Scientific structures in context : identification and use of structures, context, and new developments in science

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Postscript

As this thesis slowly took shape, the Internet developed from a novelty into a paradigm shift. Among many things, it allowed for new and improved ways of getting scientific results to the general public. Preprint archives have found their place next to the sites of more traditional publishers and it is now easier than ever before to find scientific publications on specific topics, either through specialised (sometimes closed) portals, or through general search engines. However, there are also less positive effects of the unmoderated character of internet publications. For example, prolific bloggers without any formal scientific training can be quoted alongside publications of respected scientists, as if they were of equal quality. The same goes for news outlets, as both the respected and the obscure can spread opposite claims about scientific topics such as climate change, evolution, or genetics. Without the proper context, many hapless netizens are unable to judge which source (if any) to trust. Still, science has always had to find a balance between political, societal, economic, and creative forces which try to influence its course. Therefore, it has seldom been without controversy, yet has proven to be an immensely powerful, structuring element in our world. This is mainly due to the universality of its basic methodology, its focus on quality, and its strive for continuous improvement. For some, this makes science suspicious and perhaps even something to fear—for most of us though, it will remain a source of opportunities, continuous development, and inspiration.

A society made up of individuals who were capable of original thought would probably be unendurable. The pressure of ideas would simply drive it frantic.
— H.L. Mencken, 'Minority Report', 1956, 2006 reprint, p.10

Curriculum Vitæ

Reindert Klaas Buter (roepnaam *Renald*) werd geboren in Hasselt (Overijssel) op 20 april 1973. Na een lagere-schooltijd in Hasselt ging hij naar het Carolus Clusius College te Zwolle, alwaar hij na zes jaar zijn diploma Atheneum-b behaalde. Om van zijn hobby zijn werk te kunnen maken, besloot hij Technische Informatica te gaan studeren aan de Universiteit Twente te Enschede. Tijdens zijn studie raakte hij geboeid door kunstmatige intelligentie en natuurlijke-taalverwerking. Praktijkervaring hiermee kon hij opdoen aan het einde van zijn studie bij Schuitema bv waar hij neurale netwerken gebruikte om verkoopprognoses te maken en bij de Belastingdienst waar hij het fenomeen datamining onderzocht. Na zijn studie ging hij direct aan de slag bij het Centrum voor Wetenschaps- en Technologiestudies (cwts). Daar werkte hij een lange tijd en hield zich onder meer bezig met het programmeren van een mapinterface, het opzetten en onderhouden van *data warehouses* voor bibliometrische data, het vervaardigen van websites en webinterfaces om interactief bibliometrische data te presenteren, maar ook met het ontwikkelen van een plannings- en tijdsbestedingssysteem om de vele projecten van het cwts te helpen monitoren. Daarnaast hield hij zich bezig met de uitvoering van bibliometrische projecten voor nationale en internationale opdrachtgevers. Ondertussen begon zijn promotieonderzoek onder begeleiding van prof. dr. A.F.J. Van Raan, dat tussen de ontwikkeling van bibliometrisch instrumenten en het uitvoeren van analyses laveerde, langzaam vorm te krijgen, mede door een aantal door de eu gefinancierde en in opzet ambitieuze projecten. In 2010 besloot hij het cwts te verlaten, maar daar wel zijn promotieonderzoek voort te zetten. Momenteel is hij werkzaam als it-er en heeft hij ook een eigen bedrijf genaamd *Data Ludentes* (spelende data) waarmee hij zijn jarenlange ervaring op het gebied van *science* en *business analytics* en *intelligence* probeert uit te venten. Hij is sinds 1999 getrouwd met Mirjam en samen hebben zij twee dochters, Yaël en Amarinthe.

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