

Managing Ownership of Copyright in Research Publications to Increase the Public Benefits from Research

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Abstract

Producing and disseminating knowledge is core university business and a collaborative, global activity engaging multiple stakeholders including universities, researchers, governments, Indigenous communities, commercial bodies and the public. While ownership of university inventions attracts scholarly and policy attention, effective management of copyright in research outputs is also necessary to maximise the benefits of publicly funded research, but often neglected. This article explains current dynamics in academic publishing and research ownership. It seeks to explain the complex interface of copyright law, university policies, academic customary practices, Enterprise Bargaining Agreements (EBA), research funder mandates and policies, the guidelines and policies that pertain to Indigenous research, and publishing contracts. The article concludes with proposals for copyright management to maximise opportunities for greater public benefit from Australian research.

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I Introduction

This article is about the surprisingly complex question of ownership of copyright in research outputs of Australian universities. Ownership confers control: the owner of copyright is the person or entity who decides who can copy and communicate research in its final, peer-reviewed and tested form, for what purposes and at what cost. Unfortunately, as we show in this article, across the Australian university system there is no one clear answer to the question of who owns copyright when university employees and others working in or with the university write up their research.

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Researchers are generally left on their own to muddle through, and negotiate with — or more often, simply sign copyright over to — the publishers on whom they depend for the publications that will secure and enhance their career. This allows the increasing accumulation by commercial publishers of both research, and data *about* research and its quality and impact. The failure of Australian universities to take the lead on managing copyright imposes costs on our research system: money, but also confusion on the part of researchers, and frustration of our collective ability to achieve the overall goals of Australia's research system and policy for the public at large.

When academics such as ourselves publish research, we have a number of goals. We want to publish research in ways that establish its quality. But we also want to widely disseminate and communicate that research to increase its impact in the world. By neglecting the management of copyright and handing research outputs over to publishers, the university sector gives those publishers control over how and to what extent Australian research is disseminated. This directly affects the public's return on investment for publicly funded research. Publishers have the power to decide how research is communicated, for what purposes and at what cost to universities and to the ultimate funders of research, including the Australian public. With the introduction of 'Read and Publish' Agreements in Australia and other developments, research publishing is currently at an inflection point, where previously free and open circulation of knowledge in the form of institutional repositories and tolerated open access ('OA') publications could be fully incorporated into commercial publishing models and logics — open, perhaps, but at considerable financial cost and only by making researchers and others more beholden to publishers and the commercial terms which they set. A better understanding of the foundations of ownership of copyright in research publications, and more strategic management of that copyright, has the potential to free Australian universities and academics of an increasingly expensive dependence on commercial publishers to achieve their research goals.

Part II of this article describes the various competing objectives that must be managed by actors within Australia's research system: universities, researchers and others. Questions of copyright ownership can only be understood in the context of these larger forces. A core argument of this paper is that a more coherent, holistic and strategic approach to copyright management is needed, even as the sector seeks to preserve important principles such as academics' freedom to choose where they will publish. Part III of this article examines the shaky foundations of publishers' assertions of copyright ownership by picking apart the complex intersection of practice, policies, contracts and legislation that seek to govern the activities of academic researchers. The analysis is based on research conducted as part of an Australian Research Council ('ARC') Discovery Project examining the intersections between Australian research policy and intellectual property ('IP') law, including an analysis of university-level policies across six Australian universities and fieldwork (qualitative interviews) with research practitioners at all levels across nine Australian universities.¹ We then outline alternative methods for copyright management founded in core copyright doctrines that allow ownership and control to be divided so that the benefits of copyright can be maximised. In making this argument, we draw on statutory interpretation and a review of case law, and university policies and Enterprise Bargaining Agreements ('EBAs'), as well as the qualitative interviews. In concluding, we make an argument that, sector-wide, Australian universities should take advantage of doctrines that allow copyright ownership to be divided, by

1. Australian Research Council, DP200110578, producing, managing and owning knowledge in the 21st Century University. Fieldwork cited in this article has been carried out in accordance with QUT Ethics Approval Number 2000000609. Our interview participants included individual active researchers, university and faculty research leadership (such as associate deans research), professional research support staff (central and school/faculty based) and library staff (where responsibility for the institutional repository sits in many institutions). While we draw on that material for this article, more comprehensive reporting on the fieldwork is reserved for future publications.

pre-emptively retaining — and importantly, asserting and exercising — the rights they need to disseminate research and to use it in teaching.

The analysis which follows does not, we emphasise, mean we endorse the existing structure of scientific publishing, nor of any particular subpart of it such as, for example, journal rankings, metrics of research ‘performance’ or the assumed (and contentious) association between ‘high quality’ or prestige *journals* and high quality *research*.² Our orientation here is towards improvements to copyright management that could better achieve research goals within the broader systems that exist, without requiring the wholesale reorientation of government research policy, the abandonment of metrics-based research assessment or the disappearance of the large academic publishers. More comprehensive alternatives no doubt exist that seek to reduce the power of prestigious journal publishers or erect alternative, discipline-backed places to publish research. The ultimate goal of our research, however, and this article is to assist universities, researchers and research support staff to make better use of limited research resources, and manage competing imperatives for publications and impact within current constraints.

II Background and Context: Why Managing Ownership of Copyright in Research Publications Matters

A University and Academic Imperatives for Research

The production and dissemination of research is a core purpose of universities. This necessarily involves the creation of copyright material in the form of journal articles, books, chapters, conference papers and other scholarly outputs. But more than that: universities operate in an environment where they compete for students and research funding. They must be able to demonstrate to government and other funders, and to prospective students, that their research is of the highest quality, and hence that they are worthy of continued support and enrolment, respectively. Academic publishing disseminates research and provides a mechanism, however limited, for assurance regarding the quality of research. Journals manage peer review and confer general reputational benefits, especially where the journal is perceived to be prestigious. But they also provide access to quantitative indicators of quality, including the journal impact factor (a quantitative measure of the frequency with which the average article in a journal has been cited in a particular year) and measures of individual article citations. Publishing in journals is necessary to generate such quantitative evidence, because articles in recognised journals automatically feed into the systems managed by the large commercial organisations (Clarivate’s Web of Science and Elsevier’s Scopus) which track citations.

The Australian government regularly assesses and ranks universities’ research through the Excellence in Research Assessment (‘ERA’) exercise.³ Within this framework, excellence is demonstrated in part by publishing in prestigious journals and with reputable publishers; for some disciplines citations tracked by the commercial providers are also relevant.⁴ Other commercial

2. There is a large, and critical literature on research metrics, including journal rankings, and their problems, some of which is summarised in Kimberlee Weatherall and Rebecca Giblin, ‘Inoculating Law Schools Against Bad Metrics’ in Kathy Bowrey (ed), *Feminist Perspectives on Law, Law Schools and Law Reform: Essays in Honour of Professor Jill McKeough* (Federation Press, 2021) ch 8.

3. Australian Research Council, *State of University Research 2018–2019* (ERA National Report, 2019).

4. ERA assessments are complex and vary between peer review (mostly humanities and social sciences) and non-peer review/citation-based disciplines (including most of the sciences): see *ibid*. At the time of writing, ERA assessments were on hold, but the government had indicated an intention to continue with research quality assessment including quantitative assessments.

systems such as the QS and Times Higher Education rankings also seek to rank the research excellence of universities, based in part on inchoate reputation and quantitative publication measures.⁵ Both government and commercial rankings play an important role in university strategies for attracting students, including lucrative international students.⁶

Because publications in prestigious journals are important to the university, the imperative to attain them is impressed upon academics through hiring, annual performance reviews, and promotion policies and practices,⁷ as well as the criteria applied by grant funding bodies that rate academic track records.⁸ Publication in recognised high quality outlets is required to get hired in the first place, and to enjoy career success in the form of grants and ongoing promotions. Publication can be a matter of survival in an academic research career or the only way to avoid receiving burdensome teaching allocations. Institutions may have minimum research expectations that demand a certain number or quality of outputs; or a certain number of outputs in outlets of a particular ranking.

Prestigious publications are however not the only goal universities and scholars pursue for their research. Researchers and universities are also evaluated for their ability to produce high-impact research. This general imperative is also backed up by government requirements and periodic government assessment.⁹ Universities — and by extension at least some academic researchers — must therefore take steps to ensure research is used beyond a scholarly context and has (one hopes, beneficial) effects in the world, whether economic, environmental, cultural or social. Wide dissemination of research — beyond the limited subscriber base of the high quality journals — can play an important role in achieving impact and uptake of research insights.¹⁰ Increasingly, governments and research funders are demanding that research publications be made freely available, both to increase impact and based on the principle that the public should have access to research supported by public money.¹¹ University policies also reflect these demands, often requiring academics to make their publications available open access ('OA').¹² In Australia to date, funder

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5. See QS Top Universities, *QS World University Rankings — Methodology* (Web Page, 26 April 2022) <<https://www.topuniversities.com/qs-world-university-rankings/methodology>>; Times Higher Education, *World University Rankings 2022: methodology* (Web Page, 26 August 2021) <<https://www.timeshighereducation.com/world-university-rankings/world-university-rankings-2022-methodology>>.
 6. Pernill van der Rijt, 'Framing in International Student Recruitment: A Cross-Country Comparison of the Online Corporate Identity of Universities' (2021) 27(2) *Journal of Studies in International Education* 198 <<https://doi.org/10.1177/10283153211042087>>. Van der Rijt found that Australian universities prioritise rankings in their marketing materials targeted at international students.
 7. See, eg, UTS, *Academic Promotion Policy* (version 2.2, 22 Feb 2022) cl 3 (referring to the excellence and impact of research).
 8. The research track record of grant applicants is critical, for example, in ARC assessment criteria. Investigator capability (including research outputs) comprises 40% of the assessment criteria in the most prestigious ARC program, the Laureate Fellowship Program, and 50% of the assessment criteria in the mid-career Future Fellowship program: Australian Research Council, *Discovery Program Grant Guidelines (2021 Edition)* (1 November 2021) 34, 42.
 9. See Australian Research Council ('ARC') Excellence in Research for Australia ('ERA') and Engagement and Impact Assessment ('EI') Advisory Committee, *ERA and EI Review Final Report 2020–2021* (2021); Weatherall and Giblin (n 2).
 10. There is a large literature on the impact of OA and citations in particular: for a recent summary see Zhiqi Wang, Wolfgang Glänzel and Yue Chen, 'How self-archiving influences the citation impact of a paper: a bibliometric analysis of arXiv papers and nonarXiv papers in the field of information science and library science', *Proceedings of the 23rd International Conference on Science and Technology Indicators* (STI2018).
 11. See ARC, *Open Access Policy* (version 2021.1, September 2021) cl 6.2; National Health and Medical Research Council ('NHMRC'), *Open Access Policy* (November 2018), cl 4.1; Wellcome Trust, *Open Access Policy* (2021); Bill & Melinda Gates Foundation, *Open Access Policy* (2021), cl 1.
 12. See University of Sydney, *Open Access to University Research Policy* (2015), cl 8; Queensland University of Technology, F/1.3 *Open Access for QUT research outputs* (2018), cl 1.3.4; UNSW *Open Access Policy* (2017) cl 1.

policies in favour of open dissemination of research have not come with additional resources to cover any costs incurred as a result, at least in the case of government funded research.

There is also global pressure on researchers to consider the broader implications of their research practice. The United Nations Educational, Scientific and Cultural Organization ('UNESCO') Recommendation on Open Science (2021) acknowledges the transformative potential of Open Access, Open Science and Open Educational Resources in progressing the ambitions of UN Sustainable Development Goals and in view of:

the urgency of addressing complex and interconnected environmental, social and economic challenges for the people and the planet, including poverty, health issues, access to education, rising inequalities and disparities of opportunity, increasing science, technology and innovation gaps, natural resource depletion, loss of biodiversity, land degradation, climate change, natural and human-made disasters, spiralling conflicts and related humanitarian crises.¹³

The UNESCO agenda was quickly embraced by Australia's Chief Scientist, Dr Cathy Foley.¹⁴

The various research objectives outlined above can be in tension, at least as commercial publisher, and government and university systems are currently configured. The goal of broad, open dissemination of research for impact and real-world applicability is in tension with the imperative to publish in prestigious journals which have historically made money from subscriptions.

B The Commercial Nature of Academic Publishing and Its Basis in Copyright Ownership

The industry of academic publishing and research metrics analysis is not simply an adjunct to the functioning of the academy. Academic publishing is a major and highly concentrated commercial industry, where four companies: Elsevier, Springer Nature Group, Wiley and Clarivate wield considerable global influence affecting the terms and conditions of publishing contracts, subscription licences and access to data. Feedback loops further concentrate the market power and maximise the brand value of certain journals. The use of research metrics in government research assessment and commercial rankings (journal impact factors, citation indices and journal rankings) compounds the importance of journal prestige for universities and, hence, for academics. These feedback loops limit the ability of academics to make any choice other than to play the prestige game. The resulting academic decisions about where to submit, whom to cite, what to send to review and whether to recommend publication further journal reputation, in turn produces goodwill and trade mark value owned by publishers.

The scientific publishing industry is based on control of copyright in journal articles, obtained from academic authors.¹⁵ Academic authors, however, have little choice about the transfer of

13. UNESCO, *Recommendation on Open Science* (2021) <<https://doi.org/10.54677/MNMF8546>>. Universities' contribution to the UN Sustainability Goals is itself now the subject of a new ranking system, the Times Higher Education Impact ranking: <<https://www.timeshighereducation.com/impactrankings>>.

14. Cathy Foley, 'How the United Nations' new "open science framework" could speed up the pace of discovery', *The Conversation* (online, 21 Dec 2021) <<https://theconversation.com/how-the-united-nations-new-open-science-framework-could-speed-up-the-pace-of-discovery-173148>>.

15. Stephan Puehringer, Johanna Rath and Teresa Griesebner, 'The Political Economy of Academic Publishing: On the Commodification of a Public Good' (2021) 16(6) *PLOS ONE* e0253226.

copyright. From the perspective of the individual academic author, publishing in a prestigious journal routinely means assigning copyright to the publisher via the publisher's contract presented to them during submission or following acceptance of an article.¹⁶ Publishers' contracts set the terms under which research dissemination takes place, and the conditions under which access to the final product is offered, with little opportunity for researchers to affect these terms. Interviews we conducted with researchers, managers and DVC-Rs suggests that researchers feel disempowered and too overwhelmed to negotiate with publishers over access restrictions and fees, and do not 'spend the effort' negotiating when 'the power imbalance is too big'.¹⁷ As one DVC-R explained, 'we have researchers who are just overwhelmed by, you know, computer says, sign here... [our library staff] keeps telling us to push back against all those things and negotiate stuff individually. But you know, that's not the way researchers think or act'.¹⁸ For many researchers, the 'idea that' they have 'any ability... to, like, negotiate the terms on which a paper is accepted' 'is a bit ... fanciful'.¹⁹

The bargaining disparity has been exacerbated by a recent shift away from emailed contractual documents to automated processes. Upon article acceptance, or even during submission, an academic author today may be sent a link to a portal that contains a standardised contract that must be accepted to progress in the publication process. Faced with the imperative described above to publish journal articles, and little or no opportunity for negotiation over terms, it is not surprising that academics, often the lead author or the research student who handles research administration on behalf of the team, may assent even if they have serious reservations about the contract terms because they perceive they have 'no choice' but to sign.²⁰ In our fieldwork, many researchers acknowledged that they do not routinely read the terms or keep formal records of the terms they have assented to.²¹ Their primary focus is on securing the research output:

[T]here's a pro forma you sign when ... your article gets accepted. You're really excited. Yay. I've got a publication. You just sign whatever they ask you to sign it, then you just give it back to the publisher.²²

Other researchers noted a failure to read publisher terms because terms are difficult to understand, or time-consuming to engage with:

I don't read it. I mean, ... I might look through, you know, like the page that's presented to me, but if there's a link to look at things in more detail, I'm not going to read like the, you know, the fine print really? Yeah. You know, and I couldn't understand it anyway, even if I had the time to read it, probably. ...

16. Alternatively, publishers' contracts take an extensive and perpetual exclusive licence. The functional difference between these options is limited: a publisher with an exclusive licensee can exclude even a copyright-owning academic from reproducing or communicating a work, and they have standing to sue for infringement of copyright: *Copyright Act 1968* (Cth) s 119 ('*Copyright Act*').

17. Interview with a Head of School and active researcher (28 October 2021).

18. Interview with a DVC-R (27 August 2021).

19. Interview with a research manager (4 March 2022).

20. 'I think often you are in a situation that you have no choice. I mean, it's either you get it into this journal, or...': Interview with an active researcher (28 October 2021).

21. Informal records may, however, be retained. As one Dean of Research stated, 'They would sign it [the publisher contract] at the time and send it off. And if they went through their emails, they might find a copy, but I don't think that they would systematically store and collate them that': Interview with a Dean of Research (23 November 2021).

22. Interview with an active researcher (2 December 2021).

But because I've been so, you know, time poor and I'm just really rushing, I really want to get the damn thing published, so I can get on to the next 10 things to do. Yeah, I don't pay too much attention to it.²³

Publishers sell access to published journal articles back to universities, including those written by their own academics, and to others willing and able to pay high subscription or individual article fees. Subscription costs are substantial, especially for STEM publications. This is a problem that has been documented for over three decades and the challenges maintaining appropriate access to scholarly resources within institutions have been exacerbated by other pressures on Higher Education budgets more recently. Further, librarians report that the high cost of accessing essential STEM resources currently impacts disproportionately on acquisition of Humanities and Social Science publications.²⁴

Academics in our interviews expressed resentment about a system in which they 'do so much'²⁵ — undertake research, write it up, peer review it, act as editors for journals — only to have any financial rewards accrue to highly profitable scientific publishers, or be told that libraries cannot afford to pay rising subscription fees for these same journals. The requirement of paying Article Processing Charges ('APCs') in such circumstances characterised is also particularly galling:

they charge article processing charges yet most of the journals still expect the academics to do the reviewing for free. And also, many of these journals have academics as editors, which is also done for free. Yeah. You know, so I think they've taken two bites of the little cherry, probably more than two bites of the cherry.²⁶

Our fieldwork suggests that academics would prefer their work to be more widely available: 'I think scientific work should be as widely disseminated as possible and as widely accessible as possible, and as low cost as possible'.²⁷ In addition to furthering the sharing of knowledge, openly accessible publications are perceived to have a positive impact on citation counts.²⁸ For many academics, however, regardless of their discipline, their need for prestigious publications as a prerequisite to career success overrides these concerns and the benefits of wide dissemination.²⁹ After noting a shift towards OA publications in their field of Education, one researcher nevertheless noted that 'the traditional high-impact journals are still seen as very prestigious and you try to get into those if you can'.³⁰ A research administrator confirmed, 'our engineers will always publish in the top journal that they possibly can within their field, no matter what [research funding or open access] policies are around them'.³¹

In summary, the imperative to publish in journals ranked as Q1 or high impact increases incentives for researchers to enter into onerous transfer or licensing arrangements and to pay APCs for the privilege of having an association with a prestigious journal and publisher brand.

23. Interview with an active researcher (17 January 2022).

24. 'There's less and less money for monographs': Interview with Librarian (17 November 2021).

25. Interview with an active researcher (28 October 2021).

26. Interview with a Dean of Research and active researcher (23 November 2021).

27. Interview with an active researcher (28 October 2021).

28. See, eg, Interview with an active researcher and former PVC-R (23 June 2021); Interview with an ADR and active researcher (1 March 2022); Interview with a Dean of Research and active researcher (23 November 2021). See also Wang et al (n 10).

29. The cost of publishing open access, as discussed in the next subsection, can also be a deterrent.

30. Interview with an active researcher (2 December 2021).

31. Interview with a research administrator (15 March 2022).

These dynamics are well known and would in themselves justify a more strategic approach to copyright management. But we suggest there are three further contextual factors that are also important, but perhaps less immediately visible to researchers and university managers: (1) the rise of OA and its increasing cost; (2) the link between OA and costs incurred in educating students; and (3) the rising importance of data about research. Combined, these three factors make a compelling case for strategic university or even sector-level management of copyright in research publications.

C The Rise, and Cost, of Open Access

Although far from sufficient,³² one way to promote the impact and application of research is to make the results of research available to broader non-scholarly audiences. Since audiences not based in universities generally have no reason to pay expensive subscriptions for scholarly publications, this means making work available outside publishers' paywalls.

While the seeds for OA were planted in the early 1990s, it was not until the early 2000s that the concept of OA as it exists today began to take root in Australian research institutions. Open access to research outputs has primarily been achieved in one of two ways: (a) the gold model where the author publishes with a journal that makes all its articles freely available online, usually because authors pay an APC upfront to cover the publishing costs that would otherwise be paid through library subscriptions; or (b) the green model, where the author publishes in a traditional journal, but then deposits ('self-archives') their article (or the author-accepted manuscript ('AAM'), ie the text prior to copy-editing) in an OA online repository, sometimes after an embargo period.³³

Governments, universities and researchers have, through past investments, built platforms for green OA. Some research disciplines, such as physics and computer science, have active and well-established mechanisms for OA publication of preprints (eg, arXiv). In law, both AustLII and the Social Science Research Network facilitate sharing of pre-prints and workshop papers. Self-archiving and institutional archiving have also been widely used. Australian universities have institutional repositories designed to store, and provide online access to, research publications, built through investment by the Commonwealth from 2007 onwards under the Australian Scheme for Higher Education Repositories ('ASHER') initiative to ensure every university developed an institutional repository for the purposes of government research assessment processes (such as the ERA). In practice, some universities (and some schools and faculties within universities) promote researcher use of the institutional repository more actively than others. In our fieldwork, we encountered institutions where the repository is in practice (if not formally) an optional fallback; others in which deposit is required and checked; some where it has been streamlined into systems academics use to report their publications to their employer; others where active researchers we spoke to had no idea how to use it.³⁴ These green OA platforms, in other words, are under-used in some institutions. In terms of attracting academics to use and value green OA more, one of their limitations is that while papers are accessible, there is limited cultural cache attached to this. Inclusion does not contribute to an academic's reputation and goodwill in the same way as having a paper included a proprietary system does, so the value of inclusion is much harder to sell to academics.

32. There is far more to impact than just making work available: research needs to be translated, and actively taken to relevant audiences not just made available to them. Nevertheless, access to peer-reviewed and authoritative outputs of research is an important part of the impact picture.

33. Note that Green OA preceded Gold OA. In the early 2000s, Green OA — that is, open access via self-archiving in repositories — was relatively common. Gold OA involving APCs was relatively novel at that time.

34. The range of inter- and intra-institutional approaches to use of the institutional repository in the text above reflects the range of answers received in interviews especially with academic researchers (including Associates Dean (research)) and staff with responsibility for management of institutional repositories and research reporting.

This could be addressed were Learned Societies and other organisations with recognised disciplinary expertise supported to encourage alternatives to proprietary journals and promote them to researchers.

Open repositories are also increasingly under some threat. Publishers are wary of self-archiving and academic sharing of publications, and many discourage or limit it via contractual restrictions, imposing embargos or requiring authors to seek permission. Previously not-for-profit author sharing portals have been acquired by publishers, licensing agreements negotiated, or legal action threatened.³⁵ This impacts on researcher behaviour: researchers in our fieldwork also expressed uncertainty over whether and when they are allowed to self-archive, and may be unwilling to risk annoying publishers on whose services they depend for career advancement.

Publishers have also created ‘hybrid’ OA models: folding demands for OA publication into their commercial models by allowing journal articles in a traditional outlet to be made OA on payment of an APC. Article Processing Charges vary enormously: in our interviews university librarians cited figures from \$200 up to US\$9000 for the most prestigious outlets.³⁶ Our fieldwork also uncovered instances in some disciplines of publishers levying multiple charges for the same publication in addition to an APC: a fee to include a graph, table or picture (ie, increased if the image is to be published in colour), a fee to be featured on the cover of the journal, and a further fee for the journal’s cover art — and no right to further disseminate any of the above. As one researcher describes,

I’ve published a few papers in Nature journals. 650 pounds per picture... and that’s not for open access. That’s for the print journal. Yeah ...

So, you know, you’re not getting much change out of five or 6,000 Australian dollars just to have your figures published in colour, you know, and you’re not going to get the paper published unless you agree to have them published in colour. Then on top of that, if you wanted it all open access, then they charge you again. Also, to have some representation of the article on the cover of a journal.

Like, I’ve had the cover of Nature. I’ve had the cover of Cell Biology or whatever. But of course now, you know, the journals have got into that ... you pay for it you know [...]³⁷

We found in our fieldwork that in at least some Australian universities, funding to pay APCs is not generally available or available only in some faculties, schools or research centres or to certain researchers; where available, such funds may be limited to a set of high-impact/high quality journals.³⁸ Even recipients of national competitive grants will often have to trade off payment for OA against other research costs in the context of budgets that rarely meet funding requests or the actual costs of research.³⁹ In some cases, academics have even personally paid APCs.⁴⁰ As these

35. See, eg, discussion of Elsevier’s business strategy in Claudio Aspesi et al, *SPARC Landscape Analysis: The Changing Academic Publishing Industry — Implication for Academic Institutions* (SPARC, 2019) 14 <<https://digitalcommons.unl.edu/scholcom/99>>.

36. Interview with a Librarian (30 November 2021); Interview with a Librarian (7 September 2021).

37. Interview with an active researcher (23 November 2021).

38. See, eg, Interview with an Associate Dean (Research) (17 March 2022); Interview with a research manager (4 March 2022); Interview with a Dean Graduate Research (1 March 2022); Interview with an active researcher (17 January 2022); Interview with an active researcher and former PVC-R (23 June 2021).

39. When the ARC’s successful 2021 Discovery Projects were announced in December 2021, the overall ‘return rate’ for successful projects (the proportion of funding sought by applicants that was awarded by the ARC) was 70%: ‘Selection Report: Discovery Projects 2021’, *Australian Research Council* (Web Page) <<https://www.arc.gov.au/grants/grant-outcomes/selection-outcome-reports/selection-report-discovery-projects-2021>>.

40. Interview with a Dean of Research (23 November 2021).

costs mount up, a clear risk is that only the best-funded researchers will have the funds to make work available OA: entrenching the advantage of a limited set of researchers (typically ARC/NHMRC-funded), who are then placed in a better position to achieve, and demonstrate, impact for their work.⁴¹ If the future of OA becomes more reliant on APCs, universities and researchers face an expensive and unequal playing field.

D The Education Costs of Access to Research

A second contextual factor that makes copyright management more urgent is that publication and OA decisions have financial implications beyond universities' research portfolios. When universities use journal articles as reading materials in teaching, and copy or make them available online in university systems, those uses are the subject of a compulsory ('statutory') licence under the *Copyright Act 1968* (Cth). Permission from copyright owners is not required, but equitable remuneration must be paid.⁴² Collecting societies receive university payments and distribute funds to copyright owners.⁴³ The licence fee is agreed between the collecting society and the universities, or determined by the Copyright Tribunal (a Federal Court judge sitting extra-judicially, sometimes accompanied by other expert panel members).⁴⁴ Past licence rates have been set at a per-EFTSU (equivalent full time student unit) cost for the right to copy and communicate any copyright material.⁴⁵ The per-EFTSU rate has not historically been based on an accurate calculation of the material copied and used by universities. Rather, the Tribunal conducts a more holistic assessment, informed by evidence about the amount and nature of copying. The universities and Copyright Agency did not reach agreement on the rates for a new statutory licence for 2019–2024, leaving the Copyright Tribunal to determine the value of the copyright licences.

Importantly for present purposes, OA material can be used without relying on the statutory licence. In the Tribunal, the university sector claimed that the amount paid for the statutory licence should be reduced to reflect, *inter alia*, rising OA publication rates.⁴⁶ In other words, if researchers make their articles OA, over time this should impact the cost of the statutory licence. Researchers however have no reason to take this into account when deciding when or how to publish, or whether to pay APCs. In formulating his decision on the statutory licence, Perram J wanted more evidence that OA policies were being adhered to by academics in practice, and that OA versions were being used in education.⁴⁷ A more holistic and strategic approach to copyright management in research has the potential to reduce costs in education. It is difficult however for universities to 'join the dots' to identify, let alone calculate or take into account the impact of research publication decisions on education costs, as these parts of the university are separately managed and led, often relying on information management systems that do not talk to each other.

41. Interview with an Associate Dean (Research) (1 March 2022).

42. *Copyright Act* (n 16) Pt VB, Div 2, Div 2A and Div 5.

43. In the case of research publications, this is the Copyright Agency: <<http://www.copyright.com.au>>.

44. *Copyright Act* (n 16) ss 135ZV, 135ZW, 135ZWA.

45. Up to certain quantitative limits, such as no more than 10% of a book: Estelle Boshoff, 'Universities Australia Copyright Q&A', *Pulse News* (Blog Post, 22 August 2019) <<https://blog.une.edu.au/pulsenews/2019/08/22/universities-australia-copyright-qa/>>.

46. *Ibid*.

47. *Copyright Agency Limited v University of Adelaide* [2022] ACopyT 2 at [12]. Universities Australia is appealing this decision.

E The Rising Importance of Research Publication Data

A final factor that should make management of copyright ownership more urgent is the increasing importance of data and analytics services *about* research performance. Multiple stakeholders have an interest in and use for data about research. Such data includes backward and forward academic and non-academic citations;⁴⁸ the size, nature and distribution of readership, including over time; and basic article metadata such as funding sources, academic authors, institutional affiliation and whether the publication is OA. Governments seek to evaluate the quality and impact of research in the university sector;⁴⁹ universities to ‘prove’ the worth of their research — and internally to assess the performance of research centres, faculties and schools, and individual researchers, or identify high performing units or individuals for further support. Analysis of patterns of citations and use of research can itself provide research leads or guide the work of researchers. Publishers have for some time been offering data services (especially in citations analysis), and forecasting these potential data and analytics services markets to be a significant revenue stream; the need for data explains a range of vertical acquisitions by the large publishers.⁵⁰ Potential services these firms can offer go deeper than many researchers would necessarily appreciate: for example, valuing the commercial worth of individual author employees and research teams and supplying this information to government and external parties.⁵¹ The more researchers and universities hand over management of all storage and dissemination of research publications to publishers, the more dependent they will be on those same publishers for data analytics services, and the less alternative or independent sources of information about research dissemination there will be.

F Resolving the Resulting Tensions and Complicating Factors: Research Publishing’s Inflection Point

The Australian university sector is not currently addressing the tensions between competing objectives for research, how they play into decisions on where and how to publish research, and what it all costs. At present, individual researchers must seek to understand publishing contracts presented to them, manage copyright ‘negotiations’ and often find the money for OA from grant funds or, occasionally, central or school funds. The results are predictable. Individual researchers are mostly distant from the costs to teaching or global access to research to which their publication decisions give rise and have the least individual power to effect change even should they try. For most, their most immediate imperative is achieving prestigious publications, and even if they *wish* publications to be OA for long term impact, they may not have the motivation, opportunity or money, to press for it.⁵² Putting the burden on individual researchers to reconcile inconsistent demands from universities and funders for both prestige publication and wide dissemination is unsustainable. Simply providing dedicated funds to enable all researchers to pay APCs would be a very expensive and

48. Backward citations are the scholarly works cited in an article. Forward citations are later citations to the article in subsequent publications.

49. The Australian Government contracted with Clarivate Analytics to provide citation information for the ERA 2018 evaluation: Australian Government Australian Research Council, ‘Clarivate selected as citation provider for ERA 2018’ (Media Release, 22 August 2017) <<https://www.arc.gov.au/news-publications/media/media-releases/clarivate-selected-citation-provider-era-2018>>.

50. See Aspesi et al (n 35). The three leading research data analytics vendors are Clarivate, Digital Science and Elsevier.

51. On the issues associated with these data tools and services, see Aspesi et al (n 35) 32-3.

52. We note that this description is not universal. There are individual researchers and research groups across Australia who engage very actively in questions of open science and OA, the payment of APCs and related questions. The description above is general and does not seek to capture the diversity of scholarly practice.

likely unfair solution, especially if no cap is imposed — and would divert already-scarce research resources away from directly funding research activities.⁵³

A number of solutions to remove this burden from researchers have been investigated and adopted overseas. The best known of these are the UK Scholarly Communications Licence ('UK-SCL') and Plan S.⁵⁴ At institutions which incorporate the licence into their OA policy, the UK-SCL states that researchers retain re-use rights in their own work and asserts that the institution retains a non-exclusive licence to make their author-approved manuscript⁵⁵ available without embargo through the university's OA repository under the terms of a Creative Commons licence (CC BY-NC, allowing free non-commercial reproduction and communication). Where the UK-SCL has been incorporated and publications are uploaded to the institutional repository, UK researchers automatically comply with funder OA policies and ensure the output is eligible for the Research Excellence Framework ('REF') assessment.⁵⁶ Plan S is an initiative of cOAlition S, a group of research funding agencies including the European Commission and the European Research Council.⁵⁷ Plan S requires that all scholarly publications on the results from research funded by Plan S members must be published in OA Journals, on OA Platforms, or made immediately available through OA Repositories without embargo. Article Processing Charges are permitted only if commensurate with publication services delivered and if the fee structure is transparent. Both the UK-SCL and Plan S seek to support a transition to move publicly funded research from behind paywalls, free for all to access without restriction and to impact researcher practice beyond researchers at institutions that have mandated adoption of the policy.

A publisher solution has also entered the market. New generation agreements known as 'Read and Publish' agreements (sometimes called 'Transformational' Agreements) offer universities a journal subscription which, alongside reading access for students and academics, also enables affiliated academics' journal articles to be automatically OA, without payment of any APC. The

53. We say unfair because APCs are higher in certain disciplines; some disciplines publish more monographs (where OA fees are even higher than for journal articles); as a result of these differences, the distribution of funds across disciplines is not likely to be equal, and the risk of some disciplines 'losing out' is high.

54. The UK-SCL is based on the OA policy developed at Harvard University in 2008: *UK Scholarly Communications Licence and Model Policy* <<https://ukscl.ac.uk/uk-scl-model-policy/>>.

55. The impact of copyright licences and assignments in research outputs are made more complicated by the existence of more than one version of a work: working papers and conference papers (prior to submission for publication); the submitted manuscript (before peer review); the author-approved manuscript or AAM (after peer review but before copy-editing); and the formally published copy-edited version (known as the version of record). Researchers may believe that copyright in versions is entirely distinct: that they are free to circulate earlier versions even after assigning copyright in an author-approved manuscript. While this *can* be legally correct if a publisher's contract so provides, in many cases, unless the researcher retains an ownership or licensed right, circulating an earlier version could infringe a publisher's copyright (after assignment) in any parts of the earlier version that persist into the final formally published version.

56. The Research Excellence Framework ('REF') is the UK equivalent of Australia's ERA. In REF2021, the open access policy applies to journal articles and conference contributions (with an International Standard Serial Number ('ISSN') accepted for publication from 1 April 2016 and published on or before 31 December 2020. For these publications to be eligible for submission in REF2021, the author-accepted manuscript (before copy-editing) was required to be made OA within a certain time (subject to a certain allowed percentage of 'non-compliant' publications): UK Research and Innovation, *REF2021: Overview of open access policy and guidance* (Summary document, November 2019) <https://www.ref.ac.uk/media/1228/open_access_summary_v1_0.pdf>.

57. See generally cOAlition S, 'About Plan S', *Plan S* (Web Page) <<https://www.coalition-s.org/>>.

Council of Australian University Libraries ('CAUL') has negotiated a number of these agreements, with pilots occurring during 2021–2022: Australian researchers are receiving (doubtless welcome) notification that their articles are automatically OA.⁵⁸ Pilot deals negotiated by CAUL included the 'publish' element at no additional cost to previous 'read only' subscriptions. A variation of the publisher solution was also proposed by Australian Chief Scientist Cathy Foley.⁵⁹ Foley proposed a national-level deal involving centralised payment to publishers to make Australian research OA. Detailed analysis of either solution is beyond the scope of this article. It is sufficient, for now, to note that while Read and Publish agreements take a burden off researchers, they can also impact academic freedom to choose where to publish: grant-funded researchers may have to choose journals where a Read and Publish agreement is in place. Further, neither solution addresses universities' increased dependence on publishers for dissemination and data about use. Perhaps most importantly, the longer-term economic cost and diversion of resources from paying for research activities to paying publishers is at best unclear. In our fieldwork, librarians who routinely negotiate with publishers expressed scepticism: 'It won't reduce the cost of access to publications. Many of our bigger publishers are commercial enterprises and you know, their role is to maximize profits for them'.⁶⁰

These Australian developments should also be understood in the context of institutional initiatives elsewhere in the world: in Europe, for example, where Read and Publish Agreements have been available for longer, but where there are moves to reduce reliance on them, driven by concern about paying publishers, and paying them far too much, as well as to facilitate access to publicly funded research.⁶¹ Across the EU, free access to publicly funded research publications without embargo is increasingly the norm, whether achieved by paying for OA or through deposit of the AAM in an institutional repository.⁶² Many EU nations have also enacted a secondary publication right to ensure that the author retains rights to the AAM and can deposit it in a repository, regardless of publisher contracts.⁶³ There has also been some reconsideration of dependence on publisher metrics for research assessment, given the financial burden of OA publishing.⁶⁴

In recent times too, university-level rights retention policies have been rolled out across many institutions across the globe.⁶⁵ In the UK, these policies allow researchers to comply with funder requirements of OA without embargo and ensure publications are eligible for inclusion in the REF research assessment exercise. Since 2021, United Kingdom Research and Innovation ('UKRI') has

58. See, eg, CAUL, 'Springer Nature and the Council of Australian University Librarians (CAUL) announce new partnership' (Media Release, 20 October 2021) <https://www.caul.edu.au/sites/default/files/aul-sn_read_and_publish_media_release_oct_2021.pdf>; CAUL, 'CAUL and Wiley sign transformative open access agreement that represents the largest in the ANZ region by article output' (Media Release, 4 November 2021) <https://www.caul.edu.au/sites/default/files/wiley_caul_press_release_-_final.pdf>.

59. A summary of Dr Foley's Open Access Strategy may be viewed at Cathy Foley, 'Unlocking the Academic Library: Open Access' (2021) 92(4) *Australian Quarterly* 11–19.

60. Interview with a Librarian (7 September 2021).

61. The UNESCO Recommendation on Open Science (2021) states with respect to publishers that '[g]iven the public interest in open science and the role of public funding, Member States should ensure that the market for services relating to science and open science functions properly in the global and public interest and without market dominance on the part of any commercial entity': UNESCO (n 13) 22.

62. OAPEN, *ERC OA Requirements*, (Web Page), <<https://www.oapen.org/article/13934224-erc-oa-requirement>>.

63. Christina Angelopoulos, *Study on EU copyright and related rights and access to and reuse of scientific publications, including open access*, (Publications Office of the European Union, 2022), <<https://data.europa.eu/doi/10.2777/891665>>.

64. Council of the European Union, *Conclusions on research assessment and implementation of open science* (25 May 2022) <<https://www.consilium.europa.eu/media/56958/st10126-en22.pdf>>.

65. For an overview, see Samuel A Moore, 'The Politics of Rights Retention' (2023) 11 *Publications* 28 <<https://doi.org/10.3390/publications11020028>>.

made OA publication of journal articles mandatory: either the Version of Record (final published article) must be made available, for free and unrestricted through a publisher journal or platform, or the AAM must be available in an institutional or subject repository. Books, chapters and edited collections (including images, tables and other supporting content) must similarly be made available for free and unrestricted from 1 January 2024, with a maximum 12-month embargo allowed.⁶⁶

Against this background, it is important to canvas alternatives, and/or counterweights to publisher commercialisation of the drive for OA, research impact and research measurement in Australia. We set out such an alternative below: one that depends on universities asserting a right both to make research outputs of their academic employees available OA, and to use those outputs for teaching and educational purposes, and perhaps even to cross license other Australian universities to do the same. Such an alternative must find its foundation in a clear understanding of, and strategic management of, copyright in research publications by Australian universities. Publishers' current dominance is built on the assertion of full, exclusive ownership of copyright in publications. As we will argue further below, better solutions may lie in taking advantage of the capacity of copyright to be divided in multiple ways, which depends in turn on clarifying, and leveraging, university ownership of publications.

III Copyright in Scholarly Outputs: It's Complicated

A Preliminary Matters

The right of Australian universities to own and use the copyright generated by academic employees has long been confused.⁶⁷ Determining who owns copyright in an article⁶⁸ depends on general legal doctrines, copyright law and employment law, as impacted by many institutional policies, EBAs and the customary practices of the particular institution. Before we analyse how these sources of law intersect, certain basic legal principles should be noted.

First, copyright is a property right which arises immediately and automatically as soon as a literary work is created, and without any formalities.⁶⁹ Copyright law allows the assignment of copyright and of *future* copyright.⁷⁰ Thus, if an academic's employment contract prospectively assigns copyright in scholarly articles, then as soon as any article is written, that assignment will take effect. Second, copyright, being a property right, is subject to the fundamental legal principle *nemo dat quod non habet*: 'you can't give away what you haven't got'. This common law rule provides that a person cannot transfer better title than they themselves possess.⁷¹ If an academic author of a

66. UKRI, *Open Access Policy* (version 1.6, May 2023) <<https://www.ukri.org/wp-content/uploads/2023/07/UKRI-220523-OpenAccessPolicy-v1.6.pdf>>.

67. Anne Monotti and Sam Ricketson, *Universities and Intellectual Property: Ownership and Exploitation* (Oxford University Press, 2003).

68. Our analysis is concerned with copyright in *literary* works, which includes (without being limited to) manuscripts, tables, compilations (and computer programs) as well as all documents which might take the form of publications, teaching materials and the like: *Copyright Act* (n 16) s 10 (definition of 'literary work'). To the extent that journal articles include artistic works (drawings or photographs) created by researchers in the course of their research, the same analysis would apply. Drawings or photographs supplied by publishers are in a different position, as they are not authored by university researchers.

69. *Copyright Act* (n 16) s 32.

70. *Ibid* s 197.

71. Michael G Bridge, *Personal Property Law* (Oxford University Press, 3rd ed, 2002) 195–228, particularly 195–8. *Nemo dat* has been considered in obiter and applied in the context of Australian IP law disputes. See, eg, *Larrikin Music Publishing Pty Ltd v EMI Songs Australia Pty Ltd* (2009) 179 FCR 169, 171; *Malibu Boats West Inc v Catanese* (2000) 51 IPR 134, [20].

scholarly work is not the copyright owner, they cannot transfer copyright title to a publisher,⁷² and the publisher contract will not be the definitive statement of the rights and interests in the work.⁷³ Third, copyright licences bind successors in title.⁷⁴ Thus, if at the time that an author purports to assign copyright to a publisher, that author owned copyright subject to a licence in favour of the university, then that licence to the university remains binding on the publisher.⁷⁵

A fourth fundamental principle is copyright's divisibility. Ownership of copyright can be 'sliced up' in any number of creative ways; the owner can license or assign different rights order to maximise their benefits.⁷⁶ Thus, the author of a popular novel can divide up volume rights which may be split up as paperback and hardback rights; ebook rights; serial rights (to have extracts serialised in newspapers or magazines); translation rights; film rights; podcast rights; streaming rights; turning-the-book-into-a-musical rights and so on.⁷⁷ It is therefore legally feasible to assign partial copyright to enable publishers to exercise some subset of rights, while retaining other rights and thus protecting the interests of researchers, the university and wider public in having access to research outputs.

These basic principles allow copyright owners to deal with their rights in a number of ways. The next step in the legal analysis is to understand how copyright ownership initially arises.

B Copyright Ownership Under the Copyright Act

Authors are the first owners of copyright in their works,⁷⁸ unless made in pursuance of the terms of their employment, in which case the employer is the first owner of copyright.⁷⁹ Both these rules are default rules: they can be varied by agreement.⁸⁰ If there is more than one author of a work, each author holds an undivided share of the copyright as tenants in common; each author has the exclusive rights of copyright, meaning they can individually transfer their share to another person or

72. This does not mean, however, that academic authors do not purport to do so. As mentioned earlier at IIB, researchers do not typically focus on copyright matters when dealing with publishers and are highly motivated to secure publication in a quality journal outlet. The fact that this author contracting practice is common does not, however, mean that it is commensurate with the legal position, or that any resultant contracts are necessarily enforceable by publishers.

73. It should be noted that publishers generate separate published edition copyright by virtue of formatting the work: *Copyright Act* (n 16) s 92. It would be an infringement of the publisher's published edition copyright or type-setting were the university to reproduce or make available the version of record without permission, but assuming copyright in the text has not passed to the publisher, published edition copyright would not prevent circulation of the text (such as the author-approved manuscript): *Nationwide News Pty Ltd v Copyright Agency Ltd* (1996) 34 IPR 53.

74. *Copyright Act* (n 16) s 196(4), considered in *Concrete Pty Ltd v Parramatta Design & Developments Pty Ltd* (2006) 229 CLR 577.

75. We note that in the event that a university sought to rely on the *nemo dat* rule to assert copyright ownership over a publication, or to rely on a pre-existing licence under s 196(4), a publisher detrimentally impacted could seek to argue an estoppel. It has been said, for example, that the *nemo dat* rule will not apply if the owner represented 'that a seller had ownership or authority to sell as agent': an estoppel by representation: LexisNexis Australia, *Halsbury's Laws of Australia* (online at 2 February 2021) 375 Sale of Goods, 'IV Effect and Performance of the Contract' [375–1000]. Alternatively, the rule will not apply if an estoppel by negligence, based on assumptions regarding the ownership of the property, can be proven against the owner: *Ibid* [375–1015]. We return to this point in part IIID below.

76. *Copyright Act* (n 16) s 196(2). See also s 30.

77. Kathy Bowrey, Michael Handler, Dianne Nicol, Jane Nielsen and Kimberlee Weatherall, *Australian Intellectual Property Law: Commentary, Law and Practice* (3rd ed, Oxford University Press, 2021) 170–1.

78. *Copyright Act* (n 16) s 35(2).

79. *Ibid* s 35(6), assuming other subsistence criteria for a literary work are met. Other criteria for subsistence of copyright in a literary work such as a book, article, book chapter or conference paper are that the author is a qualified person; that the work has sufficient originality and material form: ss 32(1), 32(4).

80. *Ibid* s 35(3).

entity, and the agreement of all authors is necessary to effect the transfer of the full copyright or to grant an effective licence.⁸¹ To understand first ownership, then, it is necessary to understand both (a) whether research outputs are made in pursuance of an academic's employment and (b) whether the default position is varied by agreement.

In Pursuance of an Academic's Employment? Academics' status as employees will in many cases be uncontroversial: many are permanent staff under employment contracts, and even casual or sessional staff are usually employed under short-term contracts. Still, not all cases are straightforward. Adjuncts and emeritus members of a university do not generally receive a salary: making it harder to argue that they are employees, although they may list their institutional affiliation in publications. Visitors are in a similar position. Higher degree research students, too, participate in research projects, and may in that capacity author works noting their institutional affiliation, and/or co-author with employed academics, without being employees. If there is a case for university ownership of copyright held by these variegated associates, it will lie, not in s 35(6) but in s 35(3), which allows for variation of default rules by agreement.

There is also the question whether a work was created in pursuance of the terms of employment: that is, did the employee make the work because the contract of employment expressly or impliedly required or least authorised that the work to be made?⁸² This question has been more often disputed in relation to patents over academics' inventions, and other readily commercialised outputs like software, rather than journal articles. In *Victoria University of Technology v Wilson*,⁸³ in a dispute over an online international trade exchange and related computer programs, Nettle J considered the question of whether a work was made in furtherance of the contract of employment. He viewed the employment relationship in light of the 'product[s] of work which the employee was paid to perform'⁸⁴ and noted that 'it all depends upon the nature of the research that the employee is retained to perform'.⁸⁵ In *University of Western Australia v Gray*,⁸⁶ in a dispute over patented technologies for the production and use of microspheres for the targeted treatment of tumours, the Full Federal Court drew a distinction between the academic's duty to research in general terms, as consistent with academic freedom, and the specific duty to invent. The Court held that a professor of surgery's employment contract did not create a specific duty to invent and, as such, the university did not have an ownership claim to Gray's invention.⁸⁷

These cases are not, however, directly analogous to journal publications. In both *Wilson* and *Gray*, academics had come up with products designed for non-scholarly markets. It was more straightforward therefore for courts to conclude that universities did not direct or expect academics to come up with such products. *Gray* held that there was a duty to research but not to *invent*, but it would be a nonsense to say, in relation to journal articles, that there is a duty to research but no duty to *publish the results*. As we have noted earlier, universities commonly require research outputs as a condition of satisfactory performance, and sometimes set quantitative minimums. The nature of an

81. *Ibid* s 78; *Prior v Lansdowne* [1977] VR 65.

82. *EdSonic Pty Ltd v Cassidy* [2010] FCA 1008, [41]. See also, in the context of lectures, other course materials and scholarly works, Monotti and Ricketson (n 67) [6.118]–[6.133].

83. [2004] VSC 33.

84. *Victoria University of Technology v Wilson & Ors* [2004] VSC 33, [104] ('*Wilson*').

85. *Ibid* [108]. Nettle J concluded that the University did not own the invention. The University was not without remedy: the two employees had breached their fiduciary duty to their employer, leading to compensation in the form either of a constructive trust over the employees' shares in the company, or payment of equal value.

86. (2009) 82 IPR 206.

87. *University of Western Australia v Gray* (2009) 82 IPR 206, 207 ('*Gray*').

academic's duty to publish was considered by the Fair Work Commission ('FWC'), in the 2020 case *University of Technology Sydney v Zhao*.⁸⁸ The FWC determined that failure to publish a sufficient number of journal articles in appropriately highly ranked journals was not, in itself, sufficient ground for dismissal.⁸⁹ But again, unfair dismissal law is a quite different context, and the issue in *Zhao* was complicated by the question whether the employee's duty was to publish in certain kinds of journals, not whether they had to publish at all.

It is therefore likely that many academics have a duty to publish research outputs, sufficient to ground the university's default ownership of publications especially in institutions where workload allocations reference the extent and quality of publication activity by the employee. For staff employed as research-only or to teach *and* research, there is even arguably more than just a general duty to publish, but a duty to publish specifically in peer-reviewed, professional venues. If the reality is that academics are expected to write articles and other literary works connected to their disciplines⁹⁰ and meant to publish them in scholarly journals with recognised scholarly publishers, then *prima facie* such publications fall within s 35(6).

This will not always be true, however, because not all academic employment is the same. An NTEU study (2018) suggests that the pre-COVID-19 pandemic workforce comprised: 35.6 per cent permanent/tenured staff; 20.6 per cent contractual staff; 43.8 per cent casuals.⁹¹ The diversity of employment agreements, including a substantial number that do not include publishing expectations complicates the application of s 35(6). Further, universities have sought in enterprise bargaining negotiations to remove guarantees of a proportion of workload to be allocated to research, which could undermine university claims to ownership of research outputs. With respect to teaching-only and short-term or sessional staff, whether or not there was an express or implied obligation to publish depends on the particulars of the statement of duties. On one view, while there may be no research publication requirement for casual staff and only for a percentage of contractual staff such as those on research contracts, the reality is that many permanent appointments follow from serial short-term teaching-only contracts and periods of insecure employment. If this is true, then publishing research may be an implied expectation. Still, the failure to allocate time within a worker's workload to conduct research complicates universities' claim to ownership.

Finally, collaboration complicates copyright ownership. In order to increase the impact and relevance of research to non-scholarly audiences, researchers are being encouraged to collaborate across institutions, and with external collaborators, including government and private sector research partners, or Indigenous collaborators, where different expectations, rules and agreements are likely to apply. Ownership is shared equally among authors, and universities can only claim ownership under s 35(6) of that proportion of copyright which belongs to their employees. If there are non-employee collaborators, this will not be sufficient to control the publication. We return to questions relating to co-authorship below.

88. [2020] FWC 416; [2020] FWCFB 3571 ('*Zhao*').

89. The Fair Work Commission also commented negatively on the university concern for the impact of publication outcomes on world rankings of universities.

90. See, eg, 'when the academic conducts research wholly or partially within his discipline, all such research is potentially within the duties of employment': Monotti and Ricketson (n 67) [6.129]. Note that Monotti and Ricketson do not explicitly consider this in the context of the duty to publish (rather, the duty to research).

91. Paul Kneist, 'The Flood of Insecure Employment at Australian Universities', *NTEU* (Web Page, 2018) <<https://www.nteu.org.au/library/view/id/8988>>.

2 As Modified by Agreement Under s 35(3). Default copyright ownership under the Act ‘can be excluded or modified by agreement’,⁹² and many employment contracts specifically address IP ownership. But with university employees, the employment ‘contract’ potentially encompasses both individual contracts and enterprise bargains, and neither of these documents typically addresses IP ownership in detail. Rather, copyright ownership is typically addressed in an internal IP policy. Institutional IP policies are formal documents that purport to clarify the ownership of and right to use IP resulting from the institution’s own and collaborative research and development and educational activities.⁹³ To determine whether these policies constitute an ‘agreement’ modifying copyright ownership, it is necessary to examine the legal status of university policies and their content.

(a) *Incorporation of University Policies into the Employment Contract.* In general employment law, an internal policy is not always legally binding as a source of contractual terms: policies must be part of the employment contract to be operative. Universities rely on the institutional IP Policy being incorporated through the employment contract for full-time, part-time, sessional, casual and honorary staff alike. The terms of the employment contract may refer to the university’s governing policy documents or alternatively, it may simply require, as one of its terms, that the academic complies with policies, rules and procedures made by the institution and amended from time to time.⁹⁴ For example, the Queensland University of Technology (‘QUT’) employment contract states ‘The employee agrees to be bound by QUT *Intellectual Property Policy*, Policy D/8.1, as contained on the webpage at [URL], and as it may be varied from time to time’.

While courts have accepted that terms contained in one document have been incorporated into another contractual document by reference,⁹⁵ there is authority suggesting that a policy may ‘govern the relationship’ but not be part of the contract itself. In *Westpac Banking Corporation v Wittenberg*,⁹⁶ a number of employees of St George Bank argued that they were entitled to certain bonuses payable according to the bank’s policies, although a merger with Westpac bank had led to policy changes including the bonuses being tied to retention during the merger and new financial targets. In holding that the obligation to pay the bonus was not contractual, the full Federal Court stated:

I do not think it can be said in the ordinary case that such payments are essentially contractual. One reason they are not is that they are not certain. The difficulty is exposed in any case where an estimate for the future must be made. Such an estimate is only ever able to be calculated by reference to past payments, rather than the application of a contractual promise to nominated future events.⁹⁷

92. *Copyright Act* (n 16) s 35(3).

93. See, eg, ‘Intellectual Property Policies for Universities’, *World Intellectual Property Organization* (Web Page) <https://www.wipo.int/about-ip/en/universities_research/ip_policies/>.

94. On the incorporation of the principles of the university IP policy generally through employment contracts, see Ann Monotti, ‘Academic Employees in Universities: Who can Exploit their Intellectual Property?’ in Niklas Bruun and Marja-Leena Mansala (eds), *Research Handbook on Intellectual Property and Employment Law* (Edward Elgar, 2021) 326, 336.

95. *Smith v South Wales Switchgear Co Ltd* [1978] 1 WLR 165; *Riverwood International Australia Pty Ltd v McCormick* [2000] FCA 889; *Goldman Sachs JB Were Services Pty Ltd v Nikolich* (2007) 163 FCR 62; *Ange v First East Auction Holdings Pty Ltd* (2011) 284 ALR 638; *Doggett v Commonwealth Bank of Australia* (2015) 47 VR 302. See also the overview of general principles in Lindy Willmott et al *Contract Law* (Oxford University Press, 5th ed, 2018) 233–5.

96. (2016) 330 ALR 476 (‘*Wittenberg*’).

97. *Ibid* [125].

Wittenberg suggests that even where policies are referred to in an employment contract, they may not be incorporated as binding contractual terms. However, *Wittenberg* also endorses cases standing for the principle that explicit adoption of employer policies into an employment contract gives them contractual force.⁹⁸ *Wittenberg* therefore stands for the proposition that while policies can be made operative through the employment contract, the enforceability of each term of the policy will depend upon normal contractual principles, including the requirement of certainty. Clauses which clarify ownership of IP created in the course of employment are likely to be classified as sufficiently certain⁹⁹ and hence have contractual force.

We also need to consider whether there are any other employment agreements between employer and employee that supplant the employment contract and incorporated policies. This involves a consideration of the interaction between the employment contract and the EBA.

(b) Status of University Policies in Light of the Enterprise Bargain Agreement. The industrial conditions governing the employment of university staff are prescribed in an EBA, sometimes called a Staff Agreement. There are usually separate agreements for different categories of staff: academic, general or professional staff, and sometimes for management-level employees such as Deans, Heads of School, Vice-Chancellors, and Deputy and Pro Vice Chancellors. They are formed through collective bargaining between a union or group of employees and management and approved by the FWC under the *Fair Work Act 2009* (Cth). An EBA prevails over individual employment contracts and by implication, any university policies it incorporates.

The relationship between enterprise agreements and policies incorporated via a university employment contract was considered in *James Cook University v Ridd*.¹⁰⁰ Peter Ridd, an academic staff member, admitted he had violated James Cook University's Code of Conduct in criticising his colleagues' research, but argued that he was exercising his right to intellectual freedom in accordance with cl 14 of the EBA, which he argued took precedence over the Code of Conduct. He won at trial but lost both on appeal to the full Federal Court,¹⁰¹ and before the High Court,¹⁰² the latter deciding on a narrow point regarding the distinction between academic freedom and freedom of speech. The High Court did not consider the status of the IP Policy but confirmed the general position that where there is any inconsistency, the EBA prevails over university policies, and over a law of a State or Territory, including any legislation incorporating a Code of Conduct.¹⁰³

We analysed the EBAs of the 38 public institution members of Universities Australia.¹⁰⁴ We found that enterprise bargains do not often explicitly articulate with IP Policy, leaving IP ownership to university policy and other principles of statute and common law. Only 11 universities had a

98. *Riverwood International Australia Pty Ltd v McCormick* [2000] FCA 889; (2000) 177 ALR 193; *Goldman Sachs JB Were Services Pty Ltd v Nikolich* [2007] FCAFC 120; (2007) 163 FCR 62; *Romero v Farstad Shipping (Indian Pacific) Pty Ltd* [2014] FCAFC 177; (2014) 231 FCR 403.

99. Subject, perhaps, to some perhaps small risk that uncertainty is created by conflict between university policies, as described further below.

100. (2020) 382 ALR 8.

101. *James Cook University v Ridd* (2020) 382 ALR 8.

102. *Ridd v James Cook University* (2021) 394 ALR 12.

103. *Ibid* [17].

104. Survey conducted in July 2021. Note that as of late 2021 and 2022, many EBAs are currently the subject of renegotiations: but, to our knowledge, no negotiations involve the nature or scope of any IP clauses in the EBA.

dedicated IP clause in the EBA. Such clauses typically referenced a general university duty to have an IP policy and/or commitment to recognise IP rights, but IP *ownership* was not typically covered in any detail.¹⁰⁵ Clause 30 of the University of Wollongong Enterprise Agreement for Academic Staff (2019) is typical. It states that:

The University will have and maintain an Intellectual Property Policy that respects and promotes the rights, including moral rights, and interests of originators and the University.¹⁰⁶

The vast majority of EBAs also specify that the University Policies and Procedures are not incorporated as part of the EBA. For example, in addition to cl 30 above, the University of Wollongong EBA states at cl 3.5 that:

While the University recognises that the application of the Agreement requires policies and procedures to be followed, nothing in this Agreement shall be taken as incorporating as a term of this Agreement, or being subject to any process in this Agreement, any University policy, procedure or process referred to in this Agreement.

Where such a clause exists, the IP Policy will not have contractual force through the EBA: although it may through the inclusion of an appropriate term in individual employment contracts.

(c) *What University Policies Say About IP Ownership.* The next question is how University IP policies allocate copyright ownership. We conducted a cross-institutional analysis of IP, authorship, OA and Aboriginal and Torres Strait Islander research policies of six universities: the University of New South Wales, University of Newcastle, University of Sydney, QUT, University of Technology Sydney ('UTS') and the University of South Australia. These universities were selected not only because they are the home institutions of the researchers, but because they are broadly representative of the range of public institutions in Australia: city, regional, Group of Eight ('Go8'), Australian Technology Network ('ATN') and other universities.

We found that Universities do not assert sole and unrestricted ownership of scholarly works.¹⁰⁷ Following the *Gray* case,¹⁰⁸ many Australian universities tightened their IP policies to clarify doubt about implied terms and to ensure that (most) IP is created within the scope of employment. The IP policies do not tend to draw any distinction according to whether research forms part of an academic employee's duties. For example, the University of Sydney *IP Policy 2016* expansively provides for University ownership on bases extending beyond those provided for in s 35(6) of the *Copyright Act*:

Except as otherwise provided in this policy or in a separate agreement, the University owns all IP originated by staff or affiliates:

(a) in the course of employment by the University;

105. An exception is University of Newcastle Academic Staff and Teachers Enterprise Bargaining Agreement 2018, cl.18.1(i) <https://www.newcastle.edu.au/_data/assets/pdf_file/0004/517180/Combined-Academic-Staff-and-Teachers-Enterprise-Agreement-2018.pdf>: 'The University asserts ownership of intellectual property created by originators in the course of their employment with the University unless specified otherwise'.

106. University of Wollongong Enterprise Agreement Academic Staff, 2019, cl 30 <<https://documents.uow.edu.au/content/groups/public/@web/@personnel/documents/doc/uow116061.pdf>>.

107. Here we nuance Monotti's statement that 'no universities assert ownership of scholarly works as a class': Ann Monotti, 'University Employees and Intellectual Property' (Draft, 24 August 2015) 34 <<http://doi.org/10.2139/ssrn.3000693>>.

108. See discussion in footnotes n 6–8 and accompanying text.

- (b) using University resources;
- (c) at the specific request or direction of the University; or
- (d) as part of a project or program supported by funding obtained or provided by the University.¹⁰⁹

‘Affiliate’ is also a broader term than ‘employee’ within s 35(6): the term is defined to include ‘clinical title holders; adjunct, conjoint and honorary appointees; consultants and contractors to the University; holders of offices in University entities, members of Boards of University Foundations, members of University Committees; and any other persons appointed or engaged by the University to perform duties or functions on its behalf’.¹¹⁰

Alongside this broad claim to university ownership of IP, however, there is often a separate provision made for scholarly works. The IP policies we reviewed exhibited variations on a theme with two key elements, (1) researcher control over publication and (2) reservation of some rights to the university to use research publications for teaching and learning/educational purposes. All policies contained these elements, but with notable differences in how they dealt with ownership. QUT’s IP policy, for example, claims ownership over scholarly works, then assigns a limited right to publish scholarly works back to the creator/s, subject to a licence in favour of the university.¹¹¹ The UTS policy *waives* IP ownership in relation to scholarly works, with a reservation to allow use of works for educational purposes.¹¹² The University of Sydney policy states that the academic author owns scholarly works ‘subject to a non-exclusive, free, irrevocable licence to the University to use such works and to sub-licence other parties to do so’.¹¹³ Notably this is not an assertion of ownership by the University, which retains a licence, albeit a broad one not limited to any particular purpose.¹¹⁴

University policies claiming academics’ IP but then assigning or licensing back copyright in scholarly works to the author reflect the long-standing practice for employed academics to be able to choose where and with whom they publish text books, journal articles and the like, and deal with their chosen publisher without university counsel being involved. Other purposes may also be served by the university’s reservation of some rights — at least in theory. At UTS and QUT, the author’s rights are explicitly made subject to OA requirements. Queensland University of Technology’s policy provides that the assignment of the right to publish to the author is subject to a perpetual, irrevocable, world-wide, royalty-free, non-exclusive licence in favour of QUT to allow QUT to use the work for educational, research and commercialisation purposes *and to make the work available via its institutional repository using CC BY-NC*.

We note finally that the assignment of copyright in many IP policies, from the university to the academic author, is not valid under the *Copyright Act* unless it is in writing and signed by the assignor.¹¹⁵ Writing, for these purposes, is likely to be fulfilled via the employment contract which incorporates university policies including (explicitly or implicitly) the IP policy; the position could

109. University of Sydney, *Intellectual Property Policy 2016* (10 May 2016) cl 7.1.

110. *Ibid* cl 6.

111. Queensland University of Technology, *Intellectual Property Policy D/3.1* (approved 30 June 2021) [3.1.4].

112. *Ibid* [3.1.5].

113. University of Sydney, *Intellectual Property Policy 2016* (10 May 2016) cl 7.5.

114. The licence is also a non-exclusive licence (necessarily, given its breadth), which would preclude the university suing in its own right to protect its interest: only exclusive licensees and copyright owners can sue for copyright infringement: *Copyright Act* (n 16) s 119.

115. *Ibid* s 196(3).

be less clear, perhaps, in the case of the broad range of affiliates purportedly bound, for example, by the University of Sydney's policy.¹¹⁶

A key conclusion from the cross-institutional analysis of policies is that universities across Australia already claim an interest — ownership, or a perpetual licence — in the copyright in journal articles produced by academic authors. As noted above, even if this interest is a licence, it binds successors in title, such as publishers.¹¹⁷ The foundation already exists, then, to challenge publishers' assertion of full ownership of copyright, or any attempt by publishers to prevent universities making their employees' copyright works available in OA form. This analysis only applies to the employees' copyright: that is, the literary work, or text, embodied in the author-approved version of a manuscript, and not the copy-edited version of record which is the subject of an additional, separate copyright owned by the publisher.¹¹⁸

C Other University Policies That Complicate, or Intersect With, Copyright Ownership in Research Publications

So far we have discussed core documents determining copyright ownership: the *Copyright Act*; employment contracts and enterprise bargains, and university IP policies. But other intersecting university policies, including those pertaining to commercialisation, outside work rules, OA mandates and research metrics are also relevant to questions of ownership. University policies are typically developed in a piecemeal fashion, drafted by different people in different university portfolios, each with their own goals and agendas, and implemented within universities across departments and at different levels. The cross-institutional analysis revealed that these policies diverge or conflict, directly or indirectly.

I Authorship and Co-authorship. We have assumed so far that the named authors of a research work are its authors for copyright ownership purposes. But is this true?

Research is increasingly a collaborative exercise, with multiple people involved, because no one person has all the essential skills, knowledge and resources to solve significant real-world problems. Researchers collaborate internationally,¹¹⁹ nationally and intra-institutionally, across disciplines, formally and informally. Collaborator contributions can include project proposal and hypothesis development; research design; approaching prospective funders and applying for funding; finding the right people (both staff, and sometimes research participants); project management; data collection (and experimentation); data analysis; and ultimately writing up the research in the form of articles. Questions necessarily arise as to whose contributions, of the many involved in a research venture, 'count' for the purposes of being an author of the resulting outputs.

116. There may, of course, be some other kind of agreement entered by some of these affiliates with the University, that purport to — or actually — cause affiliates to be bound by (some or all) University policies.

117. See discussion in footnote 73 above and accompanying text.

118. See discussion in footnote *ibid* above.

119. Authorship policies are not necessarily the same internationally: however, the focus of this article is on Australian law. We note nevertheless that international collaboration, which is increasingly common, can become complicated by differences regarding authorship, and the potential for differences means that it cannot be assumed, merely from looking at a list of authors, what the basis for their authorship is.

Allocation of authorship is complicated by the important role it plays in performance evaluation and promotion. Authorship is the primary way researchers prove they are research active and maintain and develop research track records and careers. Differentiating between authors and those whose status is merely that of collaborator, and how contributions and author names are ranked can be contested.¹²⁰ Universities and funders therefore have promulgated authorship policies to resolve these conflicts.¹²¹

A review of university authorship policies across six Australian institutions; and ARC/NHMRC statements about authorship¹²² reveals that university and research funder policies frame authorship and co-authorship as questions of research integrity, without regard for university IP policies or copyright ownership. These policies seek to advance ethical behaviour by improving transparency and accountability in research practice, including by encouraging data sharing and efficient use of resources. They seek to influence research cultures of attribution by ensuring that researchers who have made meaningful contributions to the research receive appropriate credit,¹²³ and that credit is not given to those who have not contributed. Current authorship guidelines also require that a researcher must *consent* to be named as an author, making authorship not only a matter of credit, but responsibility for the output.¹²⁴

Under the policies a person is entitled to be a named author if they make a ‘significant intellectual or scholarly contribution to the research’¹²⁵ to at least one of the following factors: conception and design of the research; data collection or generation (at least where the acquisition has required significant intellectual judgement, planning, design or input); determination, analysis and interpretation of research data; drafting or revision of significant parts of the research output so as to contribute to the interpretation.¹²⁶ The *Australian Code for the Responsible Conduct of Research* refers also to the ‘contribution of knowledge, where justified, including Indigenous knowledge’ as a basis for authorship status.¹²⁷ In practical terms,

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120. In some disciplines, authorship *order* may be especially contentious, because the position of the authors is used to indicate the nature, and importance of an individual’s contribution: see, eg, Stephanie Boyer et al, ‘Percentage-based Author Contribution Index: a universal measure of author contribution to scientific articles’ (2017) 2(18) *Research Integrity and Peer Review*, doi: 10.1186/s41073-017-0042-y.
121. The research shows there is not necessarily consensus amongst researchers (particularly within science and related disciplines) as to who is deserving of co-authorship: Julian Higgins et al (eds), *Cochrane Handbook for Systematic Reviews of Interventions* (Cochrane, version 6.2, updated February 2021).
122. NHMRC, ARC and Universities Australia, *Australian Code for the Responsible Conduct of Research* (2018); NHMRC, *Authorship: A guide supporting the Australian Code for the Responsible Conduct of Research* (Australian Government, 2019).
123. See NHMRC, ARC and Universities Australia, *Australian Code* (n 122) Principle 4, 2; NHMRC, *Authorship: A guide* (n 122) [4.1], 3 (both documents framing authorship as a question of fairness).
124. NHMRC, ARC and Universities Australia, *Australian Code* (n 122) Responsibility 25, 4; NHMRC, *Authorship: A guide* (n 122) [4.1], [4.4], 4–5. University-level policies on authorship repeat the language of this ARC/NHMRC Code.
125. NHMRC, ARC and Universities Australia, *Australian Code* (n 122) Responsibility 25, 4; NHMRC, *Authorship: A guide* (n 122) [2], 1.
126. NHMRC, *Authorship: A guide* (n 122) [2.1], 1. The guide also lists factors *not* sufficient for authorship: providing funding, data or materials; routine technical support; position or profession (eg, being the author’s supervisor, or head of department): at 2. Some commentators endorse an even broader conception of authorship, for example, arguing we should adapt authorship to incentivise large-scale collaborations and team building, especially in global and interdisciplinary contexts. This could include recognising mentoring, data sharing and provision of other forms of intellectual engagement or material support: See, eg, Jason Borenstein and Adil Shamoo, ‘Rethinking Authorship in the Era of Collaborative Research’ (2015) 22(5) *Accountability in Research* 267; Bart Penders, ‘Letter to the Editor: Respecting the Plurality of Value and the Messiness of Scientific Practice’ (2016) 23(2) *Accountability in Research* 136; Nicole Vasilevsky et al, ‘Is authorship sufficient for today’s collaborative research? A call for contributor roles’ (2021) 28(1) *Accountability in Research* 23.
127. NHMRC, *Authorship: A guide* (n 122) [2.1], 1.

institutional policies require attribution to be determined by consensus amongst the research team, as brokered by an individual executive author.¹²⁸

Co-authorship policies are therefore not driven by the same goals as govern the allocation of authorship in copyright and have the potential to complicate ownership, especially to the extent that these policies require naming authors who do not meet the legal requirements for copyright authorship. The conception of authorship in copyright reflects copyright's interest in recognising and rewarding, not research contributions, but literary authorship. Tests for works of joint authorship in copyright law, while contextual and fact-specific, involve narrower considerations than those that arise in discussion of research integrity and ethics.¹²⁹ The *Copyright Act* defines a work of joint authorship as:

a work that has been produced by the collaboration of two or more authors and in which the contribution of each author is not separate from the contribution of the other author or the contributions of the other authors.¹³⁰

Joint authorship in copyright law depends on contribution to *the writing of the literary work* — not to the underlying research. Because of the need for collaboration where contributions are not separate, factors antecedent to the writing of the literary expression of the publication such as methodological contributions, data collection, conception and analysis can be viewed sceptically.¹³¹ Editorial and drafting contributions or approving final copy would not necessarily be sufficient.¹³² More abstract contributions going to matters such intellectual vision, the research question, methodology, design and data creation are not automatically devalued, but it can be harder to evidence these kinds of contributions to the literary expression, which is necessary where attribution of authorship is disputed.¹³³ Even intention to be co-authors — such as might be demonstrated by a written authorship agreement between research contributors — has been treated by courts as largely irrelevant.¹³⁴

Attributions of authorship that are inconsistent with the *Copyright Act*, even if consistent with university authorship policies, could put researchers and publishers in breach of moral rights under Part IX of the *Copyright Act*.¹³⁵ Moral rights promote integrity as that concept is understood within copyright law: namely, recognising the fundamental personal connection between a copyright

128. See, eg, 'Responsibilities of the senior or executive author' in University of South Australia, *Authorship Policy* (Res-12.2, last amended 22 November 2013).

129. See generally Daniela Simone, *Copyright and Collective Authorship: Locating the Authors of Collaborative Work* (Cambridge University Press, 2019).

130. *Copyright Act* (n 16) s 10(1).

131. *Acohs Pty Ltd v Ucorp Pty Ltd* [2012] FCAFC 16; (2012) 201 FCR 173.

132. *Fairfax Media Publications Pty Ltd v Reed International Books Australia Pty Ltd* [2010] FCA 984; (2010) 189 FCR 109.

133. *Milwell Pty Ltd v Olympic Amusements Pty Ltd* (1999) 85 FCR 436; *Kogan v Martin* [2021] EWHC 24 (Ch).

134. See, eg, the approach to collaboration in the United Kingdom case of *Kogan v Martin* [2020] FSR 3, [2019] EWCA Civ 1645. Cf the United States case of *Thomson v Larson* 147 F3d 195 (2d Cir, 1998) 203–4, [30] where the court insisted upon objective manifestations of intent to share authorship. See also Daniela Simone, 'Kogan v Martin: A New Framework for Joint Authorship in Copyright Law' (2020) 83(4) *Modern Law Review* 877, 882.

135. Publishing contracts commonly require that the authors warrant that they own copyright and are entitled to enter the contract. Wrongful attributions and exclusions of authorship expose all those named to liability for costs to the publisher that could flow from infringement of the rights of an excluded author and breach of their moral right of attribution. Arguably, then, there are cases where compliance with research integrity puts researchers at risk: however, this risk will not arise if there is a written authorship agreement.

author and their work. Failure to attribute a person who is an author, and false attribution of (copyright) authorship are civil (and in some cases criminal) wrongs,¹³⁶ albeit wrongs which the genuine copyright author(s) can consent to.¹³⁷ More importantly for present purposes, a person named as an author of a research output under research integrity guidelines binding on a researcher, may not, as a matter of *copyright* law, be an author entitled to a share of ownership.¹³⁸ This should be of at least mild concern to all members of the research publication pipeline whose certainty of title is thus impaired: universities, academic authors and publishers.

Ideally, in an increasingly collaborative and complex research environment, copyright authorship would be separated out from research credit and responsibility.¹³⁹ But this seems unlikely to happen: publication, grant and university systems and metrics such as individual citation measures have been built around authorship as the foundation of credit for research. Short of separation, we would advocate for a mixture of written authorship agreements to minimise the risk of later disputes and avoid moral rights breaches by ensuring appropriate consents, and researcher education with a view to informing researchers of the risks and enabling them to build in, during the conduct of research, a credible case for copyright authorship for each named author. To better manage these tensions, we would also argue that IP and research integrity ought to be part of the same policy, or at least that these policies should be written and amended together, in order to confront and manage inconsistencies. Having a stand-alone authorship policy obscures the authorship-IP interface, and unnecessarily complicates universities' capacity to manage university IP.

2 Funder Requirements and Agreements in Relation to Indigenous Research. Further complications arise in the instance of Indigenous research. Aboriginal and Torres Strait Islander people and cultures are a focus of many Australian university researchers. Knowledge, biological material and cultural property of Aboriginal and Torres Strait Islander peoples has been taken without permission, studied and stored in university collections and used to advance colonial projects. University research practices have resulted in exploitation. Historically, Indigenous people have been largely positioned as research informants and the subjects of outsider research agendas. Problems have arisen around ownership, access to and use of research data and the presentation and dissemination of research outputs. As the copyright tests for joint authorship, discussed in the previous section, do not recognise how Aboriginal and Torres Strait Islander Peoples 'conceive and recognise their cultural and intellectual property',¹⁴⁰ this has contributed to the wrongful presumption that Indigenous contributions never amount to authorship.

136. *Copyright Act* (n 16) s 195AD. The right against false attribution is, in copyright law, the right of each *true copyright author* (each person who actually authored the article) to object to the attachment of the name of a person in such a way as to falsely represent that person as an author.

137. *Ibid* s 195AWA. Consent must be in writing but can be given generally by an employee (s 195AWA(4)); we can likely apply again analysis earlier in this paper that recognises the potential of the employment contract, and its incorporation of university policy, to constitute an agreement in writing.

138. In the event of dispute, a named author could, in court, call in aid the statutory presumption in civil litigation that those named on a publication are authors under *Ibid* s 127 (although this is a rebuttable presumption).

139. Lionel Bently and Laura Biron, 'Discontinuities between legal conceptions of authorship and social practices: What, if anything, is to be done?' in Mireille van Eechoud (ed), *The Work of Authorship* (Amsterdam University Press, 2014) 237–76. Systems developed by journals where the specific contributions of different named researchers to the research are explicitly identified as a step in this direction.

140. NHMRC, *Keeping Research on Track II* (Report, 2018) 15 <<https://www.nhmrc.gov.au/about-us/resources/keeping-research-track-ii>>.

In recent years, universities have started to acknowledge this colonial legacy and implement policies to improve research practice.¹⁴¹ It is hoped that improvements to research culture will lead to benefits to Aboriginal and Torres Strait Islander peoples that flow from more respectful collaboration and more ethical research. Universities Australia, NHMRC, ARC and AIATSIS research integrity policies and guidelines¹⁴² explicitly govern the conduct of researchers with respect to Aboriginal and Torres Strait Islander knowledge and culture. These policies are adopted as part of Research Ethics codes at Australian universities and as such, apply to all university researchers, regardless of funding arrangements.

These policies aspire to shift research practice ‘from a model of consultation and participation to an engagement model’, promoting Indigenous-led research and a minimisation of harm.¹⁴³ This reform entails more than simply adding an Aboriginal or Torres Strait Islander researcher to a research team, it also emphasises the importance of appropriately crediting *all* contributions of Indigenous people.¹⁴⁴ The AIATSIS Code, for example, advises researchers to consider joint authorship in partnership agreements with particular communities or organisations, as ‘the threshold for intellectual and scholarly contribution that warrants authorship specifically includes contribution to design and contribution of Indigenous knowledge’.¹⁴⁵ From an ownership perspective, especially where joint authorship of research has been formalised in a partnership agreement with Indigenous collaborators, another set of claimants to authorship and ownership will be created.

Many researchers around Australia working with Indigenous communities are cooperating with relevant communities to identify needs with respect to working on country, making visible information already held in libraries and other repositories and translating what university policies mean in practice for research projects relating to Indigenous Knowledge. Nevertheless, it is clear that policy development by research funders has not been matched by attention to implementation in practice, leaving potential inconsistencies between funder requirements, IP and authorship policies within universities and copyright law. These conflicts then fall to individual academics to manage — whose capacity to manage these conflicts well will vary. This problem is exacerbated by the tendency for universities to treat Aboriginal and Torres Strait Islander research matters through the lens of the ethics process and research integrity, where ownership of and control of research data and outputs is treated as a matter to be negotiated between parties or by the Research Office, and in the absence of Aboriginal and Torres Strait Islander researcher access to specialist IP expertise.

More needs to be done to harmonise funder requirements, IP and authorship policies, and to ensure clear messaging for researchers around ownership and authorship of Aboriginal and Torres Strait Islander research, so that the responsibility to abide by relevant policies is not solely in the hands of individual researchers.¹⁴⁶ Otherwise, there is a risk that copyright’s stricter joint authorship

141. See Kathy Bowrey, Irene Watson and Marie Hadley, ‘Decolonising Aboriginal and Torres Strait Islander Research’ (2022) 64(1) *Australian Universities Review* 45.

142. NHMRC, ARC and Universities Australia, *Australian Code* (n 122) Principle 4, 2; NHMRC, *Authorship: A guide* (n 122); AIATSIS, *AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research* (2020) <<https://aiatsis.gov.au/sites/default/files/2020-10/aiatsis-code-ethics.pdf>>; AIATSIS, *A Guide to applying: The AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research* (2020) <https://aiatsis.gov.au/sites/default/files/2020-10/aiatsis-guide-applying-code-ethics_0.pdf>.

143. AIATSIS, *AIATSIS Code of Ethics* (n 142) 8.

144. See, eg, NHMRC, ARC, Universities’ Australia, *Authorship: A guide supporting the Australian Code for the Responsible Conduct of Research* <<https://www.nhmrc.gov.au/about-us/publications/australian-code-responsible-conduct-research-2018>>.

145. AIATSIS, *AIATSIS Code of Ethics* (n 142) s 2.6.

146. Improvements to existing institutional procedures are put forward in Bowrey et al (n 141) 50–1.

standard will be applied in an unnecessarily restrictive way, leaving Aboriginal and Torres Strait Islander interests unprotected. As Bowrey et al observe, it is

only the status as author that provides Aboriginal and Torres Strait Islander research participants with a direct means to hold researchers and third parties to account for the content of publications and determine related matters such as whether the research should be open access.¹⁴⁷

Outside of law reform to the joint authorship standard, or a more flexible interpretation of the joint authorship test,¹⁴⁸ contracts with Indigenous collaborators could be used to promote stronger inclusion of Indigenous authorship as the basis of co-ownership, and thus prevent copyright principles trumping institutional policies. Communal authorship notices could be used where appropriate, as sought by authors or communities.¹⁴⁹ Extra-legal factors have a role to play here. Cultural inclusion information could be mandated in ethics statements published with the article to improve publication transparency and allow readers to assess the validity of research. The Public Library of Science has, for example, announced a policy for such a statement, to include details as to who granted permissions and/or consent for the study; names of local collaborators; where the research was conducted or members of the community studied; and statements of explanation where no authors are included from said communities.¹⁵⁰ Traditional knowledge and bio-cultural knowledge labels have also been developed where communities can indicate if, how and on what terms Indigenous research participants consent to use of knowledge and genetic resources.¹⁵¹ Such considerations should be of great significance to researchers due to the *Nagoya Protocol to the Convention on Biodiversity*¹⁵² and associated practices which can impact the movement of genetic resources and the capacity to obtain a patent in certain jurisdictions.¹⁵³

In addition to addressing questions around authorship, a ‘one size fits all’ OA mandate also poses challenges for Indigenous communities. On the one hand, increased accessibility to knowledge will improve access to research publication databases for Indigenous communities and enterprises, in circumstances where accessing such databases is typically prohibitively expensive. On the other hand, OA appears to undermine the principle of self-determination that typically includes the right to be consulted about uses of knowledge. A mandatory requirement of OA could therefore be

147. Ibid 49.

148. See, eg, Colin Golvan, ‘Aboriginal Art and the Protection of Indigenous Cultural Rights’ (1992) 14(7) *European Intellectual Property Review* 227, 230; Kathy Bowrey, ‘The Outer Limits of Copyright Law — Where Law Meets Philosophy and Culture’, (2001) 12(1) *Law and Critique* 1–24; Daniela Simone, ‘Dreaming Authorship: Copyright Law and the Protection of Indigenous Cultural Expressions’ (2015) 37(4) *European Intellectual Property Review* 240, 240–50.

149. In some instances, community collaboration may be most appropriately recognised by naming the authors as trustees for the community. On issues to consider in developing contracts with Indigenous collaborators, see Terri Janke’s *True Tracks*® workshops <<https://www.terrijanke.com.au/true-tracks>>.

150. See, for example, ‘Announcing a new PLOS Policy on Inclusion in Global Research’, The Official PLOS Blog, 27 September 2021 <<https://theplosblog.plos.org/2021/09/announcing-a-new-plos-policy-on-inclusion-in-global-research/>>.

151. See ‘Grounding Indigenous Rights’, *Local Contexts* (Webpage) <<https://localcontexts.org/#>>.

152. *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity*, opened for signature 29 October 2010, 3008 UNTS 3 (entered into force 12 October 2014).

153. See Brad Sherman, ‘Which Nagoya Protocol? User-driven Solutions to the Legal Uncertainty Created by the Nagoya Protocol’ in Charles Lawson, Michelle Rourke and Fran Humphries (eds), *Access and Benefit Sharing of Genetic Resources, Information and Traditional Knowledge* (Routledge, 2023) 249–58.

counterproductive and exacerbate existing programs with research agreements and lack of attribution of Indigenous authorship and agency.

D Summary of the Legal Analysis

This Part has revealed the shaky foundations of any assertion of ownership of copyright in university-affiliated research outputs, by *any* party in the research pipeline — whether that claim is made by the university, academic author or the publisher who receives an assignment from them.¹⁵⁴ Universities' claim to ownership is theoretically strongly grounded in their status as employer (as recognised under *Copyright Act* s 35(6)) and by IP policy clauses, common across the sector that retain limited ownership or perpetual, irrevocable licences and which are incorporated into employment contracts. But that claim is weakened by the rise in casual employment; moves to remove research as part of the universal workload of academics; and unclear mechanisms to make IP policies binding on anyone other than contracted employees with research as part of their recognised workload. It is also weakened by universities' failure to act on their claim. By acting as if all ownership and all responsibility for academic publications lie with academic authors, universities may make it true, via traditional legal principles such as estoppel. The picture is further confused by a morass of inconsistent university and funder policies which have turned academic authorship into a measure of credit, a proxy for research performance and a *sine qua non* of the academic career: further increasing the practical pressure to expand the list of authors, potentially in ways inconsistent with copyright law.

The copyright ownership claims of academic authors are weakened by IP policies that reserve certain rights to universities, and their status (where applicable) as employees. This in turn weakens the claims of publishers who purport to obtain ownership via assignments from researchers. Moreover, given universities' default ownership under the *Copyright Act*, publishers' *only* basis for copyright ownership lies in University IP policy clauses which assign rights back to academic authors. These are precisely the same clauses which confer perpetual, irrevocable rights on the university: publishers surely cannot take the benefit of the assignment without also accepting the university's rights. Co-authorship rules also potentially weaken publishers' claims in circumstances where publishers have received a written contractual assignment from only an executive or corresponding author.¹⁵⁵

In short, the current situation is a mess. The parties benefiting from this mess are publishers, who have stepped in to assert, and to build automated and data systems that assert default ownership of the whole copyright, however shaky the foundation of that claim, largely without challenge from the university sector to date. So long as these assertions by publishers remain unchallenged by universities, universities could have difficulty seeking to enforce their rights. However, as default owners of copyright under the Act, universities are best placed to remedy, or at least mitigate, the current lack of clarity around copyright ownership: and use copyright ownership to achieve universities' public goals. The final question is: how should this be done?

154. See also William van Caenegem, 'VUT v Wilson, UWA v Gray and university intellectual property policies' (2010) *Australian Intellectual Property Journal* 21, 148.

155. A court in Munich in 2022 held that publishers could not be awarded damages for copyright infringement in circumstances where publishers could not prove assignments from co-authors: Diana Kwon, 'ResearchGate Dealt a Blow in Copyright Lawsuit' (2022) 603(7901) *Nature* 375. The court did, however, find copyright infringement.

IV Conclusions and the Way Forward

In this article, we have explained the complex environment for research, research performance assessment, the central role of scholarly publishing and the conflicting imperatives that drive different stakeholders in the system: researchers, universities, governments and other research funders, and scientific publishers. This burdensome, expensive and unsatisfactory system rests, ultimately, on a shaky foundation of unclear ownership of copyright in author manuscripts and journal articles. We have suggested that better management of copyright ownership is needed. It is important, too, for the sector to be thinking about these questions *now*. Universities are already concerned about their systems for IP management,¹⁵⁶ and they need to get their IP houses in order, before their interests are overtaken, or ignored, by broader national and global developments. The Australian government, for example, proposed an IP commercialisation framework which would see ARC-funded research wholly available for assignment to commercial parties — without thought for the kind of issues we have dealt with here.¹⁵⁷ While those proposals are far more concerned with the accessibility of university inventions to commercialisation by Australian firms, such proposals could sweep up copyright, out of a misguided belief, reflected in early versions of the framework, that all IP can be dealt with in largely the same way. Universities should also act before Read and Publish agreements entirely overtake the sector or publisher data and technical systems become more firmly entrenched than they already are.

As we have argued, copyright law and doctrine contain tools that, if deployed strategically by the Australian university sector, could lay the foundation to help achieve the sector's research and educational goals. Used strategically, these tools could enable universities, and the researchers who work within them, to ensure that excellent research is recognised as such, and contributes to the public benefit: to the economy, society, the environment, cultures and people within and outside Australia. Better management could enable universities to produce and communicate, to those who are in a position to use it, research and knowledge that can help solve the world's problems. In the case of research linked to Australian Aboriginal and Torres Strait Islander peoples in particular, thoughtful deployment of ownership and greater publication transparency can empower. As we conclude here, it is time to pull the threads together and suggest a way forward.

Our answer begins in copyright law, and in core features of this malleable and, importantly, *divisible* property right. As researchers' employers, universities are on strong legal ground should they seek to assert ownership of copyright in research outputs, from the moment they are created, assuming universities ensure these terms apply through written contract, for all researchers. But universities do not need all of the rights that ownership of copyright confers: only those necessary to achieve legitimate university research and educational goals. Here the divisibility of property in copyright assists. Universities should retain ownership of the right to use research outputs of their researchers in educational activities and to include those outputs in OA institutional or discipline repositories. Consistent with current practice, remaining rights could be assigned to authors, enabling those researchers freely to choose where to publish and to contract with publishers to publish their articles in prestigious journals. If university ownership is thus established, prior to a researcher's dealings with publishers, universities' rights will, consistent with basic *nemo dat* and

156. RSM Pacec Limited, A Report for the Department for Business, Energy and Industrial Strategy, *Research into issues around the commercialisation of university IP*, February 2018, available at <https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/699441/university-ip-commercialisation-research.pdf>.

157. Department of Education, Skills and Employment (Cth), *Higher Education Research Commercialisation IP Framework Consultation Paper* (Report, September 2021).

copyright principles, remain with the university regardless what researchers sign.¹⁵⁸ The publisher would not be able to enforce the publishing agreement against the employer university, removing the current necessity of many universities to remove author-accepted manuscripts from the institutional repository in response to publisher notifications. More consistent use of an institutional repository would improve access to knowledge for many of our graduates, given some report graduation as a sad day because they lose access to the literature on which their future professional lives depend.¹⁵⁹ The effective assertion of ownership offers an efficient way of complying with growing research funder mandates to provide OA without any embargo period.

More will be needed than mere assertion of ownership in policy: some universities across Australia have those policies in place already, but act as if, and allow researchers to act as if, the whole of the copyright lies in researchers' hands. This failure to act could create the legal foundations for an estoppel against universities asserting their retained rights. To make a retention of rights effective, and to use retained rights to achieve their goals, universities will need actively to assert their rights: communicating them to researchers; and putting in place the systems for giving effect to them. This will also require simple systems, for example, to assist researchers with streamlined submission of author-accepted manuscripts into institutional repositories;¹⁶⁰ linking these copies to academic author websites would ensure that the knowledge is findable. To reduce costs in the education side of the university, systems to ensure repository or OA copies of content are used in course readings would also assist. Any of these moves would be far more powerful if adopted sector-wide: not least because it is more feasible for publishers' contracting systems to adjust to a commonly held position where universities retain copyright.¹⁶¹

There are obvious objections to some of these ideas, apart from the usual bureaucratic and technical difficulties of building and linking technical systems. We are suggesting more dissemination and use of author-accepted manuscripts: the last item affirmatively owned by the university, since publishers have an ownership claim in copy-edited versions of record. Scholars may prefer to see their published, copy-edited and professional versions used and circulated. And there is the question: why go to all this trouble; even build or improve institutional repositories to publish unprofessional-looking versions, in a context where publishers are providing OA solutions like the Read and Publish agreements? And do our proposals not risk the wrath, or sustainability, of the scientific publishers: a matter which would be of great concern to the researchers who depend on publishers' services to thrive in their careers?

The short answer is that we do not see university assertion of ownership as an end point in the rapidly shifting world of scientific publishing and research dissemination. What we are proposing *could* be the basis of re-enlivened institutional repositories acting as an alternative source of research to publishers. Or instead, it could establish a basis for serious negotiation between the university sector and the commercial publishers, for mutual benefit. Or it could simply be an insurance policy:

158. We acknowledge that achieving a culture shift with regard to academic practice in this regard, would likely take time and evolve alongside perceptions of journal prestige and quality.

159. Interview with a Librarian (2 December 2021).

160. The University of Edinburgh's *Open Access Checklist for Authors* provides one example of a clear streamlined approach: <<https://www.ed.ac.uk/information-services/research-support/publish-research/open-access/open-access-checklist-for-uo-e-authors>>.

161. It might be objected that sector-wide moves to assert IP ownership in this way would be anti-competitive. It is beyond the scope of this article to address competition law questions in detail, but our view is that no insurmountable competition law concerns arise where universities rely on their copyright ownership to make employee author-accepted manuscripts available OA; we note too that in the envisaged system universities still effectively gift free content produced by staff for the exploitation by commercial publishers.

the creation of a repository of the university's knowledge, ready for analysis, or communication, should publishers shift their business models again, or threaten to raise prices in ways that are unsustainable for university budgets. *Without* the right to use their own content, universities are hostage to the decisions of publishers, many of whom are global players for whom Australia is a small market. *With* those rights, universities, and researchers, become the players they should be: with an active role in determining the future of research dissemination and hence promoting the dissemination of knowledge.

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