

Changing chiropractic's subluxation

rhetoric: Moving on from 'deniers', 'vitalists', and 'unorthodox', to realists, post-realists, and absurdists.

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Abstract: Chiropractic rhetoric must advance beyond vitalists attacking subluxation deniers, and deniers holding firm to eminence over evidence. I am calling for clear and strong debate in which the issues and their evidence are examined in the manner of traditional philosophical debate.

The purpose of this paper is to present two behaviours that will each change the profession and discipline's narrative about subluxation, scilicet: (i) that an active, intellectual discussion occur and (ii) that it be published in any author's preferred journal of record, indexed by the Chiropractic Library Collaboration with terms that will connect the papers, and be open access for all.

To facilitate this change I present a palette of three terms with exposition to show how we can build our rhetoric into constructive argument from either a realist, a post-realist, or an absurdist view-point.

For the reason the post-realist and absurdist's positions are opinion, have not been thought-through, and show no appreciation of the paradox that they have no evidence at all supportive of that opinion, they should cease gaslighting the realists and anyone who opposes their position.

Chiropractic realism is the conventional position of the majority of the profession and of the discipline. The realists quite rightly demand to see and discuss the evidence, if any, held by the post-realists for their position.

Indexing Terms: Chiropractic; subluxation; realism; post-realism; absurdism; orthodox; rhetoric

Introduction

A t times the chiropractic narrative gravitates into argument (1) over DD Palmer's founding principles and tenets. I state my position as being one who continues to work to understand the meanings established by Palmer on his founding of the profession and this means I accept but continue to question and examine his essential idea that small dysfunctions in the spine have an association with health and well-being.

... is chiropractic practice an expression of discipline realism, while condemnation of it is a characteristic of a post-realist profession?'



1. Mirtz TA. The question of theology for chiropractic: a theological study of the chiropractic prime tenets. J Chiropr Humanit. 2001;10(1),1-33.

However my position seems at odds with some who openly or covertly deny the existence of the clinical entity called subluxation, (2, 3, 4, 5, 6) no matter how entrenched it is in the medical literature from the time of Imhotep, (7, 8) and indeed I am even unsupportive of those who vigorously argue a greater role for subluxation in the care of the health of humankind than perhaps the idea can carry. (9, 10)

The ignoring of evidence

The common denominator of both extremes of chiropractic rhetoric is use of speculation in the absence of evidence. Those who make claims about values associated with the correction of subluxation seem in my view at times to exceed reason, about which I am conservative. They happily accord great benefit to ideas like salutogenesis, a term emerging in the field of health promotion (11) and yet to be addressed in the chiropractic literature with any sense beyond the work of Kent, (12) and like genomics, similarly a term not well addressed in the literature of the discipline yet already proposed to become part of the curriculum. (13)

On the other hand those who take positions such as that of the *General Chiropractic Council* (GCC) of the UK, scilicet 'programmes promoting and teaching unorthodox explanatory frameworks, such as life force, innate intelligence, vitalism and a belief that manipulating the spine to remove restrictions or 'chiropractic subluxations' can restore health more broadly, will not meet these Education Standards', (14) are also taking a position without evidence, and are impacting the chiropractic educational curriculum.

To me as a somewhat experienced chiropractic educator currently implementing their tenth curriculum in their 6th institution neither extreme is advancing acceptable argument for their positions, indeed the GCC statement can be seen as a caricature of evidence-informed behaviours; my point being that the proposed GCC standards have no relevance nor validity outside the rather parochial environment of the several programs in the United Kingdom. Assertion to the contrary will not make it so, nor would adoption of these standards by the WFC should they at all be considered

^{2.} Keating JC, Jr., Charlton KH, Grod JP, et al. Subluxation: dogma or science? Chiropr Osteopat. 2005;13:17.

^{3.} Charlton KH. Essay: Data and dogma: The use and abuse of information. J Aust Chiropr Assoc. 1987;17(2):46-8.

^{4.} Marcon AR, Murdoch B & Caulfield T. The "subluxation" issue: an analysis of chiropractic clinic websites. Arch Physiother. 2019;9,11. URL https://archivesphysiotherapy.biomedcentral.com/articles/10.1186/s40945-019-0064-5.

Villanueva-Russell Y. Caught in the crosshairs: Identity and cultural authority within chiropractic. Soc Sci Med. 2011;72(11):1826-37. URL https://www.sciencedirect.com/science/article/abs/pii/S0277953611002127?via%3Dihub.

^{6.} Ernst E. Chiropractic: A Critical Evaluation. [Review]. J Pain Sympt Mgmnt. 2008;35(5):544-63. DOI 10.1016/j.jpainsymman.2007.07.004.

Ebrall P, Bovine G. A history of the idea of subluxation: A review of the medical literature to the 20th Century. J Contemp Chiropr. 2022;5:150-69. URL https://journal.parker.edu/index.php/jcc/article/download/219/106.

^{8.} Ebrall PS. DD Palmer and the Egyptian Connection: A short report. Asia-Pac Chiropr J. 2020;1:011 URL https://www.apcj.net/ebrall-egyptian-palmer-and-subluxation/.

^{9.} Williams SE. Objective scientific research confirms the validity of the subluxation. Todays Chiropr. 1996 Jul-Aug;25(4):12-14+.

^{10.} McCoy M. Who will speak for the children? [Editorial]. J Pediatr Matern & Fam Health - Chiropr. 2009 Winter;2009(1). URL https:// www.vertebralsubluxationresearch.com/2009/01/21/who-will-speak-for-the-children/.

^{11.} Mittelmark MB, Bull T. The salutogenic model of health in health promotion research. Global Health Promotion. 2013;20(2):30-38. doi:10.1177/1757975913486684.

Kent C. Chiropractic and mental health: History and review of putative neurobiological mechanisms. J Philos Princ Pract Chiropr. 2018 Aug. URL https://www.vertebralsubluxationresearch.com/2018/08/29/chiropractic-and-mental-health-history-and-review-of-putativeneurobiological-mechanisms/.

Burnham KD, Takaki LAK. Making a case for genomics in chiropractic education. J Chiropr Educ. 2022 Mar 1;36(1):37-42. DOI 10.7899/ JCE-20-17. PMID: 34170312; PMCID: PMC8895837. URL https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8895837/.

^{14.} GCC Education standards consultation draft. General Chiropractic Council. July 2022:6. URL https://www.gcc-uk.org/gcc-news/news/entry/education-standards-public-consultation-launched.

for its WHO Benchmark project. (15) I strongly recommend against this should it be the WFC's plan on the basis the WFC is representative of many countries at levels of professional development in chiropractic that are different to that of the UK for which the GCC speaks.

However I do have a concern with this unlikely outcome of the WFC's Benchmark of training standards for the WHO and it is based on the WFC's endorsement of support for a nebulous group called *International Chiropractic Education Alliance* (ICEA). (16) I call this group nebulous as it bears a striking resemblance to the *International Chiropractic Education Collaboration* (ICEC), (17) seemingly based at *Southern Denmark University* (SDU) (17) and also at the *Canadian Memorial Chiropractic College* (CMCC). (18) Their position follows the outgoing WFC President's position that it was '*time to call out substandard training*'. (19) The ICEC position statement is overt in its rejection of subluxation as an inclusion in contemporary curricular:

'The teaching of vertebral subluxation complex as a vitalistic construct that claims that it is the cause of disease is unsupported by evidence. Its inclusion in a modern chiropractic curriculum in anything other than an historical context is therefore inappropriate and unnecessary'. (16, 17)

These words are a direct extraction from the flawed GCC position statement of 2010, (20, 21) yet there are some who find them attractive.

Wickes, President of CMCC is on the record as describing 'anyone practicing in a subluxation, vitalistic model as "the gangrenous arm of the profession that needs to be cut off". (22) These are brave words spoken from an absurdist position given the heavy reliance of CMCC on its alumni for funding. (23) Here I define 'absurdism' after Koltun's examination (24) of Camus. (25) Here Camus defines the absurd as the 'divorce between the mind that desires and the world that disappoints.' In the context of my arguments in this paper, absurdism is the view of chiropractic that is disappointed by the reality of the world of chiropractic. For example, the mind of Wickes may very well desire that subluxation did not exist, however the realism is that it does, in many forms expressing conventional chiropractic and as clinical case reports.

- 18. The International Chiropractic Education Collaboration. Clinical and Professional Chiropractic Education: a Position Statement. URL https://www.cmcc.ca/documents/international-chiropractic-education-collaboration-position-statement.pdf.
- 19. Ayres C. Time to call out substandard training. [President's Message]. Quarterly World Report. WFC. April 2022. p. 3. URL https://issuu.com/wfcqwr/docs/qwr2022b.

- 21. Ebrall PS. Antagonists, Protagonists, and the General Chiropractic Council: A Pragmatic Narrative of Eminence-Based Chiropractic, J. Philosophy, Principles & Practice of Chiropractic. 2020;July 27: Pages 37-48.
- 22. President of Canadian Memorial Calls Subluxation Chiropractors the "Gangrenous Arm" of the Chiropractic Profession. [News]. The Chronicle of Chiropractic. 13 November 2018. URL http://chiropractic.prosepoint.net/160489.

- 24. Koltun K. Rick, Morty, and Absurdism: The Millennial Allure of Dark Humor. Digital Commons @ Cal Poly. URL https:// digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1154&context=forum.
- 25. Albert Camus, The Myth of Sisyphus, and Other Essays ,Translated by Justin O'Brien, New York: Vintage Books, 1991, Translation originally published by Alfred A. Knopf, 1955, published in France as Le Mythe de Sisyphe by Librairie Gallimard (1942): 17.

World Federation of Chiropractic (WFC) Works Towards WHO Benchmarking Project Renewal [Interview, R Brown]. The American Chiropractor. 1 August 2022. URL https://theamericanchiropractor.com/article/2022/08/01/world-federation-of-chiropractic-wfc-workstowards-who-benchmarking-project-renewal.

^{16.} WFC unveils plans for International Chiropractic Education Alliance. [News]. Quarterly World Report. 2022. p. 22. URL https://issuu.com/ wfcqwr/docs/qwr2022c.

^{17.} About the ICEC. Accessed 11 November 2022. URL https://www.sdu.dk/en/om_sdu/institutter_centre/iob_idraet_og_biomekanik/ uddannelse/icec/about-the-international-chiropractic-education-collaboration.

^{20.} Kent C. An analysis of the General Chiropractic Council's policy on claims made for the vertebral subluxation complex. J Philos Princ Pract Chiropr. 2011 Spring;2011(2). URL https://www.vertebralsubluxationresearch.com/2011/09/11/an-analysis-of-the-general-chiropractic-councils-policy-on-claims-made-for-the-vertebral-subluxation-complex/.

^{23.} Alumni. Canadian Memorial Chiropractic College. Home. URL https://www.cmcc.ca/support/index.

It concerns me that the WFC holds a Presidential position to 'call out substandard training' (19) while now endorsing (16) what seems to be the same group (18) that echoes the GCC position of 2010 (20) and as currently stated (14) that subluxation should not be taught, a substandard position, at the same time it launches a project to 'Benchmark' education and training standards. (15) The leap for the WFC to consider as 'substandard' any program not meeting the position of the GCC and the ICEC would be significant cognitive dissonance.

Yet my concern might not matter given the mixed beliefs of Canadian chiropractors (26) and knowing that the '*Chiropractic program attended is a significant predictor of orthodox vs unorthodox faction membership and professional practice characteristics for Canadian DCs.*' (27) I regret the use of an evidential statement which appears to validate the use of terms I object to, namely '*orthodox*' and '*unorthodox*'. The remainder of this paper examines these situations.

Testing my arguments

Open peer-review

I offer a peer-reviewed opposition to those intent on removing the idea of subluxation from the evidence-based chiropractic education curriculum. I do so in this paper which represents a new application of the peer-review process.

An online community called '*Qeios*' (28, Our Manifesto) has emerged with the manifesto to be 'committed to Open Science and transparency. The principle we operate is that rather than censoring scientific discourse using an unreliable pre-publication peer review system, we promote post-publication open evaluation and discussion.' This paper was placed on that site and received a number of critical reviews, each being open (not blinded).

As the writer I found this a positive process of peer-review and at this point I express my appreciation to the *Qeios* reviewers and this version of the paper is a result of their input. I may not fully resolve their concerns but I submit this is a much stronger paper because of this process. *Qeios* may be of use to those who join in the call of this paper for much greater debate in the chiropractic literature of contemporary issues, however as a pre-print service it may not be the best forum for arguments back and forth.

However before proceeding to give my lexicon there are two issues raised by the reviewers that deserve addressing. The first is straightforward and was thought to be an antagonism by me against the WFC. I must clearly state this is not the case and have re-written parts of this manuscript where that impression may have been taken as an interpretation.

For the record I broadly support the WFC as a representative association of which my own professional association is an active member. In fact, it was my Australian association which played a large part in establishing the WFC in Sydney in 1998. (29) As a Life Member of the *Australian Chiropractors Association* (ACA) I appreciate their, and thus my, support of the WFC. This stance does not render the WFC immune from critical observation and I trust that in those places where I am critical my evidence will speak for itself.

Biggs L, Mierau D, Hay D. Canadian chiropractors' attitudes towards chiropractic philosophy and scope of practice: implications for the implementation of clinical practice guidelines. J Can Chiropr Assoc. 1997;41(3):145-54. URL http://www.ncbi.nlm.nih.gov/pmc/articles/ PMC2485157/.

Puhl AA, Reinhart CJ, Doan JB, et al. Relationship between chiropractic teaching institutions and practice characteristics among Canadian doctors of chiropractic: A random sample survey. J Manipulative Physiol Ther. 2014;37(9):709-18. URL http://www.ncbi.nlm.nih.gov/ pubmed/25439035.

^{28.} Our manifesto. Qeios. At 11 November 2022. URL https://www.qeios.com/about.

^{29.} WFC History. URL https://www.wfc.org/website/index.php?option=com_content&view=article&id=89&lang=en.

The second point raised by two reviewers was regrettably dismissive of this manuscript as merely *'opinion'*. I reject this assertion on the basis that I am writing as a philosopher and following the rules and commonly understood principles of philosophy that ground this writing in reality.

I reinforce this grounding with generously cited evidence available to all readers. However it is dubious whether there is such a thing as an isolated philosophical position. (30) The essence of philosophy lies in navigating context, and outside of a framework of interpretation some hold that any given philosophical position to the degree it retains any meaning at all is really just an opinion. However '*argument*' which I offer relies on facts or statements to support a proposition while an '*opinion*' is a belief that a person has formed about an issue.

It may surprise some that I hold no beliefs about the issues I am arguing in this paper. I would like to think I present argument supported by evidence rather than any imagined belief, and in this sense I reject the view that I am expressing my opinion.

An example of opinion is found in one reviewer relying heavily on Homola, a retired chiropractor who publishes frequently in on-line fora (31, 32) and rarely in the peer-reviewed indexed literature of chiropractic. In that reviewer's opinion, Homola is a noted author while the evidence suggests he too is only offering opinion.

These points should be remembered when we read future criticisms by others of my argument including their critical comment.

Lexicon and context

All discourse requires a lexicon and here I provide the context of my current writing and give my lexicon in Box 1.

The explicit context of this paper is that contemporary chiropractic discourse, which no matter how intuitively compelling its truth claims, is a form of rhetoric; a discourse used both to account for and to influence political decisions that impact the chiropractic profession. I contend that this discourse must become more vigorous, relevant, critical, and open.

Three terms from the broad field of philosophy and not yet used within chiropractic form the basis of my contention. My first term is '*realism*' and from it the people who communicate with a narrative of realism whom I will call '*realists*'. I consider conventional chiropractors (33) to be realists.

For those whose rhetoric is concessional where matters narrated by the realists are relinquished I will use the term '*post-realism*' with its speakers being the '*post-realists*' across the discipline. Here lies a fascinating distinction which must be made and which I address in Box 1. The distinction is between the '*profession*' of chiropractic, being that collection of people which hangs on to the discipline without necessarily being trained to practice the discipline, and the actual '*discipline*' of chiropractic consisting of people with training from an accredited institution to be considered appropriate to be licensed/registered and to practice chiropractic. The gulf will become apparent.

Another term I draw from the lexicon of philosophy is '*absurdism*', practiced by the '*absurdists*'. I hope to show that some post-realists reveal themselves to be absurdists, as do a few realists. I have earlier given my derivation and meaning of absurdism.

^{30.} What is the difference between an opinion and a philosophical opinion? [Closed]. Philosophy. URL https://philosophy.stackexchange.com/ questions/26492/what-is-the-difference-between-an-opinion-and-a-philosophical-opinion.

^{31.} Science-based medicine. Entries by Homola. Accessed 11 November 2022. URL https://sciencebasedmedicine.org/author/sam-homola/.

^{32.} Chirobase. Your Skeptical Guide to Chiropractic History, Theories, and Practices. Entries by Homola. Accessed 11 November 2022. URL https://quackwatch.org/authors/samuel-homola-dc/.

Ebrall P. The conventional identity of chiropractic and its negative skew. J Contemp Chiropr. 2020;3(1):111-26. URL https:// journal.parker.edu/index.php/jcc/article/view/133.

Term	Meaning and derivation
orthodox	Appears to have originated in McGregor's thesis of 2006 (37) attributed to a cohort of American medical orthopaedic practitioners who viewed chiropractic practice aligned their medical thinking as 'orthodox'. Used now by a few to describe the form of chiro which rejects the idea of subluxation. I consider this a flawed position.
unorthodox	Deriving from McGregor's flawed definition of orthodox and applied without critical questioning by some writers to describe chiropractors (and students) who recognise for subluxation in chiropractic.
conventional	A term generated by my research into the schools of thought in the discipline and profession of chiropractic to describe chiropractors who practice in the conventional described by the founder of the discipline and profession. See #33.
concessional	A term generated by my research into the schools of thought in the discipline and profession of chiropractic to describe chiropractors who relinquish conventional idea as that of subluxation, from their practice to take a concessional position less than the conventional ideas of chiropractic. See #33.
realism	A term drawn from the canon of philosophy where a scientific realist places greater importance on giving meaning, by way of a story, to the data. The story must have su credence drawn from observed evidence to be accepted as true. Synonymous in ma with 'conventional'.
post-realism	A term drawn from the canon of philosophy where a scientific post-realist holds that can only come from their data, ultimately expressed as 'Evidence-Based Practice' in ideas associated as realism with conventional chiropractic are progressively relinquis
absurdism	An end position when either a realist or a post-realist has removed or added ideas the not credible and reaches a point of little semblance to realism as practiced by conver chiropractors. Camus defines the absurd as the 'divorce between the mind that desire the world that disappoints.' See #24, 25.
subluxation	See #7, 8, 34, 35. In these papers I clarify that I do not see subluxation as a thing, real not, but as an <i>idea</i> embraced by realists to carry their clinical findings derived from notservations which in turn guides their therapeutic intervention. I give the pre-Palme medical history of the idea. The flaw of the post-realists is their removal of any theraptarget beyond spinal stiffness.
discipline	Chiropractic as the practice of trained chiropractors.
profession	Chiropractic as the collection of trained chiropractors plus others through some asso- who are not trained as chiropractors, including staff of clinics and associations.

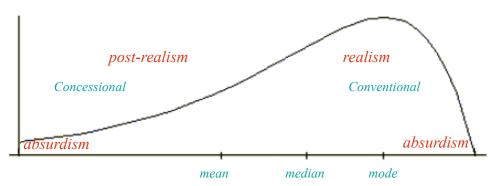
Other terms which will be used and which I have previously defined and explained in my papers include '*conventional chiropractic*', (33) '*perspectival truth*', (34) and '*subluxation*' as it appears as an idea of a small sprain about the spine. (7, 8, 35)

Next in Figure 1 I show a relationship among some of my terms. This diagram is drawn from my previously published research (33) which found the bulk of the profession to carry a conventional identity. These represent ~80% of the discipline, gathered about the mode with a negatively skewed left tail fading to statistical insignificance as '*concessional*' narrators.

^{34.} Ebrall P. The perspective-dependent knowledge claim as an explanation of chiropractic's subluxation conundrum. J Contemp Chiropr. 2021;4:52-65. URL https://journal.parker.edu/index.php/jcc/article/download/157/70.

^{35.} Ebrall P. Determining a universal meaning of subluxation in chiropractic. J Contemp Chiropr. 2022;5:222-39. URL https://journal.parker.edu/index.php/jcc/article/download/236/120.

Fig 1: Predictive left-skewed distribution of chiropractic identity as previously published (33)



The final preparatory point to make is that within these pages I will offer the names of published writers across the profession, bearing in mind my distinction between one who claims to belong in the *profession* of chiropractic and one who proclaims to practice, legally, the *clinical discipline* of chiropractic.

The basis of debate in chiropractic

Chiropractic debate using philosophical tools is only able to proceed on the basis of free and open discussion about one's ideas and those of others. Thus my mention of a name is not to be seen in any way as *ad hominem*, rather it is me showing my regard for those I mention and their arguments and positions. Each of course is equally expected to name me and either debase or enhance my arguments. This is something I welcome and perhaps it encompasses my wish for intellectual debate to become rampant within both the discipline and the profession of chiropractic.

There are a couple of instances where debate has been initiated but not really taken further. One example is from Mirtz who writes as a post-realist. His '*A treatise for a new philosophy of chiropractic medicine*' (36) has been well read (4,960 accesses at 13 November 2022) and the metrics (37) show it was tweeted 9 times, appeared on 3 *Facebook* pages and 1 from *Reddit*, and has 18 citations in *Mendeley*. My question is, why did this paper not draw a more considered debate in the open access chiropractic literature? Is it the journal in which it appeared? Is it a mental block against Mirtz's antisubluxation rhetoric? (38) An example of which is:

'Regardless of popular appeal this leaves the subluxation construct in the realm of unsupported speculation. This lack of supportive evidence suggests the subluxation construct has no valid clinical applicability.' (38, p. 6)

Or is it that chiropractors now consider *Twitter* a form of intellectual discourse? Or perhaps most chiropractors don't have time to reflect and write, which may be the case but one which does not exclude chiropractic academics whose responsibilities, rarely met, include scholarly writing.

Correcting the notion of orthodoxy

At this point I examine the sudden appearance of the term '*orthodox*' in the stream of rhetoric. It attempts to identify those who reject subluxation as being the '*orthodox*' part of the discipline. Puhl introduced this term in his paper (27) co-authored with McGregor and in turn it seems the idea to

Mirtz TA. A treatise for a new philosophy of chiropractic medicine. Chiropr & Manual Ther. 2017;25(7). URL https:// chiromt.biomedcentral.com/articles/10.1186/s12998-017-0138-y.

^{37.} Mirtz TA. A treatise for a new philosophy of chiropractic medicine. [Metrics]. Chiropr & Manual Ther. 2017;25(7)URL https://chiromt.biomedcentral.com/articles/10.1186/s12998-017-0138-y/metrics/.

Mirtz TA. An epidemiological examination of the subluxation construct using Hill's criteria of causation. Chiropr & Osteopat. 2009;17(1). URL http://chiromt.com/content/17/1/13/abstract.

assign orthodoxy to one particular viewpoint arose in McGregor's doctoral thesis. (39) McGregor's cohorts included a sample of medical practitioners as a dominant profession, and of chiropractors as subservient. It seems McGregor, a chiropractor, adopted the medical view that their perspective on chiropractic represented orthodoxy, and thus medically '*approved*' chiropractors were branded as '*orthodox*'; meaning they represented medicine's view of what chiropractic should be.

It is surprising that any well-trained chiropractor would accept this imposition. The downside is the perpetuation of this flawed judgement to trust medicine's view of chiropractors as representing the orthodox benchmark *within* the discipline. Does chiropractic deserve to be categorised in this way by medicine, where those post-realist chiropractors who align with the medical view are considered '*orthodox*' chiropractors? And those with views aligned with the discipline's founding tenets which include subluxation become '*unorthodox*'? This has led to statements such as '*key practice characteristics in contravention of national radiation guidelines or opposition to evidence based public health policy are significantly more associated with non-orthodox chiropractic paradigms*'. (40) To me, this is a overt gaslighting of the conventional, realist understanding of chiropractic, and its introduction by McGregor is now destructive to student confidence when raised to an offensive rhetoric with embellishment by the term '*magical thinking*' by Innes and LeBoeuf-Yde. (41)

The danger of these descriptors lies in these authors' proposal to screen future chiropractic students for '*Magical Health Beliefs*' so that institutions could avoid enrolling such students in their education program. This is an application within the chiropractic discipline of *China's Social Credit Score*, (42) where those with views at odd with the state are punished. In chiropractic's case, those potential students with views at odds with, for example the GCC or ICEC or Wickes' positions would be excluded from buying an education and consequently from the profession.

Innes judges as '*unsuitable*' any belief among chiropractic students that is accepting of subluxation and wellness within chiropractic practice. (43) I suggest this is an elitist attempt to exclude students who hold beliefs different to his which is a far from responsible contribution to the development of the profession and certainly not the apolitical behaviour naively expected of an academic.

I consider the promotors of these dangerous terms to be absurdists and it should not be a surprise that one of the less appropriate papers in recent times, a diatribe about chiropractors needing to divorce each other, (44) arose from this small group. Thankfully a well-grounded realist set the record straight, (45) echoed by me and my realist colleague. (46)

- 43. Innes SI, Leboeuf-Yde C, Walker BF. How frequent are non-evidence-based health care beliefs in chiropractic students and do they vary across the pre-professional educational years. Chiropr Man Therap. 2018;26. URL https://doi.org/10.1186/s12998-018-0178-y
- 44. Leboeuf-Yde C, Innes SI, Young KJ, et al. Chiropractic, one big unhappy family: better together or apart?. Chiropr Man Therap. 2019;27,4. URL https://chiromt.biomedcentral.com/articles/10.1186/s12998-018-0221-z.
- 45. Blum C. Chiropractic: A bigger family than we might think [letter; comment]. Chiropr & Manual Ther. 2019;27(51). URL https://chiromt.biomedcentral.com/articles/10.1186/s12998-019-0272-9.
- 46. Ebrall P. Murakami Y. A Critical analysis of the Reality Distortion of chiropractic among scientists with constructive criticism of the current debate. J. Phil Princ Prac Chirop. 2019; July 11:1-11. https://www.vertebralsubluxationresearch.com/2019/07/10/a-critical-analysis-of-the-reality-distortion-of-chiropractic-among-scientists-with-constructive-criticism-of-the-current-debate/

McGregor, Marion, Jurisdictional Control of Conservative Spine Care: Chiropractic versus Medicine. [Thesis, University of Texas, 2006]. University of Albany Collection. URL https://archives.albany.edu/concern/daos/vx0220302.

^{40.} Gíslason HF, Salminen JK, Sandhauge, L. et al. The shape of chiropractic in Europe: a cross sectional survey of chiropractor's beliefs and practice. Chiropr Man Therap. 2019;27,6. URL https://chiromt.biomedcentral.com/articles/10.1186/s12998-019-0237-z.

^{41.} Innes S, Goncalves G. & Leboeuf-Yde C. Who are the chiropractic students favouring a limitless scope of practice? Exploring the relationship with personality, magical thinking, and academic achievement. Chiropr Man Therap. 2022;30:30. URL https://chiromt.biomedcentral.com/articles/10.1186/s12998-022-00440-6.

^{42.} Hong K. The complicated truth about China's social credit system. [Business]. Wired. 7 June 2019. URL https://www.wired.co.uk/article/ china-social-credit-system-explained. URL https://www.wired.co.uk/article/china-social-credit-system-explained.

Another piece of nonsense from the realists and absurdists was a peculiar report about a global summit that may not have been all that was reported. (47) This too drew a calm but critical response from a realist. (48) At least we see in these two examples the seeds of debate emerging only to seemingly wither. My contention is that the post-realists and absurdists must actively engage with such comments about their flow of rhetoric and begin to defend it with reference to the literature.

While these matters demand ongoing discussion there is sufficient tension within the rhetoric, mostly from the defenders, (49, 50) that is uncomfortable if not regrettable. Rhetoric which brands a putative leader of the profession (not the discipline) as a '*denier*' and '*drug pusher*' does little to advance the intellectual conversation within chiropractic. I contend it is preferable to be dispassionate in our comments, yet as truthful as truth can be when based on published works.

For example my previously published comment (34) regarding the Secretary-General of the WFC states:

'The term "subluxation" ... is absent from the Secretary-General's proposition that "Chiropractic is part of the solution to the world crisis in spine-related disability". In another of Brown's papers, he positions "Spinal Health as the backbone of chiropractic's identity", however, the term "subluxation" appears only 5 times and in an historical, apologetic context.' (32)

In the original publication each statement of mine was supported by citation to Brown's published work as a better form of chiropractic rhetoric that is substantiated by citation of the work which is being commented upon.

From this position arises the specific purpose of this paper regarding the place of subluxation within chiropractic today. I expand my contention to include two things:

- i. that an intellectual discussion must occur, and
- ii. that it be published in any author's preferred journal of record and indexed with terms that will connect the papers with open access to all.

To best achieve this the chiropractic commentariat should use the established terms of philosophy to advance their positions.

The realists

By implicit default the original chiropractic realist was Daniel David Palmer. (51) I can not see an argument against my identification of Palmer as the original chiropractic realist given it was he who not only founded chiropractic but named it, however Mirtz disagrees (1) and presents theological arguments to support his position. (52, 53)

^{47.} Côté P, Hartvigsen J, Axén I, et al. The global summit on the efficacy and effectiveness of spinal manipulative therapy for the prevention and treatment of non-musculoskeletal disorders: a systematic review of the literature. Chiropr Man Therap. 2021;29:8. URL https://chiromt.biomedcentral.com/articles/10.1186/s12998-021-00362-9.

^{48.} Lawrence DJ. Letter to the editor: the global summit on the efficacy and effectiveness of spinal manipulative therapy for the prevention and treatment of non-musculoskeletal disorders: A systematic review of the literature. Chiropr Man Therap. 2021;29:25. URL https://chiromt.biomedcentral.com/articles/10.1186/s12998-021-00378-1.

^{49.} Subluxation Denier & WFC Secretary General Gives Keynote at Cleveland Centennial. News. The Chronicle of Chiropractic. 26 October 2022. URL http://chiropractic.prosepoint.net/179367.

^{50.} WFC Secretary General Richard Brown Appointed Visiting Professor at AECC - Known Subluxation Denier & Chiropractic Drug Pusher. News. The Chronicle of Chiropractic. 26 October 2022. URL http://chiropractic.prosepoint.net/179366.

^{51.} Palmer DD. The chiropractor. Los Angeles: Press of Beacon Light Printing Company. 1914.

^{52.} Mirtz TA. Reviewing the Green Books: BJ Palmer's biblical usage and opinion on Christianity's central figure. Chiropr Hist. 2000;20(2), 37-47.

^{53.} Mirtz TA. Universal Intelligence: a theological entity in conflict with Lutheran theology. J Chiropr Humanit. 1999;9(1), 1-17.

We owe much to McDowall for his rich evidential reporting of Palmer's thinkings, writings, and expressions of understanding (54, 55) and it logically follows that those over time who accepted and enriched Palmer's ideas would also be considered realists. I think of figures like Foster 1915, (56) Firth first in 1919 then revised in 1967, (57) BJ Palmer in detail in 1961, (58) Homewood in 1962, (59) Wardwell in 1992, (60) and Lantz in 1995. (61)

Most notable is Gatterman who examined subluxation's historical perspectives in 2009, (62) argued her understandings as peer-reviewed papers in 1992 (63) and 2009, (64) as a letter in 2009, (65) and in 2 editions of a comprehensive textbook. (66, 67) I must also include my contemporaries Kent (68, 69), Leach, (70, 71) and Rome & Waterhouse. (72) These commentators use real-world terminology to describe what subluxation could be as they understand it and in terms of what they perceive chiropractors do with it. Should I be so bold I would add Schwartz (73) who advanced the role of chiropractic in mental health in 1973, and of course I include those who advanced such notable institutions as the Spear's Hospital, (74, 75, 76) and Kentuckiana. (77, 78)

- 57. Baltzell LG. Firth's Technic Notes, Revised 1967. Self published. 1967.
- 58. Palmer BJ. Our masterpiece. Hamilton: Hamilton Press. 1961.
- 59. Homewood AE. The neurodynamics of the vertebral subluxation 3e. St. Petersburg: Valkyrie. 1977.
- 60. Wardwell WE. Chiropractic, history and Evolution of a new profession. St. Louis: Mosby. 1992.
- 61. Lantz CA. Back to basics. A review of the evolution of chiropractic concepts of subluxation. Top Clin Chiropr. 1995;2(2):1-10.
- 62. Gatterman MI. The subluxation Historical perspectives. Chiropr J Aust. 2009;39(4):151-64.
- 63. Gatterman MI. The vertebral subluxation syndrome: is a rose by another name less thorny? J Can Chiropr Assoc. 1992;36(2):102-4.
- 64. Gatterman MI. Subluxation Historical perspectives: Part 2. Chiropr J Aust. 2009;39:51-64.
- 65. Gatterman MI. Chiropractic in the Twenty-First Century [Letter]. Chiropr J Aust. 2009;39:51-64.
- 66. Gatterman MI. Ed. Principles of Chiropractic: Subluxation. St Louis: Mosby. 1995.
- 67. Gatterman MI. Foundations of chiropractic: Subluxation. 2e. St Louis: Elsevier Mosby. 2005.
- Kent C, McCoy M, Gutierrez V, et al. Open Letter from Council on Chiropractic Education. Foundation for Vertebral Subluxation. 2011. URL http://www.mccoypress.net/subluxation/docs/cce_response_open_letter.pdf.
- 69. Kent C. Proposed neurobiological processes associated with models of vertebral subluxation: Dysafferentation, dyskinesia, dysponesis, dysautonomia, neuroplasticity and ephaptic transmission. Ann Vert Sublux Res. 2019;Aug: 113-116. URL https://vertebralsubluxationresearch.com/2019/08/02/proposed-neurobiological-processes-associated-with-models-of-vertebral-subluxation-dysafferentation-dyskinesia-dysponesis-dysautonomia-neuroplasticity-and-ephaptic-transmission/
- 70. Leach RA. The chiropractic theories. Principles and clinical applications 3e. Baltimore: Williams & Wilkins 1994.
- 71. Leach RA. Doing the same thing and expecting a different outcome: It is time for a questioning philosophy and theory-driven chiropractic research. J Chiropr Humanit. 2019;26:60-74. URL https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6911892/?report=classic.
- 72. Rome PL, Waterhouse JD. Neurodynamics of vertebrogenic somatosensory activation and Autonomic Reflexes a review. [Special collection, 13 papers]. Asia-Pac Chiropr J. 2021:1-4. URL https://www.apcj.net/papers-issue-2-4/.
- 73. Schwarz HS. Mental Health and Chiropractic. New York. Sessions Publishers. 1973.
- 74. Rehm WA. Price of dissension: The private wars of Dr Leo L Spears. 1921-1956. Chiropr Hist. 1995;15(1):27-37.
- 75. Gibbons RW. Prairie Thunder: Dr Leo Spears and his hospital by William S. Rehm. [Book Review]. Chiropr Hist. 2000;20(2):7-9.
- 76. Gibbons RW. The hospital they tried to close: The 35 year saga of a chiropractic dissident. Chiropr Hist. 2001;21(1):25-6.
- 77. Panter J. Kentuckiana: Delivering special care for special needs. Today's Chiropr. 2002;31(5):18022.
- 78. Vallone SA, Barnes TA, Whittman R, et al. Dr. Lorraine M. Golden leading an eloquent life at Kentuckiana Children's Center. Chiropr Hist. 2007;27(2):21-33.

^{54.} McDowall D, Chaseling M, Emmanuel E, et al. Daniel David Palmer, the Father of Chiropractic: His heritage revisited. A story of enlightenment, spiritualism and innovation. Chiropr Hist. 2019;39(1):25-40.

^{55.} McDowall DA. Daniel David Palmer's heritage and his legacy of tone to chiropractic [Thesis]. Southern Cross University. 2021. URL 2021. URL https://doi.org/10.25918/thesis.121

^{56.} Forster A. Principles and practice of spinal adjustment. The National School of Chiropractic; Chicago, IL: 1915. [Google Scholar].

I can not include Senzon's decatuech (79) as these writings are more historical reportage than contemporary interpretative philosophical argument. Senzon has mounted argument based on a comparison of chiropractic to systems science (80) and as with Mirtz, (37) has attempted to construct a philosophy of chiropractic. (81) While Mirtz published his work as open access, Senzon published in a lesser known journal which requires payment of USD\$3000 plus taxes per article for it to be open access. (82) A key element of my call for greater philosophical debate is publication in open-access journals to ensure equity of access globally by both writers and readers.

My view of the calls by Mirtz (37) and Senzon (81) for new philosophies of chiropractic is the same as my view of the call by Walker (83) for there to be a '*new chiropractic*'; namely that calls for new philosophies and for a new version of an established profession speak more to the inability of the speaker to engage in an appropriate manner with the reality of chiropractic as it exists and has existed for 127 or so years, than to any imperative to reconstruct the discipline.

The realist's view of chiropractic is one narrative, but one narrative with many forms reflective of chiropractic's reality across many sociocultural environments. (35) In some instances I consider the realist's canon to resemble more a linguistic bouillabaisse of over-statements and semantics than a consommé of common sense. However there is one unified theme which is consistent in its presence within reports by realists of their clinical practice; in essence and as a rather minimalist summary the rhetoric of realists reduces to 'subluxations occur, affect health and well-being, can be identified and corrected, resulting in positive outcomes'.

Rejection of this idea is modification of clinical reality which is of course post-realism.

The post-realists

Any evolutionary epistemology must recognise that there always exist other knowledge processes. (84) I now provide a context for my use of the term '*post-realism*' in describing the knowledge processes of the nihilistic left-tail of the distribution of thought in chiropractic (Figure 1). (33) To cite from *Quora* '*post-real is what remains when the consensus version of reality is recognised as an illusion and put to one side - where absurdists may say it really belongs. Remove the meanings and purposes for living by which we're expected to make our version of reality accord with everybody else's, and "reality" is no longer real but post-real'.* (85)

On the basis of my logic in naming Palmer as the original realist, I would consider Oakley Smith to be an early if not the first post-realist as he tried to claim Palmer copied chiropractic from others (86) and went on to establish another discipline based on his own ideas. (87, 88)

87. Zarbuck MV. A profession for 'Bohemian Chiropractic': Oakley Smith and the evolution of naprapathy. Chiropr Hist. 1986;6:76-82. URL http://www.ncbi.nlm.nih.gov/pubmed/?term=11621192.

^{79.} Senzon SA. The chiropractic vertebral subluxation. Part 1: Introduction. [Part 1 of 10]. J Chiropr Humanit. 2018,25:10-168. URL https:// www.ncbi.nlm.nih.gov/pmc/articles/PMC6472118/.

Senzon SA. Chiropractic and systems science. J Philos Princ Pract Chiropr. 2015;(1). URL https://www.vertebralsubluxationresearch.com/ 2015/12/24/chiropractic-and-systems-science/

^{81.} Senzon SA. Constructing a philosophy of chiropractic: An Integral map of the territory. [Part 1 of 5]. J Chiropr Humanit. 2010;17(1):6-21. URL https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3342806/pdf/main.pdf.

^{82.} Gold open access publication fee. Journal of Chiropractic Humanities. Fee at 14 November 2022. URL https://www.elsevier.com/journals/ journal-of-chiropractic-humanities/1556-3499/open-access-options.

^{83.} Walker BF. The new chiropractic. Chiropr Man Ther. 2016;26(26):http://chiromt.biomedcentral.com/articles/10.1186/s12998-016-0108-9.

Beer FA, Hariman R. Learning from the Pandemic: Catastrophic Epistemology. Social Epistemology Review and Reply Collective. 2020;9 (5):19-28. URLs https://social-epistemology.com/wp-content/uploads/2020/05/ beer_hariman_learning_from_the_pandemic_serrc_5-8-2020.pdf and https://wp.me/P1Bfg0-4Wa.

^{85.} What does Post-realism mean? Quora. URL https://www.quora.com/What-does-post-realism-mean?share=1

^{86.} Faulkner TJ. The chiropractor's Protégé. American School of Chiropractic. Rock Island IL: Association for the History of Chiropractic. 2017.

^{88.} Beiderman RP. Oakley Smith's schism of 1908: the rise and decline of naprapathy. Chiropr Hist. 1994;14(2):44-50.

The fatal flaw in the rhetoric of chiropractic's post-realists is their rejection of any epistemological processes other than their own narrow world-view (89, 90, 91) published within their own journal. (92) An important motivation seems to be their desire to centralise their perceived authority.

These actors within the chiropractic profession are guided by identities, interests, and values, and by social and cultural practices such as those of the *World Federation of Chiropractic* (WFC) (93) and the *British Chiropractic Association* (BCA), (94) neither of which has any inherent organisational intelligence but acts to claim and assert authority within the global field of chiropractic discourse. (95) The Secretary-General of the WFC is the aforementioned Brown who has also led the BCA, a matter noted by Ernst (96) who evoked Big Pharma as a possible cause for the BCA's antichiropractic rhetoric.

The most harsh expression of post-realism, published or not, is denial that chiropractic's realism of subluxation exists and instead is a relic of history. This is the position of the GCC, (97) closely aligned with the BCA (the term 'subluxation' does not appear on their website (94)) and of which Byfield (98) and Newell (99) are servants and about which I have commented. (21) In particular I note Newell's rhetoric is that '*there is "zero" evidence for subluxation*'. (100)

All post-realists hold that chiropractic's discourse is in error when subluxation is mentioned. It is this view which I hold to be chiropractic's current state of ignorance. I will now present my argument for this claim, starting with a recap of my expressions up until this time.

A short history of my rhetoric

A decade ago I published a little piece called '*What's in a name?*' (101) It was a response to what I saw as the growing post-realist movement in chiropractic fighting for a toe-hold in the field of chiropractic thought. It followed attempts by the emerging post-realists to stamp their ideology on the profession for which the *Mercy Conference* served as a source of '*guidelines*' (102) which were

- 91. Axén I, Bergström C, Bronson M, et al. Misinformation, chiropractic, and the COVID-19 pandemic. Chiropr Man Therap. 2020;28, 65. URL https://doi.org/10.1186/s12998-020-00353-2.
- 92. Chiropractic and Manual Therapies. Home. URL https://chiromt.biomedcentral.com/.
- 93. World Federation of Chiropractic. URL wfc.org.
- 94. British Chiropractic Association. Search of website for 'subluxation'. No returns on 14 November 2022. URL https://chiropractic-uk.co.uk/? s=subluxation.
- 95. Pohlman and Khan Given Positions on WFC Research Committee Seen as Reward for Supporting WFC Position on Immune Function. [News]. The Chronicle of Chiropractic. 21 June 2022. URL http://chiropractic.prosepoint.net/178670.
- 96. Ernst E. Is the BCA a cover organisation of BIG PHARMA for giving chiropractic a bad name? Edzard Ernst. 17 April 2017. URL https:// edzardernst.com/2017/04/is-the-bca-a-cover-organisation-of-big-pharma-for-giving-chiropractic-a-bad-name/.
- 97. General Chiropractic Council (GCC). Home. URL https://www.gcc-uk.org/.
- 98. David Byfield BSc (Hons), DC, MPhil, FCC, FBCA, FFEAC. [Profile]. WFC. October 2022. URL https://www.wfc.org/website/index.php? option=com_content&view=article&id=377&lang=en.
- 99. Professor Dave Newell. AECC University College. October 2022. URL https://www.aecc.ac.uk/about/who-we-are/academic-staff/davenewell/.
- 100. AECC Lecturer David Newell States There is "Zero" Evidence for Subluxation. [News]. The Chronicle of Chiropractic./ 29 March 2017. URL http://chiropractic.prosepoint.net/147665.

102. Guidelines for Chiropractic Quality Assurance and Practice Parameters. Report of the Mercy Conference. Aspen Publishers. 1993.

Côté P, Bussières A, Cassidy JD, et al. A united statement of the global chiropractic research community against the pseudoscientific claim that chiropractic care boosts immunity. Chiropr & Manual Therap. 2020;28(21):1-5. URL https://chiromt.biomedcentral.com/articles/ 10.1186/s12998-020-00312-x.

^{90.} Hartvigsen J, French SD. So, what is chiropractic? Summary and reflections on a series of papers in Chiropractic and Manual Therapies. Chiropr & Manual Therap. 2020;28(4). URL https://chiromt.biomedcentral.com/articles/10.1186/s12998-019-0295-2.

^{101.} Ebrall PS. Commentary: Subluxation: Whats in a Name? Chiropr J Aust. 2011;41(3):110-2.

promptly rejected by the realists. (103) Globally, the realists align more closely with the somewhat inactive *World Chiropractic Alliance* (WCA) (104) than the WFC.

More recently I reported two historical papers (7, 8) documenting a history of the idea of subluxation. These show that the idea of subluxation is neither '*dated*' not '*putative*' as held by Newell (105) but '*timeless*'; a very distinct difference. I have recently also provided a universal meaning of subluxation (35) drawn on this timeless characteristic which I found to be deeply cross-cultural.

In contrast Newell does not yet seem to have to provided evidence for his position on subluxation, a concept of which he is a vocal critic yet a concept in which he is untrained as he is not an educated, licensed chiropractor.

My underlying contention is straightforward: the post realists either have evidence for their claim that subluxation is solely of interest as a historical artefact in which case they must produce their evidence that subluxation can not exist today, or they do not and can not which I suspect was the case in 2010. (21)

Where realists, post-realists, and absurdists clash

Those who have rejected part, most, or all of Palmer's founding ideas and knowledge would constitute the post-realists in chiropractic, an early movement which led to therapists of assorted persuasions self-proclaiming as chiropractors without bothering about any education in chiropractic. I have analysed and reported this in depth using Australia as my example. (106, 107, 108)

Realists today speak the dialect of conventional chiropractors. By and large their training as chiropractors allows an understanding of the complexity of subluxation as a clinical entity expressed as a rhetoric which deconstructs this complexity into a language understandable within the patient's context.

Post-realists reject the conventional chiropractic rhetoric and in particular, the idea and concept of subluxation.

Absurdists are insidious in their gas-lighting of the profession. Some are not qualified to comment on chiropractic as the discipline.

^{103.} The Guidelines for Chiropractic Quality Assurance and Practice Parameters (Mercy Guidelines) [Commentary]. World Chiropractic Alliance. Accessed October 2022. URL https://worldchiropracticalliance.org/mission-of-the-world-chiropractic-alliance/position-paper/theguidelines-for-chiropractic-quality-assurance-and-practice-parameters-mercy-guidelines/. The updated 2013 guidelines are at https://ccpguidelines.org/wp-content/uploads/2019/11/guideline-2013.pdf

^{104.} World Chiropractic Alliance. Accessed 13 November 2022. URL https://worldchiropracticalliance.org/.

^{105.} Newell D, Lothe LR, & Raven TJL. Contextually Aided Recovery (CARe): a scientific theory for innate healing. Chiropr Man Therap. 2017;6. URL. https://doi.org/10.1186/s12998-017-0137-z.

^{106.} Ebrall PS. Finding the professional identity of chiropractic in Australasia: A pragmatic narrative of the Formative Period to 1960. Chiropr Hist. 2020:40(1):49-71.

^{107.} Ebrall P. Finding the professional identity of chiropractic in Australasia that shaped education: A pragmatic narrative of the Inquiry Period from 1960 to 1979. Asia-Pac Chiropr J. 2022;3.1. URL apcj.net/papers-issue-3-1/#InquiryPeriod.

^{108.} Ebrall P. The establishment of the International College of Chiropractic (ICC) Melbourne. Asia-Pac Chiropr J. 2022;3.2. URL apcj.net/ Papers-Issue-3-2/#ICC

Education as the killing field

Palmer established his first college in Davenport about 1897, (109, 110) however started teaching his methods in 1896 (111) as the *School of Magnetic Cure*. The *American School of Chiropractic* was founded in Cedar Rapids, nearby Davenport, in 1904 by Oakley Smith, (112) joined by Minora Paxson and Solon Langworthy. In 1906 Howard established a college in Davenport which relocated to Chicago 2 years later. (113). Each of these institutions had different ideas about Palmer's so-called *'subluxation'*. Smith and Howard were post-realists in that they modified Palmer's ideas by adding their own.

It was not until the 1940s (or from 1935 after Napolitano and Gruber (114))that education standards became an issue of significance based on the differing views of the two prominent professional associations. Nugent (115) represented the *National Chiropractic Association* (NCA) (116) which held opinions about education that differed to those of BJ Palmer who established the *International Chiropractors Association* (ICA). (117) There seems little option but to also classify Nugent, the education reformist (118, 119) as a post-realist, perhaps due to his personal grievance against BJ Palmer. (120, 121) Nugent certainly did not justify his radical curriculum changes with evidence, just politics.

Not a lot has changed as 80 or so years later we now have a *Committee of Deans* [CoD] of the UK's *Royal College of Chiropractors* (122) offering education standards (123) without supportive evidence, and the GCC stating that programs based on vitalism, inherent in DD Palmer's founding concepts, will not be accredited by them.

As given earlier in this paper these proposed standards state:

'programmes promoting and teaching unorthodox explanatory frameworks, such as life force, innate intelligence, vitalism and a belief that manipulating the spine to remove restrictions or "chiropractic subluxations" can restore health more broadly, will not meet these Education Standards' (14, 124)

- 111. Keating Jr JC. D.D. Palmer's Lifeline. From the personal files of Joe Keating Jr. held in the author's library. p 8.
- 112. Faulkner TJ. The chiropractor's protégé. Rock Island, The Association for the History of Chiropractic 2017: pp. 322, 327.
- 113. Dougherty KJ. Thriving for 100 years: National's philosophy of collaboration and integration. J Chiropr Humanit. 2017;24:41-3.
- 114. Napolitano EG, Gruber D. The struggle for accreditation in chiropractic: A unique history of educational bootstrapping. Chiropr Hist. 1981:1(1):23-4.
- 115. Nugent JJ. Canadian Memorial College. Chiropr J. 1945;Oct:15.
- 116. Keating J, Jr., Rehm WS. The origins and early history of the National Chiropractic Association. J Can Chiropr Assoc. 1993;37(1):27-51.
- 117. International Chiropractors Association. About ICA, History. URL http://www.chiropractic.org/about/history/
- 118. Gibbons RW. Chiropractic's Abraham Flexner: The lonely journey of John J. Nugent, 1935-1963. Chiropr Hist. 1985;5:45-51.
- 119. Gibbons RW. Historical perspective: John J. Nugent, DC (1891-1979). J American Chiropr Assoc. 1997; January:33-5.
- 120. Keating Jr JC. Before Nugent took charge: early efforts to reform chiropractic education, 1919-1941. J Can Chiropr Assoc. 2003;47(3):180-216. URL http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2504968/.
- 121. Nugent JJ. California school merger completed. J Nat Chiropr Assoc. 1947;May: pp 11,63.
- 122. Outcomes for Chiropractic Graduates: Consultation on draft document now closed. 25 March 2022. URL https://rcc-uk.org/news/ outcomes-for-chiropractic-graduates/.
- 123. Outcomes for Chiropractic Graduates. ©The Royal College of Chiropractors. 2022. URL https://rcc-uk.org/wp-content/uploads/2022/03/ Graduate-Outcomes_Consultation-Document.pdf.
- 124. GCC Education Standards Consultation draft. Accessed October 2022. URL https://www.gcc-uk.org/assets/downloads/ GCC_Education_Standards_(Consultation_draft_-_July_2022).pdf.

^{109.} Palmer College of Chiropractic. The Palmer Family Heritage/History of Palmer College of Chiropractic. URL http://www.palmer.edu/about-us/history/palmer-family/

^{110.} Faulkner TJ. The chiropractor's protégé. Rock Island, The Association for the History of Chiropractic 2017: p 298.

This position has arisen from their post-realistic rhetoric which revolves around a belief paraphrased to be that every act performed by a chiropractor must be evidence-based. This includes the identification of vertebral subluxation which illuminates their internal contradiction which is their inability to identify any evidence for this position. As with Nugent, the CoD is playing politics instead of performing science.

This paradox is that the post-realists who insist on evidence are unable to present any let-alone a philosophical argument to support their subluxation-agnostic position. They hold the view that their eminence makes them speakers of truth.

These same post-realists are yet to report any examination of their null hypothesis 'subluxation does not exist'. There are weaker null hypotheses which similarly lay unaddressed, for example 'the term subluxation is not used within the majority of chiropractors' clinical practice'. The one they did address was that 'subluxation did not appear in the majority of chiropractic curricular globally' which on finding that it did appear in the majority of curricula meant their null position was rejected. (125)

Given this reliance on eminence, we have little option but to categorise CoD as a Committee of *post-realists*, if not *absurdists*. Their killing fields are academic curricula within chiropractic education.

Post-realists as absurdists

There is something obscene about using self-granted authority to extract compliance from others on the say-so of a minority who are unable to offer an evidence-based position, while at the same time gaslighting those who have made the effort to understand subluxation by claiming the realists are the ones without evidence, and further gaslighting the realists to a deeper, more insidious degree by holding that they, the post-realists, actually have evidence which they are yet to present. The Emperor stands very naked indeed.

In this sense self-proclaimed members of the chiropractic profession, being ones not trained and licensed as a chiropractor, can also be considered absurdists. Here I include the writings of Newell, (105) and Chapman-Smith, (126, 127) neither of whom is trained as a chiropractor yet through some affiliation is seen by some as a representative of the profession.

My work on the emergence of chiropractic education in Australia suggests a further category, being persons with a form of chiropractic education from an unaccredited institution who were grandfathered into the profession when registration commenced; Walker (83) is in this category.

There is a line of distinction to be drawn here as not all non-chiropractors who associate with the profession can be considered absurdists. I could not countenance consideration of Keating Jr, (128) Wardwell, (60) Rosner, (129) or Jamison (130, 131, 132) as absurdists; their writings, while at times provocative if not controversial and at all times perceptive and informative, consistently made

^{125.} Funk MF, Frisina-Deyo AJ, Mirtz TA. et al. The prevalence of the term subluxation in chiropractic degree program curricula throughout the world. Chiropr Man Therap. 2018;26,24. URL https://doi.org/10.1186/s12998-018-0191-1.

^{126.} David Chapman-Smith. WFC. URL https://www.wfc.org/website/index.php?option=com_content&view=article&id=164:bio-of-david-chapman-smith&catid=73:executive&lang=en.

^{127.} Chapman-Smith D. Legislative approaches to the regulation of the chiropractic profession. J Can Chiropr Assoc. 1996;40(2):108-120 NLM UID: 8009545.

^{128.} Keating Jr. JC. Toward a philosophy of the science of chiropractic. A primer for clinicians. Stockton CA. Stockton Foundation for Chiropractic Research. 1992.

^{129.} Rosner AL. Chiropractic identity: A neurological, professional, and political assessment. J Chiropr Humanit. 2016;23(1). URL http:// www.journalchirohumanities.com/article/S1556-3499(16)30002-X/fulltext.

^{130.} Jamison JR. Chiropractic education: reflecting the paradigm dilemma of chiropractic practice. J Manipulative Physiol Ther. 1994;17(3):186-93.

^{131.} Jamison JR. The chiropractic adjustment: The patients' perception [case report]. Chiropr J Aust. 2005;35(1):4-8.

^{132.} Jamison JR. Health promotion: Exploring the behaviour of chiropractic patients. Chiropr J Aust. 2000;30(3):96-101.

positive contributions to the advancement of chiropractic thought in general and its philosophy in particular. I consider their discourse to be the rhetoric of realists.

Keating once described himself to me as 'chiropractic's inside outsider' and his copious writings attest to his understanding of both chiropractic the discipline and chiropractic the profession. Wardwell's knowledge of who chiropractors are as a profession is second to none, and both Rosner and Jamison, as non-chiropractors, have publications that attest to their understanding of chiropractic as a discipline and which I also consider to be second to none. I am yet to see evidence from Newell or Chapman-Smith or Walker about which I could state the same.

Chiropractic's state of ignorance

And here is chiropractic's 'state of ignorance'; its rhetoric and not its position in health care.

The post-realists' rhetoric which rejects the idea of subluxation is the behaviour of absurdists and becomes their sword of Damocles; they promote a claim without providing a skerrick of evidence for that claim, while rejecting the extraordinarily rich body of empirical evidence, both objective and subjective, supportive of the idea of subluxation. As an example, at the time of writing this paper (November 2022) the *Index to Chiropractic Literature* returned 2,937 articles as a ['Case Report' OR 'Study' OR 'Series'], 1,603 (54%) of which are sub-indexed with the term ['subluxation']. This is a body of literature from over a thousand individual chiropractors with 1,603 first-hand reports of their realism of chiropractic practice; it is evidence which can not be ignored, no matter its arrogant dismissal by the post-realists and absurdists.

In contrast the literature shows a small subset of about 10 chiropractors who completely reject subluxation in addition to the members of a former iteration of the *Research Committee* of the WFC. (133, 134, 135) Those now unrelated to the *Research Committee* have been named (136) as Kawchuk, French, Axén, Hartvigsen, Descarreaux, and Kolberg. They gave the reason for their departure as being no longer able to function as independent academics, a strange claim given one's role on such a committee is to bring independent academic nous to the table.

Perhaps it was their overt post-realist stance against subluxation at a meeting in Berlin (137) which helped the WFC appreciate that the absurdist view against subluxation is not acceptable to the majority of the discipline whom I describe as realists and conventional chiropractors.

In addition to these, and Newell, Byfield and Walker, this subset includes Reggars, (138) Simpson, (139) Young, (140) Perle, (141) and Mirtz with Perle and colleagues. (125) Walker and Perle hold

- 136. WFC Researchers Resign Abruptly From Troubled Research Committee Claiming They Can No Longer Function as Independent Academics. [News]. The Chronicle of Chiropractic. 12 September 2020. URL http://chiropractic.prosepoint.net/172624.
- 137. WFC President Laurie Tassal Resigns Amid Scandal at Organization's Berlin Convention. [News]. The Chronicle of Chiropractic. URL http:// chiropractic.prosepoint.net/164441.
- 138. Reggars JW. Chiropractic at the crossroads or are we just going around in circles? Chiropr Man Ther. 2011;19:http://chiromt.com/content/ 19/1/11/abstract.
- 139. Strahinjevich B, Simpson KJ. The schism in chiropractic through the eyes of a 1st year chiropractic student. Chiropr Man Ther. 2018;26:2 DOI 10.1186/s12998-017-0171-x.
- 140. Young KJ. Gimme that old time religion: The influence of the healthcare belief system of chiropractic's early leaders on the development of x-ray imaging in the profession. Chiropr Manual Ther. 2014;22(36): http://www.chiromt.com/content/22/1/36.
- 141. Perle SM. The dichotomy in the profession. J Am Chiropr Assoc. 2000;37(3):49-9.

^{133.} Kawchuk G, Goertz C, Axén I, Descarreaux M, French S, et al. Letter to the Editor Re: Oakley PA, Cuttler JM, Harrison DE. X-Ray Imaging is essential for contemporary chiropractic and manual therapy spinal rehabilitation: Radiography increases benefits and reduces risks. Dose Response. 2018 Jun 19;16(2). Dose Response. 2018;16(4). DOI 10.1177/1559325818811521.

^{134.} Its Absolutely Rubbish' Claims WFC Researcher Jan Hartvigsen on Use of X-rays to Identify Subluxation (News). The Chronicle of Chiropractic. 21 April 2019 13:55 http://chiropractic.prosepoint.net/163926.

^{135.} Taking X-Rays for Subluxation Management is 'Careless & Unsupported by Evidence' Says World Federation of Chiropractic (News). 12 January 2019. The Chronicle of Chiropractic. URL http://chiropractic.prosepoint.net/161664.

influence as journal editors. (142) Together with 37 self-proclaimed '*expert chiropractors*' (143) and some 150 '*signatories*' to a specific position of chiropractic politics, (144) there are about 200 outspoken concessional chiropractors and associates which represents an insignificant sect of about 0.2% of all chiropractors. Recognising (i) that publication by Australian academics has been reported as low but with the majority of academics having published, (145) and (ii) that there is '*overall agreement between practicing chiropractors and academics across most research area domain items*' in Australia, (146) it is difficult to accept the opinion of one reviewer of this paper that the actual number of outspoken concessional chiropractors, or post-realists, is many times greater than the 200 or so I have identified. Allowing for a factor of 10, the result is still an insignificant number of post-realists, ~2%.

Some also offer absurdist rhetoric similar to that from some of the former WFC *Research Committee*, however to their credit they have published their commentaries with open access (89, 90, 91) while a stream of well-reasoned post-realist rhetoric is also evident. (147, 148) Open publication of one's views is always preferable to hijacking a conference meeting. (137)

I also contend that there is a tangential thread of Danish thought unravelling from what the literature shows is the conventional practice of chiropractic in Denmark. (149) In that nation the profession has developed regardless that 'government's dualistic action relative to the Danish chiropractic community' may have 'inhibit(ed) the spontaneous evolution of contemporary Danish chiropractic practice.' (150) Its characteristics include nearly half (47% in 2014) (151) of practitioners being trained locally at the country's only training program for chiropractors delivered as 'Clinical Biomechanics' (152) and developed to build the profession's legitimacy. (153) As expected the management of mechanical low back pain accounts for around half (49%) of all patient visits.

- 148. Beideman RP. An essay on chiropractic's "institute of qualification". J Chiropr Humanit. 2000;9. URL http://archive.journalchirohumanities.com/Vol9/BeidemanEssay.pdf.
- 149. Nielsen OL, Kongstead A, Christensen HW. The chiropractic profession in Denmark 2010–2014: A descriptive report. Chiropr Man Ther. 2015 ;23(27). URL http://chiromt.biomedcentral.com/articles/10.1186/s12998-015-0072-9
- 150. Myburgh C. A qualitative exploration of key informant perspectives regarding the nature and impact of contemporary legislation on professional development: A grounded theory study of chiropractic in Denmark. J Manipulative Physiol Ther. 2014;37(6):383-95. URL http://www.ncbi.nlm.nih.gov/pubmed/25092554.
- 151. Nielsen OL, Konmgsted A, Christensen H. The chiropractic profession in Denmark 2010–2014: a descriptive report. Chiropr Man Therap. 2015;23:27 DOI 10.1186/s12998-015-0072-9
- 152. Clinical Biomechanics the chiropractic programme (BA). University of southern Denmark / Programs. URL https://www.sdu.dk/en/uddannelse/bachelor/klinisk_biomekanik
- 153. Myburgh C, Multon J. The development of contemporary chiropractic education in Denmark: An exploratory study. J Manipulative Physiol Ther. 2008;31(8):583-92. URL http://www.ncbi.nlm.nih.gov/sites/entrez?cmd=Retrieve&db=pubmed&dopt=Citation&list_uids=18984241.

^{142.} Editors' statements. Chiropractic and Manual Therapies. Retrieved 22 August 2020 from https://chiromt.biomedcentral.com

^{143.} Innes S, Beynon A, Hodgetts C, et al. Predictors of instantaneous relief from spinal manipulation for non-specific low back pain: a delphi study. Chiropr Man Therap. 2020;28:39. URL https://doi.org/10.1186/s12998-020-00324-7.

^{144.} Côté P, Bussières A, Cassidy JD, Hartvigsen J, Kawchuk GN, et al, plus >140 signatories. A united statement of the global chiropractic research community against the pseudoscientific claim that chiropractic care boosts immunity. Chiropr Man Ther. 2020;28:21. URL https://doi.org/10.1186/s12998-020-00312-x.

^{145.} Hoskins W, Pollard H, Reggars J, et al. Journal publications by Australian chiropractic academics: are they enough? Chiropr Osteopat. 2006;14:13. URL https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1559708/.

^{146.} Amorin-Woods LG, Woods BL, Moore CS, et al. Research Priorities of the Australian Chiropractic Profession: A Cross-Sectional Survey of Academics and Practitioners. J Manipulative Physiol Ther. 2022;45(1):73-89. URL https://pubmed.ncbi.nlm.nih.gov/35760594/.

^{147.} Nelson C. The subluxation question. J Chiropr Humanit. 1997 ;7(1):46-55.

(154) Within the Nordic region both maintenance care (155) in the absence of evidence beyond *'reasonable consensus'* (156) and infant care is common (157) including for infantile colic, (158) a practice illogically cautioned against in Australia (159) with optimistic suggestion that such practitioners require *'a minimum 2 years of post-graduate training in paediatrics'* and Board endorsement. (160)

The evidence shows that regardless of the post-realist rhetoric found within unravelled *Danish Thought*, clinical practice in Denmark and other Scandinavian countries seems very much to be the practice of realists, inclusive of maintenance care and paediatric care in the absence of evidence.

If nothing else this observation warrants investigation to determine why it exists. Is there a mass delusion among the realists of the discipline, or is there a deliberate ignorance of data by the post-realists?

Indeed, is chiropractic practice an expression of discipline realism, while condemnation of it is a characteristic of a post-realist profession? Is this the crux of the matter?

Or worse, are the GCC and other absurdists trying to impose their concessional post-realist belief system which logically is not and can not be rightly called chiropractic? Are they mimicking Oakley Smith's removal of Palmer's core concepts to be replaced with their own generic manipulation ideas, possibly drawn from the Bohemians? (87, 161) Or given they are British, are they regressing to the 1820s manipulative style of Harrison? (162) Is the GCC proactively erasing the discipline of chiropractic as practiced by the greater majority of chiropractors globally? Who or what is behind their agenda? Could it be Big Pharma as suggested by Ernst? (96)

It is primarily for these reasons that I make this call for more frequent and vigorous debate in the open-access chiropractic literature. The post-realists have a duty to explain why and how they see their aerated version of chiropractic replacing the realist's substantive version, otherwise risk being absurdists compounded by their refusal to present evidence for their stance.

Chiropractic's state of ignorance is its intellectual silence

In a previous paper I reported (33) my findings of a skewed distribution of thought in chiropractic. In very crude terms it is a unimodal negatively skewed distribution with a fading tail to the left.

Whilst I stand by that report on the basis of the evidence from which it was drawn, the discussion it generated has led me to now offer an interpretation of places on my chart (Figure 1) of thought distribution. I place realists about the mode and post-realists about the tail.

- 156. Iben A, Lise H, Leboeuf-Yde C. Chiropractic maintenance care What's new? A systematic review of the literature [systematic review]. Chiropr & Manual Ther. 2019 ;27(63). URL https://chiromt.biomedcentral.com/articles/10.1186/s12998-019-0283-6.
- 157. Hestbæk L, Jørgensen A, Hartvigsen J. A description of children and adolescents in Danish chiropractic practice: Results from a nationwide survey. J Manipulative Physiol Ther. 2009. Oct;32(8):607-15. URL http://www.ncbi.nlm.nih.gov/pubmed/19836596.
- 158. Wiberg KR, Wiberg JMM. Retrospective study of chiropractic treatment of 276 Danish infants with infantile colic. J Manipulative Physiol Ther. 2010 Sep;33(7):536-41. URL http://www.ncbi.nlm.nih.gov/pubmed/20937431.
- 159. Evidence-based practice. AHPRA/Chiropractic Board of Australia. Statement by the Chiropractic Board on paediatric care. URL https://www.chiropracticboard.gov.au/Codes-guidelines/Position-statements/Statement-of-Paediatric-care.aspx.
- 160. Statement on Paediatric Care. Australian College of Chiropractic Paediatrics. URL https://accp.asn.au.
- 161. Bovine G. The Bohemian thrust: Frank Dvorsky, the Bohemian "napravit" bonesetter. Chiropr Hist. 2011;31(1):39-46.
- 162. McDowall D. Before chiropractors and osteopaths did anything, an English physician did it all: A comparative review of Edward Harrison's tome. Chiropr Hist. 2007;27(2):79-85.

^{154.} Hartvigsen J, Sorensen LP, Grunnet-Nilsson N, et al. Chiropractic patients in Denmark 2002: an expanded description and comparison with 1999 survey. J Manipulative Physiol Ther. 2006;29(6):419-24. URL http://www.ncbi.nlm.nih.gov/entrez/query.fcgi? db=pubmed&cmd=Retrieve&dopt=Citation&list_uids=16904487.

^{155.} Malmqvist S, Leboeuf-Yde C. The Nordic Maintenance Care Program: Case management of chiropractic patients with low back pain - defining the patients suitable for various management strategies. Chiropr & Osteopat. 2009;17(1): http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2717107/.

A third and blatant placement is for the untrained or partially-trained individual who offers critical comment within the chiropractic thought ecosphere. (163) Their refusal to accept subluxation in the absence of any training about it means they have made a significant concession which places them to the far left, a statistically insignificant minority. This is indeed an absurdist position.

The two challenges are:

- i. trying to understand those to the left of the mean (Figure 1) who progressively extract elements from conventional realist knowledge to end up in the absurdist position, and
- ii. trying to understand why their concessional conversations seem to be louder and more persuasive with legislators.

Why does this matter?

It matters because the realism that conventional chiropractors are known to exhibit is actually a realism within which the idea of subluxation, however it is expressed, forms a guide to their practice, no matter what they may consider their practice to be; (33, 34) here I mean the technique of choice ranging from Gonstead Methods to Activator Methods™ to CBP® to Applied Kinesiology (AK) to Thompson Drop and so on through all the different techniques identified by Cooperstein and Gleberzon. (164)

In the absence of any such guide it is valid to ask what is it that post-realist chiropractors address in practice? Indeed, are they *chiropractors* or *manual therapists*? If the latter, why not follow Oakley Smith and form their own professional grouping apart from chiropractic? Perhaps this could become the schism called for by Strahinjevich and Simpson, (139) or perhaps and somewhat frighteningly, Walker's '*New Chiropractic*'? (83) Except of course it could not be called '*chiropractic*'.

I contend that the goodwill of conventional chiropractors has been intellectually abused by the post-realist commentariat through ridicule of any and all claims in favour of the idea of subluxation. It fascinates me that while the existence of subluxation is rejected by the post-realists, the evidence shows good reliability in identifying the perceived existence of this clinical lesion. (165, 166, 167) A rather odd finding and difficult to explain why something claimed to be only an historical relic of no clinical value has strong evidence supporting its discovery in the contemporary clinical environment.

This abuse represents gaslighting; the post-realists deny that the conventional chiropractors hold evidence for their position while not producing evidence for their own position. I can see that we are now at the point where the majority of chiropractors are saying 'show us your evidence for why the idea of subluxation is dated', and for why 'subluxation has no clinical use in chiropractic today'.

To Newell, Byfield, Walker and others in this self-important clique we are saying '*show us your evidence*', it has been claimed for such a time that it should not be too hard to produce. In fact it will be harder for the post-realists to admit they have no evidence than to produce it. Byfield has a record of publication dating from 1988, and Newell from 1989. Perhaps Byfield's ideas are frozen in that preceding period during which he attended chiropractic college. No such concession can be made for Newell as he is not trained as a chiropractor.

^{163.} Loughlin P. Engaging with the thought leadership ecosphere. Purchasing Insight. 28 February 2012. URL https://purchasinginsight.com/ engaging-with-the-thought-leadership-ecosphere/.

^{164.} Cooperstein R, Gleberzon BJ. Technique systems in Chiropractic. Edinburgh: Churchill Livingstone 2004.

^{165.} Plaugher G, Hendricks AH. The inter- and intraexaminer reliability of the Gonstead pelvic marking system. J Manipulative Physiol Ther. 1991;14(9):503-8. URL https://www.ncbi.nlm.nih.gov/pubmed/1761961.

^{166.} Triano JJ, Budgell B, Bagnulo A, et al. Review of methods used by chiropractors to determine the site for applying manipulation [review]. Chiropr & Manual Ther. 2013;21(36). URL http://www.chiromt.com/content/21/1/36.

^{167.} Hariharan KV, Timko MG, Bise CG, et al. Inter-examiner reliability study of physical examination procedures to assess the cervical spine. Chiropr & Manual Ther. 2021;29(20):1-9. URL https://chiromt.biomedcentral.com/articles/10.1186/s12998-021-00377-2.

Byfield and Newell can only offer *opinion* which is enough for the GCC to confer their perceived status in the UK profession, the epitome of *Eminence-Based Chiropractic*. As far as I can glean, neither have published on the topics of subluxation, (34, 35) vitalism, (168) or tone, (54, 55) so actually neither is qualified-by-publication to offer an evidence based argument one way or the other.

Yet they are now required to defend and justify their position to members of the discipline they are seeking to dismantle, and to do so in peer-reviewed papers in the open-access literature. To not be overt in their thinking allows suspicion of unprofessional behaviours by the GCC. Previously (2010) the GCC was denied the evidence they requested (20, 21) and would again be found negligent if not incompetent should it repeat that mistake. It must be remembered that the GCC is an *'independent statutory body established by, and accountable to, Parliament'* (169) Annually the GCC is reviewed by the *Professional Standards Authority* (170) and is reasonably expected to demonstrate that it makes evidence-based decisions.

What do we do about it?

Bold statements must be made because if chiropractic is to take any position on subluxation in education then it must be a position based in evidence. The eminence-based stance of the CoD is fatally flawed because it has not one published paper to support it. Their documentation itself does not cite from the literature but is *'informed'* by the educational standards of other disciplines. (124)

The same applies to Brown and his positions (171, 172) especially when expressed on behalf of the WFC; in the absence of evidence they hold no substance. Brown must provide supportive argument, as mere opinion is the hallmark of eminence-in-action.

In my view the evidence is favourable for the positions of the conventional chiropractor, the realists of the discipline and profession. Paper after paper shows the majority of chiropractors base their practice around the idea of subluxation, no matter what they call it and no matter how they practice its identification and correction.

Conclusion

Chiropractic has moved on from a handful of British elites meeting over a pint in a pub and thinking it was a good idea to kiss subluxation goodbye, as seemed to have occurred in 2010. (20, 21)

For the reason that their position is opinion, has not been thought-through, and shows no appreciation of the paradox that they have no evidence at all to hold that opinion, the post-realists and absurdists must cease calling on anyone who opposes their position to instead show their own evidence.

The chiropractic realist, representing the conventional position of the majority of the discipline, quite rightly expects to 'see the evidence held by the post-realists'.

Thus until the post-realists and absurdists in the minority left-tail of Figure 1 (33) produce evidence supporting their position that subluxation has no contemporary clinical relevance in the practice of chiropractic and should not appear at all within the sphere of influence of the profession, chiropractic's narrative will remain fractured into '*deniers*' and '*vitalists*', terms which do not enhance the discipline's professional reputation.

^{168.} Richards DM. The meaning and value of vitalism in chiropractic [Thesis]. Southern Cross University. URL https://researchportal.scu.edu.au/ esploro/outputs/doctoral/The-meaning-and-value-of-vitalism/991012904700402368?institution=61SCU_INST.

^{169.} General Chiropractic Council About. 15 November 2022. URL https://www.gcc-uk.org/about-us/what-we-do.

^{170.} Professional Standards Authority. What we do. 15 November 2022. URL https://www.professionalstandards.org.uk/what-we-do/our-work-with-regulators/find-a-regulator/general-chiropractic-council.

^{171.} Brown RA. Chiropractic as part of the solution to the world crisis in spine-related disability. J Chiropr Humanit 2018;25C:6-9. URL https://pubmed.ncbi.nlm.nih.gov/31019416/.

^{172.} Brown RA. Spinal Health: The Backbone of Chiropractic's Identity. J Chiropr Humanit. 2016;23:22-8. URL https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5127906/pdf/main.pdf.

It is time we collectively moved forward with courteous debate in the mode of philosophical argument from our respective positions as a '*realist*', a '*post-realist*', or an '*absurdist*'. There are no members of the discipline or of the profession who are entitled to utter evidence-free rhetoric as discourse used both to account for and to influence political decisions that impact the chiropractic profession.

I contend the expressions of the chiropractic narrative must become more vigorous, relevant, critical, and open.'

And grounded in evidence.

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