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#### Dear Scientometrics Editors,

In the letter published [1 August 2023], Torres-Salinas et al claim that for some time a wave of "bibliometrics denialism" has crept into bibliometric and research evaluation communities and is becoming more pronounced. The use of the term denialism appears deliberate, drawing links with climate change denialism, COVID denialism, vaccine denialism, and flatearth movements. Characteristics of denialism include "dogmatic rejection of scientific results, the selection of data for convenience and, above all, the formation of impossible expectations about what science can provide... [and in] some cases denialists adopt unfounded positions based on a distorted version of the original message."

Torres-Salinas et al assert the position that DORA and CoARA's Agreement on Reforming Research Assessment (ARRA) adopt - that qualitative peer review should be the bedrock of evaluations - is a form of denialism, because it ignores evidence undermining peer review. Furthermore, they claim that many of the signatories of DORA and ARRA are guilty of forms of denialism, for which these prominent statements are at least partly to blame. The desired end-goal of "bibliometrics denialism" is obliteration of bibliometrics from evaluation.

Their characterization of bibliometric denialism and efforts to link this to DORA and CoARA are, in my view, unconvincing. Here I would like briefly to reflect on where I think this line of attack has come from, why it is misguided, and how scientometricians might better engage with emerging assessment reform movements.

### Background: Research assessment reform as a coalition

In a recent pre-print, Bjorn Hammarfelt and I (2023) argue the "responsible metrics" (and latterly "responsible research assessment") reform movements that have risen to prominence since the 2010s, encompass three ways of framing concerns about misuses and unintended consequences of bibliometrics in research assessment: a professional-expert framing (users have a deficit in specialist knowledge about how to use bibliometrics appropriately), a metrics scepticism framing (critique and emancipation from performance measurement is needed), and a reflexive framing (dialogue and learning are needed). We argue the responsible metrics reform movement has grown through uniting a disparate coalition of research system actors around the refrain that metrics should support, not replace peer review (sometimes referred to as "informed peer review"). At the end of our study, we suggest, despite ostensible agreements that multiple stakeholders hold over the importance of informed peer review, ruptures between sections of the scientometric community and research assessment reform followers will likely emerge in the near future: as strong articulations of metrics scepticism are likely to antagonize scientometricians committed to professional-expert framings of reform. Our analytic framework can I believe help explain what is going on in Torres-Salinas et al's letter: it is an example of individuals

(the authors) who subscribe to a professional-expert framing, criticizing those who articulate a metrics-scepticism framing, and holding the assessment reform movement accountable. Our prediction has thereby already come to pass.

Pointing all this out is not about patting me or my colleague on the back. I would like instead to use insights from our study to help think through some problems I have with Torres-Salinas et al's argument and reframe how I think scientometricians can better engage with research assessment reform movements going forward.

## Why denialism is an unconvincing characterization

The authors suggest that *denialism* towards the flaws of peer review is a core feature of proreform statements. In my view, this is not a fair characterization of DORA or CoARA. DORA makes a fairly uncontroversial point that deliberation and judgment is needed in evaluation, particularly in the context of individual-level assessments. One can certainly question whether qualitative expert judgment should be the default when it comes to assessing larger-scale units like universities or countries: but would it not suffice for the authors just to say DORA is wrong and explain why? Furthermore, the ARRA text does in fact acknowledge briefly that peer review has biases and limitations (on page 5). As I have written elsewhere (Sivertsen and Rushforth, 2023), ARRA's relationship with peer review is a weaker element of the statement, however, it is not right to state that ARRA *denies* peer review has limitations.

The authors characterize ARRA as implying that evaluations should "work blindly, without data, rather than tarnish their judgements with vile indicators." Hammarfelt and I show that while prominent statements such as ARRA adopt some negative rhetoric around the general influences of bibliometrics on research systems, ultimately they are careful not to wholesale dismiss bibliometrics: instead they endorse the mantra that bibliometrics can play a role in assessments, as long as they are used responsibly.

In some corners, followers of DORA or CoARA have no doubt caricatured and scapegoated bibliometrics as the root of practically all present evils. But does this merit the sensationalist label of "denialism". A more proportionate and less inflammatory way of criticizing strong metrics scepticism would be to say some of its advocates sometimes adopt hyperbolic or straw-man characterizations of bibliometrics.

While some followers of reform movements like DORA or CoARA caricature bibliometrics in calling for their full-scale removal, it's not clear how widespread this practice is. Is it really that big a deal if the odd DORA or CoARA follower here-or-there mis-interprets or mis-quotes the position of these statements? And how directly responsible are DORA and ARRA for any mis-interpretations or mis-quotations made by their signatories?

Correctly the authors note that the notion of informed peer review goes back a long time – while ARRA credits the Leiden Manifesto rather than earlier scientometrics sources for this idea. Hammarfelt and I (2023) argue that the Leiden Manifesto has helped to raise awareness of the informed peer review mantra and package it in a form accessible to a wider audience. The Leiden Manifesto is a common authoritative reference point in the contemporary assessment reform movement, in ways that older scientometrics texts are not:

the latter probably should be credited more, but it's not the most burning of injustices. CoARA and other reform actors, for their part, should not reinvent the wheel and ensure they build on earlier efforts by scientometricians and others.

## A way forward

Despite my strong reservations towards the authors' "bibliometrics denialism" polemic, their letter does afford a useful opportunity for research system actors to re-ignite an important debate: just what should the role of evaluative bibliometrics be in the new world that CoARA and other reform champions hope to create? Yes we can all agree these tools should be used responsibly, but this often comes across as a platitude. Clearly it is good to have broad agreement over informed peer review, but it also risks providing a false impression of consensus, at the very time ongoing discussion, debate and soul-searching is needed about the place of evaluative bibliometrics in research assessment landscapes. If CoARA-type commitments are to become the norm, what should evaluative bibliometrics look like? What skills and training are required? What is the worth of specialist academic publications (and by extension quantitative information about them)? How should they relate to other qualities and achievements, around openness, diversity or academic citizenship? Torres-Salinas et al do not offer constructive suggestions on these points in their letter.

Having accumulated decades worth of wisdom and expertise on the qualities and limitations of bibliometric tools, scientometricians have an indispensable role to play in such discussions. In coming into dialogue, reform initiatives like CoARA and scientometricians alike should be aware of the three framings of evaluative bibliometrics circulating within current reform discourse, as these help explain common misunderstandings, why parties often talk past one another, as well as genuine differences in values over reform. It is worth remembering that there is still significant common ground among metric sceptics and defenders of advanced bibliometrics: all would surely agree that bibliometrics cannot meet all assessment needs in academia and that improper application of indicators (including of course the notorious JIF) poses problems for research systems. These points of agreement seem to me a better starting point for dialogue and debate than incendiary labels like denialism, which will most likely create fights than aide discussions, an outcome not productive for anybody.

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#### **CONFLICT OF INTEREST**

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