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Scholarship 'In Thy Light' – Accountability

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The School of Theology (TSP) of the Gereformeerde Kerke van Suid-Afrika (GKSA) hosted the TSP-150 Conference on the impact of Reformation theology in celebration of its 150 years of existence (1869–2019). However, TSP from its inception was irrevocably linked to what became the Potchefstroom University for Christian Higher Education (PUvCHO – Potchefstroomse Universiteit vir Christelike Hoër Onderwys), an institution aspiring to pursue Christian scholarship (CS – *Christelike Wetenskap*). This article used the method of historiographic mapping to obtain information on the conceptual development of CS at the PUvCHO. Some parallels are drawn between the PUvCHO and the Vrije Universiteit at Amsterdam, being the only two international research universities in the Protestant neo-Calvinist tradition, both with an original commitment to the pursuit of CS. The history of both institutions is well researched and documented. The results show how both the institutional leadership and the academic scholars contributed to the ideal of CS and how it was accounted for over four distinctive periods in the history of the PUvCHO. The final discussion is structured around the following thesis: 'The history of responsiveness from the PUvCHO to account for CS reveals a developmental path reminiscent of the biological process of metamorphosis'. It is argued that the national setting, sociopolitical factors, institutional development and secularisation led to not only the development but also the eventual floundering of CS. The study concludes that integrally CS may still be a fruitful enterprise for committed Christian scholars, even at secular institutions.

Keywords: Christian scholarship; Accountability; Neo-Calvinism; Potchefstroom University; Vrije Universiteit; Reformed Church; Transdisciplinary.

Introduction

The Potchefstroomse Universiteit vir Christelike Hoër Onderwys (PUvCHO) and the Vrije Universiteit (VU) in Amsterdam originated through the initiative of Reformed Christians in a neo-Calvinist tradition and became the only two comprehensive universities of this orientation internationally (Schutte 2005:348). The developmental path of these institutions followed a general trend observed in higher education (Finnegan & Gamson 1996:141): humble outsets, commitment and perseverance, expansion and progress towards comprehensive universities. Both institutions pursued Christian scholarship (CS – *Christelike Wetenskap*)[1] as being primary in their mission and remained close to, but independent of, the institutionalised church. Periodic interactions with its Dutch counterpart influenced the development of CS and emancipation at the PUvCHO.

Accountability is multidimensional and a contested phenomenon. In higher education, accountability is characteristically related to educational processes and institutional contexts (Dowd & Tong 2007:67). Some calls for accountability rely on the full support of the institutional leadership concerned, together with the availing of sufficient resources, data, information and time to be effective (Dowd & Tong 2007:96). Here, the research question focuses on the approaches followed at the PUvCHO (1869–2004) in critical moments/events/periods when accountability appeared on the institutional agenda. As will be discussed under 'Research question and approach' the type of accountability (Brandsma & Schillemans 2013:964) and the context of time and tide (Dowd & Tong 2007:58) directly affected the emancipation of the PUvCHO and the development and eventual floundering of CS.

1.The translation of the Afrikaans *Christelike Wetenskap* as 'Christian Science' is problematic. Mary Baker Eddy founded Christian Science, an organisation based on biblical tenets, rather than on a creed or doctrinal beliefs (https://www.christianscience.com/). To overcome this possible semantic confusion, this study used 'Christian scholarship' as nomenclature rather than 'Christian science'. This nomenclature has the further advantage that the concept of scholarship is deeply embedded in academe and refers equally well to the activities of a seminary (*Theologiese Skool*), of a university as an institution of higher learning and to the learning that is characteristic of advanced scholars.

Historicity provides the conceptual framework for the study. The history of the PUvCHO (Van der Schyff 2003; Van Eeden 2005a) and the VU (Roelink 1955; Van Deursen 2005; Van Os & Wierenga 1980) is well documented, including the history of the VU in South Africa (Schutte 2005). The VU obtained judicial recognition from its founding in 1880. By contrast, the origin of the PUvCHO is regarded to have coincided with the founding of the School of Theology (TSP) of the Gereformeerde Kerk van Zuid-Afrika (Duvenage 1969:7), progressing from the TSP (1869) towards university status in 1951. The conference of the TSP in 2019 (TSP-150) thus presented a unique opportunity to consider how the university accounted for itself as an institution of Christian Higher Education (CHE) in its pursuit of scholarship (Reinecke 2019).[2]

Research question and approach

The research question for this study is: 'How did CS come into being at and how was it accounted for by the PUvCHO?' The argument is built on the triad of history, scholarship and accountability. Although widely used, these are contested concepts requiring some definition:

1. Historical information provided the main results for the study, selected through the approach of historiographic mapping (Westhoff 2012:1115), and it is presented in four time slots. The inception of the TSP in 1869 is the point of departure, even though CS was by then not even a rudimentary concept. The inaugural lecture of Dr Abraham Kuyper at the opening of the VU (Roelink 1955:64) provided some demarcation of CS at this conceptual stage. In this lecture, *Souvereiniteit in eigen kring* [Sovereignty of sphere] (Roelink 1955:67), Kuyper proclaimed sovereignty for a university in the field of science and for the VU as being national, scholarly and Reformed.[3] This pivotal historic point paved the way towards scholarship in a religious (Reformed Christian) and cultural (national) context, justified as sovereignty, elsewhere paraphrased as academic freedom and institutional autonomy.

2. Scholarship is also multidimensional. Many higher education institutions during the 1960s and 1970s oriented themselves progressively towards a research culture, or a so-called culture of scholarship (Finnegan & Gamson 1996:142). Ernest Boyer provided direction through a dynamic approach to scholarship (Boyer 1990:16). He distinguished four separate but overlapping variants: scholarship of discovery (research), scholarship of teaching, scholarship of application (technologic/ professional) and the scholarship of integration/ engagement, a concept crossing traditional disciplinary boundaries. All four variants are topical for the present study, being germane to individual academics, but equally so for institutions of advanced education. Along with these academic perspectives, there is the recognition that scientific knowing/practice/scholarship is associated with/based on prescientific assumptions intrinsic to the worldview/paradigm of the academic/scholarship concerned (Kuhn 1970), and specifically so in the Christian context (Stoker 1961:145–147).

3. Accountability signifies the willingness/obligation to accept the responsibility to account for one's actions, with the accountability–responsibility relationship together contributing to responsiveness. Moreover, accountability mechanisms change over time (Dowd & Tong 2007:63). Accountability thus clearly is a contingent and multidimensional concept, with norms, conduct and behaviour being crucial to assure responsiveness by leadership/officials to the government/public/ stakeholders (Brandsma & Schillemans 2013:956, 961). In addition to these fundamental societal issues, accounting for CS is above all underpinned by the normative context of responsiveness.

Firstly, accountability is a *biblical concept*, with Hebrews 13:17 serving as the point of reference. The commentary of the VU theologian Prof. F.W. Grosheide (1955:316–317) refers to accountability as continuous involvement ('to be watchful') of both leadership (pastors) and followers (community). Involvement implies a calling (*roeping*; *vocatio Dei*; cf. Van Wyk 1996:160), not as an objective phenomenon but as a subjective commitment of equal importance to leadership and community.[4] Hence, the biblical exposition of accountability tends to acquire a universal meaning as responsiveness ('*antwoordgewend*'; cf. Aalders 1943). Indeed, accountability became recognised as an ever-expanding concept and a general term for mechanisms that make leadership/ institutions responsive to their particular publics (Brandsma & Schillemans 2013:955). For Christian scholars, their calling is an 'authentic commitment', inseparable from their personal identity (Wolterstorff 1976). This view resonates with Max Weber's perspective on the relatedness of a *calling* and one's *vocation* ('*vocationes*'; cf. Van Wyk 1996:160) as 'a way of living, acceptable to God precisely in the fulfilment of one's obligations imposed upon the individual by his position in the world' (Chamberlain 2004:28). Responsiveness may thus attain a dual measure of accountability – secular and religious.

Secondly, accountability became a standard item on the policy agenda of many higher education systems (Huisman & Currie 2004:529). From the 1950s, 'soft' approaches to accountability appeared in academic discourse and institutional discussions of key issues, and through professional mechanisms, such as conferences. Performance criteria became developed as measures against which academic and institutional researchers evaluated their academic programmes (Dowd & Tong 2007:58). An accountability movement of the early 2000s reported on university–state relationships, emphasising the increasing implications for financing and governance of public higher education (McLendon, Hearn & Deaton 2006:2). An empirical

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3. '*zal moeten zijn nationaal, wetenschapelijk en Gereformeerd*'

4. Grosheide (1955): '*het gaat niet om de objectieve plicht of roeping, die moet worden vervuld, maar om de wijze, waarop zó gemeente als amptsdragers zelf verkeren onder het volbrenging van hun roeping*'

study in the United States of America on some underlying political forces driving accountability highlighted two trends: (1) accounting for defining conditions to increase the oversight of bureaucracy and (2) ideological dispositions of political parties/governments (McLendon et al. 2006:18). Inevitably, therefore, the question arises as to which factors drove South African governments to implement accountability measures and how the PUvCHO gave account in its responses to these policy measures, which informed the formulation of the research question for this study.

Nonetheless, some accountability relationships afford managers the discretion/choice to be responsive to key actors, including the general public (Huisman & Currie 2004:531). On the contrary, some analysts argue that governments/stakeholders do not have the right to make academics formally accountable for their performance, based on the concepts of academic freedom and professional autonomy (Huisman & Currie 2004:529). Academic freedom is, however, highly complex in multicultural settings as in South Africa (Venter 1998), yet it is a cornerstone of democracy (Brandsma & Schillemans 2013:953) leading to the societal/public variant of accountability, which is important in higher education.

Thirdly, then, accountability in the public domain can be viewed from two perspectives: (1) public accountability as a 'means by which public agencies and their workers manage the diverse expectations generated within and outside the organisation' (Brandsma & Schillemans 2013:954), on the one hand, and (2) that citizens, on the other hand, can take action and bring about sanctions to end the abuse of power, alternatively in support of governments. Both of these perspectives are by now well documented as being societal accountability (Bauhr & Grimes 2014:294). This variant of accountability serves primarily two functions, namely, mobilising public opinion (positive)/protest (negative) and collecting/uncovering relevant information and evidence (Grimes 2013:384), but it has a limited effect when good governance is lacking (Bauhr & Grimes 2014:298).

Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

Results

The inception (1869): Towards a culture of accountability

From the founding of the Reformed Church on 11 February 1859, a pressing need for pastors existed and became a key point on the agenda of the fourth synod of the church (Acta GKSA 1869:art.53&54), held in May 1869 at Potchefstroom.

Three aspects indicate that Rev. Dirk Postma, *praeses*, ensured accountability in decision-making, resembling managers using discretion in their relation to key actors (Huisman & Currie 2004:531): (1) he tabled the minutes of the Dutch

Synod[5] as a *reference* for deliberations (Acta GKSA 1869:art.53); (2) annual *financial* contributions had to ensure material viability, at that stage amounting to £411-0-0[6] (Acta GKSA 1869:art.55), and only then did the synod decide to establish the school, with the blessing of the Lord[7]; and (3) finally, accountability directed the vital aspect of *staff* selection (Acta GKSA 1869:art.63; Van der Schyff 2003:10).

Following the deliberations, the synod decided on Friday, 21 May 1869 (Acta GKSA 1869:art.77), that the school would also offer general education. Two aspects[8] ensured accountability for academic standards: (1) admission only for those who qualified for higher education, today defined as *admission requirements*; and (2) respect for the regulations of the school, today referred to as *institutional rules*. Deliberations on this proposal appeared rational, though liturgical practice prevailed[9] (Acta GKSA 1869:art.78–81).

The school opened on 29 November 1869, which is also commonly regarded as the founding date of the PUvCHO (Duvenage 1969:7).

The formative period (1869–1919): Accountability in response to a calling

The early history of the school at Burgersdorp was a very modest and local enterprise, often ridiculed (Van der Schyff 2003:16–17). However, outsiders did observe[10] the internal commitment to survival (material) and development (academic). Thus, in 1876 the theological and general education sectors were restructured into the Academic Department (*Literariese Departement*). This was significant as a further step towards what in future would become a university (Van der Schyff 2003:20).

During the Anglo-Boer War (ABW), students J. D. du Toit (Japie, later Totius) and F. Postma (Ferdinand) enrolled for doctoral studies at the VU (Schutte 2005:105–112). In Amsterdam – and not in Cambridge or Berlin – a paradigm for scholarship became engraved in their minds. Indisputably, Kuyper developed the foundation for CS (Van Deursen 2005:17). In his 'Stone Lecture on Calvinism and Science', Kuyper (1931; Molendijk 2008:235–250; cf. Kuhn 1970) defines science to be contextual:

> I deny that mere empiricism in itself ever is perfect science. Even the minutest microscopic, the furthest reaching telescopic investigation is nothing but *perception* with strengthened eyes. This is transferred into science when you discover in the specific phenomena, perceived by empiricism, a universal *law*, and

5. Acta GKSA (1869): *De notulen van Synoden der Christelijke Afgescheidene Gereformeerde Kerk van Holland*.

6. Acta GKSA 1869: Art. 55, "*Wordt gevraagd hoeveel de jaarlijkse bijdragen*" vir die Skool sal wees: Transvaal: £68; Vrystaat: £43; Kaap: £300.

7. Acta GKSA (1869:art.55): '*met 's Heeren hulp*'.

8. Acta GKSA (1869:art.77): '*naar hunne vatbaarheid gebruik van de school te maken*'; Acta GKSA, 1869: art. 77, '*allen onderworpen aan de regulaties der school*'.

9. Acta GKSA (1869: art.81): The session on non-theological education was closed with the singing of Psalm 116:10 and a prayer by J. J. Reinecke, elder from Fauresmith and my father's great-grandfather.

10. De Maandbode, 1 April 1877: '*Van nu voortaan zal zij een Seminarie zijn, even als dat te Stellenbosch*'.

thereby reach *the thought* which governs the whole constellation of phenomena. (pp. 173–174)

On 31 May 1902, the peace treaty ending the ABW was signed, and in 1905 the school moved to Potchefstroom (Van der Schyff 2003:74–77). Du Toit and Postma became intimately involved in rebuilding the school, inspired by ideals from their Amsterdam experience (Van der Schyff 2003)… However:

On 31 May 1910 the Union of South Africa was established, a British colony. It may be regarded as the First 'Historic Compromise' (cf. McKinley 2001:66) in South Africa: an event of aspirations for reconciliation between Boer and Brit. (p. 74)

The newly structured federal University of South Africa[11] built on the British tradition of quality assurance for its constituent colleges. A clause required respect in the colleges for religious neutrality (Van der Schyff 2003:152). A positivist paradigm defined the cornerstone of educational policy at the time: an approach 'which is agnostic about the existence of a world beyond our ideas' (Mackenzie 2011:534), directly counter to the neo-Calvinist educational context (Molendijk 2008:236). The key issue at Potchefstroom was survival: to obtain state support (educational/accreditation and material/infrastructure) and retain its Christian identity. A parliamentary commission was resolute, supporting an underlying ideological governmental disposition (McLendon et al. 2006:18): subsidy could be considered only if Potchefstroom subscribed to religious neutrality (Van der Schyff 2003:152).

The historic sequence is known: on 21 May 1919, a synod approved the formation of two entities – the Church-based TSP and the Potchefstroomse Universiteits Kollege vir Kristelike Hoër Onderwys (PUK vir KHO), with Postma as rector (Van der Schyff 2003:209–222). In 1921, the government approved Het Potchefstroom Universiteits Kollege (PUK) as a constituent college of the University of South Africa,[12] without its KHO identity. The rector did not succumb to the inevitable (Van der Schyff 2003:215). Accounting for the identity of the PUK came to be publicly expressed in its motto, '*In U Lig*' ('In Thy Light', Ps 36:16b), and emblem, a burning seven-armed candelabrum (Van der Schyff 2003:252–262).

On 12 December 1922, the scripture-based corporate identity was used for the first time on a letterhead – symbolic accounting by the PUK leadership for their calling.

Towards university status (1923–1949): On identity

From the institution's inception, the scholarship of teaching from a Christian perspective was well established at the institution. A unique historic appeal to account for the meaning ('*grondbetekenis*') of the motto in relation to scholarship in

science/discovery came onto the agenda on 27 June 1923, when Prof. J. A. du Plessis delivered an address entitled '*In U Lig of die Christelike Wetenskap*' (Du Plessis 1923:1).

Du Plessis built on Kuyper's view of '*two scientific systems*, opposed to each other, *each having its own faith*', yet being mutually related (Kuyper 1931:203). Du Plessis then defined brokenness[13] in creation as a key point of distinction ('*die skeidingsweg*') between the Christian and neutral ('*ongelowige*') pursuit of science. Knowledge can at most be a reflection of the full reality because of the covering veil of brokenness ('*verduistering*'). This ought to bring humbleness in the pursuit of knowledge (Du Plessis 1923:2).

Next, he proclaimed that the pursuit of science at the PUK would require courage ('*durf*') to develop, accept and use the 'shield of Light' (Du Plessis 1923:3). The PUK, being so despised,[14] must foster perseverance. The pursuit of CS should never be weak ('*moet deurtas om te belyn*'), nor vague ('*sonder vae begrip*'). Then followed the real appeal: we owe it to ourselves, to our supporters, to our opponents ('*die ongelowige wetenskap*') – in our pursuit of knowledge, and as a confessional community ('*ons dink en praat; wil en wandel*').

The government soon called the colleges to account for its investment in higher education. A commission (Report 1928) was tasked to assess the quality of education in the college sector. The commission expressed overtones of a (liberal) educational disposition (McLendon et al. 2006:18), seeing a 'scientific spirit' as basic to a 'true university', with 'the spirit of research' its highest manifestation (Report 1928:16). The findings and recommendations regarding the PUK were potentially devastating (Report 1928:17). Furthermore (Report 1928):

In regard to the *Potchefstroom University College* there is very little I can say that is favourable. It is essentially an institution designed for one of the religious minorities of the community. … The buildings are old wood and iron army huts and the fittings and equipment of the laboratories are in keeping with their outside appearance … in no single laboratory ought third year B.Sc. work be undertaken. (p. 52)

The response at the PUK during the 1930s sounded a threefold strategy: 'Pray, consult and act',[15] together with an open protest on unfair impeachment ('*Onbillike verdenking*'; Van der Schyff 2003:317–320). Student W. F. Venter saw the report as a call to account.[16] The vision and action of Postma for the cause of the PUK became legendary, and the outcomes evident. On 04 August 1930, the foundation stone for a new academic building ('*Hoofgebou*') was unveiled by

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11.South African Government: *University of South Africa Act 12 of 1916*.

12.South African Government: *Private Act no. 25 of 1921* (*Government Gazette*, 15 July 1921).

13.Du Plessis (1923): *Die 'ontredderde toestand van die kosmos*'; compare also Romans 8:20–23.

14.*Die Kerkblad*, 07 August 1928: '*biddend, raadplegend en handelend*'.

15.Du Plessis 1923:3 '*Dit getuig van 'n moed om te verduur … wat die ongeloof belag, naamlik die van die Christelike Wetenskap.*'

16.'*Die uitwerking hiervan op ons was heilsaam … Ons self is wakker geskud en aangespoor tot nuwe aksie*'.

Dr D. F. Malan, Minister of Education (Van der Schyff 2003:330), and the appeal by Prof. Postma for financial support to the PUK mustered a broad support community of alumni and other like-minded individuals.

The 1940s became a polarised period. The centenary of the Great Trek in 1938 awoke the Afrikanerdom, but the pro-British South African government decided to join World War II. The war deeply divided Afrikanerdom and led to a rise in societal accountability in different contexts (Bauhr & Grimes 2014:298). This societal context/commitment of educational institutions later became articulated by J. J. Degenaar as university–community engagement ('*volksuniversiteit*'; cf. Coetzee 1991:38; Degenaar 1977:148) – alignment between a university and a segment of the community, which is characteristic of highly stratified and deeply segmented (plural) societies; the underlying principle is the protection/development of the individual through group association, sharing specific values of freedoms and rights. Postma opted not to become involved in sociopolitical factions – yet did not remain silent (Postma 1943:1–3). His views were prophetic wisdom: in times of turmoil, the essence for the future lies in our foundation ('*beginsels*' – Afrikaans and Christian); however, this foundation is fire – fire that destroys when handled indiscreetly.

Several PUK academics expressed themselves on Afrikaner nationalism (Van der Schyff 2003:515–524), fostering views on Calvinism and Afrikanerdom[17] (De Klerk 1996:335). The directives were predominantly from the academics as individuals, based on Christian perspectives from their fields of scholarship. These views became known as '*Die stem van Potchefstroom*' [The voice of Potchefstroom] (Van Eeden 2005b:211–236). Decades later, this history came to be judged through opposing paradigms (Du Toit 1985; Hexham 1975; Van der Walt 1978). All in all, 'it cannot be denied that during this first phase (the 1940s) the Calvinists of Potchefstroom endorsed a policy of segregation to safeguard a Christian civilisation and culture' (Van Wyk 2016:3).

On 02 September 1945, World War II ended. Another governmental commission had to advise on the higher education system. The commission 'was on the whole favourably impressed with the work at the Potchefstroom University College' (Report 1947:6). Three aspects highlighted by the commission underscored the institutional/generic accountability: (1) 'It is a business-like institution, characterised by a spirit of unity not always apparent in university institutions …' (accountability in the government/ institution context; Brandsma & Schillemans 2013:4); (2) it 'has shown great prudence and wisdom in the careful expenditure of its none too abundant revenue' (accountability in the context of performance-funding; McLendon et al. 2006:18); and (3) '[t]he amount of post-graduate work being done is surprisingly high … and research work of value is being done' (accountability for academic quality; Huisman & Currie 2004:529).

The commission recommended that as 'Potchefstroom University College is ripe for independent status, and has applied for such, he (Minister of Education) should grant it such status' (Report 1947:6).

The Potchefstroomse Universiteit vir Christelike Hoër Onderwys (1950–2004): Accountability as a university

In 1950, the *Private Act of the Potchefstroomse Universiteit vir Christelike Hoër Onderwys*[18] was promulgated in parliament (Van der Schyff 2003:597–600). Section 25(2) stipulated the accountability of the university staff for maintaining its historic Christian identity, without applying any denominational test (cf. Van Rooy 1998:100). On 17 March 1951, the PUvCHO gained the status of an independent university.

'Soft' forms of academic accountability (Huisman & Currie 2004:531) were soon seen at the PUvCHO. Prof. H. Dooyeweerd of the VU attended the 1951 celebrations as guest of honour (Schutte 2005:346–351). In 1958, Prof. J. C. Coetzee, rector of the PUvCHO (1953–1963), approached the VU for the annual exchange of academics, resulting in eight annual exchange visits from both sides between 1959 and 1967 (Schutte 2005:361–362, 502).

Accounting for CS was a key priority at the PUvCHO and the VU. When teaching is defined as scholarship, this teaching both educates and entices future scholars (Boyer 1990:20). From early on, this view was firmly entrenched at the PUvCHO/VU as a mission to expose students to diverse views on knowledge, but specifically schooling in Christian perspectives (Fernhout 1997:12; Van der Schyff 2003:116–122). Prof. H. G. Stoker developed prescribed undergraduate courses (*Beginsel en Metodeleer*, previously as *Geloofsleer*; Stoker 1961:7), which laid the foundation for the active involvement of all faculties in courses of Philosophy of Science (*Wetenskapsleer*), which were clear examples of Christian commitment in the scholarship of teaching (Boyer 1990:23). A further significant strand in their tradition is their shared view on the key position of philosophy, between faith and science: 'those involving faithfulness to (one's understanding of) the biblical worldview, and those of a more strictly analytical or empirical kind' (Wolters 1983:127). At the VU, new philosophical perspectives came from Dooyeweerd (*A New Critique of Theoretical Thought* - Wolters 1983:119); at the PUvCHO, Stoker took the lead on a Christian view of reality (*The Philosophy of the Creation Idea*; Van der Walt 2013:11; Wolters 1983:120), both seeking to reform philosophy in the light of the scriptures (Wolters 1983:125).

Most notably, Stoker proposed a methodology for the development of CS (*Die hoof-kruisindeling van die wetenskappe*).

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17. '… om die Calvinistiese denke op alle samelewingsterreine te laat deurwerk en 'n besondere Calvinistiese kleur aan Afrikanernasionalisme te gee' (De Klerk 1996:335).

18. South African Government (1950): *Private Act no. 19 of 1950 of the Potchefstroomse Universiteit vir Christelike Hoër Onderwys*.

A schematic model for the method[19] indicated a shared point of intersection of perpendicular bidirectional arrows, representing philosophy, theology and subject sciences ('*vakwetenskappe*'). Each has unique foundations ('*indeling volgens die kenbare*') and directedness, with each functioning in one of three dimensions (Stoker 1961:240–244). Each of the three disciplines has its own field of scholarship, and they are related ('*onderlinge samehang*') but not reducible to one another ('*nie tot mekaar herleibaar nie*'). The proposed methodology fits the scholarships of discovery and integration (Boyer 1990:17, 18) and appeals to Christians in academia to attain an understanding of the context of their work, potentially developing a theory of integrally CS (Bartholomew 1997:25).

The centre of gravity of accountability started to shift. In 1958, the National Party (NP) implemented race-based higher education and envisaged segregated university colleges to serve the ethnic groups of South Africa (Report 1958:14). In 1958, a single legislative decree[20] expanded the university system to a geopolitical profile, manifesting the Afrikaner doctrine of separate but equal development.[21] Responses from academics and institutions became examples of societal accountability: civil society calling for accountability by policymakers (Grimes 2013:380).

The response from the PUvCHO was complex ('*nie eenvormig nie*'; Coetzee 1998:271). Segregation was in theory congruent with the normative view of the Senate: agreement with the ideal of apartheid, and based on the biblical principle of unity and diversity (Coetzee 1998:276). Three neo-Calvinist academics specifically came to the fore. They expressed critical views on apartheid, seen from the normative basis of their respective fields of scholarship (Coetzee 1998:278–280). Prof. L. J. du Plessis (constitutional law) 'wanted apartheid to become a social order founded on moral principles'; Prof. J. H. Coetzee (ethnologist) 'identified party politics as one of the main obstacles to a working order of racial separation'; and Prof. D. W. Kruger as historian gave 'a comprehensive criticism of apartheid' (Marx 2010:50, 69). Their calls for accountability had three lines in common (Coetzee 1998:278): (1) their normative conceptualisation versus the contemporary political pragmatism; (2) debunking of political intolerance of criticism; and (3) an admonition against dogmatic adherence to apartheid at the expense of freedom of expression.[22]

The three academics opted to make their views public, which underscores the primary functions of societal accountability: uncovering relevant information and mobilising public opinion (Grimes 2013:384). They offered their articles to the Afrikaner press (Marx 2010:69) but entered the public domain through reports in English newspapers (*Sunday Times*, 01 March and 03 May 1959; *Cape Argus*, 10 March 1959; *The Cape Times*, 12 March 1959). A sophisticated campaign in the NP's press left no stone unturned to silence them (Marx 2010:69). The university council publicly distanced itself from the three dissidents (*Sunday Times*, 21 June 1959). The professors remained steadfast on the foundations of their scholarship and calling (Coetzee 1998:278–280). Their *voices* and related ones kept sounding through the *Afrikaanse Calvinistiese Beweging* (ACB) and its journal, *Woord en Daad* (Coetzee 1998:281; De Klerk 2001:34–57; Marx 2010:74; Van Eeden 2005b:215–216). They did not distance themselves from the PUvCHO, church and society, but proclaimed scripture-based reformist views from their scholarship in a manner of critical solidarity (Van Wyk 2016:4).

On 03 February 1960, the British Prime Minister, Harold Macmillan, addressed the Parliament in Cape Town, referring to the wind of change that was blowing through Africa. All must accept it as a fact, and national policies must take account of it. The NP relentlessly advanced towards independence from Britain, culminating in the Republic of South Africa (31 May 1961).

The year 1969, the centenary year of the PUvCHO, became one of celebration. Prof. W. F. de Gaay Fortman, Rector Magnificus of the VU, attended and reminded the University of the immense challenge of the scripture–nature relation.[23] The rector of the PUvCHO, Prof. H.J.J. Bingle (1964–1977), gave perspectives on the road ahead (Bingle 1971:11). In 1975, he called for the First International Conference of Reformed Institutions for CHE (Van der Walt 2005:558), eventually resulting in the formation of the International Association for the Promotion of Christian Higher Education (IAPCHE; Van der Walt 2005:559–560). The IAPCHE became a network of institutions and individuals worldwide, encouraging biblical and contextual responses to critical issues in society (Van der Walt 2005:568).

In the 1970s the impact of apartheid politics and anti-apartheid protest intensified. The 'voice of Potchefstroom' still spoke, notably that of Prof. T. van der Walt of the TSP and later rector (1977–1988). A formal watershed meeting (Potchefstroom, 02–05 March 1976) was convened between the VU and PUvCHO on their respective societally critical roles as Christian universities – in essence a dialogue on societal accountability. Following the meeting, the discourse became irrational (Schutte 2005:563). The VU council on 17 August 1976 terminated all ties with the PUvCHO (Schutte 2005:567) because of the irreconcilable Christian views on racial diversity.[24] At the PUvCHO, views on Christian responsiveness were ambiguous and the voice of Potchefstroom became polyphonic (Van Eeden 2005b:223).

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19. *Skema VI: Teologie, wysbegeerte en vakwetenskap* (Stoker 1961:243).

20. South African Government (1959), *Extension of University Education Act, no. 45 of 1959*.

21. The University Colleges should enrich each ethnic group spiritually and materially, as well as promoting the broader interests of South Africa (Report 1958:14).

22. 'die "totalitêre partypolitieke en ideologiese omspanning van die universiteit"' (Coetzee 1998:278).

23. Duvenage (1969:13), De Gaay Fortman: '*Zij* (VU & PUvCHO) *weten, dat er een machtige geheim is: het probleem van de verhouding van openbaring en wetenschap, en zij proberen iets van dat geheim te doorgronden*'.

24. VU (1974): '*verschillen zodra het gaat om vraagstukken van raciale gerechtigheid en apartheid*'.

By 1980, the United Nations adopted resolutions for economic, academic and other sanctions against South Africa. Following increasing pressing economic conditions, the South African government followed international practice (McLendon et al. 2006:5) by linking incentive elements (input) to academic performance (output). From 1984 on, the new approach (the South African Post-secondary Education [SAPSE] formula; Steyn & De Villiers 2007:15) stimulated funding of advanced education (input), success rates (output) and research articles published in accredited scientific journals (output). Science councils turned to funding of research based on performance, supporting academics who were highly rated as scholars of repute (Marais 2007:18).

Rating required measurement (Pienaar et al. 2000:27). The Afrikaans-medium universities performed dismally relative to their English-medium counterparts in the first rating process (Gilliomee 1985:8–11). The mean success factor for scholars from English universities was 8.34, compared to 3.21 for those from Afrikaans universities, with the PUvCHO in last position (2.2). First and foremost, the funding policies were accounting for the most distinguishing element of higher education: the scholarship of discovery (Boyer 1990:17). However, the outcome also confirmed the consequences of the *volksuniversiteite* being unduly dedicated to the cause of Afrikaans (Degenaar 1977:148–171).

In 1985, the PUvCHO initiated a programme well known in international institutional practice: reward academic actors through positive incentives for achievement (Brandsma & Schillemans 2013:5, 17). Financial incentives were introduced for accredited publications and excellence in teaching (VERKA[25] programmes; Viljoen 1998:164). Support was provided for professionalising the editorial practice of *Koers* and *In die Skriflig*. Dedicated to CS, both journals became accredited a few years later. Academics of all faculties progressively qualified as rated researchers, and accredited scientific publications strongly increased (Geertsema & Van Niekerk 2009:927). Apart from those in *Koers* and *In die Skriflig*, articles on CS in accredited journals remained few and far between.

In the 1990s, the idea of 'Potchefstroom with a voice' fell into oblivion. On 02 February 1990, President F. W. De Klerk delivered his maiden Opening of Parliament Address. 'Apartheid ended on 2 February 1990. When President F.W. de Klerk concluded his Opening of Parliament Address, apartheid was dead' (Cameron-Dow 2016:108). The international press captured some basics. 'De Klerk is a lawyer with an obvious sense of justice. He is a religious man – a "Dopper," or member of the Reformed Church – which rejected the biblical justifications of apartheid' (*The Wall Street Journal*, 28 February 1990). For once the 'voice' sounded indelibly. De Klerk himself said that

Potchefstroom had had an enormous influence on his development. 'Potchefstroom taught science within the framework of Christianity, to think analytically from the perspective of the principles that governed a subject' (Cameron; Dow 2016). In 1993, he shared the Nobel Peace Prize with Nelson Mandela – for their work toward the peaceful termination of the apartheid regime and for laying the foundations for a new democratic South Africa:

> On 27 April 1994 the Second 'Historic Compromise' (cf. McKinley 2001:66) became a reality: the outcome of an inclusive democratic event with aspirations for reconciliation between black and white South Africans. (p. 33)

The early 1990s at the PUvCHO sparked a period of accounting for its societal role during apartheid. Restoration of relations with the VU materialised on 24 September 1991 (*Ad Valvas*, p. 1; Schutte 2005:664–666). Prof. W. E. Scott and constitutional experts found no judicial conflict between the interim Constitution,[26] the revised *Private Act*[27] and the Statute of the PUvCHO (Scott 1998:227–269). A PUK forum was convened on 17 March 1994 to commemorate the PUvCHO as an independent university (Reinecke 1998:214–219). The discourse initiated a process of intense inclusive reflection, leading to a declaration by the University Senate (04 May 1994) conceding injustices and discrimination practised by the university against fellow South Africans, as a confession of guilt and deep remorse. On 26 June 1994, the council endorsed the confession and added the commitment to responsiveness by the PUvCHO to the new South Africa. Reflection on the academic identity of the PUvCHO followed at several meetings of officials and scholars, resulting in a one-page brief, made public as the *Mandaat*. It flagged the historical and perceived future role of the PUvCHO, with a mission/vision statement:

> The Potchefstroom University for Christian Higher Education aspires to be a *University of high quality, based on a Christian foundation, with a responsive commitment to the needs of the era, the country and the people*[28]

Three universal aspirations befitting an academic community were defined at the same time: 'Excellence – Respect – Principled reasoning'.[29] The mission statement and draft strategic planning document was approved by the Council of the University on 15 September 1994.

New sociopolitical systems influence governments to adopt accountability policies in higher education (McLendon et al. 2006:1). In a wide-ranging process, the new democratic government called universities to account for their academic/societal profiles, directed by Education White Paper 3

25.VERKA: Verbetering van die kwaliteit van die akademiese personeel [Improvement of the quality of the academic staff].

26.South African Government: *Interim Constitution of the Republic of South Africa, Act 100 of 1993*.

27.South African Government: *Potchefstroomse Universiteit vir Christelike Hoër Onderwys Privaat wet, Act 80 of 1993*.

28.'*n Universiteit van hoë gehalte, op 'n Christelike grondslag, diensgerig vir die tyd, die land en die mense*.'

29.'*Uitnemendheid Respek Prinsipiële denke*'.

(EWP-3).[30] This policy document outlined the goals, procedures and legislative process required for transformation to redress past inequities and to serve the new social order.

A proposed mechanism for redress included public accountability by making public funding to institutions conditional on approved institutional strategic plans and performance against set goals (EWP-3:§4.60–4.62; Huisman & Currie 2004:530–531). Education White Paper 3 envisaged funding only for 'those parts of institutions where there is demonstrable strength, informed by performance indicators' (EWP-3:§4.30). The management of the PUvCHO decided on a far-reaching institutional accounting process for postgraduate education and research. The Center for Higher Education Policy Studies (CHEPS)[31] was contracted to give direction and supervise the process.

The proposed methodology of CHEPS was for quality promotion (Verkleij 1999:87) through self-evaluation as instrument for institutional change, followed by external review to add rigor to the outcomes (Verkleij 1999:98). Scholarly academics from all faculties followed the lead, resulting in the formation of 15 focus areas[32] for research and postgraduate education (Geertsema & Van Niekerk 2009:919–920). An External Review Committee with the secretariat from CHEPS[33] performed an on-site investigation (09–12 June 1998) and reported to an open meeting of the Senate on 13 June 1998. The final report became publicly available in August 1998. The University had followed 'best international practice in university quality promotion' and 12 focus areas were recommended for establishment (Bartelse 1998:6).

Christian scholarship was an essential aspect of the focus area on Foundational Studies. The committee recommended (Bartelse 1998):

> [T]hat the University postpone decision about a Focus Area *Foundational Studies* until a new basis for such a decision has been developed. This implies innovation within the venerable tradition of the PU vir CHO. (p. 20)

30.South African Government: Education White Paper 3, *A Programme for the Transformation of Higher Education, Notice 1196 of 1997.*

31.The Center for Higher Education Policy Studies (CHEPS), a research institute at the University of Twente, also acting as a consulting agency on higher education assessment and accountability (www.utwente.nl › bms › cheps).

32.**Faculties** and 15 focus areas (numbered 1 to 15) that participated in the 1998 External Audit: **Humanities**: (1) Communicating in South Africa: Language, Literature and Media; (2) Foundational Studies; (3) Social Dynamics and Community Development; **Law**: (4) Development in the South African Constitutional State Theology: (5) Reformed Theology, Ethics and Society; **Economics**: (6) Decision-Making and Management for Economic Development; **Education**: (7) The Teaching-Learning Organisation; **Natural Science**: (8) Chemical Transformation and Separation Technology (Interdisciplinary with Engineering); (9) Space Physics; (10) Business Mathematics and Informatics (Interdisciplinary with Economics); (11) Environmental Science and Development (Interdisciplinary with Humanities); **Engineering**: (12) Manufacturing, Energy Systems, Material and Mineral Technology; **Health Science**: (13) Preventative and Therapeutic Interventions (Interdisciplinary with Humanities and Natural Sciences); (14) Pharmaceutical and Biomedical Research and Services; **Vaal Triangle**: (15) Socio-economic Development of Industrialised Communities.

33.Chairman: Dr H. J. Brinkman (Netherlands); international members: Prof. Lydia P. Makubu (vice-chancellor of the University of Swaziland), Dr G. P. Mullins (Advisory Centre for Higher Education, Australia) and Prof. H. van den Berghe (director of research, Catholic University of Leuven); national members: Dr B. Jager (manager process development at SASOL [SA]), Prof. J. Reddy (former rector of the University of Durban-Westville and chairman of the National Commission on Higher Education), Dr R. H. Stumpf (president of the Human Science Research Council of South Africa); Secretary: Dr J. Bartelse (research associate and advisor, CHEPS).

Christian scholarship outlines from this focus area did not convince.

Next, the Faculty of Theology proposed a focus area on Reformed Theology, ethics and society. The committee noted with enthusiasm the commendable development of this focus area of two meaningful sub-programmes and the considerable progress already made in establishing a sound scientific basis for the research and postgraduate work in this area – this focus area represented a viable one (Bartelse 1998:21).

Thirdly, views on CS from academic discipline(s) other than philosophy or theology came under the spotlight in the remaining 13 focus areas. The Audit Committee observed that the statements on this value (Christian) in the self-assessments showed a greater variety than can be understood from the difference between scientific disciplines (Bartelse 1998:36). The idea of CS in scientific disciplines seemed to have lapsed into oblivion.

The Senate accepted the report as well as the follow-up process of self-assessment and external peer review (1999–2001; Geertsema & Van Niekerk 2009:921–922). Innovation in CS and foundational studies changed minimally (Verkleij 2001:§2.1.4). However, the peers observed that the university has managed in a short time to align itself with international good practice in university research management and quality assurance (Verkleij 2001:5).

All universities in December 2001 had to submit their 'three-year rolling plans' (responses to EWP-3) to the Department of Education. The full cohort of proposals from the PUvCHO for their postgraduate programmes and research covered in the 12 focus areas conformed with those of a comprehensive university and were approved by the department (2002).

Prof. A. K. Asmal became the new Minister of Education and informed the universities of his intention to repeal the private acts of the universities, enabling a total reconstruction of the higher education system.[34] By decree,[35] mergers of and cooperation among higher education institutions enabled restructuring of the geopolitical landscape from the apartheid era to one consistent with the vision and values of a non-racial, non-sexist and democratic South Africa. For the PUvCHO, the proclamation (*Government Gazette* of 21 June 2002) read:

> The Potchefstroom University for CHE and the University of the North-West should be merged; the Vaal Triangle campus of Potchefstroom University should be retained as part of the merged institution, incorporating the students and staff (but not the facilities) of the Sebokeng campus of Vista University. (n.p.)

34.South African Government: *Higher Education Act no 101 of 1997* – Section 23(1) opened the door.

35.South African Government: *Higher Education Act no. 101 of 1997, amended 2003 – Merger of public higher education institutions.*

The reconfiguration left no university untouched. Implementation on institutional level was delegated to their councils. On 31 December 2003, the PUvCHO was *de jure* terminated, on 01 January 2004 becoming one of the three campuses of the new North-West University, the others being in Mafikeng and Vanderbijlpark, portrayed in its corporate identity as three overlapping links of a chain, in maroon, blue and green. The shield, emblem and motto of the PUvCHO vanished unceremoniously.

Discussion

The historic overview disclosed involvement of several key actors and a vast complexity of factors and situations, all contributing in some way to what became CS at the PUvCHO. Informed by the overview, the research question – 'How did CS come into being at and how was it accounted for by the PUvCHO?' – may be rephrased into a thesis: The history of responsiveness from the PUvCHO to account for CS revealed a developmental path reminiscent of the biological process of metamorphosis.

The thesis conforms to the view that universities are historically embedded institutions (Stoker 1961:16) with responsiveness towards the future,[36] and it opens three perspectives for discussion:

- The School at its inception revealed an immutable identity (inherited/genetic) with openness to change (plasticity), foreshadowing eventual institutional metamorphosis.

Metamorphosis is a known biological phenomenon of development,[37,38] having an immutable original identity (genetic base) with the potential for life, change (plasticity) and a profound renewed appearance, character and function (somatic transformation). The identity (immutable) of the PUvCHO became established at inception by expanding its education (for: '*predikanten*'), towards non-ecclesiastical education (for '*onderwijzers*' and students '*zonder een bestemd doel*'; Acta GKSA 1869:art.77) in tandem with ecclesiastical education. The resolution was in agreement with the Reformed confession of the church.[39] However, the crucial decision of 21 May 1869 marked the nuclear moment for a sure path of development towards a university by broadening the curriculum to include '*Natuurlijke Godgeleerdheid*' and '*Geopenbaarde Godgeleerdheid*' (Acta GKSA 1869:art.83).[40]

36.'*Die PU vir CHO is verankerd in sy beginsels en gerig op sy toekoms.*'

37.For example the life cycle of *Papilio demodocus*: egg/larva/pupa/Christmas butterfly.

38.A profound change (Greek: *metamorphosis*) is also used in scripture: '*een veranderd worden, niet een metamorphose slechts van het uitwendige leven, maar door de vernieuwing van u inzicht, dus niet alleen maar uiterlijk gedrag, maar de innerlijke gezindheid en denk- en levensrichting moet vernieuwd worden…*'; Van Leeuwen J.A.C. & Jacobs D., De Brief aan de Romeinen (Korte verklaring der Heilige schrift), 12:2, p. 259.

39.We know God by two means, firstly by 'the creation, preservation and government of the universe' and secondly by 'his holy and divine Word' (Article 2, The Belgic Confession of Faith).

40.'[T]wo scientific systems, each having its own faith' (Kuyper 1931:203).

At the end of the synod, the identity of a future university was by definition fixed, later expressed as 'for Christian Higher Education' (CHO). The identity implied: (1) uniqueness ('*onderskeidend*') for schooling in perspectives from a Reformed Christian foundation; (2) commonality ('*gemeenskaplikheid*') in knowledge production with institutions having different foundations and functioning in the world of modernity. Uniqueness manifested on two fronts: (1) the link between the school and *Literariese Departement* remained immutable, but with plasticity seen in and at the Faculty of Theology of the PUvCHO; (2) the motto 'In Thy Light' underscores the view that scholarship at the PUvCHO is neither neutral nor sectarian, by also having to appeal to its opponents ('*die ongelowige wetenskap*'; Du Plessis 1923:2):

- The historic overview disclosed accountability to be a creative power causing the events of metamorphosis of the PUvCHO from its humble beginnings towards full emancipation.

The embryonic phase of the university was an educational offering in the curriculum of the school. Internal commitment (1876; 1919) showed responsiveness to change (new configurations – *Literariese Departement*/PUK vir KHO) whilst maintaining identity.

The creative power revealed itself especially strongly in the dyadic relationship (Brandsma & Schillemans 2013:956) between the government ('principal') and the institution ('actor') when political driving forces called for accountability (McLendon et al. 2006:18). This manifested four times at the Potchefstroom institution – 1921, 1933, 1951 and 1998 – resulting in a profound change in educational directedness and context.

The political/ideological dispositions of 1910 defined accountability in a *de jure* context as a precondition for becoming a constituent college of the University of South Africa. This formal obligation (Brandsma & Schillemans 2013:961) triggered powerful accounting from the PUvCHO, causing the metamorphosis seen in the *de jure* transition (1921) from 'private' (PUK vir KHO) to 'public' higher liberal education (PUK), whilst retaining its identity as seen in the 'Shield of Light' (Du Plessis 1923:3), despite being despised for it (Report 1928:52), but persisting on identity until *de jure* recognition of its identity in 1933 (PUK vir CHO).

By 1947 the political bureaucracy/government changed its strategy towards one of increased oversight of autonomous institutions, assessed against established accountability principles (McLendon et al. 2006:18). Judgement on the PUK appeared *de facto* favourable (Report 1947:6), but almost 100 pages of the Hansard Reports of 1950 testify to accounting responses from the PUK regarding its identity (Cf. Moore 1950). It served as a driving force towards the fundamental metamorphosis seen in 1951, a *de jure* preservation of identity in the transition towards full university status (PUK vir CHO to PUvCHO).

At the event of the 'historic compromise' of 1994, the PUvCHO had completed a cycle of introspection, remorse, confession and commitment. The constitution of the new democratic South Africa called for accountability, and the PUvCHO responded, substantiated by its revised *Private Act* (Scott 1998:260–267). Modification does not obviate but in fact accentuates the commitment of universities to their mandates. At moments of metamorphosis, accountability manifests itself as a creative power ('authentic commitment'; Wolterstorff 1976). Whereas the PUvCHO *de facto* maintained its institutional identity, new configurations could emerge, as seen at the transitions from 1869 to 1994 and eventually at its termination in 2003:[41]

- Plasticity contributed to innovation at the PUvCHO, but also to a progressive floundering of commitment to develop CS in the field of science/discovery at the PUvCHO, as was the case at its companion university, the VU.

In biology, plasticity refers to changes in an organism's phenotype (behaviour/morphology) in response to environmental change/pressure. Likewise, change is an essential characteristic of well-functioning universities, succinctly phrased by Stoker: Every era needs a university in accordance with its time (Stoker 1961:16).[42] Once having status as a university, previously prescribed ('*verpligte*') modules on faith (*Geloofsleer*; Stoker 1961:7) were developed to *Beginsel en Metodeleer*, and eventually as *Philosophy*, *Wetenskapsleer*, *Regsfilosofie* and other variant names in all curricula at the PUvCHO. The university continuously accounted for the essence and relevance of its Christian identity in teaching, which became a recognised characteristic of Potchefstroom (cf. Cameron-Dow 2016:33). The same applies to scholarship of integration/engagement, ranging from social/public accountability (e.g. the voice of Potchefstroom; ACB, Instituut vir Reformatoriese Studies [IRS]) to internationalisation in a Christian context (e.g. IAPCHE).

The scholarship in science/discovery became commonly known at the PUK as '*Wetenskap In U Lig*' (Du Plessis 1923:1) and at the VU as '*Gereformeerde beginselen als grondslag*' [Reformed principles as foundation] (Fernhout 1997:9; Van Os & Wierenga 1980:17). Its centenary (1880–1980) provided the VU with an opportunity for intense accounting for its foundation. As early as 1959, they realised that scholarship from their traditional foundation was unsustainable. The VU responded by accepting a new foundation, the Gospel of Jesus Christ as calling

(Van Os & Wierenga 1980:36&37).[43] The profile of the VU ('*wetenschaplijke kracht*'/scholarship of discovery) progressively gained a secularised profile (Van Deursen 2005:409–410). At the PUvCHO, perspectives/studies/knowledge from the focus areas did not convince external reviewers of the account that was given for CS in science/discovery (Bartelse 1998:20; Verkleij 2001:§2.1.4). Despite commitment, contributions on CS in accredited journals other than *Koers* and *In die Skriflig* remained meagre. The ideal/aspiration for the scholarly/academic dimension of CS (Van Rooy 1998:103) eventually floundered.

The *voice* of the PUvCHO will resound in historic records, but on 31 December 2003 the PUvCHO had fulfilled its mission. At the transmuted institution, a culture for scholarly research (Finnegan & Gamson 1996:143) opened new opportunities for further innovation of research and technology (Geertsema & Van Niekerk 2009:931; Marais 2007:56). By 2012, the research profile in the redressed national system showed low participation, high attrition and shortcomings in producing high-level skills (Cloete 2014:1358). Knowledge production and advanced scholarship in the restructured sector presented as three clusters, quantified as 4.34, 2.33 and 1.73 (Cloete 2014:1355). The universities in Cluster 1 (high knowledge production – mean 4,34) were ranked, in order, UCT, Rhodes, US, NWU, UP, Wits, UKZN and UWC (Cloete 2014, Figure 1).[44]

Perspective in conclusion

Finally, a ray of hope remains, being the pursuit of integrally CS, championed even at institutions not having a Christian orientation.

The meaning of scholarship ought to be continuously reconsidered to meet changing academic and social mandates (Boyer 1990:12). For Christian academics this is of ultimate concern. Arguments to pursue CS in the world of modernity are numerous, but 'many Christians succumbed to the pressure of doing Christian scholarship under the Cartesian umbrella' (Bartholomew 1997:33). The founding fathers confessed reality as 'two scientific systems' (Kuyper 1931:203) and aspired to scholarship 'In Thy Light'. Today, Christian scholars 'who want coherence in life, cannot help asking, how does my membership of these two communities fit together?' (Wolterstorff 1976).

The model on a shared point of intersection between philosophy, theology and subject sciences (Stoker 1961:240–244) has inspirational potential for the development of *integrally Christian scholarship* (defined by Bartholomew [1997:32]), using epistemology, ontology and anthropology as analogous terminology for the Stoker terminology. The intersection could provide a metaphoric Archimedean point (Holland & Landgraf 2014:7-8). This Archimedean point inevitably implies a

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41.The last meeting of the Council of the PU for CHE was held on Thursday, 27 November 2003. The scripture reading was by Rev. C. J. (Neels) Smit of the Reformed Church Noordbrug. It was from Psalm 90 and was both reflective and visionary: 'Today we are in the last meeting of the Council of the PU for CHE. It is a nostalgic moment. The planning and ideals of men are by nature temporary, but those of God eternal. For this institution a destiny may be in store, much better than we may imagine.' A farewell dinner was scheduled for that evening, presented in the Gallery of the Ferdinand Postma Library. The setting was splendid, the atmosphere solemn but with an air of relief, such as after the funeral of a loved one. At the end of the evening the rector, Dr Theuns Eloff, invited some alumni to join in with a few light-hearted student songs of times gone by – '*O Pukkie jy*!'

42.'*Elke tydsgewrig het 'n universiteit (of behoort een te hê) wat by hom pas*'.

43.'*... om in gehoorsaamheid aan de Evangelie van Jesus Christus te richten op het dienen van God en Zijn wereld*'.

44.UCT, University of Cape Town; Rhodes, Rhodes University; US, University of Stellenbosch; NWU, North-West University; UP, University of Pretoria; Wits, University of the Witwatersrand; UKZN, University of Kwa-Zulu Natal; UWC, University of the Western Cape.

transdisciplinary approach at the crossroads of the 'two scientific systems': (1) empirical sciences provide input on accounting for observations, direct understanding, supply explanations and assist in formulating predictions (Winther 2015); (2) theological contributions from well-founded ('*weldoordachte*') hermeneutics (Fernhout 1997:11) provide scriptural insight and enable reflection on the 'veil of brokenness' and on paradigms (Van Rooy 1998:104; Kuhn 1970); (3) philosophy ensures directedness of meaning and value through discussion, and clarity on the epistemic status of scientific theories, as well as on the limits of understanding/knowledge (Van den Brink, De Ridder & Van Woudenberg 2017). By being transdisciplinary, integrally CS goes beyond philosophy, theology and science. Transdisciplinary studies do not constitute yet another discipline but operate on a different level altogether. 'As the prefix "trans" indicates, transdisciplinarity concerns that which is at once between disciplines, across the different disciplines, and beyond all discipline' (Boersma, Reinecke & Gibbons 2008:209; Nicolescu 2002:44).

The appeal for 'scholarship *coram Deo*' (Bartholomew 1997:33) calls for Christian scholars with an 'authentic commitment' (Wolterstorff 1976). In the corridors of the pragmatic academe, Christians and non-Christians can readily share basic standards of evidence and argument (Marsden 1998). Taken together, this bodes hope for crafting integrally CS going beyond the philosophical age of the day.

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References

Aalders, W.J., 1943, 'Roeping en beroep bij Calvijn', *N.A.W. Nieuwe Reeks* 6(4), 87–103.

Acta GKSA, 1869, *Handelingen van de vierde Algemeene Synodale Kerkvergadering saamgesteld van al de Gemeenten van Zuid-Afrika*, Saul Solomon & Co., Kaapstad.

Bartelse, J.A., 1998, 'Quality promotion of research and postgraduate education at Potchefstroom University for Christian higher education', *Report of External Audit Committee*, Center for Higher Education Policy Studies (CHEPS), Enschede.

Bartholomew, C., 1997, 'Post/late? Modernity as the context for Christian scholarship today', *Themelios* 22(2), 25–38.

Bauhr, M. & Grimes, M., 2014, 'Indignation or resignation: The implications of transparency for societal accountability', *Governance* 27(2), 291–320. https://doi.org/10.1111/gove.12033

Bingle, H.J.J., 1971, 'Toekomsperspektief', in P.D. Van der Walt, C.J. Reinecke, W.J. De Klerk, S. Du Toit, & B. Duvenage (eds.), *Besinning en Uitsig*, pp. 11–23, Potchefstroom Herald, Potchefstroom.

Boersma, F.K., Reinecke, C.J. & Gibbons, M., 2008, 'Organizing the University–Industry relationship: A case study of research policy and curriculum restructuring at the North-West University in South Africa', *Tertiary Education and Management* 14(3), 209–226. https://doi.org/10.1080/13583880802228216

Boyer, E.L., 1990, *Scholarship reconsidered – Priorities of the professoriate*, The Carnegie Foundation for the Advancement of Teaching, John Wiley & Sons, New York, NY.

Brandsma, G.J. & Schillemans, T., 2013, 'The accountability cube: Measuring accountability', *Journal of Public Administration Research and Theory* 23(4), 953–975. https://doi.org/10.1093/jopart/mus034

Cameron-Dow, J., 2016, *A question of balance – A biography of FW de Klerk*, JCD Publishers, Cape Town.

Chamberlain, G., 2004, 'The evolution of business as a Christian calling', *Review of Business* 25(1), 27–36.

Cloete, N., 2014, 'The South African higher education system: Performance and policy', *Studies in Higher Education* 39(8), 1355–1368. https://doi.org/10.1080/03075079.2014.949533

Coetzee, C.J., 1998, 'Die PU vir CHO en die rasse- en volkereproblematiek – enkele aspekte', in C.J. Reinecke (ed.), *Verkennings in oorgang: Gedagtes by die 125-jarige bestaansjaar van die PU vir CHO – 1994*, Supplement series 1, pp. 273–289, Koers, Potchefstroom.

Coetzee, J.K., 1991, 'The role of universities in training for development', *Development Southern Africa* 8(1), 35–46. https://doi.org/10.1080/03768359108439568

Degenaar, J.J., 1977, 'The concept of a volksuniversiteit', in H.W. Van der Merwe & D. Welsh (eds.), *The future of the university in Southern Africa*, pp. 148–171, David Philip, Cape Town.

De Klerk, P., 1996, 'Nederlandse nasionalisme en Afrikanernasionalisme – 'n vergelyking', *Koers* 61(3), 323–344. https://doi.org/10.4102/koers.v61i3.602

De Klerk, P., 2001, 'Afskeid van apartheid – Die politieke koers van die tydskrif Woord en Daad in die periode 1967–1990', *Journal for Contemporary History* 26(2), 34–57.

Dowd, A.C. & Tong, V.P., 2007, 'Accountability, assessment, and the scholarship of best practice', *Higher education: Handbook of theory and research*, pp. 57–119, Springer, Dordrecht.

Du Plessis, J.A., 1923, 'In U Lig of die Christelike Wetenskap', *Die Saaier* 1(3), 1–4.

Du Toit, A., 1985, 'Puritans in Africa? Afrikaner "Calvinism" and Kuyperian Neo-Calvinism in late nineteenth-century South Africa', *Comparative Studies in Society and History* 27(2), 209–240. https://doi.org/10.1017/S0010417500011336

Duvenage, B., 1969, 'Voorwoord', in P.D. Van der Walt, C.J. Reinecke, W.J. De Klerk, S. Du Toit, & B. Duvenage (eds.), *Besinning en Uitsig – 'n Keur van referate gelewer tydens die eeufeesjaar van die PU vir CHO en die Teologiese Skool, 1969*, pp. 7–8, Potchefstroom Herald, Potchefstroom.

Fernhout, R., 1997, 'Hoe is een universiteit aan het woord van God te binden? Kuypers antwoord en de huidige situasie an die Vrije Universiteit', in J.P. Verhoogt, S. Griffioen & R. Fernhout (eds.), *Vinden en zoeken – het bijzondere van de Vrije Universiteit*, pp. 9–24, J.H. Kok, Kampen.

Finnegan, D.E. & Gamson, Z.F., 1996, 'Disciplinary adaptations to research culture in comprehensive institutions', *The Review of Higher Education* 19(2), 141–177. https://doi.org/10.1353/rhe.1996.0028

Geertsema, J.C. & Van Niekerk, F., 2009, 'Strategies for university improvement: The research profile change at a South African non-research-intensive university', *South African Journal of Higher Education* 23(5), 912–934. https://doi.org/10.4314/sajhe.v23i5.48808

Gilliomee, H., 1985, 'Ons universiteite en hulle navorsingsgehalte', *Die Suid-Afrikaan* 4(1985), 8–11.

Grimes, M., 2013, 'The contingencies of societal accountability: Examining the link between civil society and good government', *Studies in Comparative International Development* 48(4), 380–402. https://doi.org/10.1007/s12116-012-9126-3

Grosheide, F.W., 1955, *De Brief aan de Hebreën en de Brief van Jakobus*, J.H. Kok, Kampen.

Hexham, I.R., 1975, 'Christian national education as an ideological commitment', *Collected Seminar Papers, Institute of Commonwealth Studies* 20, 111–120.

Holland, J. & Landgraf, E., 2014, 'The Archimedean point: From fixed positions to the limits of theory', *SubStance* 43(3), 3-11.

Huisman, J. & Currie, J., 2004, 'Accountability in higher education: Bridge over troubled water?', *Higher Education* 48(4), 529–551. https://doi.org/10.1023/B:HIGH.0000046725.16936.4c

Kuhn, T., 1970, *The structure of scientific revolutions*, The University of Chicago Press, Chicago, IL.

Kuyper, A., 1931, *Calvinism – Six Stone-lectures*, William B. Eerdmans, Grand Rapids, MI.

Mackenzie, J., 2011, 'Positivism and constructivism, truth and "Truth"', *Educational Philosophy and Theory* 43(5), 534–546. https://doi.org/10.1111/j.1469-5812.2010.00676.x

Marais, H.C., 2007, 'Impact of the NRF evaluation and rating system – A review', in *Report commissioned by the HESA NRF Review Steering Committee*, ST&I Network & NRF, Pretoria.

Marsden, G.M., 1998, *The outrageous idea of Christian scholarship*, Oxford University Press, New York, NY.

Marx, C., 2010, 'From trusteeship to self-determination: LJ du Plessis' thinking on apartheid and his conflict with HF Verwoerd', *Historia* 55(2), 50–75.

McKinley, D., 2001, 'Democracy, power and patronage: Debate and opposition within the ANC and the tripartite alliance since 1994', in R. Southall (ed.), *Opposition in South Africa's new democracy*, pp. 65–79, Frank Cass, London.

McLendon, M.K., Hearn, J.C. & Deaton, R., 2006, 'Called to account: Analysing the origins and spread of state performance-accountability policies for higher education', *Educational Evaluation and Policy Analysis* 28(1), 1–24. https://doi.org/10.3102/01623737028001001

Molendijk, A.L., 2008, 'Neo-Calvinist culture Protestantism: Abraham Kuyper's stone lectures', *Church History and Religious Culture* 88(2), 235–250. https://doi.org/10.1163/187124108X354330

Moore, P.A., 1950, *Debates of the House of Assembly, Third session, Tenth Parliament, 70–73*, p. 3850, Parliamentary Printers, Cape Town.

Nicolescu, B., 2002, *Manifesto of transdisciplinarity*, transl. K.-C. Voss, Albany State University Press, New York, NY.

Pienaar, M., Blankley, W., Schirge, G.U. & Von Gruenewaldt, G., 2000, 'The South African system of evaluating and rating individual researchers: Its merits, shortcomings, impact and future', *Research Evaluation* 9(1), 27–36. https://doi.org/10.3152/147154400781777395

Postma, F., 1943, 'Die P.U.K. vir C.H.O. (1921–1941)', *Die Veteraan* 8(1943), 1–3.

Reinecke, C.J., 1998, 'Die wording van die PU vir CHO as deel van die Suid-Afrikaanse universiteitsisteem', in C.J. Reinecke (ed.), *Verkennings in oorgang: Gedagtes by die 125-jarige bestaansjaar van die PU vir CHO – 1994*, Supplement series 1, pp. 181–222, Koers, Potchefstroom.

Reinecke, C.J., 2019, 'Scholarship "In Thy Light" – Accountability', Paper presented at the Conference on 'Die impak van Gereformeerde Teologie', North-West University, 18–20th September.

Report, 1928, 'Union of South Africa', *Report of the University Commission,* (Chairman: J.G.P. Van der Horst), U.G. 33, Government Printers, Pretoria.

Report, 1947, 'Union of South Africa', *Report on the Commission on the University of South Africa*, (Chairman: E.H. Brookes), U.G. 44, Government Printers, Pretoria.

Report, 1958, 'Union of South Africa', *Main Report of the Commission of Enquiry on the Separate University Education Bill*, (Chairman: J.E. Holloway), Government Printers, Pretoria.

Roelink, J., 1955, *Vijfenzeventig jaar Vrije Universiteit – 1880–1955,* J.H. Kok, Kampen.

Schutte, G., 2005, *De Vrije Universiteit en Zuid Afrika – 1880–2005,* deel 1 & 2, Uitgeverij Mienema, Zoetermeer.

Scott, W.E., 1998, 'Die regsposisie van die PU vir CHO in 'n nuwe grondwetlike bedeling', in C.J. Reinecke (ed.), *Verkennings in oorgang: Gedagtes by die 125-jarige bestaansjaar van die PU vir CHO – 1994*, Supplement series 1, pp. 227–271, Koers, Potchefstroom.

Steyn, A.G.W. & De Villiers, A.P., 2007, 'Public funding of higher education in South Africa by means of a formulae', in L. Lange & T. Luescher (eds.), *Review of higher education in South Africa. Selected themes*, pp. 11–52, Council on Higher Education, Pretoria.

Stoker, H.G., 1961, *Beginsels en Metodes in die Wetenskap*, Pro Rege Pers, Potchefstroom.

Van den Brink, G., De Ridder, J. & Van Woudenberg, R., 2017, 'The epistemic status of evolutionary theory', *Theology and Science* 15(4), 454–472. https://doi.org/10.1080/14746700.2017.1369759

Van der Schyff, P.F., 2003, *Wonderdaad – Die PUK tot 1951: Wording, vestiging en selfstandigheid*, Paarl Print, Paarl.

Van der Walt, B.J., 1978, 'Christelik-nasionaal: Die spoor van die Calvinisme in Suid-Afrika', *Koers* 43(2), 129–153. https://doi.org/10.4102/koers.v43i2.1158

Van der Walt, B.J., 2005, 'Dertig jaar (1975–2005) internasionale aksie vir Christelike hoër onderwys: enkele persoonlike indrukke', *Koers* 70(3), 555–574. https://doi.org/10.4102/koers.v70i3.283

Van der Walt, B.J., 2013, 'H.G. Stoker (1999–1993) as Christelike filosoof: 'n Historiese legende en ikoon, of nog steeds 'n kontemporêre mentor?', *In die Skriflig* 47(1), 1–15. https://doi.org/10.4102/ids.v47i1.86

Van Deursen, A.T., 2005, *Een hoeksteen in het verzuild bestel – De Vrije Universiteit 1880–2005*, Uitgeverij Bert Bakker, Amsterdam.

Van Eeden, E.S. (ed.), 2005a, *'In U Lig': Die PU vir CHO – van selfstandigwording tot samesmelting, 1951–2004*, Dcomm Design Print Signature, Potchefstroom.

Van Eeden, E.S., 2005b, 'Die 'stem van Potchefstroom' – 'n Terugskouing oor die beeld van die PUK as universiteit in die Suid-Afrikaanse samelewing, 1951–2003', *Historia Archive* 50(2), 211–236.

Van Os, M. & Wierenga, W.J. (eds.), 1980, *Wetenschap en Rekenschap 1880–1980 – Een eeuw wetenschapsbeoefening en wetenschapsbeschouwing aan de Vrije Universiteit*, J.H. Kok, Kampen.

Van Rooy, H.C., 1998, 'Die PU vir CHO as Christelike universiteit', in C.J. Reinecke (ed.), *Verkennings in oorgang: Gedagtes by die 125-jarige bestaansjaar van die PU vir CHO – 1994*, Supplement series 1, pp. 97–113, Koers, Potchefstroom.

Van Wyk, J.H., 1996, 'Arbeidsetiek: 'n teologies-etiese benadering', *In die Skriflig* 30(2), 155–184. https://doi.org/10.4102/ids.v30i2.1571

Van Wyk, J.H., 2016, 'Should we blame Calvinism for the development of apartheid in South Africa? A perspective from the reformed churches in South Africa: A case study', *In die Skriflig* 50(1), a2155. http://dx.doi.org/10.4102/ids.v50i1.2155

Venter, F., 1998, 'The protection of cultural, linguistic and religious rights: The framework provided by the Constitution of the Republic of South Africa, 1996', *SA Public Law* 13(2), 438–459.

Verkleij, A.C.L., 1999, 'Self-evaluation and external review', in M. Röbbecke & S. Dagmar (eds.), *Qualitätsförderung durch evaluation?*, pp. 87–99, WZB Berlin Social Science Center, Berlin.

Verkleij, A.C.L., 2001, *Report of the 2001 external review teams,* Center for Higher Education Policy Studies (CHEPS), Enschede.

Viljoen, A.J., 1998, 'Die PU vir CHO as akademiese instelling', in C.J. Reinecke (ed.), *Verkennings in oorgang: Gedagtes by die 125-jarige bestaansjaar van die PU vir CHO – 1994*, Supplement series 1, pp. 181–222, Koers, Potchefstroom.

Westhoff, L.M., 2012, 'Historiographic mapping: Toward a signature pedagogy for the methods course', *The Journal of American History* 98(4), 1114–1126. https://doi.org/10.1093/jahist/jar614

Winther, R.G., 2015, 'The structure of scientific theories', in E.N. Zalta (ed.), *Stanford encyclopedia of philosophy*, viewed n.d., from http://plato.stanford.edu/archives/fall2015/entries/structure-scientific-theories/.

Wolters, A.M., 1983, 'Dutch neo-Calvinism: Worldview, philosophy and rationality', in H. Hart, J. Van der Hoeven & N. Wolterstorff (eds.), *Rationality in the Calvinian tradition*, pp. 113–131, University Press of America, Lanham.

Wolterstorff, N., 1976, *Reason within the bounds of religion*, William B. Eerdmans, Grand Rapids, MI.