employs what looks like analogical reasoning throughout *Theory of Life* and other works on philosophy of nature.
2. Yet, he repeatedly berates the 'German natural scientists' for 'abuse of analogy' in his marginalia,<sup>2</sup> and corrects what he believes to be misuse of the term or the practice.
3. He also claims that more progress is to be made in natural science from looking for 'antithesis' than analogy.

This apparent ambivalence has given rise to differing pictures of what Coleridge thought about the use of analogy. To give three examples:

1. Byron Hawk gives analogy a central role in Coleridge's *Theory of Life*, by writing that for Coleridge, "any explanation of life force has to operate through analogy", and that Coleridge "was using argumentative analogy in relation to function."<sup>3</sup>
2. In his paper addressing Coleridge's later work from the 1820s, "Coleridge, Natural history, and the 'Analogy of Being'," A.J. Harding claims that Coleridge's philosophy mobilises the *analogia entis* to reconcile scientific developments with his theological commitments.<sup>4</sup>
3. George R. Potter claims that Geoffroy Saint-Hilaire's ideas "exerted... a very strong influence on Coleridge's growing appreciation of organic nature's unity of structure",<sup>5</sup> citing Geoffroy's claim that different classes have analogous (now homologous) organs.

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<sup>1</sup> Samuel Taylor Coleridge, *Theory of Life*, 66.

<sup>2</sup> see Samuel Taylor Coleridge, *Collected Works: Marginalia*, 545 (on Eschenmayer), 860 (on Goldfuss).

<sup>3</sup> Byron Hawk, *A Counter-history of Composition: Toward Methodologies of Complexity* (2007) 144.

<sup>4</sup> A.J. Harding, 'Coleridge, natural history, and the 'Analogy of Being', *History of European Ideas*, 26:3-4, (2000), 144.

<sup>5</sup> George R. Potter. Coleridge and the Idea of Evolution. PMLA, Vol. 40, No. 2 (Jun., 1925), 379-397, 384-385.

Of course, there are many different ways analogy has been used and theorised in metaphysics and in epistemology. The waters are further muddied by the lack of agreement about the correct understanding of analogy; and the use of the same word can obscure instances where people are in fact operating with different concepts. Given the range of approaches by scholars to the role of something called ‘analogy’ in Coleridge’s thought, and given the variety of statements from Coleridge himself about the value of analogy in the context of the philosophy and science of life, an account of how he uses the concept – and how it relates to other accounts – will provide clarity on his use of this epistemological and metaphysical concept. The ambiguity surrounding Coleridge’s discussions of analogy is particularly important given his keen interest in the philosophy and science of nature of his time, which gave varied yet important roles to analogies and analogical arguments.<sup>6</sup>

This investigation will therefore build on the recent growth in scholarship on analogy in late 18<sup>th</sup> and early 19<sup>th</sup> century philosophy and science, in which scholars such as Breitenbach (2014), Nassar (2015), Callahan (2008), Whistler (2012), and Hein van den Berg (2017) have emphasised its prominent role in in late 18<sup>th</sup> and early 19<sup>th</sup> century debates about scientific research and philosophy of nature, in figures such as Goethe, Herder, Schelling, Kant, Buffon, and Blumenbach. Their work not only demonstrates the import of analogy, but the presence of plurality in the forms of analogy and analogical reasoning as well as their varied epistemic uses. Hein van den Berg, for example, writes that “analysis of the works of Buffon and Blumenbach shows that eighteenth-century biological theories were fundamentally based on analogy and analogical arguments”.<sup>7</sup> In philosophy, as Nassar has shown, Herder gave analogy a still more foundational role in which “our very cognition is analogical”.<sup>8</sup> By putting Coleridge’s view of the relative value of analogy as a method to employ to understand nature within the more general context of *Naturphilosophie*, the paper will show Coleridge’s concern about the role played by analogy in the philosophy and science of nature and put him into conversation with his contemporaries on this issue.

In particular, this paper focuses the role and limits of analogy in thinking about nature for Coleridge in 1817.<sup>9</sup> I will develop the claim, first, that Coleridge presents an attempt to limit the scope and the epistemological role of analogy ‘proper’ in natural science. The understanding of analogy he proposes has very specific conditions: its scope is limited to apply only with respect to goal-directed phenomena, in different genera. Further, his views coincide with the popular 18<sup>th</sup> century concern that analogy should be used only as an ‘aid’ to understanding, and further,

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<sup>6</sup> For Coleridge’s engagement with the sciences and with *Naturphilosophie*, see e.g. Raimonda Modiano, *Coleridge and the Concept of Nature* (Basingstoke: Macmillan, 1985).

<sup>7</sup> Hein van den Berg, ‘Kant and the Scope of Analogy in the Life Sciences’. *Studies in History and Philosophy of Science* (October 2018): 67–76, 71.

<sup>8</sup> Dalia Nassar ‘Analogy, Natural History and the Philosophy of Nature Kant, Herder and the Problem of Empirical Science’, *Journal of the philosophy of history* 9 (2015) 240–257. As Nassar describes it, for herder, seeing ‘one thing through another’ as a condition for something becoming ‘an object of knowledge for us at all’. 246.

<sup>9</sup> The investigation has been restricted to its use with respect to the scale of life and scientific enquiry.

that analogical arguments do not, of themselves, furnish proof. That said, analogy in Coleridge is also presented as an important complement to the role played by other methods to think about the scale of life: comparison of differences, discussion of resemblances, deductive reasoning ('unfolding' powers), and the use counterposing and attending to differences.

On the other hand, I wish to point out Coleridge's frequent tendency to refer to 'analogy' – perhaps more loosely than he has himself ostensibly permitted. In particular, these instances and his more general remarks about the scale of nature will lead to the further question regarding his ontology and its relation to the use of analogy: does Coleridge think that powers on the different levels of being can, or should, be considered as analogous? If so, what is the basis of this consideration, and how does it relate to his explicit definition of analogy? I will examine Coleridge's account in *Theory of Life* with the aim of unentangling various notions of analogy, and in so doing hope to go some way to explaining the diversity of scholarly opinions summarised above regarding Coleridge's use of analogy.

Ultimately, I argue that Coleridge's concern with the notion of analogy is an expression of his concern not to collapse differences when thinking about a unified nature, and thus ties into his general move to distinguish himself from (what he viewed as) key problems with *Naturphilosophie*.<sup>10</sup>

The paper will have the following structure. First, (1) I will address Coleridge's explicit remarks concerning the 'correct' understanding of analogous phenomena in *Theory of Life*. Here analogy is cast as an operation that can only be employed in a teleological context, between things 'different in kind' that have the 'same' end. I will go on to address his criticisms of analogy (1.2) and the misuse of it among his contemporaries. He seems to air the more general complaint – especially in his later marginal notes – that it is used too frequently without proper care. I will then (1.3) focus on the restrictions given to analogy in his account, in particular his remarks on the use of analogy as an aid, as well as the conditions he implies for its best use and endorsement of different methods for better scientific inquiry and philosophy of nature. The second part of the paper (2) will situate Coleridge's 'correct understanding' of analogy within his broader ontological commitments, and try square his claim that analogy can only correctly be used between different kinds with his metaphysical claim that comparisons are only possible at all in light of the fundamental homogeneity of powers in nature. Powers at different intensities, or levels of being are neither completely identical, nor wholly different to each other. In 2.2 I will show that Coleridge's difficulty – that of retaining the homogeneous root nature of powers, whilst *maintaining qualitative distinctions in kind* between aspects of different powers, is most clearly expressed in his dual representation of the plant-animal relation as simultaneously antithetical and hierarchical.

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<sup>10</sup> [NB. in the second draft I will add a section arguing for this in more detail]

## 1. Coleridge's (Ostensible) Understanding of 'Analogy'.

Coleridge indicates his view on the correct understanding of analogy in passing in his *Theory of Life*. There, to the criticism put to him that

“there is no resemblance, no analogy, between Electricity and Life; the two orders of phenomena are completely distinct; they are incommensurable. Electricity illustrates life no more than life illustrates electricity.”<sup>11</sup>

Coleridge responds:

“I feel some curiosity to discover what meaning the author attaches to the term analogy. Analogy implies a difference in sort, and not merely in degree; and it is the sameness of the end, with the difference of the means, which constitutes analogy.”<sup>12</sup>

Coleridge seems to want to pull apart the equivocation between analogy and resemblance made by his interlocutor here. A first point to note is therefore that Coleridge's definition of analogy is applicable only to sets of means-end relations. Coleridge goes on to suggest that the criticism levelled against him – that he wrongly equates life and electricity via analogy – has missed the mark, in the first place, because analogy doesn't imply identity between the two sides of analogy, and secondly, because he hadn't claimed that they were analogous in the first place:

“no one would say the lungs of a man were analogous to the lungs of a monkey, but any one might say that the gills of a fish and the spiracular of insects are analogous to lungs. now if there be any philosophers who have asserted that electricity as electricity is the same as life, for that reason they cannot be analogous to each other; and as no man... is capable of imagining the lightning which destroys a sheep was a means to the same end with the principle of its organisation, for this reason, too the two powers cannot be represented as analogous.”<sup>13</sup>

To unpack this in the context of the quotation: here it seems that for Coleridge we can't correctly think of two lungs in different species of mammals as analogous, and this is the case because they are both already considered lungs. In this scheme, analogy only works if the things being compared are *different in kind*, and because human and monkey lungs are not 'different means' (they are both lungs) – they don't qualify as analogous. The example may be initially misleading in that monkey and human lungs are in one sense obviously not identical; they are in different species, but for Coleridge it seems they are both nevertheless considered to be *lungs*.

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<sup>11</sup> Coleridge, *Theory of Life*, 61.

<sup>12</sup> Coleridge, *Theory of Life*, 64.

<sup>13</sup> Coleridge, *Theory of Life* 64-65.

It is equally important that in Coleridge’s understanding of analogy analogies hold between *means-end relationships*. A second point is that it is the ‘means’ under consideration that must differ in some way for an analogy to be an analogy. The crux seems to be what Coleridge would count as a difference in kind. We have seen that the lungs of different species, monkey and human, are not analogous. If someone claimed that electricity *as* electricity were life, that too wouldn’t be an analogy because both cases would be just be electricity; their identity would preclude analogy as a method for thinking about the electricity in the two cases.

The third point is that his definition of analogy finds it applicable only to sets of means-end relations where *there is an identity between ends*. To return to the lungs example, put very crudely:

	<i>means</i>	<i>end</i>
<i>human</i>	lungs	respiration
<i>fish</i>	gills	respiration

An analogy might be asserted between gills and lungs as each of these types of organ, within their own systems, have the same end – they perform the same function, respiration. On this picture, analogies are not just drawn between some two objects taken in isolation (a lung, a set of gills). The analogy is only intelligible given the relation of the relation of the (in this case, organ) to its parent system.

In sum, the conditions for two items to be analogous, on this view, are 1) that analogy pertains between things which are different in kind, 2) that analogy pertains between two sets of *means-end relationships*, and the ‘means’ are what must differ and, 3) that the ‘ends’ in the two sides of the analogy must be identical in some way. At this stage, it might be objected that this initial analysis reads much too significance into a throwaway remark, or that it takes something mentioned in a specific context too generally. But this does seem to be part of an at least partly general theory of analogy for Coleridge, because he not only expresses concerns about analogy throughout the *Theory of Life*, he also uses the same characterisation to discuss analogy in a literary context elsewhere.<sup>14</sup> In addition, when compared to other prevalent accounts of analogy of his day, this definition of analogy seems quite peculiar to Coleridge. It’s a much more restrictive definition of analogy than, to cite one example, Reimarus’, as outlined by Hein van den Berg, in an “influential eighteenth logic textbook”, as “a similarity between different objects”.<sup>15</sup>

Coleridge’s account here echoes Aristotle’s discussion in the *Historia Animalium*, where Aristotle makes the following remark:

<sup>14</sup> Coleridge gives the same definition of analogy in a literary context – to compare the plays of Shakespeare with Ancient Greek drama. See the lecture “Shakespeare and Milton”, Lecture IX, in *Lectures and notes on Shakespeare and other English Poets*, 1888.

<sup>15</sup> Hein van den Berg, *Studies in History and Philosophy of Science* 71, p.68.

“we may have to do with animals whose parts are neither identical in form nor yet identical save for differences in the way of excess or defect: but they are the same only in the way of analogy, as, for instance, bone is only analogous to fish-bone, nail to hoof, hand to claw, and scale to feather; for what the feather is in a bird, the scale is in a fish”<sup>16</sup>

Here Aristotle contrasts the type of difference that holds between e.g. nail and hoof, to differences *within* species or genera, which would be manifest in either identity of “form” or of “excess or defect”: it is a difference which is not merely a question of quantity, but of kind. Coleridge’s views on analogy do not coincide with everything Aristotle has to say about analogy, however. With respect to Aristotle’s analysis of analogies in science, Mary Hesse, drawing on Nagel, distinguishes ‘formal analogy’ and ‘substantive analogy’.<sup>17</sup> Formal analogies draw on a similarity of relation, or proportionality (scales and feathers stand in the same relation to the organisms they belong to, for example), whereas substantive analogies indicate a feature or property in common (fish spines and mammal bones share a certain ‘osseous nature’). According to Hesse, the most interesting cases in Aristotle’s work are those that combine both forms of analogy.<sup>18</sup> In his official account of analogy, however, Coleridge seems not only to be more interested in formal analogies, but to suggest that a substantive analogy is not an analogy at all. The idea that despite their location in different systems, the hoof and the nail are thought to perform the same function, Coleridge reformulates as sameness of ends, difference of means.

Having addressed the conditions outlined by Coleridge for the correct use of analogy in *Theory of Life*, I now turn to further instances in the text where he criticises the way others employ it.

## 1.2. Coleridge’s Criticisms of the use of Analogy

In addition to the criteria laid out for analogy just discussed, Coleridge can be found offering criticisms of the use of analogy – especially in the German naturalists. He complains of the “100 instances of the abuse of analogy among the later German naturalists”. for example, when discussing Goldfuss.<sup>19</sup> This was also a common criticism, and still is, of *Naturphilosophie* as well.<sup>20</sup> He also complains misuse of analogy in science in his marginal notes to Eschenmayer:

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<sup>16</sup> Aristotle, *Historia Animalium* 486b, Book 1.

<sup>17</sup> Mary Hesse, “Aristotle’s Logic of Analogy,” *The Philosophical Quarterly*, 15/61 (1965), 328. Besides these strands of analogy, Aristotle also has a further consideration in his metaphysics, which I will briefly return to in section [II].

<sup>18</sup> Hesse, “Analogy”, 332.

<sup>19</sup> “What fair analogy is there between the Ganglia (there are many) and the Brain?” Coleridge, *Marginalia* Camden to Hutton, 860.

<sup>20</sup> [references and examples of the reception of *Naturphilosophie*, esp. re. analogy, to be added here].

“where are the proofs that the infusory animals are any more the product of putridity, than the fish are of the rivers, or caterpillars of leaves? All the attempts at proof, that I have yet seen, are drawn from ignorance against knowledge and analogy.”<sup>21</sup>

The complaint seems to be that the claim that infusoria result from putrefaction lacks sufficient proof in Eschenmayer’s account (nor the position that Eschenmayer argues against). Further, anywhere Coleridge has seen attempts to furnish it, he feels they have been unsatisfactory.

Perhaps Coleridge’s issue here is that claims that infusoria come from putridity are attempts to explain something in the absence of sufficient evidence – thinking it comes from putrefaction is an assumption without knowledge. Occasions where there is insufficient proof are the kinds of occasions where people most be most tempted to introduce analogy. ‘Ignorance against knowledge and analogy’, I think, should be interpreted in line with his comments above, as a concern for how analogy is to be used in science, i.e., for experimental thinking and comprehension, not as of itself a proof of a theory or an explanation. It can form *part* of a method of comprehension and can be used as an aid in science, but a real explanation of a power requires following its dialectical movement: ‘to explain a power’, Coleridge writes, ‘is to unfold or spread it out’<sup>22</sup> – deduction remains the paradigm for explanatory science (at least regarding powers) but analogies and attending to similarities and differences can help in the comprehension of what is unfolded. It was common at the time to discuss limiting the use of inductive arguments in science, and in this respect he appears to align himself with Kant and Wolff’s remarks, as outlined by van den Berg, as to the preference for deduction over induction in the scientific paradigm.<sup>23</sup>

## 1.2. Comments on the use of Analogy in *Theory of Life*

For the most part, when he apparently endorses the use of analogies, Coleridge assigns them a heuristic value. For example, he asserts that we shouldn’t cast the use of analogy with chemistry aside when considering physiology, writing that it can be an ‘aid’ when thinking about

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<sup>21</sup> From an 1818 comment on Eschenmayer’s 1817 *Psychologie* in Coleridge, *Marginalia*, [Camden to Hutton], 545.

<sup>22</sup> Coleridge, *Theory of Life*, Coleridge also uses a thought experiment about two machines to illustrate, I think, a point about the limitations of attending to differences between otherwise similar objects as unable to give a complete explanation of the beings under consideration. If we try to understand things merely by distinguishing them, we don’t form an understanding of them, but rather a taxonomy. He writes that noting the difference between two machines could help distinguish them, and facilitate communication, but would not be an understanding that exceeds “the nomenclature of botany”. This echoes a commonly repeated point among the *Naturphilosophen*, who distinguished between what they considered a true understanding of the kind of being under consideration from the lesser knowledge afforded by a ‘merely formal’ taxonomy. (see *Theory of Life*, 37-8).

<sup>23</sup> See Hein van den Berg’s discussion of Wolff and Kant in ‘Kant and the Scope of Analogy in the Life Sciences’.

physiology.<sup>24</sup> An aid helps us understand something more complicated via the analogy with something simpler, and, according to his earlier framing of analogy, we can think about the relation of means to end in the more complex by thinking about the simpler pair. For the most part, Coleridge seems to value analogies primarily to help facilitate the *understanding* of more complex things, rather than to provide proof of something. Crucially, he goes on to claim that the...

“question of analogy of the powers manifest as electricity to those in the organism [...] will depend on the inductions by which it is supported and the insights it adds about the chain of facts it is to illustrate”.<sup>25</sup>

In addition to the claim that the inductions supporting the analogy are important, this remark suggests that Coleridge takes a somewhat pragmatic approach to the selection of relevant analogies in the respect that the value of the ‘insights’ offered is mentioned as a factor here. It also shows that he considers whether or not an analogy is useful is whether or not it be ‘illustrative’ of chains of facts. Here, understanding some causal story is complimented by analogies – the analogy is not of itself a definition or an explanation. This complements his claim elsewhere in the *Theory of Life*, that a real explanation or definition of a power unfolds it deductively.<sup>26</sup>

## 2. Analogy and Ontology

Thus far, Coleridge’s ideas for the use of analogy seems coherent: he has offered conditions for what can count as analogy (teleological, different means, same ends – broadly influenced by Aristotle’s framing in *Historia Animalium*), and emphasised its role as primarily illustrative. Like many of his contemporaries, he expressed concerns about the frequent, overly hasty uses of analogy.

However, another strand of discussion of ‘analogy’ can be found in *Theory of Life* – a discussion that is not presented in the same terms as his means-ends model. This strand of analogy concerns the *scala naturae*, and the relations between different levels of its composition. According to this conception of analogy, the use of analogies for thinking about powers at

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<sup>24</sup> Coleridge, *Theory of Life*, 32-35. But this analogical use, as an aid, would crucially not reduce the higher science to the lower. Because Coleridge thinks that the objects of physiology express powers at a higher intensity (he notes that “we recognise that we can define the bounds of chemistry through its failures”).

<sup>25</sup> Coleridge, *Theory of Life*, 35.

<sup>26</sup> [develop. This section will also include discussion of his claims about For example, he remarks that the architecture made by insects may ‘bear an analogy’ to the mineral process of crystallisation. Coleridge, *Theory of Life*, 78.]

different levels in Coleridge's scale of nature is made possible by an aspect of continuity in nature's structure itself.

The idea of an underlying continuity as a condition for analogy is introduced in his discussion of the notion of life and its scope. Coleridge proposes that expanding the notion of life will have an advantage: namely, that it "fills" an "arbitrary chasm" between the sciences of physics and physiology, providing "justification" for "using the former as means of insight into the latter". This, he claims, is a use that "would not be possible if the powers acting in different things were essentially diverse".<sup>27</sup> What this suggests is that the use of models from physics for understanding physiology only makes sense on the basis of an underlying continuity of some kind between the objects of these two sciences. The continuity in that they are both constituted by the actions of, at root, the same powers, but at different levels of intensity:

the ascending series of intermediate classes, analogous gradations in each class, to a reflecting mind, indeed, the very fact that the powers peculiar to life in living animals include cohesion, elasticity &c [...] would demonstrate that, in the truth of things, they are homogeneous, and that both the classes are but degrees and different dignities of one and the same tendency.<sup>28</sup>

This claim – that a homogeneity at root is expressed in analogous gradations between levels of phenomena – more explicitly connects Coleridge's perception of similarities or patterns at the phenomenal level with his underlying conception of the structure of nature or, what is the same here, life. Coleridge combines two models for representing the structure of nature in *Theory of Life*: an ascending ladder, and concentric circles of development.

Coleridge claims that "the progress of nature is more truly represented by the ladder than by the suspended chain".<sup>29</sup> Nature as an 'ascending ladder' represents a hierarchical series of kinds of an ascending of increasingly individuated kinds of phenomena. This scale is understood to be generated by the activity of powers, in particular, the polar opposition of two primary powers. The series of kinds of beings is generated by the actions of powers at increasing levels of intensity.<sup>30</sup>

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<sup>27</sup> Coleridge, *Theory of Life*, 41.

<sup>28</sup> Coleridge, *Theory of Life*, 43.

<sup>29</sup> Coleridge, *Theory of Life*, 71. See also *Theory of Life* 41: [nature] "does not ascend as links in a suspended chain, but as the steps in a ladder; or rather at one and the same time ascends as by a climax, and expands as the concentric circles on a lake..."

<sup>30</sup> [still to add: short summary of the levels of powers to make this clearer (magnetism etc).]

Following Schelling, he understands these increasing levels of ascension as higher potentiations of the same powers.<sup>31</sup> Coleridge claims that life expands as “by concentric circles”<sup>32</sup> – the result is a picture of ‘ascent modified by collateral expansion.’ Coleridge uses the language of ‘assimilation’ to explain this:

the more intense life is, the less does elasticity, for instance, appear as elasticity... lower powers are assimilated, not merely employed... assimilation presupposes the homogeneous nature of the thing assimilated; else it be a miracle, only not the same as that of a creation, because it would imply that additional and equal miracle of annihilation...<sup>33</sup>

The lower power is therefore thought to be assimilated in the higher power, but not *as* the lower power, rather, as something higher. Schelling also employs this mode of explanation.<sup>34</sup> For our purposes, the importance of this ontology is that, on the one hand, it enables Coleridge to claim that he doesn’t, for example, reduce electricity to magnetism.<sup>35</sup> It is important to understand these powers as *different*, because they are on these different levels of potency. This is illustrated by a mathematical image: we can understand the ‘same power as root and cube’<sup>36</sup> and a geometrical one: “I no more confound magnetism with electricity, or the chemical process, than the mathematician confounds length with breadth, or either with depth...”.

On the other hand, the assimilation of the lower in the higher ‘circles’ allows for some continuity between the levels of life and the recapitulation of patterns at higher intensities.<sup>37</sup> It is on the basis of this ontological structure – that nature is a ladder of concentric circles – that Coleridge suggests the epistemological strategy of studying ‘the complex in the simple’.<sup>38</sup> He proposes that

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<sup>31</sup> This was a frequent argumentative feature of late 18<sup>th</sup> and early 19<sup>th</sup> century *naturphilosophie* and can be found in various elaborations in Schelling and Eschenmayer, among others. For example, Schelling writes that “it is certain that the galvanic phenomena are identical with the electrical in their ultimate principle, although galvanism and electricity are themselves diverse phenomena; for through galvanism electricity is raised, as it were to a higher function”. Schelling, *First Outline of a System of the Philosophy of Nature*, 151-2.

<sup>32</sup> Coleridge, *Theory of Life*, 41.

<sup>33</sup> Coleridge, *Theory of Life*, 43.

<sup>34</sup> [references to be added - schelling]

<sup>35</sup> Coleridge, *Theory of Life*, 66.

<sup>36</sup> *Theory of Life*, 92.

<sup>37</sup> This is not extended beyond natural phenomena. Whilst Coleridge can consider his scale of life as a scale of degrees insofar as its manifestations exhibit the power of life, this is also accompanied by the frequent assertion that the “chasm” between animals and humans is “unbridgeable”. Due to his theological commitments, he is unwilling to assert continuity between humans and other animals apart from a bodily continuity. He writes that “in the lowest forms of vegetable and animal worlds we perceive totality dawning into individuation, while in man, as the highest of the class, the individuality is not only perfected in its corporeal sense, but begins a new series beyond the appropriate limits of physiology...”<sup>37</sup>. Coleridge, *Theory of Life*, 33. See also e.g. his later comments on Schubert’s natural history “to man, as man, to that which constitutes his kind, I find no approximation. the elephant and ape seem as distant as the ant and the bee.” Gotthilf Heinrich von Schubert, *Allgemeine Naturgeschichte oder Andeutungen zur Geschichte und Physiognomik der Natur*. 1826. Marginalia, May 1827.

<sup>38</sup> Coleridge will continue to discuss the idea of anticipation of the higher in the lower, in butterflies, polyps, etc, on through the 1820s.

we can better understand a more complex instantiation of something through looking at its simpler manifestations. Again, this is possible because life is made up of a ‘perpetual resurgency and reconciliation of the primary contradiction’.<sup>39</sup> We can use a simple to think through a more complex manifestation because this polarity of powers is repeated at different levels of potentiation.<sup>40</sup>

Such claims may lead us to ask what precisely the ‘homogeneous nature’ that is constitutes the continuity between the levels of life aside from the different instantiations at different intensities – what it is in virtue of which we could say that they are analogous. If this question is answered in terms of the means used by the powers rather than their ends, that would suggest Coleridge’s official account of analogy does not apply here. In any case, for Coleridge there is clearly a sense in which things are ‘analogous’ that are neither identical, nor wholly other to each other.<sup>41</sup> It is in this sense, then, that Coleridge articulates a strand of analogy in his ontology, one that allows him to consider the relation of powers at different intensities as connected yet distinct. I would argue that this type of analogy is not probably not best understood in terms of the debates surrounding ‘*analogia entis*’ in the Thomist tradition, not least because Coleridge does not make any explicit reference to such discussions – it could be perhaps a misleading term for what Harding has described as an interpretation of nature that is scientifically up to date with his contemporary developments but framed within governance by a divinity.<sup>42</sup> There are clear similarities to Neoplatonic traditions, though, as Harding has also pointed out.<sup>43</sup>

## 2.2. Antitheses

However, this ontology of expansion and ascent, composed of increasing potentiations of polar opposition, also indicates limits for the use of analogy. In some cases, Coleridge uses this understanding of the structure of nature to justify the search for ‘counterpoints’ as a method distinct from and preferable to analogy when conducting scientific enquiries. These limitations of analogy appear in the context of his construction of the plant and animal kingdoms. Here,

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<sup>39</sup> Coleridge, *Theory of Life*, 70.

<sup>40</sup> Coleridge, *Theory of Life*, 83. A similar formulation appears in his later *Marginalia 4, vol 12* as ‘air and variation’, 300.

<sup>41</sup> [develop further, with reference to historical figures]

<sup>42</sup> I should briefly respond to Harding’s claim that Coleridge’s task was to present the natural world using a version of *analogia entis*. Harding writes that “what Coleridge was attempting in the 1820s was nothing less than a reconciliation of the findings of contemporary science with belief in a universe governed by an intelligent divinity. Philosophically, it was also a late flowering version [...] of a centuries old concept, the scholastic concept of the *analogia entis*”. First, Harding focuses on Coleridge’s later notebooks from the 1820s, rather than *Theory of Life*, so his not intended to cover the same material as this paper. I do not disagree with Harding’s particular points, but rather, his description of them as a version of ‘*analogia entis*’, insofar as this could suggest a Thomist understanding of the term (which I take to be the most common) and whilst Harding doesn’t give an explicit redefinition along new lines, he seems to use it to connect design to purposiveness in nature. See A.J. Harding, ‘Coleridge, natural history, and the ‘Analogy of Being’,’ *History of European Ideas*, 26:3-4, (2000) 144.

<sup>43</sup> *Ibid.*

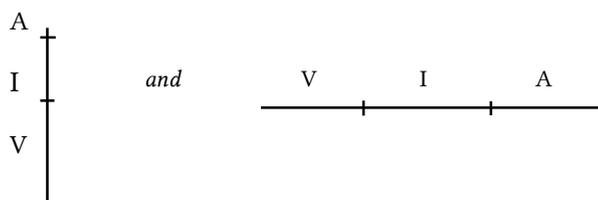
emphasis on the difference between plant and animal is accompanied by an avowed rejection of the utility of analogy:

“from this point flow, as in opposite directions, the two streams of vegetation and animalisation, the former characterised by the predominance of magnetism in its highest power, as reproduction, the other by electricity intensified, as irritability, in like manner. the vegetable and animal world are the thesis and antithesis, or the opposite poles of organic life. We are not, therefore, to seek in either for analogies to the other, but for counterpoints [...]”<sup>44</sup>

This suggests that Coleridge finds that despite the continuity of plant and animal kingdoms as far as life is concerned, they are in fact not just different, but are related in a special way, which means that analogy is not the best method to use to develop an understanding of them. Rather, because of their polar opposition, we should attend to corresponding ‘counterpoints’ between them – this is more constrained than any analogical relation, as they are held as in some way complimentary or inverse. According to this prescription, we might note corresponding opposite features between plants and animals, as for example in his 1818 commentary on Schelling’s *Von der Weltseele* – in which he notes the “contrast again between plant and animal” and that plants release oxygen and animals perform the inverse operation by absorbing it.<sup>45</sup>

The import of emphasising opposition between plant and animal persists in Coleridge’s mental landscape into his later work – his later comments on Schubert’s natural history make clear some of the difficulties of 1817 in understanding the plant-animal relation both horizontally and vertically. He suggests that Schubert should preserve clear distinction between the plant, insect, and animal kingdoms:

“Dear Schubart! [sic] but what, *what*, WHAT, I say, do these visualities, these pictures of both by altitudes, *mean?* the *verschlungen* und *die umfangenden* &c &c The true problem is: to state the inferiority of the vegetable antecedence & creation as to preserve & imply its counterposition to the animals—i.e. so to place V= Veg., I. Insect; and A = anim[al] that they may be at once...



<sup>44</sup> Coleridge, *Theory of Life*, 71.

<sup>45</sup> see Coleridge *Marginalia* 4, vol. 12, 764-5.

What this diagram demonstrates clearly is Coleridge's insistence that are able to make use of both a horizontal polarity of vegetable and animal, for which 'antitheses' are illuminating, as well as plant and animal in a vertical continuum of increasing individuation where reproduction, irritability, and sensibility predominate respectively, but with the lower powers assimilated in the higher.

Coleridge's diagram above demonstrates his later grappling with this problem. Here he wants to preserve the vertical hierarchy, in which vegetable, insect, animal are an ascending series – alongside the horizontal scheme which shows them as antithetical. The issue with Plant-animal analogies in 1817 seems to be not that we can't conceive them, but that they aren't the most helpful way to comprehend what he thinks is going on ontologically.<sup>46</sup>

### Initial Conclusions

Coleridge seems to be committed outwardly to an attempt to limit the *scope* and *role* of analogy (as an 'aid' in understanding) in natural science.

With respect to the scope, he explicitly advances an understanding of analogy that is drawn between two sets of causes and effects ("means" and "end"), with the entities that the analogously related cause-effect pairs relate to must be different "in kind".

The role of analogy can be contrasted (as complementary) with deductive explanation, or 'definition', which 'unfolds' powers. His proposal seems to be that analogy can help guide our understanding, when used appropriately, due to his underlying ontology that uses the potencies of being – and only in conjunction with the larger overall framework of other methods, and to help comprehend rather than to prove arguments.

Despite the rigid conditions he places on the correct use of analogy, Coleridge sometimes himself seems to point out in passing 'analogous' things which really seem to be more like noting vague resemblances.

When discussing the ontological basis of analogical gradations that allow for vertical analogies to be drawn and lays the groundwork for recapitulations in the scale of life, Coleridge appears to be wrestling with dual commitments: Because the emphasis on difference in kind is so important to Coleridge's initial conception of analogy in Theory of Life, it may seem strange

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<sup>46</sup> where plants express reproduction, animals express sensibility, a different, opposing dominant power to animals. Coleridge interprets the eyes of insects as "eye-facets" that "form the sense of light, rather than organs of seeing". He is so concerned that these phenomena represent opposing powers that he is unwilling to grant insects "the independent existence of sensibility as sensibility" and wants to cast them as beings that express irritability. He writes that "their almost paradoxical number, at least, and the singularity of their forms, render it probable that they impel the animal by some modification of its irritability, herein likewise containing a striking analogy to the known influence of light on plants, rather than as excitements of sensibility". Coleridge, Theory of Life, 77.

that he goes on to stress, at the same time an underlying continuity between the powers of nature: these levels of being are neither completely identical, nor wholly different to each other. The difficulty of retaining the homogeneous root nature of powers, whilst *maintaining qualitative distinctions in kind* between aspects of different powers, is most clearly expressed in his dual representation of the plant-animal relation as simultaneously antithetical and hierarchical.

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## Bibliography

- Berg, Hein van den. 'Kant and the Scope of Analogy in the Life Sciences'. *Studies in History and Philosophy of Science Part A* 71 (October 2018): 67–76.
- Coburn, K., *The Notebooks of Samuel Taylor Coleridge 1804-1808*, (New York: Bollingen, 1961).
- Coleridge, Samuel Taylor, *Theory of Life*
- Coleridge, Samuel Taylor, *The Collected Works of Samuel Taylor Coleridge. 12, Marginalia. 4, Pamphlets to Shakespeare*, ed. by H.J. Jackson, (Princeton: Princeton Univ. Press, Cop, 1998).
- Samuel Taylor Coleridge, Jackson, H. J., and Whalley, G., *The Collected Works of Samuel Taylor Coleridge. Marginalia: Camden to Hutton*. (1980). Kiribati: Routledge & Kegan Paul.
- Samuel Taylor Coleridge and H J Jackson, *The Collected Works of Samuel Taylor Coleridge. vol.9*
- Eschenmayer, Carl August, *Psychologie in drei Theilen als empirische: reine und angewandte*. Germany: Cotta, 1817.
- Griggs, E.L., *Collected Letters of Samuel Taylor Coleridge*, 6 vols., Oxford: Clarendon Press, 1956-71.
- Harding, Anthony John, 'Coleridge, natural history, and the 'Analogy of Being', *History of European Ideas*, 26:3-4, (2000) 143-158.
- Hesse, Mary. 'Aristotle's Logic of Analogy' *The Philosophical Quarterly*, Vol. 15, No. 61 (Oct., 1965): 328-340.
- McKusick, James C. Coleridge and the Economy of Nature. *Studies in Romanticism*, Vol. 35, No. 3, *Green Romanticism* (Fall, 1996), 375-392, Boston University.
- Modiano, Raimonda, *Coleridge and the Concept of Nature* (Basingstoke, 1985)
- Nassar, Dalia. 'Analogy, Natural History and the Philosophy of Nature'. *Journal of the Philosophy of History* 9, no. 2 (14 August 2015): 240–57.
- Panchen, Alec L. 'Etienne Geoffroy St.-Hilaire: Father of "Evo-Devo"?' *Evolution and Development* 3, no. 1 (January 2001): 41–46.
- Perry, Seamus 'Coleridge's Turtle: Coleridge and the Divisibility of Life'. *The Wordsworth Circle*, WINTER, 1997, Vol. 28, No. 1 (WINTER, 1997), 27- 34
- Potter, George R. 'Coleridge And The Idea Of Evolution'. *PMLA/Publications of the Modern Language Association of America* 40, no. 2 (June 1925): 379–97.
- Schelling, F.J.W, *First Outline of a System of a Philosophy of Nature*, trans. Peterson.
- Schelling, F.J.W, *Von der Weltseele*.