

SOME CONTEXTUAL REFLECTIONS ON
'PURPOSE IN THE LIVING WORLD?'

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Jacob Klapwijk's book *Purpose in the Living World?* is examined with special attention given to the scholarly background from out of which it emerges as a significant contribution to reformational philosophical reflection. As an initial step to clarify some important issues raised by Klapwijk's critical comments about Dooyeweerd's "essentialist" concept of species, the article probes facets of the way Jan Lever incorporated reformational philosophical concepts into his biological theory and considers the 1959 review written by Herman Dooyeweerd of Lever's *Creation and Evolution*. The analysis focuses specifically upon the social responsibilities of these two scholars and the confrontation of their respective views. With the work of Lever and Dooyeweerd we sense something of the ambiguities when reformational philosophy confronts an evangelical scholasticism. This confrontation is an important facet of the context in which Klapwijk has set forth his discussion of creation and emergent evolution. *Purpose* is also the fruit of scholarly collaboration across disciplines, providing a welcome stimulus for a deepened understanding of the corporate character of the student vocation.

1. *Introduction: Purpose and the study of its context*

Let me begin by observing what may be the greatest achievement of Jacob Klapwijk and Harry Cook in *Purpose*. Here is a book, the result of a significant professional collaboration, between author and editor, philosopher and biologist, which also addresses an expansive readership: not only does it challenge any 20-year-retired *professor emeritus*, it also provides an argument that can, with resilience, be studied with profit by the first-year undergraduate; not only is it a valuable contribution to the reflections of the seasoned supporter of reformational philosophy, it also challenges any serious Christian scientist who may never have heard of Vollenhoven; not only does it address the professional scientist, it also includes in its ambit the citizen who wants to be well-informed about public debate. The creation-evolution debate can hardly be avoided. Here is a book that invites readers, whoever they may be, and on whatever plain they may operate, to boldly and actively participate.

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So we can observe that *Purpose*, in addressing a diverse readership, offers important insight, albeit indirectly, about the complex social context in which this debate unfolds. This is also a scientific contribution to a public discussion about science, religion and indeed the meaning and purpose of life. Klapwijk presents his argument in terms of an overall "story". On its first page, *Purpose* introduces us to this story and at specific places in his narrative my copy now has penciled notes which read "story mode" (pages 74, 78, 79, 86, 105, 107, 130, 156, 161, 164, 228, 259, 282, 288). This may strike some readers as a vulnerable or "soft" aspect of his argument, but if we follow along with him we will find that this is not a treatise about "the survival of the strongest argument", nor even of the best story that can be imagined, nor about how scientific his own view of the evolution of life may or may not be. *Purpose* is a challenge to reassess critically the mode of public discussion fitting for scientific reflection. And its author is by no means the only one who adopts a "story mode". Yet, his "storied bits" help us to reflect upon the way scientific literature makes its diverse contribution to science, while also giving an account of how science *should* fit into ongoing public debate, by encouraging people to rethink their taken-for-granted views. In that sense it embraces the task of promoting science in a way that appeals to its readers' search for a good story, a cogent account of how things came to be as they are.

And when we assess scientific argument, we need sharpened awareness of how a writer's desire to meet the needs of a diverse readership weaves imaginative description of states of affairs together with scientific arguments derived from theoretical analysis. This is an important element in the debate among "public intellectuals" and, I suspect, it often serves as a lightning rod for the contentious disagreements that arise between them. Klapwijk cogently illustrates his reflective-empirical philosophical method in the book's opening paragraphs (*Purpose* 1-3). The "problem of evolution" is an invitation to the scientist to set forth a theoretical solution while also challenging the researcher to reflect upon and continue the story within which such scientific explanations take their own distinctive place. Klapwijk would avoid any presumption that creation is a scientific problem that has to be solved by scientific reflection.

Purpose shows the philosopher's determination to take his reflective-critical hermeneutic with him — without hiding the fact that he is not a specialist in evolutionary biology. He makes public his analysis four-square within the scientific, public and religious debates that are still generated from within that discipline. It is as if he says: "Here I am! Come and offer your criticisms! Come to the party!"

The trajectory is Klapwijk's own and in that sense we might also discern something of a generational change in the ongoing emergence of reformational philosophy itself.

Klapwijk had dared to assert at his arrival as a lecturer in 1976 that if there were not a Free University, one would have to be established [BCW: reminding us of Huxley's view of god]. Western culture historically considered was strongly influenced by modern science and Christian belief. The Free University was the place where the two met. Given its twofold expertise, it would be able to

render important services, now that the whole culture was in a serious crisis. (van Deursen 2008, 348)

With Klapwijk, the philosophy discipline was not going to shy away from reminding the *Vrije Universiteit* of the “distinctive integrity”¹ of its historic project. From the 1920s, and for decades thereafter, Dooyeweerd, Vollenhoven and their collaborators in this Association,² and beyond, both at the *Vrije Universiteit* and elsewhere in the Netherlands, and across the seas, through the war years and after, continued to contribute philosophically in ways that they believed were faithful to the *Vrije Universiteit*’s founding vision. And that meant making individual and corporate philosophical contributions to assist their colleagues in the scientific work developed at that university as well as at other places of higher learning at home and abroad. Klapwijk’s philosophical contribution emerged from within a context formed to some extent by these developments, and from within the university’s philosophy programme from the middle 1970s. He was no less committed to seeking an answer to Kuyper’s “key question” — “May a reformational effect be expected of the Gospel for science itself?”³ — even if that needed to be re-framed for a later era. This philosophy could be seriously misrepresented as an anti-philosophical philosophy (Sassen 1967), but Klapwijk’s philosophical output demonstrates a persistent reflective sensitivity, a scholarly attempt to overcome any public stereotype that had affixed itself to the *kind* of philosophy with which he was, and is, reflectively and critically happy to be associated. This hopeful contribution to reformational philosophy is a distinct variant when compared with the kind of philosophy Dooyeweerd anticipated for the scholarly service his philosophy promoted.

It is a matter of life and death for this young philosophy that Christian scholars in all fields of science seek to put it to work in their own specialty. (NC I, vii)

Klapwijk’s variant in *Purpose* stands as a philosopher’s public statement of *his need qua philosopher* for fellow-labourers in the fields of evolutionary biology, in order that he gain help from them to form a professionally focused and truly sensitive *philosophical* account. This involves thinking through the leading ideas that have propelled development within that field, within biological science. As “a change in trajectory” this is no difference in principle. If it is a “change in trajectory” it is brought about by the needs of a new generation of scientific workers, let alone philosophers, who also sense that it is a matter of spiritual life

¹ This term, coined by Keith Sewell as an alternative to “sphere sovereignty”, occurs in an authorised reissue of a 1962 lecture of van Riessen (1997, 6). The impact of the views of Sassen (1967) should also be assessed. His statement conveys a possible interpretation that this philosophy’s critical purpose in subjecting the dogma of the autonomy of theoretical thought to critical enquiry is to deny the “distinctive integrity” of the philosophical discipline itself. “In Calvinist circles, ... [at] the Free University at Amsterdam, a ‘philosophy of the idea of law’ was developed, which denied autonomy to philosophical thinking and sought for the origins of philosophy in the special revelation of God... After World War II... only the Calvinist ‘philosophy of the idea of law’ seemed immune to these new influences....”

² van Deursen (2008, 169-176) mentions Janse along with Schilder in relation to the “Dreigende Deformatie” (Threatening Deformation) brochures of Professor Hepp. See also Veenhof (1980).

³ van Deursen (2008, 348) reports that Klapwijk gave a positive answer to this question.

and death that they bind themselves as neighbours to those whose theoretical work they philosophically criticise, even as they learn from them.

Purpose, we can say, is a Christian contribution to “the creation-evolution debate” in an attitude of readiness to listen (James 1:19), part of a philosophical disposition that avoids rushing to judgment and thus seeks to keep a good biblical tradition alive (Phil. 3:17, 1 Tim. 4:12). The aim is to form concepts that freshly advance an understanding that has been patiently crafted in the midst of contending scientific and philosophical perspectives.

Jacob Klapwijk seeks to provide help for people by “getting alongside” the various participants in debate, by philosophically arguing their cases with them in order to see clearly the weaknesses where he agrees, and the strengths where he must disagree. *Purpose* emerges, as we read it, as a work which turns the reader’s attention, first this way, then that way, to the genuine scientific results of the well-established discipline we now know as evolutionary biology. It is an attempt to explain how one can take a concerted intellectual orientation and thus also engage in scientific investigation while remaining sensitive-from-the-heart to “the way to God’s kingdom of shalom.” (*Purpose* 291-292) This *philosopher’s* commendation of the scientific sub-discipline of evolutionary biology emerges from his disciplined exercise of an inter-disciplinary sympathetic imagination and much more. This scientific work has its own “distinctive integrity”, no matter how much of a jungle of contention it may still have to confront, with various kinds of philosophical and ideological contributions seeking to slake an insatiable thirst for intellectual status by asserting that some or other theory or concept deserves intellectual survival because it is the fittest explanation of empirical reality. However much we might wish to avoid that brutal contention, it is still a struggle that arises about the appropriate way to explain life in this world, a world Scripture tells us God loves so very much.

As I have said, an important facet of *Purpose* is that it is the major publication so far of a most significant scholarly collaboration. In the Preface and in footnotes throughout the volume, Klapwijk the author, pays tribute to Cook the translator and editor. Klapwijk’s work has been in philosophy, resident in the Netherlands at the Vrije Universiteit; Cook has been persistently active as a biologist and historian of the life sciences at King’s University College, Edmonton. Significantly, the volume is not co-authored even though Klapwijk takes repeated opportunity to acknowledge his debt to Cook’s work, advice, correction and stimulus.

Klapwijk’s *Purpose* exhibits some of the same reflective-empirical sensitivity which these days is the assumed *sine qua non* of the published reports of sociological research. It exhibits a disciplined ability to frame an account of some or other reality by remaining alert to the fact that any one formulation is set forth alongside other formulations, and that the reality of scientific analysis must also appear as the subject and/or object in one’s account of complex scientific discourse. In that sense *Purpose* stands alongside other works such as Michael Ruse’s (2006) *Darwinism and its Discontents*, as good exemplars of a kind of scholarly engagement in the midst of highly complex scientific discourse, seeking to present a theoretical overview, albeit driven in their work by a well

articulated set of pre-scientific commitments. As with Thomas Kuhn's construal of the history of science in terms of paradigm shifts, such contributions (i.e. Klapwijk and Ruse) may well be viewed by some as "sociological" explanations of how scientific analysis is to be understood, even if this construal often betrays a lack of critical understanding about sociology. Yet, what I have said above gives sufficient background to indicate why such a judgment appears credible. It is a judgment that sees in such works a sensitivity to the diverse contributions that need to be taken into account if a genuinely *scientific* account of the current state of discussion is to be presented. And so *Purpose* is also representative of the "current position and prospects" genre of scientific theory-writing.

In the remainder of this article, I propose to discuss one particular facet of *Purpose's* relation to its own philosophical and scientific context as a work of reformational scholarship. In the process of doing this I will explain why at least two further research projects in the history of reformational philosophy should be taken up by *students* of this philosophy. The first research project would be involved in the production of a critical edition of Dooyeweerd's (1959) review of Jan Lever's (1956), (1958) book. Here I will simply try to indicate the complexity that is involved in that review, and what it signals to us now about the difficulties involved in promoting a reformational response to the debate about creation and emergent evolution. When *CE* is confronted with *SE* we meet with their respective expressions of scholarly regret, and in seeking to explain this we then begin to discuss how scholarly collaboration plays an implicit and normative part in any reformational scholarship. So, in this way, this article becomes an appeal for further research, a theoretical exploration of the various social responsibilities inherent in the student's vocation *coram Deo*. These responsibilities have also been decisive in forming the context within which our three primary artifacts, *Purpose*, *CE* and *SE*, are to be evaluated, and within which our own calling to be students in the school of Jesus Christ is to be worked out in fear and trembling.⁴

2. *Confronting Lever's CE with Dooyeweerd's SE*

This discussion now seeks to identify the character of an important exchange that is part of *Purpose's* scholarly background. We cannot do full justice here to Lever (1956), (1958) and Dooyeweerd (1959). What I propose to do is to examine a particular moment in Dooyeweerd's review where respective expressions of a scholar's regret by both Lever and Dooyeweerd come into view.

I assume that any judgment on the validity of Klapwijk's critique of Dooyeweerd's essentialism, at least his exposition of that in Chapter 12 of *Purpose*, will also have to assess Dooyeweerd's critique of Lever. Klapwijk takes issue with particular comments Dooyeweerd makes in the midst of his

⁴ All three scholars exhibit an understanding of the Christian life that is associated with John Calvin who dated his conversion to the time he became teachable as a member of "Jesus' school."

... critical objections to Lever’s cautiously worded hypothesis of a general evolution from elementary matter to man. (*SE* 158, *K* 45)

It must be said that that review is also very “cautiously worded”. As it stands, *SE* reads as an attempt to pour oil on troubled waters. As we probe the disagreement between them, we can appreciate their respective expressions of regret embedded in their works. Jan Lever, who became the *Vrije Universiteit*’s inaugural professor of zoology, was a graduate of the Zoölogische Laboratorium of the *Rijks-Universiteit Utrecht*. It was as a doctoral graduate from that university that he made his contribution to science and scholarship, and his undoubted Christian contribution to biology was noted at the *Vrije Universiteit* by the invitation to continue his scientific work via a professorial chair.⁵ *SE* was written by Dooyeweerd, the senior of the two, when both were professors of their respective disciplines at the *Vrije Universiteit* — Lever in zoology and Dooyeweerd in law. Although they were also more than that, it is important to keep in mind the social structural characteristics that are presupposed by this exchange.

Interpreting the exchanges that pass between academic colleagues is not a straightforward business. When any attempt is launched from one academic-cultural context to interpret a work that has arisen in another, then it is quite possible to miss the nuances and the taken-for-granted rules of engagement. For instance, a common expectation held about academic life in previous decades was that when a lecturer gained tenure then that would coincide, sooner or later, with the publication of “the book”. This was the expected visible and concrete evidence that the university had made the right choice in giving this person a chair. So we can ask, how, if at all, did such an institutional expectation relate to Lever’s *Creation and Evolution*? And then we would be confronted with the question of how Dooyeweerd’s extensive review should be interpreted in relation to this state of affairs. But then the question becomes: was this an academic context in which “the book” was expected, by the university community, from newly appointed professors? What was the character of institutional expectation in this instance?

Let’s take another example concerning the presumed characteristics that often pertain to the professorial office. If the review *SE* had been written by a professor in the context of a British (including Australian or New Zealand) university in the early fifties, then it would have been the published view of a proprietor of one academic field making his views known about the views put by a proprietor of an adjacent academic field. In that case, it would have been highly unlikely that a professor of law would have even contemplated writing an extensive review of a book written by a professor of zoology, which raises the question for us concerning the prevailing academic ethos in which both of these *Vrije Universiteit* professors worked. Further, Dooyeweerd does not set forth *SE* from his standpoint as a professor of law. *SE* is written from the

⁵ Along with four jointly-authored articles, Lever and Dooyeweerd (1948-1950), Lever’s work was reviewed in *Philosophia Reformata* by Duyvené de Wit (1950), (1953). The collegial interaction between Lever, van de Fliert (1968), the *Vrije Universiteit* geologist, and Duyvené de Wit should also come into consideration.

standpoint of the person who had developed the philosophy which Lever in *CE* claims can bring about significant disciplinary integration into the life sciences.

From the writings of reformational philosophy, I have never read anything to suggest that the incumbent of a professorial office “owns” the discipline, which views were held rather strongly in former times in universities of the British type. That does not mean that reformational scholarship has not functioned on the basis of such proprietorial assumptions. Often the most important factors are the ones that are never spoken about.

Purpose is certainly cut from a cloth of a different academic tradition. It might well be received as evidence that the professor *emeritus* has now had sufficient opportunity to write “his book”, having had to wait until his retirement from active university duties.

It is difficult to make sense of Dooyeweerd’s review if we do not also keep his editorship of *Philosophia Reformata* in mind, as well as his involvement in the *Vereniging voor Calvinistische Wijsbegeerte*. In Lever’s case, *CE* explicitly identifies the author’s “orthodox Protestant” background, and it is when we note Lever’s positioning of his discipline in relation to this background, that we also confront Dooyeweerd’s regret about his way of framing his argument. In Dooyeweerd’s review we discern how he construed the confrontation between two approaches to science, both advocating a Christian view. From Klapwijk’s Chapter 12 references to Dooyeweerd’s review we know his view that in this confrontation with Lever, Dooyeweerd succumbed to “the slumbering temptation of essentialism.” Parts of Dooyeweerd’s review of Lever’s work convince Klapwijk of Dooyeweerd’s (equally regrettable) basic philosophical error.

But now we are faced with the fact that the extensive philosophical discussion of Lever’s work, which Dooyeweerd explicitly encouraged, never eventuated, at least not in a form that reached publication in *Philosophia Reformata*, or that allows us to assess how Dooyeweerd’s review was received. Instead, there has been a general silence. And at this point *Purpose* has surely been a welcome contribution for many students of reformational philosophy, because it’s critique of Dooyeweerd’s “essentialism” alerts them to the need to obtain a deepened understanding of the relationship of *Purpose* to both Lever’s book and Dooyeweerd’s review of it. To do this, there needs to be a full assessment of both *CE* and *SE*. And even though what I present here raises an issue I think is a crucial one for what has to be explored, this can not claim to be a comprehensive analysis of either *CE* or *SE*.

3. *Analysing the regret*

The expression of “regret” occurs three times in Dooyeweerd’s review⁶ before it appears at the particular place where he discusses Lever’s formulation at the

⁶ “Ik vind het jammer ...” (SE 121), “I find it regrettable ...” (K 9); “Hier kan ik mijn vriend Lever tot mijn spijt niet meer volgen.” (SE 125), “I regret that I cannot follow my friend Lever any more here.” (K 13); “En dit vind ik bepaald jammer ...” (SE 130), “And I really regret this ...” (K 17).

close of Chapter 4 of *CE*. Dooyeweerd makes his fourth expression of regret,⁷ having drawn the attention of readers to the fact that, at this specific place, Lever emphatically renounces the “dogma of the constancy of species” (*soortconstantiedogma*). This critical comment, at this place, both for what it says and what it refrains from saying, is important for how we interpret Dooyeweerd’s entire review and hence for how we evaluate Klapwijk’s identification of “essentialism” in *Purpose*. I judge that Dooyeweerd’s expression of “regret” at this point in some ways gives expression to the purpose of the entire review as one of deep disappointment about a philosophical parting of the ways.

Let us then focus our attention upon these expressions of “regret”. The particular expression of Dooyeweerd’s “regret” from *SE* that I consider crucial, does not stand alone. It occurs alongside other “cautiously worded” and “regrettable” criticisms earlier in the review. Dooyeweerd’s use of the term helps explain why he has had to say what he has said. To say it again: the review is a review of regret. Lever also uses the term to bring *CE*’s Chapter 4 to a conclusion.

While Dooyeweerd’s regret gives explicit expression to his collaboration and friendship with a fellow *Vrije Universiteit* professor, Lever’s regret is not focused upon his older colleague or any particular person, but more broadly upon the “orthodox Protestant community”. It is also from within that community that Lever’s own calling as a scientist has emerged. Clearly he identifies himself with that community even if a persistently negative attitude is held within it to evolutionary biology, his own vocational field. Therefore, Lever’s expression of regret, in its public confessional side, is his call to fellow Christians to reform their attitude to science.

The distinctive character of Dooyeweerd’s criticism at this point comes into focus when we examine the context of the quote he provides from Lever. Dooyeweerd quotes Lever’s comment about the deeply “regrettable” attitude to science found within “orthodox Protestant circles”. Not only has this attitude denigrated the pursuit of science but it has also eroded respect for nature. It presents a completely misleading picture of how Christians *should* relate to creation. And so, Lever says,

... by not accepting the only point in which the idea of evolution has been proved, the philosophically strong anti-Christian evolutionist was given a weapon to brand the Christians as narrow and bigoted deniers of the facts. (*CE* 138-139; *SE* 145; *K* 32)

Dooyeweerd’s quotation of this statement, and his “regret” (“Ik vind het jammer”⁸) are ironic when read alongside Lever’s statements of what lies at the root of this deeply “regrettable” attitude, this fixated⁹ appeal to the “dogma of

⁷ “Ik vind het jammer, dat hij aan het slot van dit belangwekkend hoofdstuk de zaak aldus stelt.” (*SE* 145), “It is regrettable that at the end of this interesting chapter he puts the matter in that way.” (*K* 132)

⁸ *K* 32 at this point has “It is regrettable.” Another rendering might be “It is a pity.” I have not consulted the original Dutch. Lever’s regret is evidently about the pitiful attitude towards evolutionary science among fellow Christians thus branded as “bekrompen feiten-looche-naars”. *SE* 145 refers to Lever (1956, 110).

⁹ My term not Lever’s.

the constancy of species". Here, Dooyeweerd says, Lever most clearly renounces the dogma and sets forth his own view that the mutability of species has been definitively established by evolutionary biology. But in Dooyeweerd's view, Lever has not definitively explained or formed the concept which he claims has now been historically established by the discipline itself.

Dooyeweerd's review at that point refers to Lever's explanation of how and why, within biological systematics and phylogenetics, there was no longer any clear-cut concept of species. The chapter has already explained the immense potential of the "Philosophy of the Cosmonomic Idea", as developed by Dooyeweerd and Vollenhoven, for biological science (*CE* 129). Whatever Lever may have later concluded about the value of this philosophy,¹⁰ his discussion in Chapter 4 of his book indicates that he then rated it very highly. What he says in his discussion implies that it could well have the conceptual resources to provide the biological disciplines with a firm theoretical basis for bringing together all aspects of such scientific research in "biological systematic thinking" (*CE* 125). The unity of biology as a science, he says, is in danger of being lost, and clearly he perceives that this philosophy could help the biological disciplines restore "... the unity of concept concerning the essence of the living biological structures." (*CE* 126).

Lever had reviewed the history of biological systematics which, in recent decades, faced the increased danger of losing its disciplinary unity of conception.

What plays, in the first place, an important role in this is that the struggle between the ideal of constancy and that of evolution, although with a different design and other motives, is not settled by any means. Formerly constancy was based upon scholastic-religious presuppositions and the antithesis was clearly one between the Christian faith and materialistic evolutionism. At present the antithesis has penetrated deeply into science. (*CE* 126)

And so, from this historical presentation of "The Concept of Species and the Problem of Origin", Lever's argument unfolds to identify a niche for reformational philosophy within, or in close relation to, the biological sciences. Dooyeweerd's review signals his appreciation for Lever's endorsement of the philosophy. We note also Lever's use of the term "antithesis". Dooyeweerd's regret is that Lever, having expressed his anticipations of the philosophy's impact upon evolutionary biology, has somehow declined to think through the central concepts of biology, in particular the concept of species, in a *philosophical* way. Dooyeweerd seems content to concede Lever's commendation of the philosophy as a potential basis for disciplinary unity in the life sciences, and instead hones in upon Lever's unproblematic acceptance of the discipline's current view of species that has now supposedly been historically established. It would seem that from Dooyeweerd's viewpoint, Lever's approach at the end of

¹⁰ Has Lever discussed this philosophy in his other publications? *Purpose* 250 footnote 14 discusses Lever (1973), and dissents from Lever's view that the taxonomic distinction between kingdoms should be dropped since all organisms share a common genetic language packaged in the structure of DNA. In this regard the ambiguous (metaphysical?) concept of "information" should be examined.

Chapter 4 leaves him standing with his scientific task circumscribed by the view that "biology is what biologists do" without any *philosophical* need for re-defining the discipline itself along with its central concepts. Apparently, Dooyeweerd's regret is also that Lever's anticipations about the contribution of this philosophy to biology are poorly founded. How can this philosophy make a contribution to biology if not by means of a biological concept?

Earlier in his review, Dooyeweerd perceives a neo-scholastic tendency in Lever's argument (*SE* 130-132, *K* 17-19). So could this later "regrettable" way of putting his argument confirm Lever's neo-scholastic appropriation of the Philosophy of the Cosmonomic Idea? Lever had clearly stated that the Philosophy of the Cosmonomic Idea could be of great value for the biological sciences and, as a specific example of its possibilities, he had outlined how the theory of "Structures of Individuality of Temporal Things" (*NC* III) applied to the analysis of, what he calls, biological entities and specifically applies this to a brief discussion of endocrine functions (*CE* 131-134). From what he has written, Lever hoped that this philosophy could stand as a bulwark against the immanent disaster of scientific fragmentation in which all of the biological sub-disciplines were each tending to go their own sweet way. This fragmentation had emerged as a strong possibility in recent decades (*CE* 125-137). The brief example of the philosophy's fruitful application serves to confirm Lever's stated confidence in the philosophy's potential for theoretical enrichment and indeed for scientific reformation.

So is it that Lever's historical review of the development, from the "old concept of species", based on constancy, to the "new concept", based on mutability, confirms a neo-scholastic tendency in his biological theorising? That may be. As it stands, Lever's argument seems to rest upon a view that the Philosophy of the Cosmonomic Idea will redefine and re-integrate the diffuse results of biological research rather than contribute to the philosophical redefinition of biological research itself. Lever doesn't seem to realise that it is possible to do so. He leaves us with an account in which the recent historical development, within biological science itself, determines the shape and content of any concept of species to be subsequently applied in the various life sciences.

Lever also seems to have found in the Philosophy of the Cosmonomic Idea a strong philosophical endorsement of his vocation as a Christian worker in the field of evolutionary biology. His appreciation for the work of Dooyeweerd's earlier collaborator from biology, Harry Diemer, is quite apparent. Presumably, Lever also saw Diemer's work as a spur to himself *qua* biologist in his professional task of making his contribution to zoology and overcoming the immanent fragmentation of its sub-disciplines. He signals his view of how this philosophical contribution might be made to the integration of the life sciences by its redefinition of biological *entities* which he analyzes in terms of the "theory of structures of individuality". This, presumably, was how Lever anticipated the contribution made by the *Vrije Universiteit's* zoology research programme, not least, I presume, in the aftermath of the discoveries of Watson and Crick. And yet, even while all these developments may be anticipated by what Lever implies about this philosophy in *CE*, Dooyeweerd finds it necessary to point out that

Lever has not actually provided a distinctive concept of biological species based upon the conceptualization suggested by the Philosophy of the Cosmomic Idea!¹¹ And that, it would seem, is where the evangelical-scholastic line in Lever's argument becomes manifest to Dooyeweerd, and it is with regard to this that Dooyeweerd expresses regret. The regret from Dooyeweerd's side would seem to suggest that, for Dooyeweerd, Lever's use of the Philosophy of the Cosmomic Idea has been integrated into a neo-scholastic frame of reference. And yet, he doesn't say this explicitly. Why? Would this be "unprofessional" in some way? I don't think so, but we also know that the storm clouds of theological controversy were never too far away.

Lever's way of bringing Chapter 4 to a conclusion somehow allows him to avoid facing the fact that from a critical scientific standpoint, his confrontation of one dogma — the dogma of species constancy — has been made from the standpoint of another — the *dogma* of species mutability. And that is the regrettable consequence of not forming an alternative concept of species, together with corresponding conceptualizations of biotic constancy and biotic mutability from within a biological frame of reference. It would seem therefore that while Lever has rightly assumed that the Philosophy of the Cosmomic Idea would endorse the need for critical examination of "the dogma of species constancy" (*soortconstantiedogma*),¹² as that need has come to expression within biology, he yet ignores the possibility that the scientific task must also critically examine *any* dogmatic theorising, including that of species mutability.

So that constitutes my analysis of Dooyeweerd's confrontation of Lever's insightful book at that particular point. It also needs to be pointed out here that Dooyeweerd goes out of his way to avoid using the term "dogmatism" when confronting Lever's view. In subjecting Lever's scholarship to his critical judgment, Dooyeweerd leaves it up to the author and the readers to decide whether Lever is adopting a dogmatic stance or not. Where Dooyeweerd's regret meets Lever's analysis of the harmful results of the idea of the "fixity of species" (CE 137), he seems to be concerned solely with commending Lever's book to the readers of *Philosophia Reformata* rather than taking issue with him about his criticism of the way the dogma is held within the "orthodox Protestant" community. Could not Lever's critique apply to certain applications of this reformational philosophy as these had been developed by any of its

¹¹ "Wanneer immers de inhoud van dit begrip nog niet vaststaat, hoe zou dan bewezen kunnen zijn dat de soorten, zoals ze naar dit begrip zouden dienen te worden gevat, in haar realisering in levende individuen niet constant zijn en slechts als variabele evolutievormen zijn te beschouwen?" (SE 146) "For this concept has not yet been defined. How, then, could it have been proved that the species, as this concept sees them, are not constant in their realisation in living individuals and should be viewed only as variable evolutionary forms?" (K 32-33)

¹² Here Dooyeweerd's review is headed "Lever's requisitoir tegen het 'soortconstantie-dogma' mist feitelijke grondslag" (SE 145); "Lever's Denouncement of the 'Dogma of the Constancy of Species'" (K 32). The English translation gives "constancy-of-species dogma" which appears only once and in Chapter 4's final paragraph. At the point of "regret" Lever discusses it as "the idea of the 'fixity of species'" (CE 137) and earlier in the chapter as "idea", "ideal" or "concept". There is also this telling statement: "In summary, against the belief that the dogma of fixity of species is of a typical Christian character and that it retarded the development of Greek thought, it can be argued that it had its origin in a fusion of observed law and order with the Christianized Greek philosophy." (CE 110-111).

publicly-active *students*? After all, was not this same philosophy also set forth in the context of the same orthodox Protestant circles that Lever had identified?

Dooyeweerd's review confronts Lever's conclusion to Chapter 4 of *CE* with the logical implication that a theoretical unwillingness to simply concede species mutability will be defined as a dogmatic adherence to "the dogma of species constancy". Dooyeweerd's regret at this point in his review may therefore be strategic. Is he not trying to draw Lever out to see whether he identifies such theoretical unwillingness with an approach similar to that found in "orthodox Protestant circles"? If Dooyeweerd's philosophy could not concede the concept of species mutability does this not indicate that it is now part of the problem? Lever does not seem to have suggested this subsequently. But it would be a critically important point to have Klapwijk's view of Dooyeweerd's regret at this point. This would also involve Klapwijk in evaluating Lever's "regrettable" renunciation of the dogma of species constancy as that is dogmatically held in these reformed communities.

While on first glance that seems to be a valid question, Lever's previous appeal to the Philosophy of the Cosmogenic Idea of Vollenhoven and Dooyeweerd, plus his explicit attempt to extend the salient insights which Diemer had bequeathed to those seeking a new way within biology "... which, as it were, combines or overbridges mechanism, vitalism and holism ..." (*CE* 128), confirms that in articulating his theory for biological science, Lever was not suggesting at that point that any *students* of the philosophy were to be found within these dogmatic circles. Likewise, Dooyeweerd's regret is expressed to make a specific theoretical point rather than trying to distance himself and his philosophy from the regretted dogmatic community.

So, with both of these expressions of regret we are confronted with two scholars binding themselves to the subjects of their regret, even when, by giving their views, they distance themselves from what they find to be regrettable. And here, I sense, is strong evidence of an academic *modus operandi* in which both scholars are joined, as if to a common ancestral ethos. What could that be? Well, both are reformed "public intellectuals"; both are professors at the *Vrije Universiteit*. As such, their respective formulations of regret can also be read as the results of a conscious effort in their scientific work to carry forward a distinctly Dutch neo-Calvinistic attitude in a tradition that has emphasized the importance of expressing regret publicly in order to take decisive distance from what is in error. But that is only one side of it. The other side is that the expression of open regret is a public attempt to bind oneself as critic in a Christian neighbourly way to the person or the community criticised. This, I suggest, can be read as an enduring bequest of the spirit of *doleantie*¹³ to Christian scholarship.

¹³ Reformational philosophy "emerged" from the difficult task of "reforming the reformation". The *Doleantie*, a late-19th century development among Dutch reformed churches (Veenhof 1980), was a lament about the ecclesiastical injustice done to them. When the leaders of the *Doleantie* discussed union with an earlier group of seceding churches (the *Afscheiding* in 1834), they emphatically refused to agree to an act of union binding the united churches to a view of the *Nederlandse Hervormde Kerk* as a false church. This hunch about the way

What is noteworthy is the absence of any explicit statement from Dooyeweerd critical of Lever's *historical* analysis of the way the species concept had been inherited by modern science.¹⁴ The point to explore in relation to this might well be Dooyeweerd's critical observations in relation to the impact of the philosophical conception of Leibniz upon biology, and how that makes an impact upon Lever's historical exposition of the influence of Leibniz's philosophy upon Linnaeus (*SE* 134-136, *K* 22-23; *CE* 62-64, 108, 110, 115, 136). Instead, Dooyeweerd points out that Lever's discussion publicly and formally gives support to reformational philosophy in a way which

is especially important for the readers of this journal because it expertly confronts the Philosophy of the Cosmonomic Idea with the present-day position of science as regards the problem of evolution. (*SE* 158, *K* 45).

There *are* "technical matters" in Lever's historiography of modern science, significant ones, which require careful, critical examination. But Dooyeweerd does not query Lever's interpretation of the philosophy and the way he construes its strategic contribution to biology. Nor does he raise any objection to Lever's view of the emergent *antithesis* that has become manifest among the diverse professional sub-disciplines of modern biology (*CE* 126). As well, we might ask how Lever's exposition of "antithesis" relates to the modified positivist view of the history of science that seems to have shaped his argument at this point. Is not this a distinctive way of construing "antithesis" in the historic task of forming scientific concepts? And was not this perhaps part of what Dooyeweerd was suggesting when he expressed his hope that *CE* would be discussed within the Association's philosophical discourse?¹⁵ If so, might not the modified positivism of Lever's historical outline coincide with a reversion to a neo-scholastic form of argument?¹⁶ Lever's view of entities also raises issues — does his anticipation of disciplinary integration derive from an attempt to accommodate insights gained from the Philosophy of the Cosmonomic Idea with a substantialist (if not operationalist) view of the functional characteristics of living things? (*CE* 130-137)¹⁷ These matters cannot be decided here but need

reformational philosophy inherits a valuable approach to criticism from within its own (Dutch) reformed tradition needs further confirmation.

¹⁴ Dooyeweerd does pin-point a misunderstanding — involving "a slip of the pen" — in Lever's exposition of Leibniz's contribution to the history of biology, namely in relation to the connection between Leibniz's thought and the constancy idea in systematic typology (*SE* 134-136; *K* 21-23).

¹⁵ A neo-positivist appropriation of the Philosophy of the Cosmonomic Idea might view the intellectual development that had taken place in "orthodox Protestant circles" as one which has passed through a "religious world-view" phase (Kuyper), on to a "philosophical" stage (Dooyeweerd), to then make its culminating contribution to modern science. Could this be indicative of a "slumbering" echo of Comte's "law of the three stages" with a neo-scholastic turn?

¹⁶ *CE* 127 footnote 53 refers to Genesis 2:19-20. Biology is said there to be "the oldest science". Is this proof-text in jest? If not, does it contradict Lever's previous statements about the way "Protestant dogmatism" appeals to the biblical text in order to derive scientific and historical data?

¹⁷ Lever refers to Dooyeweerd (1950). Lever's concept of entities at places is about the analysis of organs and processes gathered from specimens (living or dead) and from diverse species, and how they are to be analysed when grouped together. In other places "entities" is an equivalent for modal functions as explained in the Theory of Structures of Individuality.

to be further unpacked in a comprehensive study of Lever's timely and critical contribution to a Christian biological theory.

4. *The closure and disclosure of scientific collaboration*

Dooyeweerd's review now signals the closure of a professional collaboration. We have noted how Lever's "regret" concerning the "dogma of species constancy" had bound him to his reformed community. Likewise Dooyeweerd, by his regret, bound himself to his friend and colleague, despite his obvious disappointment at Lever's evangelical neo-scholastic turn obviating any need for the development of an alternative species-concept. In this analysis we are confronted with a normative question: how should scholars publicly express their disagreements? How can the expression of scholarly "regret" promote authentic solidarity between parties who must regrettably disagree?

There is of course something deeply sad in this. Was the review the termination of what previously had been a creative collaboration? While we might hope that *Purpose* has opened a way to formulate the concept of mutability that escaped Lever's theorising, we are confronted instead by Klapwijk's critique of Dooyeweerd's implicit essentialism. The hiatus, however, is not simply with Dooyeweerd's concept of biological species, but with Dooyeweerd's "theory of structures of individuality", to which Lever has, by and large, explicitly subscribed, and in terms of that side of Lever's exposition, Dooyeweerd offers no explicit criticism. The point of course is that if Dooyeweerd's biological concept of species shows an essentialist tendency in his thought, then this would also manifest itself in his theory of structures of individuality. What then might be the way forward? As an initial step, I suggest that further research should seek to provide a comprehensive and systematic comparison and contrast of the views of Klapwijk and Lever, Lever and Diemer. This would also mean reviving "Diemer studies" and "Lever studies" in order to maintain momentum with "Klapwijk studies".

We also note Jacob Klapwijk's "regret" at the philosophical tendency exhibited in Dooyeweerd's philosophy. But in Klapwijk's case "regret", coming to expression from within the scientific conversation between Christian scholar and Christian scholar, also discloses itself within *Purpose* as a *leit-motif* which is by no means limited to such *Christian* scholarly interaction but is broadened by a critical involvement with the scholarship of biologists and others bound by a naturalistic and deterministic ideology. And so our focus upon "regret" serves to draw attention to the peculiar "reflective-critical" side of Klapwijk's "reflective-empirical method" (*Purpose* 246-248). *Purpose* is also a work of *Christian* critical scientific solidarity.

But let us recall that *SE* was possibly the longest review ever to be published in *Philosophia Reformata*. Was it written pre-eminently as Dooyeweerd's challenge to his younger colleague? That is not clear. Was it a case of trying "to pour oil on troubled waters"? After all, Dooyeweerd and Lever had collaborated a decade earlier in a significant writing project before Lever gained his doctorate, after which, in 1952, he took up an appointment as professor of zoology at

the *Vrije Universiteit*.¹⁸ Could *CE* have embarrassed Dooyeweerd in some way by associating him with views with which he so evidently disagreed? Had *CE* required him to revisit his earlier jointly-authored articles to re-examine some of the points made therein? If so, was there anything to prevent Dooyeweerd from saying so explicitly? Maybe there was. For Dooyeweerd to have written an article titled “My collaborative series with Jan Lever revisited” may too easily have been interpreted as his subsequent regret at Lever’s appointment, based on what *CE* had disclosed about the underlying *philosophical disagreements* between them. Dooyeweerd takes Lever’s stated adherence to the Philosophy of the Cosmonomic Idea at face value and works with his book in those terms. It seems plausible, therefore, to maintain the interpretation that *SE* is an attempt, albeit an overly long one, to provide an immanent critique of the argument of an “aanhanger” (adherent) of the Philosophy of the Cosmonomic idea.

Subsequent to *SE* there has been only scant and indirect reference to *Creation and Evolution in Philosophia Reformata*.¹⁹ So, knowing what we know now, that Lever did not take up Dooyeweerd’s challenge, this lengthy review could easily be read as an example of overkill. Was Dooyeweerd actually expecting a reply? I suspect he was, but it might have been better written as his own *aide memoire* and in the first instance presented personally to Lever.

From Lever’s side, *Where are we headed?* (1970), is a booklet that was translated from the publication of his 1968 Dutch radio talks. It has approximately the same number of words as Dooyeweerd’s review! It reiterates the same viewpoint to which Dooyeweerd took exception in his 1959 review, but makes no mention of Dooyeweerd or of reformational philosophy. But by then, the public review of Lever’s work from the side of the Philosophy of the Cosmonomic Idea had ceased.²⁰

¹⁸ Lever and Dooyeweerd (1948-1950). The first three parts of this jointly written series designates Drs. Lever as the senior writer who was then, presumably, a candidate; the fourth refers to Dr. Lever indicating he had passed his doctoral examinations. It is noted that his institutional location is Zoölogisch Laboratorium der Rijks-Universiteit, Utrecht.

¹⁹ There is a brief reference to Dooyeweerd’s *SE* in Hughes (1961, 62). As well, Lever’s colleague from student days in Utrecht, J. R. van de Fliert, who joined the *Vrije Universiteit* in 1960 as professor of geology (Van Deursen 2008, 267) made his contribution to *Philosophia Reformata* by contrasting Dooyeweerd’s style of critique with that set forth by Duyvené de Wit (van de Fliert 1968). One further reference to *SE* is an interesting fact in the “background” of this present article. Edward Fackerell, “specialist in Einstein’s algemene relativiteitstheorie”, is mentioned by Dooyeweerd (1971, 4) in relation to his efforts to form a Sydney study group, outside the formal structure of Sydney University, to study reformational philosophy. Dooyeweerd’s comment continues “Deze groep heeft met mijn toestemming een afzonderlijke engelse (sic!) uitgave verzorgd van mijn verhandeling over ‘Schepping en Evolutie’ in *Philosophia Reformata* 24 (1959).” In that same year, 1971, Fackerell, then at Monash University’s Faculty of Mathematics, recommended that I read Dooyeweerd’s *New Critique*, a copy of which, the four separate green volume Paris edition, was located in the Monash library.

²⁰ Mention should also be made of Hart’s (1964) examination of how Lever’s scientific work in zoology related learning to the Word of God. Stellingwerff (1987, 387-388) informs us that some time after publishing his review of Lever, Dooyeweerd suffered a heart attack. Moreover, he goes on to say that Dooyeweerd’s anthropology did not offer the biologist much scope for developing his views.

This apparent failure of Lever does not mean his more senior colleague is “let off the hook”. Not at all. Dooyeweerd’s published critique of *CE* is not merely the work of one university professor responding to the work of a colleague. It is a review published in a scholarly journal of which the reviewer is editor. It is also the work of a member of a philosophical association, and in relation to these factors we are hard-pressed to avoid the “regrettable” conclusion that the editor of the journal had allowed the author of the review to engage in overkill. And could that be the problem? *SE* expresses Dooyeweerd’s considered critique of *CE* and it may even be an accurate account of what he had said to Lever face-to-face prior to publishing the review in *Philosophia Reformata*. But as a journal article it has had very few children.

At the basis of Dooyeweerd’s philosophical regret is his concern at the lack of consistent philosophical and conceptual development in Lever’s appropriation of the Philosophy of the Cosmonomic Idea. But let us consider here what we might say were we the editor when an author submitted “Schepping en Evolutie” to our journal? No matter how eminent the writer might be, and no matter how much of a “prime mover” the author had been in getting our association and its journal up and running, we would probably respond by saying something like:

Thank you for submitting your article. We kindly ask you to resubmit it. Please limit your review to 3 or 4 points, and note the journal’s still lenient requirements for the size of articles which means reducing its size by between 1/2 and 2/3rds. Please ensure that you also send what you propose to send us to the author of the book you review, since we propose to publish his response immediately alongside your review in order to generate appropriate open discussion. You will agree that even then it will be a difficult task but as a journal editorial team we are keen to encourage the views of all our valued contributors.

Of course, this kind of *editorial* advice is what we might offer. It contains the advice we think Dooyeweerd needed, from our retrospective vantage point 50 years later. How was his review to overcome its overly expansive form and keep the much-hoped-for discussion alive? Readers of *Philosophia Reformata*, who were also appreciative readers of Lever, also stood in need of specific philosophical direction for constructing biological concepts of mutability and constancy for the scientific analysis of living things. Surely this task is not the sole preserve of professors! And professors who are journal editors also need sub-editors and other advisors who can share the load — ask Jacob Klapwijk about the assistance he has needed from Harry Cook! What we uncover here are the difficulties of sustained collaborative scholarship between faculty members of the same academic institution! And perhaps this is another reason why reformational philosophy, for example, needs its own association to help bring about, and share the load needed for, active collaboration between the students (*aanhangers*) of this philosophy.

So why did Dooyeweerd not content himself with a much briefer statement which explicitly drew attention to the implicit problems in Lever’s appropriation of his philosophy? Had not Lever in Dooyeweerd’s view avoided the philosophical questions raised by this philosophy about the conceptualization of

species mutability and constancy? That critical observation might satisfy us now, half a century later. But though this is clearly implied in Dooyeweerd's review, it was not successful in bringing Lever into ongoing philosophical discussion within the association. And at that point, where the regrets of Lever and Dooyeweerd intersect, we must express our regret about this state of affairs and hope that *Purpose* actually brings about some fresh reflection and spurs further creative collaboration between philosophers and scientists. We have to move on from our regrets to deepen our philosophical and scientific confrontation with evolution from a reformational standpoint. Clearly, Klapwijk and Cook have been engaged in a collaborative project which challenges the intractable communication problems that often arise when scientific research confronts philosophical critique. For philosophy, criticism is "the name of the game" and in the exchange between Dooyeweerd and Lever, we note with regret that reformational philosophy had not reached a stage where it could maintain the philosophical and scientific discourse that had arisen between these two scholars even though their previous collaborative project had been such a significant one.

The respective expressions of "regret" by both scholars, as these were embedded in their writings, can nevertheless help us reflect upon the path previously taken and the path we now need to find in which, as Dooyeweerd says at the outset of his *magnum opus*, personal reactions do not overtake theoretical combat (*NCI* viii). But theoretical combat can be smothered. And so, we probe this context, which is part of the background out of which *Purpose* has emerged, and reflect that the dissemination of the fruits of scholarship requires thankful recognition of the many aspects of the scholar's or scientist's responsibility. In particular, we need to recognise how the God-given responsibility to engage in science and science's disputes must come to expression in what are sometimes very complex and even confusing interactions, that are yet a part of our experience of scholarship and science, of their associations, journals and universities. We may not always know what is actively slowing down the collaboration we thought was under way. But we are also in need of others taking up various tasks in order to sustain and help our scholarly efforts to flourish. Our evaluation of this *kind* of interaction also has an immediate relevance for how we conceptualise the *social context* of what we are doing here, in this journal's symposium.²¹

²¹ Students outside the Netherlands who keenly promote Christian higher education will note how the setting up of the Vereniging voor Calvinistische Wijsbegeerte in 1935 involved a differentiation in "associational life" among Dutch supporters of reformational scholarship. This "new" association promoted reformational philosophy alongside the association which gave the Vrije Universiteit its mandate.

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