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The pseudoscientist 'priest': Religiously selling nanotechnology

Abstract

Nanotechnology is the pinnacle of high technology, increasingly coveted by non-scientist buyers seeking science fiction rather than fact. This B2B ethnography deepens our understanding of scientist sellers rejecting orthodox technical sales talk, in order to guide culturally distant non-scientist buyers into more similar sense via religious pseudoscience (scientism). Although heretical, scientism is a powerful proselytising tool, enabling (pseudo)scientist sellers to reimagine themselves as powerful 'priests', while obligating buyers to have faith in their teachings, or face excommunication from the 'church' of nanotechnology. Within this sales-based 'theocracy', the metaphoric methodological 'God' Science is the ultimate form of validation, duplicitously manipulated, and overtly drawn on to facilitate the diffusion of poorly understood 'salvific' innovations, while supporting an apocryphal religion for high-technology sales.

Key words: B2B marketing, critical marketing, ethnography, product management, sensemaking, pseudoscientist priest

Summary statement of contribution

This study explicates pseudoscientist seller sensegiving and identity work within culturally dissimilar high-technology B2B sales relationships. Attention is drawn to the religious nature of sales, where framing the scientific method akin to 'God' empowers pseudoscientist sellers as 'priests', enabling the flow of simpler pseudoscientific product sense to non-scientist buyers. Critically, scientism not only supports pseudoscientist sellers in coping with the condemned act of selling but is a means to develop a high-technology sales religion.

Introduction

We are often told that science is an empiric and objective enterprise focused on developing testable models of the universe (Wilson, 1999), whereas religion is a bricolage of otherworldly beliefs that tend to sit outside of sensory validation (Dean, 2019). Yet, and for a supposedly secular-materialist paradigm, (pseudo)scientist sellers frequently sin by using religious pseudoscience 'scientism' (Orman, 2016; Peterson, 2003) to market beliefs in the 'divine' nature of high-technology products such as Apple's 'Jesus' iPhone (Campbell & La Pastina, 2010). Helping us understand this issue, this B2B (business-to-business) ethnography examines twelve pseudoscientist sellers using scientism to claim 'priestly' identities (Harris, 2017; Jackelén, 2008), and facilitate nanotechnology sales with technically illiterate buyers. Simply, scientism invites belief in fake science that sounds authentic, enabling scientists to speak religiously about all things (Chittick, 2007), irrespective of their knowledge to do so (Williams, 2013). Being an extreme form of religious thinking (Durkheim, 1995; Kant, 1960), 'truth' is whatever the 'priest' says it is, based on a doctrine of 'because science' (Golshani, 1998), that offers to restore order to chaos (Hallowell, 1960), providing the right 'salvific' nanotechnology products are purchased (Dean, Ellis & Wells, 2017). As we will come to see, the degree to which we can regard these participants as scientists or pseudoscientists is highly debatable, and complicated by sales talk switching between authentic and fake science. However, and to emphasise the duplicity of this sales method, the term pseudoscientist seller is preferred and used throughout this study.

The story of nanotechnology, started in the late nineteen fifties, with the notion of manipulating small scale matter (Drexler, 1987). What started as mere speculation, led to the mass manufacture of products between one billion and ten million times smaller than a metre (Drexler, 2013). Over recent decades, nanotechnology became a revolutionary high-technology

platform (Haverila, 2013), eagerly sought to achieve miracles (Olawoyin, 2018). For example, bulk silver was used for thousands of years to kill germs, but only became cost-effective through nanotechnology, allowing minute quantities to be incorporated into products such as bandages, cutlery and soaps (Deshmukh, Patil, Mullani & Delekar, 2019). Even though nanotechnology delivers more 'bang per buck', it has left scientist sellers with the challenge of how to give sense about each new innovation (Tolfree & Jackson, 2008), particularly as it is increasingly positioned as a Manichean technology likely to usher in utopia or the end of times (Grech, 2020). Drawing on the Diffusion of Innovation Model (Rogers, 2003), what is said within sales relationships is critical for the success or failure of new products (Krush, Agnihotri, Trainor & Nowlin, 2013). While giving sense about 'incomprehensible' innovations is the raison d'être of high-technology sellers (Shineha et al., 2017; Slater, 2014), it is a precarious act within culturally distant relationships (Rogers, 2003), as technological wonders are rarely understood by non-scientist buyers (Vydra & Klieving, 2019). Further complicating this issue is that communicative training is often inadequate (Michel, Naude, Salle & Valla, 2003), leaving scientist sellers struggling for what to say about products, while attempting to mitigate the stigma of selling science (Lee, Sandfield & Dhaliwal, 2007). Regrettably, such issues have received little attention from sales organisations, who have faith that such products will simply sell themselves and that sellers will somehow cope with being othered (Haverila, 2013).

Even though, little is known about religion within marketing management practices (Tracey, Phillips & Lounsbury, 2014), it is increasingly apparent that religious talk is highly persuasive (Dean, Ellis and Wells, 2017; Purchase et al., 2018). As such, this study considers how pseudoscientist sellers act as religious innovators (Luhrmann, 2012), discursively creating a religious culture to facilitate high-technology sales (Lessl, 1996). The research question driving this study is therefore: how do pseudoscientist sellers religiously give sense, within culturally

distant B2B nanotechnology sales? To help us understand this question, the literature review examines 'giving and making sense about high-technology products' and 'the 'religious' pseudoscientist seller'. Following this, the ethnographic methodology is detailed, alongside the discussion and conclusions, highlighting contributions to the literature, and areas for further research.

Literature review

Giving and making sense about high-technology products

Making sense of our professional world and ourselves is an ongoing discursive task (Fellows & Liu, 2016; Weick, 1995), triggered by: 'violated expectations, that involves attending to and bracketing cues in the environment, creating intersubjective meaning through cycles of interpretation and action, and thereby enacting a more ordered environment from which further cues can be drawn' (Maitlis & Christianson, 2014, p.11). The need for sensemaking is most pressing when we encounter products and discourses that are unexpected or confusing (Louis, 1980). Critically, the sense we make does not have to be true and can be what is preferred (Weick, 1995), which is advantageous for sellers seeking to enchant buyers with miraculous claims (Belk, Ger & Askegaard, 2003) about products that transcend mundane materiality (Belk, Wallendorf & Sherry, 1989). There are limits however to the sense people are willing to make, as the more extraordinary the claim, the less likely it is to be adopted (Hartmann & Ostberg, 2013). Critically, whether a product is regarded as miraculous is heavily dependent on the expectations of the buyer, and how sense is given by the seller (Burkill, 1978).

Sensemaking is a social act, where making sense is to make oneself, with individuals reflecting on how their sensemaking will influence how they are viewed by themselves and others (Helms Mills & Mills, 2009). There is a need 'to take seriously the proposition that sensemaking occurs

in the context of individuals' idiosyncratic efforts at identity construction' (Brown, 2008, p.1035), which is true for both sellers and buyers. When we speak, we give sense, restructuring how others understand the world and themselves (Weick, 1995). Notably, sensegiving and sensemaking 'occur in a sequential and reciprocal fashion, whereby cognitive stages of understanding (sensemaking) alternate with active stages of influencing (sensegiving)' (Corvellec & Risberg, 2007, p.307). Even though sensegiving may produce undesirable outcomes, sensegivers cannot capitulate (Henneberg, Naude & Mouzas, 2010), but must instead, try to restore organisational order by actively making sense of uncertainty (Daft & Weick, 1984).

Within B2B arenas, high-technology products are typically sold through face-to-face meetings, providing frequent opportunities for sellers to reflexively address buyer misunderstandings, and re-orientate them into preferred sense (Slater, 2014). These sales relationships are either similar or dissimilar (Lott & Lott, 1965), and as such, close or distant (Barnlund & Harland, 1963). The rationale for closeness is based on Byrne's (1971) similarity-attraction hypothesis, which suggests that people preferentially interact with others they view as similar (Smith et al., 2014). This is supported by Turner's (1987) theory of self-categorisation, where individuals engage in an ongoing judgement of themselves and others, based on personal characteristics. Thus, similar talk leads to relationship closeness, and dissimilar talk to distance (Rogers, 2003).

High-technology B2B relationships tend to be dyadic and close, between scientist sellers and scientist buyers, where technical sense is shared through scientific metaphors and stories (Dean, Ellis & Wells, 2017). This study, however, suggests that there has been a recent shift towards culturally distant relationships, driven by non-scientists seeking 'miraculous' nanotechnology products. While dissimilar relationships present new selling opportunities, non-scientist buyers are rarely capable of understanding technical terminology and concepts (Broyles, 2011),

preferring to make sense using 'personal experience and expertise, analogies and comparisons, and fiction and popular culture' (Davies, 2011, p.317). For scientist sellers, the challenge is therefore how to prime the market (Jones, Suoranta & Rowley, 2013), educate their buyers (Barrette, 2015), and explain what a product is and how it works (Simakova & Neyland, 2008). Throughout this study, we will see how scientism is a key part of simplifying technical complexity, but more than this, a key part of creating an idolatrous view of high-technology products more magic than mundane (Davies, 2019). With identity being at the heart of these sales relationships, the next section examines the religious foundations of this self, social and professional conceptualisation.

The 'religious' pseudoscientist seller

We all have identities, consisting of 'the meanings that individuals attach reflexively to themselves, and develop and sustain through processes of social interaction' (Brown, 2014, p.23). Our identities exist in a state of flux, influenced by the people we meet, the environments we exist within, and the professional work we carry out (Pratt, 1998). Undertaking identity work, we reflexively ask ourselves, who am I? And how do I become who I want to be? (Corley & Gioia, 2004). Our identities do not have to be authentic and may show 'facades of conformity' or 'false representations' to meet specific personal or organisational goals (Hewlin, 2003, p.634), such as an atheist duplicitously claiming to be a theist. While we all have personalised notions of self, i.e. self-identities (Watson, 2008), we also have social and professional identities, brought into being through the discursive resources related to specific organisational roles (Essers & Benschop, 2007; Watson, 2008). Although each role has an expectation, individuals always maintain some flexibility for how to construct themselves (Wright, Nyberg & Grant, 2012).

Identities are rarely equal in the organisational power they exert, with those claiming access to esoteric knowledge being highly capable of guiding weaker individuals into preferred organisational sense (Corley & Gioia, 2004; Purchase et al., 2018). Scientists and priests are prime examples of hegemonic identities, and although they use divergent sense to understand the universe, both wear unusual garments, have their places of 'worship', serve a 'greater power', and reserve the right to regulate what is considered true (Bassett, 2012; Delaney & Hastie, 2007). Considering the current complexity of technological innovations, it is perhaps not surprising that scientists find themselves being portrayed as modern-day sorcerers (Haynes, 1994; Schummer, 2006), '…seeking truth in a world of mystery' (Hinshelwood, 1953, p.301). Such conceptualisations certainly suggest a metaphysical bricolage, fusing cultural elements from secular-materialism, religion, the supernatural and magic (Dean, 2019). Discussing the similarity between professional religion and science, Jackelén (2008, p.290) argued that scientists can be 'compared to a class of priests—motivated by a common (religious) belief in the intelligibility and oneness of nature, held together by a sense of vocation to reveal the truth'.

As Western 'science grew up in a Christian tradition' (Coulson, 1966, p.22), it is not uncommon for scientists to embed themselves with religion, even positioning themselves akin to priests (Harris, 2017; Jackelén, 2008), when perceived as advantageous (Van Assche, Koç & Roets, 2019). Such aspects do of course breach secular-materialism and objectivism (Flower, 1995; Harris, 2017), and the mandate 'to be…straight-thinking, correct, rigorous, exact' (Fausto-Sterling, 1992, p. 8). However, the scientist is far from an automaton, committed only to neutrality and truth (Gilbert & Mulkay, 2009), and is instead capable of religiously reimagining science as irrational and fictional (Berger, 1999; Bradley, 2017; Plantinga, 2012), providing the constraints of their organisation are not breached (Zabusky & Barley, 1997).

Importantly, we are in a time where 'traditional' laboratory employment is coming under increased strain, and as the competition for posts rises, many scientists are begrudgingly seeking employment in commercial non-laboratory roles (Sztompka, 2017). Problematically though, scientists often struggle in adjusting outside of a culture of science, as they rapidly lose professional prestige and an 'unchallengeable' right to speak about the nature of reality and themselves (Dean, Ellis & Wells, 2017). This is an acute issue within high-technology B2B sales, with acute renegotiations of sense and self being common (Prelli, 1989), particularly towards mitigating the stain of being a scientist seller (Lee, Sandfield & Dhaliwal, 2007).

Finally, and having highlighted the importance of sensemaking and identity work, the methodology section explains how these aspects were unpacked to address the research question.

Methodology

This ethnographic study was carried out to better understand how scientist sellers religiously give sense about nanotechnology and themselves within culturally distant B2B sales relationships (Brewer, 2000). Having worked in nanotechnology sales for over a decade and being considered a seasoned and trusted insider (Layton, 1988), the author was able to secure access to twelve nanotechnology pseudoscientist sellers within separate UK-based multinational enterprises (MNEs). Table 1 shows the pragmatic, purposeful and anonymised sample that this study was built around (Wengraf, 2004). Importantly, no participant had been met prior to this study.

Participant	Gender	Age	Education	Organisational role	Company information	Self ID	Years in role	Religion	Currently practicing a religion
David	M	40	PhD Biology	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	5	Christian	Yes, and on a personal level outside of a church
Vila	M	39	PhD Chemistry	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	7	Agnostic	No, but previously a member of the Church of England
Mark	M	55	MSc Biology	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	6	Science	No, but previously a member of the Church of England
Ash	M	32	PhD Physics	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	4	Agnostic	No, but previously a member of the Church of England
Terry	M	40	PhD Chemistry	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	5	Christian	Yes, member of the Church of England
Gary	M	44	PhD Chemistry	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	6	Atheist	No, but previously a member of the Church of England
Caius	M	52	MSc Biology	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	9	Science	No, but previously a member of the Church of England
Richard	M	60	PhD Biology	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	5	Science	No, but previously a member of the Church of England
Matthew	M	35	MSc Chemistry	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	5	Christian	Yes, a member of the Church of England
Ken	M	36	PhD Chemistry	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	7	Atheist	No, but previously a member of the Church of England
Avon	M	29	MSc Biology	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	5	Agnostic	No, but previously a member of the Church of England
Paul	M	31	PhD Chemistry	Sales/marketing manager	Nanotechnology sales MNE	Scientist seller	3	Christian	Yes, and on a personal level outside of a church

Table 1 – Pseudoscientist seller information.

Table 1 shows the participants fitting within the average profile of B2B technology sellers, who are likely to be well-educated males with backgrounds in science (Gounaris, 2016). Importantly, 58 % of this sample identified as religious, similar to the findings of Ecklund (2010), but rather unexpectedly, 25 % overtly claimed science as their religion. Even though only 33 % of participants saw themselves as Christian, all argued that they had attended the Church of England as children and received Christian instruction as part of their school education. As such, and following the advice of the participants, this sample is considered culturally Christian, where even secular-atheists can scaffold sense and self through Christian religion and theology (Moffat & Yoo, 2019).

Fieldwork and data collection

This study was carried out over a two-year period, with the author functioning as ethnographer and spending approximately two weeks in each sales organisation, working to integrate himself into the organisational lives of these pseudoscientist sellers (Gould, 2006). While unregulated access to non-scientist buyers was prohibited, the author was allowed to sit in a limited number of sales meetings providing he remained silent. Private access to non-scientist buyers was denied due to pseudoscientist seller concerns about their religious sales tactics potentially being exposed, even inadvertently. While this might raise the question why these participants undertook this study, the comment by Avon is perhaps most insightful: 'nobody reads social science papers anyway, so who cares what you reveal. I can speak freely, as long as my identity is concealed'.

Using a hybrid ethnographic approach, data was collected using participant observation, semi-structured interviews, informal conversations, participant storytelling, as well as the author drawing on his autoethnographic experiences as a scientist seller (Schouten & McAlexander &

Koenig, 2007). The myriad of approaches was considered vital for drawing out the fine-grain processes of sensemaking and identity work (Whiteman & Cooper, 2011). This resulted in the production of over 700 pages of field notes, and over 1,000 pages of transcripts, based on 75 direct interviews, 237 informal conversations, and 29 meetings between sellers and buyers. The mean number of words recorded per participant was just over 7,800, split between all forms of data collection. While data primarily consisted of utterances, care was also taken to record intonations, body language, and the context of interactions, alongside potential meanings in relation to the author's experiences and the extant literature.

Working the data

After the data was collected, it was read several times and transcribed, with additional comments being added from memory (Lindlof, 1995). This was an ongoing process of developing an in-depth understanding of the ethnography (Chronis, 2008). To aid in the clarification of core themes, the data was analysed immediately after collection, again after three months, and then finally several months later (Spiggle, 1994). With the author being heavily sensitised to this sector, repeat analysis provided additional opportunities for further reflection (Goodier & Eisenberg, 2006).

The data was worked to categorise units of meaning, with codes changed, added or removed as perceived necessary (Miles & Huberman, 1984). In practice, content analysis was used to discern units of meaning based on frequency, which was aided by the first author's emic and etic experiences as a buyer, seller and researcher (Chronis, 2008; Kottak, 2006). As higher- and lower-order codes were drawn out, it was clear that multiple lower-order codes often supported several higher-order codes (Spiggle, 1994). Following this, discourse analysis was initiated (Wood & Kroger, 2000), enabling a greater focus on abstraction, in order to highlight the

discursive resources used in the metaphysical construction of sense and self (Foucault, 1974). A simple overview of this process is shown from Vila's comments, highlighting the lower-level codes of (1) scientism-based sensegiving, and (2) poor buyer understanding of nanotechnology, being abstracted into (3) the pseudoscientist seller as the priestly arbiter of 'science':

I know the value of pseudoscience and religion to sell products (1 & 3). T'be honest, these guys can't understand real science anyway, it only confuses them (2). Fake science keeps me in prime position, and everyone worshipping me, where they belong (3).

Having spent over a decade working in nanotechnology sales, the author was mindful of the need to engage in 'reflexive pragmatism' (Alvesson, 2003, p.14), where multiple developing interpretations can be explored. To aid this process, vignettes were written up, producing several overviews of research findings, and leading to a coherent answer to the research question (Humphreys, 2005). Research findings were validated using within method triangulation, with data compared between participants and ethnographic methods (Denzin, 1970). This was alongside themes and findings being shown to the participants via a summary report, followed up by face-to-face meetings to allow detailed feedback (Aitken & Campelo, 2011), and peer debriefing at the conclusion of this study (Lincoln & Guba, 1985).

Findings

This ethnography starts by examining the unexpected emergence of culturally dissimilar high-technology sales relationships, in, 'searching for nanotechnology miracles: the rise of the pseudoscientist priest'. Following this, attention is paid to how pseudoscientist sellers struggled to give adequate sense via technical sales talk and consequently developed 'a new religion for culturally distant sales'. As religion tends to spread by evangelism, consideration is made of

how scientist priests engage in 'preaching the good Word of scientism'. Finally, and in the ultimate act of scientific heresy, the 'methodological 'God' Science' is introduced, highlighting how a theistic reframing of the scientific method enables pseudoscientist sellers to validate their sales talk and present themselves as the unchallengeable arbiters of what is 'true'.

Searching for nanotechnology miracles: the rise of the pseudoscientist priest

Miracles, by their definition, are highly unlikely organisational events, driven by chance or divine intervention, yet are far more common than we might imagine (Burkill, 1978). In this section, consideration is made of a miracle of sorts, or at least a paradigm shift within the status quo of high-technology sales. As a starting point, and prior to this study, it was commonly recognised that B2B sales relationships are dyadic and culturally close (Rogers, 2003), predominantly occurring between scientist sellers and scientist buyers. As such, little was known about culturally dissimilar relationships, as not only have scientist sellers neglected this arena, but non-scientists have typically avoided purchasing products beyond their understanding (Vydra & Klieving, 2019). This, however, is no longer the case, as sales relationships with non-specialists appear to be increasing, leading scientist sellers to reappraise how they give sense about nanotechnology (Shineha et al., 2017; Slater, 2014), as the discussion between Ash and the author shows:

> Ash: I'd only sold to scientists before, usually selling this product to fix that problem. I'd never sold to a non-scientist. Thing is non-scientists started contacting me, saying: "I was watching some science fiction, and I knew nanotechnology would make our product perfect. Do you have some nanotechnology?" They were drunk on science fiction, thinking nano can do anything. I couldn't help thinking this was a hell of an opportunity and would be easy. Just simplify the science. [Pause]. Boy was I wrong.

Author: I think I see what you mean. [Pause]. Was this the first time you'd explained science to non-scientists?

Ash: Pretty much. When I was in university, I only spoke to scientists. I was always a bit uncomfortable speaking to non-scientists, and even other academics who weren't scientists. 'Cos I always assumed they wouldn't understand it. Mmm, well I might shout at someone and accuse them of being stupid and use science to baffle 'em. Clever sounding science is wonderful for getting stupid people to do what you want, even when they don't understand it. But, no, I never had to explain science to a layperson before. All my conversations had been scientific really. In a way, my first experience of selling science to scientists was easy. We knew the game of science and what to say.

Reflecting on such comments, it seems that previously working in academic science had initially left the participants with a lack of schematic and discursive resources to adequately give sense about science outside of scientific buyer-seller relationships (Dean, Ellis & Wells, 2017). Having said this, Ash's comment suggests that the participants had long realised the value of deploying technical scientific talk for 'getting people to do what you want, even when they don't understand it'. Listening to the participants speak, it was clear that they ironically held negative opinions of non-scientists as individuals sitting outside of truth and knowledge. Discussing this, Paul argued:

It is very simple. Science is at the top. Seriously, it is. Nothing comes close, and anyone not using science is a fool. Facts don't care about feelings and all that. [Pause]. Mmm, yeah, so you see my problem. Being here and doing this [selling nanotechnology], was a problem for me. The only solution was to go back but I couldn't, so I did the next best thing and embraced this new science. Since my very being is chained to science, science

must reign supreme even if it is damned. I will not give up everything I am just by being here. And doing what I did is an opportunity to be the scientist again, with all the things I'd lost before.

Ruminating on these aspects, we might well ask if the foundations of the scientist-priest and temptation to use scientism were born within academia as a result of a perceived epistemological hierarchy, but could not be realised until the opportunity afforded itself in industrial selling? Importantly though, and irrespective of this issue, it seems fair to say that the participants were ill prepared to meet the expectations of non-scientist buyers who had been enchanted by science fiction like promises that nanotechnology is a product panacea (Drexler, 2013; Olawoyin, 2018) capable of ushering in a utopian future (Davies, 2011; Kennedy, 2008). We thus see the participants as highly knowledgeable about the cultural pressures related to being a scientist and operating within orthodox scientific norms. Yet, and at the same time, struggling to operationalise authentic scientific discourses with non-scientist buyers, resulting from a misunderstanding of commercial life. This was particularly noticeable with the participants claiming to have initially violated their non-scientist buyers' spectacular desires for product magic (Belk, Wallendorf & Sherry, 1989) through the use of tried and tested mundane technical sales talk, as Stephen said:

Trying to sell using science was a failure. They wanted nano magic and hated me using technical words they didn't understand. When I used real science; it broke the spell nano had over them. They hated me being Dr objectivist and Dr neutral. Using real science was costing me loads of sales. So, I figured they wanted me to be as magical as nano. Leave the facts for selling to other scientists. So, I started to imagine myself through their eyes, dreaming of what a scientist could be, forged through the wonders of nano.

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It thus appears that authentic science disenchants and confuses non-scientist buyers (Broyles, 2011; Vydra & Klieving, 2019), denigrating beliefs that nanotechnology transcends the mundane (Drexler, 2013). Thus, and meeting new buyer expectations left little room for these pseudoscientist sellers to be the automaton (Gilbert & Mulkay, 2009), espousing naturalist, positivist, or objectivist sales talk (Flower, 1995). Yet, and having said this, all participants viewed the emergence of non-scientist buyers as an opportunity to renegotiate science and the scientist identity (Essers & Benschop, 2007; Watson, 2008), through asking, what is science? And who do I want, and not want to be? (Corley & Gioia, 2004). Or as Richard mused, 'can I really remake science? And who can I get away with being?' In line with current conceptualisations of identity work, all participants claimed to have some flexibility towards their idealised notions of a professional self (Wright, Nyberg & Grant, 2012), as Luke argued:

> They come with big dreams of a nanotechnology saviour. Wanting their own personal Jesus. This was a dream come true for me though. I spent ages talking to them about what a scientist should be. Most believe science is like magic and scientists know everything. Well this suited me perfectly. I destroyed the parts of science that held me back and started becoming the scientist I've always wanted to be, with my own cult.

Considering the problems raised by non-scientist buyers entering this high-technology marketplace, we might wonder why buying organisations did not employ technically competent staff (Gounaris, 2016) to mitigate the potential for product confusion. Helping us understand this issue, Terry said:

For a long time, it baked my noodle. Why would any buying company be dumb enough not to use scientist buyers? Obviously, and as part of my job I had to answer this. Mmm, it seems to me that the rapid spread of nano and phenomenal drop in price to buy nanomaterials opened the door for new companies dealing in low-tech[nonology] to dream big just by having some nano. Any old nano really. Clearly, these companies have no culture of science. And honestly, they can't afford real scientists. When you see their staff, they are all low-skilled. They just add products together and mix them for simple products. Detergents and whatnot. For these guys, saying "protein" probably constitutes doing science. No wonder they come here to worship me.

Perhaps though, as Terry condescendingly argued, low-technology companies have been enchanted by nanotechnology, but lacking the resource to employ technical experts have not only been left to seek guidance from pseudoscientist sellers but been induced into a form of technological religious fervour.

A new religion for culturally distant sales

To suggest that science is at some level religious, is often an invitation to be condemned within the natural sciences (Golshani, 1998). Yet, it was clear that these pseudoscientist sellers had embedded themselves within a quasi-scientific religion as a means to sell nanotechnology products to non-scientist buyers (Chittick, 2007). Not surprisingly, this raised critical questions about how the participants viewed science, religion, and the degree to which science can be considered a religious enterprise, now explored in a discussion between Caius and the author:

Caius: Science and religion eh? Not an easy question. Ah, they are very different in theory and maybe similar in practice? I think that science is about rigorous measurement

and hypothesis testing. Whereas religion is about belief. Yes. So, in the lab[oratory] I tested things and had faith in the method. It was like science was my religion. [Pause]. Some people go to church and I went to the lab. I think I got the better deal. At least my God is real. Like real as in a method, not floating in the sky sitting on a cloud or anything like that. [Pause]. I look back on my time as a scientist and I think I have been very religious. I cursed anyone who disagreed with science, protected the honour of scientists, and condemned all other methods as heresies. Which they are of course. [Pause]. At the end of the day, science and religion are systems of power. Science usurped religion, and now I'm still religious about science. Only difference is that I no longer believe in science in an entirely objective way, as I also create it. So, I guess, what I believe is knowledge, at least inasmuch as I can get away with it.

Author: But in practice, how does this work? I mean, can you tell me more about how scientists are religious?

Caius: Science has always been a religion to me. When I worked in a lab[oratory] it was for the glory of scientists and science too. We crushed all other methods. To glorify our methodological god, we rewrote the garden of Eden with the big bang. We made a new teleology using evolution. We made Christ redundant, and gave true miracles. Being in sales is hard, as it's a godless profession… Honestly, it was time for a new religion, based on how I see science.

It thus appears that the participants felt that they had always been religious about science, and while arguing that there is a distinct epistemological difference between these two systems of knowledge, that by nature, a scientist should be religious about science. We therefore see the boundaries between knowledge and belief eroded within scientism, and belief being interchangeable with knowledge, and played as a 'game' to aid sales. Looking at the religious

concepts raised by Caius, we see the story of Christianity being mixed with science to weave a new cosmic sales-based journey, albeit with the scientist no longer serving, but ruling science. While quasi-spectral beliefs in science as a methodological deity would certainly be at odds with the foundations of present-day science (Gilbert & Mulkay, 2009), participant talk frequently stepped beyond secular-materialism, and indicated deeper forms of religious thinking (Van Assche, Koç & Roets, 2019). Trying to unpack this issue suggested a complex mix of beliefs and metaphysical contradictions, wrapped up in an ongoing attempt to form a new religion of science through scientism. Discussing this privately with the participants, it was clear that all viewed scientism as well suited for giving simple sense to non-scientists, and for pushing back against the general stigma of being a scientist seller (Lee, Sandfield & Dhaliwal, 2007). Thus, and while there was little to suggest that the participants viewed the natural sciences as a truly supernatural endeavour (Durkheim, 1995), they frequently claimed to be guided by the metaphoric God Science, who was deployed to empower their sales talk and themselves (Luhrmann, 2012). Explaining this issue, Avon said, 'Science isn't a god, but I speak like it is to help my selling. Science requires devotion, and I make sure everyone worships it', as Ken confirmed to the author:

Ken: What matters is buyers believing me. This is the make or break of selling. When I sell to scientists, I can't play this game, as they know what pseudoscience is. These new guys have no clue what science is, and oh my God, can I tell them a tall tale. Make them fall in love with me as their guru. [Pause]. I'm building a sales cult now. Every day I play the part of this magnificent scientist who exists beyond fault. As the perfect scientist, I am beyond reproach. I genuinely want to be this guy. Who wouldn't?

Author: Ok, yes. [Pause]. And do you think that religion is important to all of this?

Ken: Undoubtedly! Religion is the means to achieve everything I need. All humans are religious man, the only question is, what you 'gonna be religious about? If it is up to me, and it is, my buyers should be religious about me and nano. They are anyway, and just need a bit more help. Why spend your life in hell when you can enter paradise with nano. [Pause]. And before anyone complains, even if what I say isn't technically true, at least the science works. I tell a tall tale about nano, but damnit man, beyond my chicanery the product always works.

Importantly, and while indicative of complex methodological fakery, it is worth noting that the participants left little doubt they wanted to remake their idealised version of the scientist identity through evangelising a false religion. Curiously though, the participants all argued that irrespective of their discursive duplicity in sales, that their products always worked, creating an interweaving of truth and deception. Attempting to better understand what had led these participants to embrace this less than truthful view of science, Paul said 'look man, the drowning man will cling to whatever he can to survive, and if it gives him power, and almost everything he lost, why wouldn't he love it and play this game'. In this way, we see scientism tactically meeting mundane sales-based goals but also giving the participants the ability to survive the chaos of sales by 'playing' at being scientists. The notion of sales being a 'game' was perhaps most evident from the participants thriving in the lack of knowledge of their non-scientist buyers, which further elevated the scientist priest's perceived right to speak about all things. Within itself, it is worth noting that those performing a priestly function, can easily tempt themselves to dismiss all competing forms of knowledge, while claiming a hegemonic status as the arbiter of reality (Dean, 2019). Reminding ourselves that scientists seem unable to self-conceptualise without science (Zabusky & Barley, 1997), or in this case scientism, we

should not be surprised that the scientific method was revised, to better suit these preferred notions of self (Hewlin, 2003), in order to sell innovative products (Rogers, 2003).

Preaching the good Word of scientism

The question of how to convey sense about what a product is and how it works is a thorny issue, and one that has long been explored by sellers and scholars alike (Jones, Suoranta & Rowley, 2013; Simakova & Neyland, 2008). In this section, consideration is made of the departure from technical sales talk into pseudoscientific religious discourses, seemingly fit for culturally dissimilar sales. Commenting on this, Matthew stated:

> I tried to live my life by the wisdom of the scientific method. Following the rules hurt my income. Science became a noose around my neck. I can't educate non-scientists, and they love fantasies too much anyway. They hate real nano. Proper science is too hard for 'em. So, I use scientism. Faith is all about them believing in what I say. We build strong relationships this way, that science is like magic. I don't believe this nonsense. But they certainly do. I never say these things in front of other scientists, as they'd expose me.

The guiding principle of scientism appears to be the development of a common discourse to share meaning through a less than rational metaphysical outlook on the universe (Williams, 2013). Functionally, the act of decoupling nanotechnology from the constraints of materialism allows sellers to more easily support the fantastical beliefs of their non-scientist buyers (Bradley, 2017), while inducing cultural closeness through pseudoscience (Rogers, 2003). Curiously, and outside of the gaze of other scientists, these sellers are teaching the market about

nanotechnology (Barrette, 2015), albeit, through a fake doctrine, where little of what is said, is scientifically true. Commenting on this aspect, Paul said:

Nano is bound by the physical laws. If I want to sell to these fellows, my sales patter has to match their beliefs. People love hearing nanotechnology is the cure, and faith in my words guarantees it. [Pause]. I might say something like "nano, yeah! It's the basis of life, so buy it", or "blah, blah, blah, nano-DNA". The science doesn't even have to make sense. Just sound cool. Has to match something they've seen on TV or whatever.

Scientist seller sales talk can thus move from scientific fact into fakery, as long as it sounds plausible to a scientifically illiterate audience and satisfies previously encountered cultural cues (Davies, 2011). This being the case, it was common to watch pseudoscientist sellers attempting to induce a sense of religious fervour in their sales meetings, through situating nanotechnology as capable of fixing any product problem (Drexler, 1987), as now highlighted:

Non-scientist buyer: Our detergent needs some real nanotechnology magic.

Vila: I've got just the nano for you. It's as good as real magic.

Non-scientist buyer: What is it?

Vila: The nano you need. Have faith. As science is my witness. Save your product. Save your company. Save yourself. If you don't, your products will suffer. Hell awaits men who refuse the wonders of science. [Authorial comment: While such participant claims may seem surprising, if not shocking, they were frequently expressed to non-scientist buyers.]

Look at how Vila avoided any need to explain what a product is or how it works, but through scientism seemed to make it look he was using authentic science (Shineha et al., 2017; Slater, 2014). Furthermore, how purchasing the 'right' product becomes the road to salvation, whereas the wrong product leads to inevitable damnation (Dragojlovic & Einsiedel, 2013; Drexler, 1987) and excommunication from this fake church of science. Reminding ourselves that sensegivers are rarely immune to their own communications, Ken now discusses the impact of proselytising on his own sensemaking:

> I spend a lot of time spouting about this stuff. It's really made me think about what I believe. When I was just a scientist, I was a bit blinkered. The threat of breaching the regulated rules of science were everywhere, with punishments galore for those who said the wrong thing. Keep saying "I believe in science, science is true, and science knows everything" and you'll be fine. Don't dare say anything different. Mmm, being in sales has given me so much freedom to think and speak. Yes, of course I don't get complete freedom, but who does in life? And over time I have started to believe some of what I say to non-scientists. Sometimes I don't. The more religious I feel the more I believe my own teachings. I'm just trying to find a way to make it through all of this. Selling is mad at times, and I need something to believe in, even if I made it up.

We might consider that becoming a pseudoscientist seller, and indeed scientist priest, is a religious act of remaking sense and self through preaching fake science and negotiating what is beneficial to surviving the chaos of sales (Hallowell, 1960). Importantly though and decoupled from the expectation of what to say and think from other scientists, it seems that science and the scientist are fluid constructs, highly malleable and capable of being reworked

to meet the daily challenges of organisational life. Reflecting on this, and drawing on his field diary, the author said:

> I really feel that the concept of science and scientist are up for grabs in sales. All that seems to matter is meeting buyer expectations of being extraordinary. With [pseudo]scientist sellers frequently presenting magical images of science and themselves to their buyers, I'm not surprised that they start to believe their own religious teachings and use them as a crutch when facing difficulties, or a need to persuade someone through the God Science.

The methodological 'God' Science

Considering that the scientific method is the foundation of science, it is not surprising that its erroneous use is an attractive proposition for those attempting to religiously validate sense and self (Harris, 2017), particularly for those embedded within cultural Christianity (Ecklund, 2010). While the duplicitous deification of this supposedly secular method may support the diffusion of innovative products, and priestly identity work, it also eroded the participant's view of science as an objective and empiric approach to the world (Gilbert & Mulkay, 2009; Wilson, 1999). Discussing such aspects, Mark said:

> Being in sales, I was exposed to so many ideas about the universe, and I saw I could free myself from serving science. Nietzsche was right, God is dead. And since science has the power of God now, I became Satan. No, not waging a war against God or science. But from the hell of sales, I reached up to the starry heavens and dethroned science. Fusing science with God, I became my own creator. Building a new science for

a new type of scientist. Buyers feel at peace through the certainty of science, even if it is a hidden sham.

We now start to see the theological underpinnings of the scientist identity more clearly, and how fusing science with God is a simultaneous act of methodological sacrilege, and religious self-making (Zabusky & Barley, 1997). Furthermore, we might also consider the act of 'subjugating', 'subduing' and 'enslaving' science as an act of covert rebellion against orthodox science, which the participants had abandoned. Reading Mark's comments, there is certainly an element of Milton's (1996) epic poem Paradise Lost, where losing access to real science, was akin to Satan's fall from the Heavens, and eternal attempt to punish God through remaking false sense and self. Expanding on this theme, Matthew argued:

I know that I can never return to the laboratory. Selling science will never be forgiven. All scientists hate marketers and salesmen. Do I regret what I did? No. None of this is my fault. I came here for money, plain and simple. Oh, I might have sold my soul and I got a pretty penny. But all of this is sciences fault! Don't get me wrong. I get it. Science isn't really a person and all that. Thing is, I've always treated science like God, talking to science and hoping that he'd provide. [Pause]. He didn't though. Hah! It was the Devil who provided for me. It was marketing who gave me a better life. [Pause]. If I remember correctly, the Devil offered Jesus Christ wealth if he knelt before him [reference to the Bible, Matthew 4:1-11]. So yeah, marketing made me the same deal and I took it. Nobody can blame me. And I had to learn to make my own way here. Like the Devil though I had to learn to live without science, I mean God. I mean science. So, mmm, I made science to serve me. A scientist must have science to survive. But I forsook the science I once knew and made a fake one up to help me sell.

Such comments suggest that the participants viewed the sale of science as a transgression against their former scientific notions of sense and self. Intriguingly, and even though all participants acknowledged their role in leaving their laboratories, they externalised this decision as an 'evil' that had 'befallen' them, mitigating any personal responsibility through blaming the wider culture of science, and a personified scientific method. As Matthew further argued 'what do you want me to say? That I'm not good enough to be a scientist? That I'm a failure? And that's why I ended up here?' We thus see the scientist priest identity and the God Science as a sensemaking defence against a perceived cultural hierarchy that positions sales as a professional 'failure' in relation to the orthodox scientific method and scientist identity. Yet, and from a metaphysical perspective, the participants were frequently incoherent about the relationship of science and God, and the extent to which science is a methodology, state of mind, a substance without matter, or an actual being replete with personality, consciousness and agency (Plantinga, 2012). Furthermore, we might raise a similar issue about marketing and the Devil, and how the participants struggled to negotiate an almost Manichean view of laboratory science as a 'divine' act in comparison to the corrupt nature of selling high-technology products (Dean, Ellis & Wells, 2017). Thus, and while the participants had attempted to tell themselves preferred stories about why they had left their previous professions, escaping the sin of selling required new sensemaking models to be constructed that rewrote extant norms of truth, science and what it means to be a scientist. The discussion between Paul and the author helps us better understand this issue:

> Author: Can you tell me a little bit more about how you view science and your relationship with it?

Paul: There is something you have to remember. First of all is that science is something defined in a textbook. A method. Empiricism and materialism etcetera. Then there is my relationship to science. This is personal man. Y'know? I paid a fortune to get to know science when I studied. And science never really repaid me. In the end what could I do but put him to work for me.

Author: It sounds almost like science is a person?

Paul: Well yes. No. Damnit. It is, and it isn't. Oh, I'm confused. Oh, I know science isn't some guy I have drinks with and is a method. Believe me I get this. Mmm, but then there is the science in my head. The science I've spoken to for years and who is like God to me when I think about it. Kind of like an imaginary friend I suppose [laughs]. I missed being able to talk to science and having the certainty he gave. As he is in my head though he can be whatever I want him to be.

While caution should be shown in assuming that science is treated as an actual imaginary friend, we must consider that science appears to have been the foundation of sense- and self-making for these participants (Zabusky & Barley, 1997). Thus, recreating science as 'God', was a means for the participants to maintain order within their daily organisational lives and chaotic sales relationships (Hallowell, 1960). At the heart of this issue was the ability of pseudoscientist sellers to use the God Science to derive certainty about all things, often arguing that they were following a form of divine mandate (Kant, 1960). Commenting on this, Paul argued:

Stupid real priests sell by faith alone. No wonder their churches are empty. I'm smarter and pull out my phone or point at my iPad saying, "see how science is real. This is God right here. This is science". I always mix God and science. "How did you hear about nano?" I say, and give the reply, "Science guided you". In my new sales talk, everything

is guided by science. In a way, God and the scientific method are similar. Both with their stupid rules. Enslaving science is so much easier. Every single thing I say, every word, is backed by science. So, science speaks through me, and I am his priest delivering my flock to the promised land of nano. Even if what I say is wrong.

Unpacking this personified and deified conceptualisation of the scientific method, we come to see these participants misleadingly positioning themselves as the priestly source of truth, with a 'divinely' inspired right to speak about the universe (Bassett, 2012; Delaney & Hastie, 2007). Importantly, there appeared little need for these pseudoscientist sellers to verify their claims, beyond appealing to the quasi-supernatural authority of science, and occasionally pointing at technology to assert the presence of science. Perhaps this is the crux of the matter, that our participants realised that pure faith-based selling can expose buyers to doubt (Brown, 2009; Gunton, 2010) particularly when there is only the word of the priest to confirm the presence of God. In comparison, a counterfeit methodological 'God' may create a sense of psychological comfort and certainty amongst buyers (Luhrmann, 2012), enabling preferred metaphysical views of products to flourish.

Discussion and conclusions

How to give sense about high-technology products is an ongoing concern for scientist sellers engaged in B2B sales relationships, as what is said, will either help or hinder the diffusion of innovative products (Krush, Agnihotri, Trainor & Nowlin, 2013). Historically, high-technology relationships have been dyadic and culturally close (Rogers, 2003), enabling technically knowledgeable buyers and sellers to co-construct product sense based on a shared understanding of science (Dean, Ellis & Wells, 2017). Having said this, this study indicates that high-technology sales relationships have partially re-orientated towards cultural distance,

leaving scientist sellers with the challenge of how to give sense to non-scientist buyers, who are much more likely to be confused by technical sales talk (Vydra & Klieving, 2019). Drawing on the author's experiences as a scientist seller (Kottak, 2006) this study embraced heresy and examined the possibility that scientists are not always devoted to secularism, objectivity and materialism (Ecklund, 2010). As such, the question driving this study was: how do pseudoscientist sellers religiously give sense, within culturally distant B2B nanotechnology sales? It seems that for those willing to embrace the religious nature of science, they quickly arrive at the metaphysical shores of scientism, where the natural laws, scientific method and sense of self are all negotiable (Orman, 2016). By attempting to reveal the theological nature of pseudoscientist sellers, this study transgresses against the notion that science and religion are discrete epistemological forms (Coulson, 1966; Plantinga, 2012), at least in how they exist within the commercial scientific mind (Bradley, 2017).

This ethnography started by considering the emergence of culturally distant sales relationships, and what force, secular, supernatural, cultural, or other, led non-scientist buyers to seek magical nanotechnology products. Exploring this issue, and perhaps finding synergy with religion itself, it seems that non-scientists were seduced by popular cultural promises of nanotechnology as a miraculous panacea (Drexler, 2013; Olawoyin, 2018), and gateway to product utopia (Davies, 2011; Kennedy, 2008; Plantinga, 2012). Considering that these pseudoscientist sellers had not expected a paradigm shift within sales, it appeared that they were ill-prepared for the arrival of non-scientist buyers. This was most obvious from their failure to prime the market (Jones, Suoranta & Rowley, 2013), and ongoing use of inappropriate technical language and concepts, which only confused technically illiterate buyers (Michel, Naude, Salle & Valla, 2003). While this mismatch of product sense appeared to reduce initial potential sales (Rogers, 2003), the participants did not capitulate in front of uncertainty (Henneberg, Naude & Mouzas, 2010,

p.355), but confronted the unknown, in order to make sense of it (Daft & Weick, 1984). Thus, and exploring non-scientist buyer desires, the participants came to see that materialist communications can easily break the spell of nanotechnology, leaving the mundane in their wake (Belk, Ger & Askegaard, 2003), and eroding any notion of the scientist as a quasi-magical identity.

Overviewing these culturally distant relationships, it seemed that the participants had a choice of continuing with the debased discursive currency of scientific sales talk or attempting to meet their new buyer expectations of science as a semi-magical and religious endeavour. Choosing the latter in the form of scientism might seem curious when we note that scientism tends to be a condemned act within scientific arenas (Peterson, 2003). However, and away from the gaze of other scientists, scientism enabled the development of a new scientific culture (Lessl, 1996), facilitating the sale of poorly understood products, and leading pseudoscientist sellers to cleanse themselves of their commercial sins through a form of professional religious renewal (Prelli, 1989). Yet, for scientism to flourish in culturally distant sales, required the participants to reject their former conceptualisations of the scientist as an empiric automaton, committed to objectivist interpretations of the cosmos (Fausto-Sterling, 1992; Flower, 1995; Heilbron, 2003).

Even though all participants argued that they were partially constrained by non-scientist buyer expectations of the scientist as a quasi-magical being, it seemed that they maintained agency in their identity work, duplicitously drawing on scientism to position themselves akin to scientist priests (Harris, 2017; Jackelén, 2008) capable of using technological sorcery (Haynes, 1994; Schummer, 2006). While clearly a breach of the supposedly secular-materialist foundations of the natural sciences (Plantinga, 2012), scientism is a vehicle for cultural Christians (Moffat & Yoo, 2019) to develop a semi-scientific religion not for society (Lessl, 1996), but for high-

technology sales. Within this false theocracy, pseudoscientist sellers are avid metaphysical bricoleurs, combining religious and pseudoscientific themes, to position themselves as the ultimate arbiters of truth (Bassett, 2012; Delaney & Hastie, 2007), supposedly mandated (Kant, 1960) by the metaphorical 'God' Science. Yet, mixing science and religion was a culturally Christian affair, repeatedly demonstrated through rich Christian imagery from popular culture and the Bible. This certainly raises the question about whether the findings in this study are applicable elsewhere to other religions? While difficult to answer, it seems unlikely, as the relationship between the natural sciences and Christianity is relatively unique due to their long histories of co-creating each other (Coulson, 1966). Perhaps there is a simpler answer though, in that being cultural Christians, this sample had a mental repository well-suited to scaffolding sense- and self to fabricate this novel priestly identity (Jackelén, 2008). Within itself though, we might wonder why the scientist priest arose now? And why in this organisational context? While there has been speculation about scientists acting as priests in general (Harris, 2017), it is clear that there is an increasing flow of scientists into non-traditional laboratory roles (Milojević, Raddicchi & Walsh, 2018), and accompanying organisational uncertainty requiring intense sense- and self-making (Dean, Ellis & Wells, 2017).

Irrespective of the longer-term challenges of scientism, tactically, it simplifies products, allowing pseudoscientist sellers to religiously dominate fraught relationships, through creation myths, promises of salvation, and utopian/dystopian futures (Davies, 2011; Kennedy, 2008). As such, faith in the unchallengeable scientist priest, and nanotechnology as the provider of product miracles (Drexler, 2013; Olawoyin, 2018) become the sensegiving route to converting non-scientist buyers into the one true faith of this false science. Perhaps the metaphysical strength of the scientist priest is in being able to erroneously invoke the scientific method to validate any comment made, independent of the soundness of the claim (Williams, 2013).

Problematically though, we are left to ponder on the longevity of this fake identity (Hewlin, 2003) and phoney religious sensegiving practices.

Finally, we should remember that science and religion have existed in a state of contested oscillation for the past few hundred years, with scientists and priests frequently arguing about who can ultimately speak about the cosmos (Coulson, 1966). Thus, and while it is fair to say that traditional Western religions are losing power over the collective mind (Brown, 2019), it is also worth noting that we are slipping back into a state of religious enchantment (Partridge, 2005), as individuals seek to better understand themselves through hybridising science and religion (Dean, Ellis & Wells, 2017). In this way, the plausibility of a religious form of science may well satisfy the ongoing human need for the mundane and magical (Berger, 1999), providing that other scientists do not expose this sacrilegious act (Peterson, 2003). When we consider that traditional religions are increasingly being reimagined to create new knowledge, perhaps we should not be surprised that science may also be reworked by individuals looking for an 'unchallengeable' methodology to validate sense and self. Stepping beyond this study, we should reflect more broadly on how scientism can easily be sold as science, driving fake news and empowering political agendas within times of great uncertainty and upheaval (Scheufele & Krause, 2019). As such, it is vital that ongoing consideration is made of how science may function as religion to induce belief in baseless statements that are more science fiction than fact.

Further research

As this study continued, it became increasingly apparent that the participants were acclimatising to being part of an ethnography and had developed an interest in better understanding their sales roles. In turn, the author was invited to continue this work, focusing on how non-scientist buyers

make sense of culturally distant high technology sales. The first area to be examined therefore, will be the theological journey undertaken by non-scientists, elucidating how they make sense of themselves and products, in relation to pseudoscientist seller religious sensegiving. Reflecting on the literature, and the author's experiences, it is well understood that weaker organisational members tend to be highly susceptible to religious discourses wielded by more powerful actors (Bochner & Ellis, 1995; Herrmann, 2015). Yet, and having said this, it must not be assumed that sense flows only in one direction, as even when relationship power is skewed, there tends to be a reciprocal interplay between sellers and buyers, influencing how both parties make sense (Purchase et al., 2018). This certainly appeared to be the case in this study, where perceived motivations for purchasing nanotechnology seemed to guide and constrain what religious sense pseudoscientist sellers could give. As such, further work will attempt to unpack this issue, and what role, if any, non-scientist buyers play in the development of coherent culturally distant religious sales doctrines.

The second area of examination will be to understand the longer-term consequences and sustainability of selling via religious pseudoscience. Conceivably, this may well depend on what exactly non-scientist buyers want from 'magical' nanotechnology products (Drexler, 2013). For example, is nanotechnology supposed to provide specific product functionalities? Or just the impression that it might? While it seems that non-scientists may well lack the schematic and discursive resources to meaningfully discuss nanotechnology (Davies, 2011; Kennedy, 2008), it is entirely possible that they are seeking products which transcend materiality. As such, further work will examine how non-scientist buyers view science, nanotechnology, and whether they are enmeshed within magical thinking, where purchasing is undertaken to achieve product reveries (Sierra, Hyman & Turri, 2018).

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