

Exchanges

The Interdisciplinary Research Journal

Volume 11, Issue 1 (October 2023)



Issue Highlights:

- Celebrating 10 years of Exchanges
- Disrupting Academic Publishing with AI
- Overcoming Adoption Barriers for Sustainability
- Persuasive Linguistics within Australian Advertisements
- Pedagogy & Practice in a Post-COVID-19 World

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Exchanges: The Interdisciplinary Research Journal

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Exchanges is a scholar-led, peer-reviewed, diamond open access, interdisciplinary, online-only journal dedicated to the publication of high-quality work by researchers in all disciplines for a broad scholarly audience. No author fees or subscription charges are levied, and contributors retain their author rights. Since 2013, the title has attracted innovative research articles, critical essays and interviews from emerging domain experts and early career researchers globally. The title also publishes scholarly work by practitioner authors and independent scholars.

A Managing Editor-in-Chief based at the University of Warwick oversees development, policy and production, while an international Editorial Board comprised of early career researchers provide advice and practically contribute to editorial work. Associate editors are recruited to participate in producing specific special themed issues. *Exchanges* usually publishes two issues annually, although additional special themed issues are periodically commissioned in collaboration with other scholars.

Exchanges' twin missions are to encourage intellectual exchange and debate across disparate research communities, along with developing academic authorial and editorial expertise. These are achieved through providing a quality assured platform for disseminating research publications for and by explicitly cross-disciplinary audience, alongside ensuring a supportive editorial environment helping authors and editors develop superior academic writing and publishing skills. Achieving enhanced contributor esteem, visibility and recognition within these broader scholarly communities is a further goal.

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Coming Back to Where You Started is Not the Same as Never Leaving: Editorial, Volume 11, Part 1

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Always remember that the crowd that applauds your coronation is the same crowd that will applaud your beheading. People like a show. Sir Terry Pratchett.

Introduction

Welcome to the twenty sixth edition of *Exchanges: The Interdisciplinary Research Journal*. This is a landmark issue for us, as you will read about below, because it represents our tenth birthday issue since our creation in 2013. How have we changed over that time? Well, read on for a potted history of the journal. If you are a new reader, you are most welcome. Conversely, if you are a regular reader, or have even been with us since day one, then you are even more welcome. As normal, this editorial offers an introduction to this issue's contents, alongside advice for potential authors looking to contribute to future journal editions. There's also a guide to our various social media presences, which form part of our continuing conversation between issues.

We're History

Whenever I talk about *Exchanges*, and by extension scholar-led journals oft-launched in a miasma of collective enthusiasm, I tend to note how such titles can have a precarious existence. From their initial seeds some will more or less thrive, others will bloom spectacularly, while some can wither on the vine after a solitary issue or two. At the outset their future is rarely certain, no matter how initially enthused their instigators are.

Exchanges has certainly survived over the past decade, although no matter how much our journal's evolved, I'd be hard pressed to argue we've bloomed beyond all measure. Keeping us hale and hearty requires continual editorial efforts, highlighting how journals like ours are as reliant on those dedicated souls working on them as they from their contributors' inputs. Indeed, over the past ten years there have been a range of actors – from authors to reviewers to special issue collaborators to editors – whose labours contributed to making *Exchanges* what it is today.

It would be Herculean challenge to identify every single worthy being who brought us to this tenth birthday celebration. A risky endeavour too, as the chance of an inadvertent omission is likely quite high. Certainly, not every prior leading editor kept as fastidious records as me as to their interactions over the years! Those of you who *did* help to make us who we are today, know your role. So, allow me to voice a collective, if anonymous, ‘thank you’ to you all on behalf of the current Board.

Nevertheless, I thought it would be worth celebrating our landmark issue by contextualising some of these contributions and developments over the years. So, here’s an annualised potted, if doubtless incomplete, history of *Exchanges’* decade of development.

2013

The first issue of *Exchanges* was published on 8th October 2013, under the full formal title of *Exchanges: The Warwick Research Journal*. Surprisingly even at this point not every article was from a Warwick scholar, demonstrating the journal’s contributor institutional agnosticism was present from the very start. Naturally preparatory work had started some months prior to October, in terms of coordinating, sourcing, assessing and editing the papers to appear in this inaugural issue. Leading in drawing these threads together was my ultimate predecessor in the leading editorial role was *Senior Editor Hannah Grainger-Clemson*. Hannah led a seven person Editorial Board which itself derived entirely from the journal’s progenitor department – *Warwick’s Institute of Advanced Study (IAS)*: each of the Board being also members of the IAS’ Early Career Fellows (ECF) programme. I am pleased to report this represents a strong association which continues to this day.

Figure 1: Early Exchanges Article Formatting

Forêt de Guerre: Natural remembrances of the Great War
Orlando Prestidge, Northamptonshire.Archaeology / University of Bristol

Abstract

I will discuss the effect that the Great War had on the medieval woodland landscape of France, and how the cataclysmic destruction of the conflict is now represented, remembered and sometimes even preserved by the presence of post-war woodland. The unparalleled quantities of munitions that tore apart the landscape from 1914-1918 had both physical effects at the time, as well as longer-lasting manifestations that we see today. The first use of chemical weapons, along with the problems posed by their disbursement and disposal, also still affect the soil of the Western Front, as well as the trees and plants that traditionally grew in the region. I will also analyse the deeper and far more ancient significance of forests and trees within French culture, and how this has affected the way that people have interacted with the ‘Forêt de guerre’ landscape that grew up to replace that lost during the hostilities.

Keywords

World War I, 1914-18; Archaeology; Anthropology; Folklore; Landscape; Trees; Forests; Zone Rouge; Historic Sites - France

Introduction

The landscape of Northern France at the beginning of the Great War was one of rural beauty, punctuated by rolling hills, winding rivers and thousands of acres of lush forest. Within months this idyll had been transformed into the monochrome image of hell that has become so infamous, with shattered trees and the ruins of crumbling buildings barely protruding from an almost endless sea of mud. Today, the forests now cover large amounts of the former Western Front landscape, acting as living memorials and reminders of the horror that unfolded upon the ground they now cover. Under the canopies of these vast swathes of woodland, remains of the Great War landscape are often preserved. The remains of ‘Villages détruits’ are now buried under the tree roots, while trench systems and shell-holes gradually decay, set in ground so full of buried munitions that the growth of woodland is the only safe use for the sites.

Here I will discuss the effect that the Great War had on the medieval woodland landscape of France, and how the cataclysmic destruction of the conflict is now represented, remembered and sometimes even preserved by the presence of post-war woodland. The unparalleled

quantities of munitions that tore apart the landscape from 1914-1918 had both physical effects at the time, as well as longer-lasting manifestations that we see today. The first use of chemical weapons, along with the problems posed by their disbursement and disposal, also still affect the soil of the Western Front, as well as the trees and plants that traditionally grew in the region. It is even a common occurrence today to find material evidence of the conflict within the fabric of trees themselves, in the form of shrapnel from shells fired during the conflict still being imbedded in the trunks (Food and Agriculture Organization of the United Nations, 2005: 121).

I will also analyse the deeper and far more ancient significance of forests and trees within French culture, and how this has affected the way that people have interacted with the ‘Forêt de guerre’ landscape that grew up to replace that lost during the hostilities.

The impact of industrialised war on the landscape of Northern France has not only permanently altered the physical appearance of the region, but has also left deeper, cultural damage to the people and nation itself. The woodland that has reclaimed much of the shattered landscape today, the ‘Forêt de guerre’, represent this physical and cultural change to the French nation, as well as raising questions as to the power and longevity of nature in the face of warfare on a huge scale.

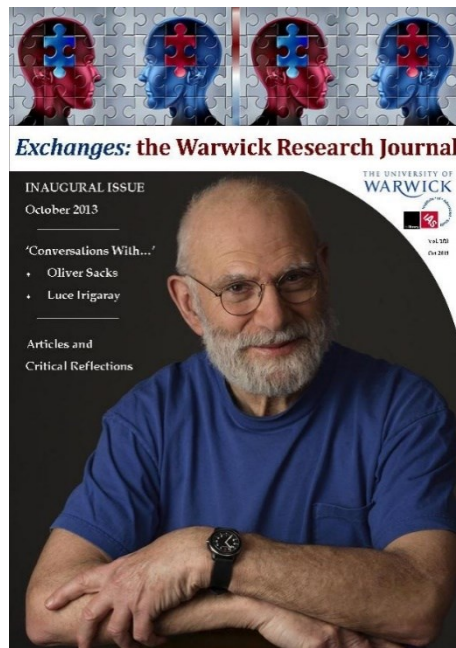
There has yet to be any Anglophone research into this area of Great War conflict archaeology, and whilst the logistical demand upon France’s ancient woodlands is touched upon in Chris Pearson’s *Mobilizing Nature: The Environmental History of War and Militarization in Modern France* (2012), my focus is to look deeper into the symbolic and psychological effects of the mass destruction of the forests that held so much history and so many memories for those involved in the conflict - the same men that contributed towards the destruction of these symbolic and historic landscapes in their role as combatants.

Pearson examines the physical and mental effects of the physical scouring of landscapes during the Second World War in *Scarred Landscapes: War and Nature in Vichy France* (2008), however this article will combine this approach, along with more focus upon landscape and conflict archaeology, and anthropological study of the enormous landscape change that occurred between 1914 and 1918.

My approach will focus on symbolism of, and memory held within, the trees and the forests they form as a collective. The idea of the identity of material culture is heavily influenced by the work of Dr Nick Saunders, in *Crucifix, Calvary, and Cross: materiality and spirituality in*

Admittedly, to an editor's practised eye a modest lack of formatting standardisation across individual articles is recognisable in this first issue (**Figure 1**). Although, it is something I suspect, most readers wouldn't have noticed or been concerned about! Moreover, at launch *Exchanges'* visual appearance is considerably different from what was to come over the years, both in terms of internal and external layout and formatting. For example, the earliest three issues are surmounted with images of key scholars, featured in *Conversation* articles within. Hence, renowned scholar **Oliver Sacks** had the signal honour of being our first featured 'cover star' (**Figure 2** Error! Reference source not found.).

Figure 2: *Exchanges Issue 1(1) Cover*



2014

Moving into its second year and publishing that crucial sophomore issue, it is noticeable that *Exchanges* appears to have already lost its leading editor with an editorial collective now providing the core guidance. There was continuity without as both issues this year retained the photographic cover theme too, with **Mona Siddiqui** and **Eric Foner** gracing issues 1(2) and 2(1) respectively. They would be though the final such stars as change lay ahead outside and within.

2015

With April's issue 2(2), a new look arrived for *Exchanges*, with a blue cover theme surmounted by a multicoloured image (**Figure 3**). This recurrent polychromatic visual trope was described to me when I joined as Chief Editor as representing a 'rainbow of interdisciplinarity'. Hence, it is an element we continue to deploy to this day.

I still take it as a personal challenge each time to find an image which resonates with this ideal, and where possible the issue's contents too. I can't swear to have always succeeded, but it's a design aesthetic for which I've yet to find a superior option.

Figure 3: Issue 2(2) New Cover Design



Inside the journal's pages change was afoot too. Volume 2(2) saw the introduction of the very first 'themed section', presenting a series of articles grouped under the topic of *Inequality in Education – Innovation in Methods*. Certainly, this would not be the last such thematic collection, as they would be a relatively frequent feature of the journal for years to come. Arguably it may be possible to draw a relationship between the contemporary Board's disciplinary composition and the topics addressed this and future thematic sections, although this has not always a direct correlation. This fourth issue of *Exchanges* also witnessed a major article formatting shakeup as a style, closely analogous with one we use today emerged for the first time (**Figure 4**).

With the seeds now sown for *Exchanges'* look and feel for many years to come, the journal moved confidently into its third volume, with issue 3(1) published in late October 2015. This was also to be the first, and sadly only, issue under *Exchanges'* second titular Senior Editor **Naomi Pullin**.

Figure 4: Article Layout Contrast 2(2) vs 10(3)

Sample article, issue 2(2)

Exchanges : the Warwick Research Journal

A Picture is Worth a Thousand Words

Examining learners' illustrations to understand Attitudes towards Mathematics

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Abstract This article presents my experience of using pictures/images drawn by children as a form of data in research and discusses the merits and implications of employing this method. It comes from research of a mixed method exploratory case study to investigate the attitudes of 11 and 15 year old secondary school students (in the East Midlands) towards Mathematics. The aim of this research was to gain an insight into the emotions, cognition, beliefs and behaviour of learners regarding Maths and the factors which influence their attitude. Besides using the tried and tested data collection tools such as focus groups and questionnaires, the children were asked to draw pictures illustrating their vision of Maths and its impact on their lives. The idea was to offer them an alternative medium of communication to exhibit their feelings and thoughts. Students used emotions, numerals, figures, characters and mathematical symbols to show their favourable/unfavourable attitudes towards Maths and their understanding of the importance of Maths in future life. The results of visual data in this study conform to the findings of the other forms of data collected and show that boys and higher ability students have a more positive attitude towards Mathematics as compared to girls and low ability students.

Keywords: visual data, images/drawings, case study, attitudes, affect, cognition

Introduction
This article is a part of a larger study to understand learners' attitudes towards Mathematics and to investigate whether attitudes are related to

Syeda, Exchanges 2015 2(2), pp. 234-248

Sample article, issue 10(3)

Exchanges: The Interdisciplinary Research Journal

An Aesthetic Portrayal of Republican-era Shanghai: The exciting and discordant beauty of the metropolis in Zhang Ruogu's Urban Symphony

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Abstract
This article examines the aesthetic representation of Republican-era Shanghai in Zhang Ruogu's 繁华交响曲 都市交响曲 ('Urban Symphony'). Guiding the construction of the city are Zhang's aesthetic principles of *cijimei* and *podaoemei*, two concepts taken from Japanese modernism, which convey a unique vision of Shanghai modernity. On the one hand, *cijimei* refers to a kind of 'exciting beauty', which, according to Zhang Ruogu, is the apex of modern aesthetics. Zhang Ruogu locates *cijimei* within modern Shanghai in places such as the city's cafés, dance halls, and cinemas. On the other hand, *podaoemei* can be translated as 'discordant beauty'. This kind of beauty differs from the traditional concept of harmonic beauty, as it originates in more modern surroundings that emphasise simplicity and excitement. Zhang Ruogu characterises *podaoemei* as 'simplification' and 'excitement'. When reading Zhang Ruogu's works, it is possible to identify these aesthetic elements in relation to his depiction of Shanghai. Thus, these concepts enhance our understanding of Zhang Ruogu's representation of urban culture in Republican-era Shanghai.

Keywords: Zhang Ruogu; Shanghai; Twentieth-century China; Shanghai modernity; Shanghai's urban culture; aesthetics

Minoli, Exchanges 2023 10(3), pp. 48-61

2016

With its early years having been marked by fairly regular changes in lead editor, or relying on collective leadership, issue 3(2) in April, welcomed the third Senior Editor aboard. Thankfully, Yuexi Liu would become the longest serving person in this role yet and introduced a desirable period of stability for the title, its direction and development.

2017

As *Exchanges* entered its fifth calendar year of production, it could be argued that it entered into a transitional period. It was no longer a 'new initiative' but rather one which had managed to secure its ongoing existence with considerable success. This is always a risky period for any ongoing endeavour, as the possibility of no longer being the *cause célèbre* can lead to an effective deprioritisation or reduction in overt attention. Nevertheless, behind the scenes Yuexi Liu diligently continued her work, overseeing the journal and its evolving Board membership.

Notably this was the year during which the Editorial Board's *Warwickcentricity* finally changed, with the first international editors joining from Monash University, Australia. I spoke recently with **Roy Rozario**, one of the two Monash based editors who joined, about how this came about. He explained how he and fellow new editor **Natasha Abrahams'** involvement originated from their desires to forge links between the two universities. *Exchanges* was warmly receptive of the idea to broaden the Board's geographic base, and hence by mid-2017 we could

finally boast an international Board for the first time. That Roy continues on the Board today – as its most veteran editor – represents a remarkable longevity of service.

There were some significant changes behind the scenes for the journal too, as the latter half of this year saw *Exchanges'* operations fall under the purview of a newly appointed IAS Director. Reportedly they possessed a greater curiosity about how the journal might evolve and relate to the IAS and institution's ambitions. Curiously, their arrival is coterminous but likely coincidental, to subtle alterations introduced to the journal's cover design (**Figure 5**). Consequently, issue 5(1) saw a shift to adopt a larger central image than before, surmounted with very slight darkening over the background colour tones.

Figure 5: Subtle Changes in Vol 5(1) Cover Appearance



2018

Having been responsible for four published issues, Yuexi's departure from *Exchanges* early in 2018 left the role of Senior Editor vacant. With the anticipated publication time of issue 5(2) rapidly approaching, and considerable work yet to be done on finalising its contents, this was the moment when I first entered the picture. Appointed as *Exchanges'* fourth Senior Editor, my outline remit was to consider what the journal had been and consider how it might be somewhat reinvented and revitalised. The earliest such changes I was responsible for enacting were a revision to the journal's full title. Thus, since April 2018's issue 5(2) we have been published under the formal title of *Exchanges: The Interdisciplinary Research Journal*. This change sought to offer a conscious decoupling from

the Warwick nomenclature, alongside a statement to *Exchanges'* contributor inclusivity and hopeful greater appeal to global contributors.

More changes were to follow with the leading editor role rapidly rebranded as the *Managing Editor-in-Chief*, serving to better reflect the post's broadening remit and ambitions: it looks better on business cards too. Desires towards continued greater internationalisation and global visibility of the title were soon also met the first editors from Shanghai Jiao Tong University, China were welcomed onto the Board ahead of issue 6(1). Alongside this, an increased push to educate, inform and engage saw *Exchanges'* social media presence develop with a twitter account and editorial blog being launched.

I even found time this year on behalf of *Exchanges* to make multiple contributions at Warwick's to the *PLOTINA/PAIS* Summer Schoolⁱ on peer review practice, which in turn led to the publication of a very well received handbook on peer review.

2019

From this solid base, early in 2019 discussions commenced concerning another new initiative – publishing additional, themed, special issues. With the collaborative support of academics at Warwick and Monash University the first steps towards publishing the *Cannibalism* and *Climate Fiction* (cli-fi) special issues began. My thanks here to **Giulia Champion** for initiating these highly productive discussions. Additionally, towards the year's end discussions concerning what would eventually become the *Lonely Nerd* special issue also commenced between the journal and the universities of Oxford and SOAS. With three special issues under now development *Exchanges* editorial labour efforts looked set to considerably increase. As a result, and to answer this demand, 2019 also saw the origination of our associate editor programme. This programme brings in additional post-graduate and early career researchers who specifically support the production of one or more special issues, gaining in editorial skill and professional confidence as they do. Undoubtedly our experiences in developing these first three issues helped shape much of how we prepare and deliver future such collaborative editions too.

Figure 6: Issue 7(1) New Look Cover



More broadly on the journal there was a publication policy update. From issue 6(2) onward each article's Creative Commons reuse licence shifted to a more open *CC-BY* (attribution) one. This was in line with the publication policy steer from major research funders and the open publishing community, and as such the change was warmly welcomed by our author community. There was also another aesthetic change, with an update to the cover style, image layout, logo and underlying colour scheme (**Figure 6**) – to be fair, I always thought the prior blue background was too gloomy. Alongside these cosmetic changes, the Board's internationalisation continued with membership now expanded to include staff from Vrije Universiteit Brussel, Belgium.

2020

While behind the scenes discussions and work towards yet more special issue collaborations continued, the year began with the momentous publication of the first completed one. Issue 7(2) was dedicated to cannibalism research and study. It was also one of the largest single issues of the journal ever published in terms of page count and article number, and hence a marked success for all involved. Consequently, this also meant that for the first time ever more than two issues of *Exchanges* were published in a year. Meanwhile, the Editorial Board continued to evolve with staff from the Université de Cergy-Pontoise, France joining to lend their support for the journal's activities.

2020 was also for *Exchanges*, and the world, the height of the COVID-19 pandemic. Among the pandemic's many deleterious impacts was the unprecedented enforced physical separation of contributors and editors.

The informal conversations we had often enjoyed at events or on campus were for some considerable time simply not permitted. So, it was in part to address this relative stifling of informal scholarly debate, that this year saw the launch of *The Exchanges Discourse* podcast. While early episodes were focused on the journal itself, it would soon evolve as a platform for discussion and debate with past contributing authors. Certainly today, this latter element is very much at the core of the Discourse brand.

2021

With the pandemic still raging, 2021 saw the highest number of *Exchanges* issues we've published in a single year yet, with two special and two regular issues achieving publication. In February saw the special issue dedicated to papers deriving from the *20th International Conference of the Utopian Studies Society* focussing on climate-fiction arrive, and in August it was the *Then & Now: Arts at Warwick* special issue. Behind the scenes, this was also a year where the journal was actively participating in more events. Firstly, March saw a successful two-day online workshop co-hosted by *Exchanges* which drew together scholars as part of the preparations for the *Cultural Representations of Nerds* special issue, delayed a year by COVID's impact. Later, in September, the Editor-in-Chief contributed to a *British Academy* funded series of online international workshops on academic writing, as part of the *Anthropocene and More-than-Human World* special issue preparations. Naturally each of these developing issues too involved their own set of associate editors contributing to the production of their respective issues. Not content to rest on our laurels, October saw the call for contributions to our sixth special issue project around *Translation and Plurality*.

Figure 7: The New Look from Issue 9(1) Onward



Notably, October's issue 9(1), our twentieth published overall and specifically this year's regular autumnal edition, saw the latest rebranding of the journal's cover layout (**Figure 7**). This time the underlying colour shifted to a green base-colour alongside a subtle reflection effect being introduced to the cover image too. The journal's logo was also refined, returning to a simpler format to help increase contrast and clarity.

2022

A slightly quieter year for publication followed, with only three issues appearing, although improvements to the journal's hosting platform were introduced in January. These were principally the addition of *altmetrics* for every article, providing a measure of the audience engagement each piece enjoys in the social media sphere. Special issues were not forgotten though as August though saw issue 9(3) published, our long-awaited *Lonely Nerd* collection. This bumper issue was met with strong acclaim in the social media sphere and marked a successful end to a three-year multi-institutional collaboration.

Behind the scenes though, Editorial Board membership had over the past year or so somewhat waxed and waned, with the departure of a number of longstanding members impacting on our knowledge base. Moreover, a many remaining longstanding Board members had also been with us so long that the potential risk of their own departure was increasing. Not wanting to be suddenly faced with a major loss of editorial talent, it agreed to be the perfect time to expand our Board membership and seek some new blood through an open call across Warwick's international partnership networks. As a result of this seven new editors from four different universities around the world joined *Exchanges*. This represented the largest single intake since the journal was founded. They also brought an exciting range of new perspectives aboard as collectively these new editors represented a significant broadening of the Board's fields of expertise, especially in the STEM disciplines. Naturally, it also helped to ensure we had sufficient editorial labour capacity available to handle submitted manuscripts. Consequently, Board membership now numbered almost twenty scholars located around the globe – the largest it had ever been to date.

2023

This brings us almost up to date, with 2023 witnessing the publication of the spring issue, *Anthropocene and More-than-Human World* special and the edition you're reading right now. This would have been perhaps a sufficient degree of activity under the journal's base remit, but as always *Exchanges* looks to explore new opportunities. Hence, we launched a monthly email newsletter, highlighting the key developments and news from the journal, in an effort to reach new readers. We also instigated new

policy developments too with the Board supporting the introduction of regulations pertaining to AI and authorship, alongside contributor conduct. The journal also became more actively involved in Warwick's exciting work on research culture, collaborating on the first of potentially a series of special issues now in preproduction. Behind the scenes we've also been talking more regularly with our fellow Warwick University Press journal leading editors. As a result, we're looking to a future where we individual journals can collaborate and exchange knowledge more readily and perhaps in a more coordinated footing than ever before.

Figure 8: IAS' Exchanges Webpages



Alongside this, following popular demand, we introduced a new book reviews submission format for future submissions, and brought our Board membership up to a round twenty with our newest Monash and Warwick based editors joining us. Furthermore, a series of new IAS webpages featuring information on the journal were created, offering readers and contributors an alternative route to finding out more about the journal and its opportunities (Figure 8). Finally, and I'd be remiss in not mentioning it, the *Exchanges Discourse* podcast celebrated a small milestone, with the release of its 50th episode over the summer. The podcast had also played host to its first panel discussion episode earlier in the year too, a lively discussing centring on perceptions around interdisciplinary publishing endeavours.

I think you will agree, it's been an interesting and varied decade of life for *Exchanges*. While I was drawing this information together for this editorial, I noticed how currently there are only two Board members with an even greater longevity than myself on the title. The rest have all been recruited and trained by myself during my own, somewhat, lengthy tenure as Chief Editor. Given our mission to 'develop' editorial skills within researchers, a modestly rapid team turnover has always been an anticipated artifact of

our operation ethos – indeed one of my first tasks as Editor-in-Chief was to sunset one of the previous Board members! Certainly, we rarely have many problems finding new recruits: compare and contrast the current Board of late '23 with that of just 18 months ago for example to see how many names have changed.

This aside though, I thought it appropriate in this valedictory issue to conclude by offering a special tip of the editorial hat to my pair of longest standing and most well-seasoned, veteran editors: **Roy Rozario** and **Marcus Estrada**. Between us three we have seen a lot of scholarly water pass under the *Exchanges'* bridge. Will any of the present Board be around to help celebrate our twentieth anniversary? That, I am afraid is a question for the ages!

I do hope you dear reader at least are still with us then.

Papers

That's the past, and naturally it is only right and proper to move to consider the present – that is, the articles in this issue. As this is our tenth birthday edition a suitable challenge had been posed to our authors some months ago, and I am pleased to note two of the papers represent a response on a theme of *authentic interdisciplinarity*. My thanks to them, and of course, all the authors whose work appears in this issue. I hope as always our readers once more find something valuable, intriguing or inspiring in the articles detailed below.

Articles

We open the issue with *Placing ChatGPT in the Context of Disruptive Technology in Academic Publishing* by **Beth Montague-Hellen**. In this timely and insightful article, the author considers a myriad of issues around the deployment of generative AI tools in the research communications sphere. Taking an academic librarian framing, a contrast and contextualisation is drawn between these tools and impacts from other 'disruptive' technologies. Montague-Hellen argues that in time even such seemingly transformational developments will be successfully assimilated within scholarly publishing activities ([1](#)).

With delightful resonance, our next article by **Constance de Silva** offers us a measured consideration around the historic adaption and adoption of emerging technology and methodologies within consumer advertising. In *The Rise of Conceptual Association and Linguistic Register as Advertiser Persuasive Instruments* de Silva focus on the persuasive language utilised across a century and a half of Australian advertising. Following an insightful introduction to the core linguistic concepts, the article

contextualises this through an exploration of historic advertising artefacts and written copy. Interestingly, de Silva's piece continues with considerations of how such phrasings impacted on their readers, in terms of persuading and encouraging the purchase of the goods and services detailed in the advertisements. (17).

From adaption, we move to *Sustainability: Getting everyone involved*, from author **Jean Marshall**. In this article, Marshall considers the reality of achieving sustainability, contrasting public awareness of the problem's multifactorial nature with the potentially effective personal actions which can be taken. However, the author argues given the complexity of the situation, understanding the sheer scale of the problem faced by the planet and its population presents a staggering challenge. As natural resource use continues increasing and populations rise, Marshall argues how therefore achieving an effective solution goes beyond the individual and into the broader social-economic and politic spheres, where authentic interdisciplinarity and multinational collaboration must be deployed (48).

Critical Reflections

Moving on, in this issue we have two critical reflections. The first, by **Amanda Kowalczyk**, is entitled *Emerging from the COVID-19 Cocoon* and offers a critical reflection on pedagogical changes in Higher Education in the pandemic's wake. Kowalczyk considers from an educator's perspective the inherent changes and societal impacts to emerge from extended periods of lockdowns and remote learning have had on teaching praxis. Despite the emergence of a greater facility and availability of online or hybrid delivery systems, the author notes student demands for traditional, in-person delivery remain strong. Consequently, the article considers if education should return to the pre-pandemic delivery paradigms, or if an inalienable evolutionary tipping point in educational practices has now been achieved? (66).

Our second reflective piece by **Raad Khair Allah** resonates with some of these themes too. In *Reflections on AI in Humanities: Amplifying marginalised voices of Women*, Khair Allah offers a personal consideration of the risks from perpetuating inherent bias within the deployment of AI tools. In particular, the author considers how such tools' configuration might impact on the representation and study of traditionally excluded or disenfranchised narratives or peoples. As such, while acknowledging the benefits AI tools proffer within automated data analysis, Khair Allah stresses the risks in how they may replicate rather than challenge extant inequities –contrary to the intent of many researchers. As such they call for multidisciplinary dialogues to ensure AI tools development and usage serves to amplify rather than exclude marginalised voices (77).

Books Reviews

Finally, we bring you our latest book review which is also by **Raad Khair Allah**. In this article Khair Allah offers us their take on Fassih Keiso's book *The Body in Twilight: Representation of the Human Body, Sexuality and Struggle in Contemporary Arab Art*. The author focuses on a consideration of this text's exploration of art's relationship with illustrating broader societal changes, especially including issues of struggle, resistance and representation. While highlighting the lack of illustrative content within the book, Khair Allah argues it still offers a compelling and engaging piece on comparative gender and feminist art. As such they conclude it is a text worthy of greater exploration by scholars and students alike whose interests are aligned with this fascinating domain (84).

Calls for Papers

That was the present, now to the future, where a journal editor must always be looking towards for new content! Hence, I would like to remind all readers and potential authors of our general (open) call for papers on any theme, along with a new thematic call – details of which both follow. Authors are also advised to register for our newsletter and follow our social media feeds for announcements in between editorials: see the links towards the end of this editorial.

Themed Call for Papers: Becoming a Productive Publishing Scholar

A recurring theme in the *Exchanges Discourse* podcast and in the workshops the journal has hosted in recent years, are questions around the effective steps scholars can take towards becoming more productive publishing scholars. Books and articles remain the *lingua franca* of our disciplinary domains, with career and professional esteem enmeshed in their production. New and early career scholars, like many who publish with and read *Exchanges*, keenly desire to establish themselves in their disciplinary field. Yet they often feel they face a Sisyphean task in publishing sufficiently, or via their desired channels or even identifying where their focus should be in terms of their written output. That they are also expected to be achieving a myriad of other 'career critical' goals alongside publishing – from gaining secure employment, conducting research, obtaining income and establishing impact generation activities – creates further tensions and problematics.

Nevertheless, establishing and maintaining an academic careers remains – arguably – intrinsically linked with embracing a seemingly inescapable 'publication imperative'.

However, in the discussions around this theme within *Exchanges'* workshops a recurrent message has been the lack of any singular route to achieving publication success. Moreover, alternative digital and social dissemination routes mean formal publishing is no longer the only route through which recognition for ideas, thinking and research can be established. Despite this, seemingly much of every academic's career trajectory, personal worth and disciplinary status remains enmeshed in a seemingly inescapable tango with research publication.

Without 'one true way' to approach writing, publishing and communicating research: *how* then does an any researcher set about becoming an effective publishing scholar, while balancing a successful work/life existence?

Therefore, for the *Exchanges* issue to be published October 2024, we invite submissions of papers around the theme of *becoming a productive publishing scholar*. Topics for the issue could include but are not limited to:

- Balancing pragmatism and production with healthy self-care
- Creating a greater strategic approach publication outputs
- Embracing interdisciplinary audiences, research or practices
- Emerging scholarly communication and alternatives to 'traditional' publication routes or platforms
- Personal reflections, insights or advice on achieving effective publishing techniques
- Use, abuse or opportunity from emerging digital and AI tools to enhance publication effectiveness

Manuscripts may be submitted in any of our papers formats, and should include a note to the editor at submission that they are to be considered for this particular call. Authors should also include a note to the editor as part of their submission that they are responding to this call.

Deadline

The closing date for submissions varies by manuscript format:

Peer-reviewed papers or review articles **Friday 1st March 2024**

Critical reflections, Conversations or Book Reviews **Friday 28th June 2024**

Manuscripts should be submitted via our online submission portal on or before the above dates.

exchanges.warwick.ac.uk/index.php/exchanges/about/submissions

As with all calls, the Editor-in-Chief welcomes but does not require conversations with authors ahead of submission. For more online and style guidance see our submission pages.

Open Calls for Paper

Thematic call aside, *Exchanges* continues to invite and welcome submissions throughout the year on any subject. There are **no manuscript submission deadlines** on our open call and submissions will be considered throughout the year. Manuscripts therefore may be submitted for consideration via our online submission portal at any point.

Articles passing our review processes and accepted for publication will subsequently appear in the next available issue, normally published in late April and October. *Exchanges* readers have a broad range of interests, hence articles from any discipline or tradition written for a broad, scholarly audience will be considered. However, articles which explicitly embrace elements of interdisciplinary thought, praxis or application are especially welcome.

Manuscripts can be submitted for consideration as a peer-reviewed research or review article formats or alternatively submitted for consideration as one of our editorially reviewed formats.ⁱⁱ There latter, briefer formats are often able to transit to publication faster.ⁱⁱⁱ They can also be for authors who with limited publication experience or who are those looking to embrace reflexivity, posit an opinion or share professional insights. All article formats receive extensive reader attention and downloads.^{iv}

As *Exchanges* has a core mission to support the development and dissemination of research by early career and post-graduate researchers, we are especially pleased to receive manuscripts from emerging scholars or first-time authors. However, contributions from established and senior scholars are also welcomed too. Further details of our open call requirements can be found online (**Exchanges, 2022a**).

Special Issue Calls

Astute readers will note we have two special issue calls on the journal site (**Exchanges, 2023a**). These are, regrettably, semi-closed calls, relating to papers and discussions at two recent major conferences. Hence, they are only open for submissions from a select group of contributors.

Informal Approaches

As Editor-in-Chief I welcome approaches from potential authors to discuss prospective articles or article ideas for *Exchanges*.^v However, abstract submission or formal editorial discussions ahead of a submission are *not* a prerequisite, and authors may submit complete manuscripts for consideration without any prior communication.^{vi} Authors are always encouraged to include a note to editor indicating the [article format](#) or call under which their manuscript is to be considered along with any other matters they wish to bring to my attention.

Exchanges is a diamond open-access, scholar-led journal, meaning there are no author fees or reader subscription charges and all content is made freely available online (Fuchs & Sandoval, 2013; Bosman et al, 2021). Furthermore, authors retain copyright over their work but grant the journal first publication rights as a submission requirement. *Exchanges* is happy to support translations of our published articles subsequently appearing in other suitable journals, and requests only that a link back to the original piece is incorporated for completeness. Authors may wish to familiarise themselves with *Exchanges*' journal policies for further information on how we handle author contributions (Exchanges 2023b).

Briefly though, all submitted manuscripts will undergo initial scoping and originality checks before normally progressing to editorial review. Manuscripts seeking publication as research articles additionally will undergo one or more rounds formal peer-review by suitable external assessors. Editorial decisions on manuscript acceptance are final, although unsuccessful authors are normally encouraged to consider revising their work for later reconsideration by the journal.

Further advice for prospective authors can be found throughout the *Exchanges* and IAS websites (Exchanges, 2023c, IAS, 2023a), as well as in our editorials, podcast episodes and blog entries.

Forthcoming Issues

I am hopeful we *might* have one last issue to share with you in 2023, that being the long gestating *Pluralities of Translation* special issue. My thanks to the authors and associate editors especially working on bringing this one into the clear light of day.

After that our next scheduled issue will be Volume 11.3, the regular spring issue. There are a number of papers which I had hoped we would have ready for the issue you're currently reading which I suspect may grace that edition's pages instead. Naturally, there is ample time to submit one of

highly popular editorially reviewed format pieces in time to appear in that issue. See details above and online for more on how to contribute these.

Beyond this, well, I am currently juggling numerous intriguing expressions of interest for two special issues, both of which look set to be expansive editions. The first revolves around Warwick's fabled and wondrous archive the *Modern Records Centre* (MRC), currently celebrating its 50th year of operation. The papers draw on talks delivered at their celebratory symposium this September (**MRC, 2023**). For the other, we have partnered with Warwick's *National Centre for Research Culture* (NCRC) as part of their 2023 international conference (**IRCC, 2023**) to bring your papers inspired by discussions there. This may, we hope, form the first of a regular annual issue: an exciting long-term prospect for *Exchanges*.

Figure 9: Chief Editor promoting *Exchanges* at the recent International Research Cultures Conference 2023



Naturally, I was in attendance at both events, though thankfully photographed only the once (**Figure 9**), or at least only once of which I was aware. We have tentatively scheduled both issues for publication in summer 2024, which should make for a rich vein of content for our lovely readers.

If all this wasn't enough, we'll be launching another call for papers for a further special issue early in 2024, this time partnering with Australia's Monash University. Not to mention I am already deep in discussions about a further, and potentially recurring, special issue call on the horizon for 2024. However, that is one I'll save as a topic for a future update!

Acknowledgements

As noted earlier, my particular thanks to everyone who has contributed to the life of *Exchanges* over the past decade. This issue of course my thanks goes out to all our authors and reviewers for their vital and often timely intellectual contributions towards this particular edition. Without these people, producing a quality-assured, peer-reviewed, scholar-led publication would not be possible.

My continued thanks as well goes to the members of our Editorial Board past and present for their work over the years keeping the *Exchanges'* flame burning. Special acknowledgement here to departing editors **Magda Zajackowska** and **Guilherme Sampaio** for their contributions to the journal over recent years, and with every best wish for their future success. I'd also like to formally welcome aboard our four new Editorial Board members who joined over the summer, with **Ute Oswald**, **Bing Lu** and **Louise Morgan** hailing from Warwick and **Jacob Thomas** from Monash University. You can read all about their interests and careers, and indeed that of all our editors, over on *Exchanges'* main site.

Finally, particular gratitude to **Fiona Fisher** and the [Institute of Advanced Study](#) for their part in continuing to support *Exchanges'* mission strategically and operationally.

Continuing the Conversation

Exchanges has a range of routes, groups and opportunities for keeping abreast of our latest news, developments and calls for papers. Some of these are interactive, and we welcome comments from our readership and contributors alike. Some of these include:

Editorial Blog: blogs.warwick.ac.uk/exchangesias/

Linked.In Group: www.linkedin.com/groups/12162247/

Twitter:^{vii} [@ExchangesIAS](https://twitter.com/ExchangesIAS)

Mastodon: [@ExchangesIAS](https://mastodon.social/@ExchangesIAS)

As well as these, our regular email newsletter appears monthly, encapsulating all our latest news in one place. You can register to receive future messages, along with accessing all previous ones, via the link below.

www.jiscmail.ac.uk/cgi-bin/wa-jisc.exe?A0=EXCHANGES-ANNOUNCE

The Exchanges Discourse Podcast

exchanges.warwick.ac.uk/index.php/exchanges/podcast

Over the summer we released our 50th episode of our podcast series, featuring an interview with academic scholar and acclaimed fiction author **Professor Intissar Haddiya**. We will be following this with new episodes in the coming weeks as we talk with a number of the authors whose articles appear in this issue. Past episodes are free to download or stream via the [Spotify for Podcasting site](#), and they can also be found on [Apple](#) and [Google](#) podcasts too. There's also a handy list of [past broadcast episodes](#) available too.

Contacting

As Editor-in-Chief I am always pleased to discuss any matters relating to *Exchanges*, our community, contributions or potential collaborations. My contact details appear at the start of this editorial.

Gareth has been *Exchanges'* Editor-in-Chief since 2018. With a doctorate in cultural academic publishing practices (NTU), he also possesses various other degrees in biomedical technology (SHU), information management (Sheffield) and research practice (NTU). His varied career includes extensive experience in running regional and national professional bodies, academic libraries, project management and applied research roles. He retains professional interests on power-relationships within and evolution of scholarly academic publication practice, within social theory and political economic frameworks. He has aptitudes in areas including academic writing, partner relationship management and effective communication praxis. An outspoken proponent for greater academic agency through scholar-led publishing, Gareth is also a Fellow of the *Higher Education Academy*, and regularly contributes to a various podcasts and vodcasts. He is also the Director of a property development company.



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Endnotes

ⁱ **Acronyms:** That would be the Promoting Gender Balance and Inclusion in Research, Innovation and Training project hosted by Warwick's Politics & International Studies Department. You can find the pee-review booklet and other materials here: <https://www.plotina.eu/plotina-documents/>.

ⁱⁱ **Editorially Reviewed Formats:** e.g., Critical Reflections, Conversations (interviews) or Book Reviews. As these do not undergo external peer review, they are also usually able to be more swiftly published in the journal – provided they pass our editorial scrutiny.

ⁱⁱⁱ **Word counts:** For the purposes of considering a submissions' word count, we do not typically include abstracts, references, endnotes or appendices. While submissions just over or under their word count will still be initially considered for review, any significantly in excess will normally be declined and returned to their authors with advice for revision.

^{iv} **Top Articles:** This diversity of format interest is frequently reflected in our annual Top Articles list, which appears in the IAS annual report, and on our blog pages early in the new year.

^v **Contact Details:** The EIC's address is given at the head of this article, and on *Exchanges'* Contact pages. <https://exchanges.warwick.ac.uk/index.php/exchanges/about/contact>

^{vi} **Expressions of Interest:** We do on occasion operate expressions of interest ahead of submissions for special issues. For regular (open or themed) issue submissions though, authors may submit their manuscripts without any prior contact.

^{vii} **Twitter/X:** We remain on Twitter/X for now, although given the changes that have come to this site in recent months, we may migrate elsewhere in the near future. That is, assuming we can gain a Bluesky invite!

Placing ChatGPT in the Context of Disruptive Technology in Academic Publishing

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Abstract

ChatGPT is an AI-based text generating tool which was released at the end of 2022. The tool is significantly better than previous AIs at generating written outputs which appear to have been written by a human including academic research articles. Within academic research there has been considerable interest in whether the tool can be used to write scholarly content, and what the consequences of this would be. Despite the increased quality of output ChatGPT still suffers from many of the flaws which plague other AI tools such as bias, inaccurate training materials and its use leads to concerns around plagiarism and research integrity. This article centres the viewpoint of an academic librarian to discuss ChatGPT in the context of other technologies which have been disruptive. An argument is made that the tool is simply one in a series of transformational developments in scholarly communications, which have all been, eventually, successfully assimilated.

Keywords: Artificial Intelligence; AI; academic integrity; research integrity

Introduction

Within publishing, libraries and the field of scholarly communications change can be slow, but the progress of technological change is relentless. Although the primary mode of research communication has been the journal article for hundreds of years, the 21st century has seen many innovations which have changed the way that researchers interact with these publications, both in their roles as readers and as authors.

Artificial Intelligence (AI) and natural language processing (NLP) algorithms are not new to computer science. However, public access to tools which provide value in knowledge acquisition or contextualisation have been rare. AI and NLP algorithms were used for small discrete tasks, customer service chatbots and for businesses to predict customer behaviour but were not being used on a regular basis by most people. ChatGPT arrived with a bang on the world stage at the end of November 2022 and rapidly caused many to reassess their position on AI algorithms, both in terms of how these might be used, and the issues that they raised around authorship, intellectual property rights and the replacement of the human workforce (**Crawford, Cowling & Allen, 2023**).

Although based on an algorithm which was developed in 2020, it was not until the web version was trialled that this step forward in AI and chatbot functionality really caught the public's imagination (**Kirmani, 2022**). The internet was alight with newspaper articles predicting the sudden demise of many careers including journalism, education and law. There was an equal number of suggestions that AI, and ChatGPT in particular was a false promise, and there was nothing to worry about. This new algorithm could write articles, essays, and poems (**Ibid**). It could write in almost any style under the sun, and there was no clear way to track the fact that it had been used. There was even talk that the AI singularity, the moment that AI evolves beyond human control, was just around the corner.

ChatGPT forced publishers, librarians, and authors to rapidly consider how AI written content could be used to enhance, replace or subvert the scholarly literature. Several instances of ChatGPT being listed as an author in a research article were identified before publishers started to disallow it for example King and ChatGPT, 2023. Many other applications built on the technology have rapidly been developed such as ChatPDF which allows a reader to ask questions about an uploaded document (**Ortiz, 2023**) and competitors such as Amazon, Google, and Microsoft have increased their own efforts to produce human-like AI applications. (**Rudolph et al., 2023**)

Guidance quickly sprung up in response to the new technology, although this has yet to be standardised. Some publishers have allowed the use of ChatGPT to be placed in the acknowledgements whereas some have

suggested ways in which ChatGPT use should be cited (**McAdoo, 2023**), but across the board the inclusion of the tool as an author was rejected (**Stokel-Walker, 2023**). Standard guidelines on who should be credited as an author include the requirement to make ‘Substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data’ (**Rosenberg et al., 2013**) and to approve the final version of the text, neither of which an algorithm is able to do.

ChatGPT, and other NLP tools, feel like a new horizon in scholarly communication, but are they really? The history of how scholars acquire and share knowledge is constantly changing, and this rate has rapidly increased in the 20th and 21st centuries. There have been tools and inventions previously which have upset the norms in publishing and research, but these have eventually been assimilated into our standard processes. To ensure that tools are used correctly, however, their uses must be understood, they must have clear guidelines, and training should be provided to ensure optimal and ethical use. This article discusses ChatGPT in this light; positing that ChatGPT is simply the next step in a long series of advancements, and discusses how this tool should be contextualised to allow the academy to assimilate and move forward with the use of AI and NLP tools such as ChatGPT.

Previous Technological Upsets

ChatGPT is not the first technology to upset knowledge discovery and publication landscapes, and it won't be the last (**Cox et al., 2019**). Assessing the consequences of previous changes can help us identify where ChatGPT may be transformational, and where it is unlikely to live up to its promise.

eJournals

The first major upheaval in the twenty-first century, within academic publishing, was the movement of journal content from printed paper journals to online eJournals (**Montgomery & Sparks, 2000**). Prior to this, academic librarians and educators had complete control over the hard copy resources housed in their collections. If a student or researcher found a resource within the library, you could have a reasonable level of trust that it was a reputable source.

Moving journal content online meant that librarians no longer had complete control over which resources were considered reputable and which were not, particularly once the drive towards open access made many more articles available to everyone. Predatory journals popped up, difficult to differentiate from high quality peer-reviewed publications, and websites or blog posts were brought up by search engines as often as journal articles were. Libraries combated this through online library

catalogues which could be searched to find only those resources acquired and trusted by the library. The ease of use of tools such as Google meant that control and guidance over knowledge continued to slip away (**Levine-Clark, 2014**).

Google Scholar

Google, and even more so, Google Scholar are often posited as a replacement for academic librarians. These search engines provide access to an enormous corpus of information, far more than could ever be reviewed and assessed by librarians (**Godwin, 2006**). However, rather than removing the need for professionals it has simply shifted their role. Now, instead of being provided with a collection of materials which had already been assessed, the researchers and students must learn to assess the resources themselves, a skill called information literacy (**Taylor & Dalal, 2014**). Librarians are ideally positioned to provide this training.

Google Scholar has to some extent pushed out traditional library discovery software and domain specific search tools such as PubMed although these search tools continue to outperform the generalist Google Scholar (**Morshed & Hayden, 2020**). New efforts to use AI models trained on domain specific knowledge may eventually cause the demise of general-purpose search engines in academic use, but only if they are as easy to access and use as Google Scholar.

Wikipedia

Since the early days of the internet, ideas of provenance of information and author authority have been questioned, and the use of ChatGPT and similar tools will exacerbate this further. Prior to the use of AI tools in scholarly writing, no resource or tool had brought this as sharply into focus as has Wikipedia, an online encyclopaedia which has grown to a scale which completely eclipses its nearest competitors both in terms of content and use (**Ball, 2023**).

As a crowd sourced resource with many editors, Wikipedia relies on two methods to reduce bias. Firstly, the community aspect of Wikipedia allows those with opposing views to engage in discussion, debate and the editing of content originally written by others. Greenstein and Zhu (**2018**) have shown that crowd sourced knowledge does not produce any greater levels of bias than content produced by experts. The second method, which has been essential for the adoption of Wikipedia into the wider scholarly knowledge landscape, is the importance placed on citation of information. Although Wikipedia is sometimes found cited as a source in itself, Ball (**2023**) argues that its true value is as a secondary source, strongly aligning with the assertion by Bould et al., (**2014**) that 'citing Wikipedia or any other tertiary source in the academic literature opposes literary practice'.

AI so far in Publishing and Libraries

A survey in 2017 showed that 44% of librarians did not believe that super computers would have a serious effect on libraries. Survey respondents also assumed that it would be 30 years before super computers were in libraries. The survey asked about supercomputers broadly, however the questions were asked in light of Watson, a natural language processing AI supercomputer, which was developed to answer questions in a similar way to ChatGPT. The majority of respondents when asked about supercomputers in this context did not believe that they would ever replace librarians and that developments in this area would be positive overall (**Wood, 2018**).

Having said this, in the scant 5 years between this survey and today, could AI-based solutions and tools have become significantly more accessible to students and researchers? The NMC Horizon Report: 2017 Library Edition had suggested a 4-to-5-year timeline to the adoption horizon for AI (**Adams Becker et al., 2017**). AI and Machine learning are already being used within academic libraries (**Ali et al., 2020**) to create chatbots for customer service (**Panda & Chakravarty, 2022**), for pattern recognition in discovery solutions (**Fernandez, 2016**) and in attempts to predict future book usage through analysis of previous reading patterns (**Walker, 2021**).

Some researchers have also started to use AI tools during the literature review and discovery phases of their research. AI based discovery tools such as Yewno support the discovery of related topics and highlights hidden relationships within the literature (**Gramatica & Pickering, 2017**). Whilst some researchers have embraced technology such as Yewno particularly expressing its usefulness in identifying new concepts in quickly moving fields (**Kiani et al., 2020**). Others have not felt that it gave them any insight greater than that they could have provided for themselves through the use of concept maps (**Hoeppner, 2018**). Frequently a solid understanding of the topics was required to understand whether suggested connections were useful (**Lacey Bryant, 2022**).

AI tools have already appeared within and alongside word processing software. Grammarly, an AI tool designed to improve grammar and improve the grades of students who use it (**Grammarly, 2012**). Whilst this can be seen as problematic for educators who may lose the opportunity to instil an understanding of language in students (**Toncic, 2020**), for researchers the use of tools to improve readability are extremely beneficial. These tools can go some way to levelling the playing field for non-English speakers and for those with disabilities such as dyslexia.

Whenever new tools are created the most enterprising will always look at how these can benefit them. For most, this will not be a desire to cheat, but a desire to gain an edge, to perform as well as they possibly can, or even to just make their lives easier. We can see this in the increased use of Google Scholar instead of traditional library catalogues (**Halevi et al., 2017; Schultz et al., 2007**). Many librarians still teach that catalogues are better than Google Scholar, but many others realise that this is a losing battle (**Luftig & Plungis, 2020**). Rather than banning tools, or shaming users, teaching responsible use is a far better approach. As discussed previously, students are sternly warned not to cite Wikipedia, however there is a growing positive perception of the website as a way of initially learning about the subject, of gaining a general knowledge before moving onto more specialist and reliable publications. It may that in this model we can start to see a use for tools such as ChatGPT.

Benefits and Uses of ChatGPT

Time Saving and Framework Building

Whilst there is little debate that the use of AI to write large sections of articles or other research outputs is considered to be a research integrity issue, the tool may be useful as a timesaving device, quickly building frameworks based on previous work. The use of AI by lecturers and assessors has been suggested as a good way to free up time (**González-Calatayud, 2021**). Academic staff are overburdened and expected to conduct research alongside teaching (**Miller, 2019**), therefore tools which reduce the time needed to mark an assignment may well be welcomed. There is of course a downside in that, compared to detailed, thoughtful and caring feedback designed to nurture students, the feedback is likely to be formulaic and not provide much more insight than reading a clearly worded marking scheme. To be truly useful these tools would still need to be used alongside an expert educator.

As with the Yewno tool discussed previously, ChatGPT may be a useful way to quickly explore new topics and identify themes and questions. By identifying what ChatGPT does not return it may also be possible to start to identify gaps within the literature.

Proof Reading

Language models such as ChatGPT can be used to proofread or spell check documents, although tools written directly for this purpose may still be preferable. This may be of particular use to writers with dyslexia or who do not have fluent English writing skills. Within academic research the ideas and competency of writers is still frequently tied to their ability to write fluently in English (**Duran & Saenkhum, 2022**), and comments from journal reviewers frequently highlight the quality of language rather than

the underlying research (**Romero-Oliveres, 2019**). A direct spell check would not be a marked increase in functionality over that found in word-processors, however asking ChatGPT to re-write paragraphs of text may be considered quite differently as this is starting to move into the territory usually occupied by authors (**Roe, & Perkins, 2022**).

The algorithm is also able to translate into and from numerous languages and performs similarly to tools such as Google Translate (**Jiao, 2023**). ChatGPT's functionality is limited in this regard and is likely to underperform compared to a tool specifically designed for this purpose. For example, it is unable to translate into extremely rare languages such as Taushiro. This is likely to be because of the lack of examples within the training set. Given time, however, the use of language models such as ChatGPT may allow for writers to initially write in their native language and then translate into English. Scholarly publishing currently biases research written in English (**Mas-Bieda & Thelwall, 2016**). If AI tools can develop to a point where real time, accurate, translate of articles could be easily accessed by both writer and reader, this could go a long way to removing some of the structural barriers that this language bias has erected.

Rapid Learning

ChatGPT can function in a similar way to Wikipedia if asked to write generally about a topic or to give a definition, it can provide a generalised background and entry point for someone new to the topic. Neither Wikipedia nor ChatGPT are considered to be the sources of information, but both are able to function in ways which allow information from other sources to be discovered (**Ball, 2023**).

One major difference between Wikipedia and ChatGPT, however, is that although neither has a clear provenance for the author, Wikipedia is clear about citing quality sources, the lack of which is currently a major drawback in the use of ChatGPT and similar tools. Whilst neither resource is suitable for citing in an academic document, they can both provide a quick overview of a subject, giving you jumping off points and directions in which to point your research.

Although rapid learning has been included as a benefit here rather than a misuse, it can easily move categories. ChatGPT is by design a generative AI algorithm, it creates text that looks like the answer the user is looking for. Whilst in many cases this text contains useful information, frequently there are serious errors in accuracy (**Baidoo-Anu & Owusu Ansah, 2023**). Information from ChatGPT at the very least should be treated as knowledge gained from an unreliable witness and be fact checked before used in any subsequent outputs.

Concerns and Misuse

Did the Author Write the Content, Whose Ideas Are These?

There is arguably a difference between these two questions, however in academic scholarship we would usually expect both the writer and the idea generator to be either cited or included as an author. In some areas of publishing, biographies for example, ghost writing is an accepted concept; the author of the book may not be the person who turned ideas into text. In these cases, the person who wrote the text is usually not stated as the writer has sold their copyright. Within an academic context this is considered a research integrity issue – authors must all contribute intellectually, and everyone who contributes intellectually must be named as an author (**Rosenberg et al., 2013**). ChatGPT creates a grey area. Springer Nature and other respected publishers have made it clear that the algorithm does not count as an author, merely as a tool (**Stokel-Walker, 2023**). However, if this is the case, how should its use be identified? Is this even necessary? Other tools that we use for improving our writing, such as spelling and grammar checks are not acknowledged. It may be that in the future the use of AI as part of writing becomes so ubiquitous that it falls into the same category as these.

One of the major reasons why identifying the use of ChatGPT in some form is necessary is that its use plagiarises the ideas and text of other writers (**Cotton et al., 2023**). Although the authors of a work can retrospectively cite articles which corroborate the claims in the text written by ChatGPT, this is unlikely to find all of the actual works which contributed to the training of the algorithm. As such the authors will be failing to credit other scholars appropriately. At the very least it is academically dishonest to pass off AI written text as one's own.

Identification of ChatGPT text is not a simple task because it is designed to write content which looks like a human has written it and which is also not direct plagiarism from other sources (**Else, 2023**). OpenAI, the makers of the algorithm, have provided a new tool for detecting AI written text. However, this tool only identifies true positives 26% of the time and will flag text that is not written by an AI 9% of the time (**OpenAI, 2023**). Whilst the AI detecting tool may be useful as an indicator, it is a long way from being able to accurately identify AI written text whilst not erroneously accusing others of using the tools.

Bias and Prejudice

AI implementations have been notoriously biased and prejudiced. Biases in training sets will always lead to biases in the algorithm. The internet is not known for its moderate and balanced opinions and, as such, any training set built from this corpus will likely have bias and may also have

implications for EDI (*Equality/Equity, Diversity and Inclusion*). Google photos AI-based image recognition software is a good example of where this has already happened. In 2015 it was highlighted that the Google Photos algorithm was labelling Black people as gorillas. Google put out a statement saying they were ‘appalled’, but rather than looking in detail about how this could have happened, Google simply stopped the algorithm from identifying gorillas (**Prates et al., 2020**). Until this was pointed out by users, it had not been picked up in testing.

Some bias has already been detected in ChatGPT, although there is no consensus as to which way this bias leans. It is likely that different topics will be skewed in different ways depending on the training set. Although some safeguards have been placed in ChatGPT to prevent toxic language, these can be bypassed by asking the algorithm to write in a certain style (**Zhuo et al., 2023**). Early reports showed that ChatGPT encouraged racial profiling in its responses, particularly regarding the western ‘war on terror’. When one user asked the AI which air travellers present a security risk it suggested anyone who was Syrian, Iraqi, Afghan, or North Korean (**Biddel, 2022**).

Academic research and teaching have a long history of centring western ideas and biases (**Chilisa, 2017**), of failing to confront colonialism (**Stein, 2020**) and of ignoring literature written in languages other than English (**Di Bitetti & Ferreras, 2017**). ChatGPT, by having been trained on this very dataset, cannot help but perpetuate these ideas. It is designed to do so, even if not purposefully. If frequently cited aims to decolonise research and universities are to be brought to fruition, new ideas, and new sources should be prioritised. Relying too heavily on ChatGPT, and other trained AI tools, without critical assessment of sources and training data, will set back these efforts further entrenching academic writing in the values of its past.

Accuracy and Reliability

There is a frequently quoted saying in the world of computer science and AI: ‘rubbish in – rubbish out’ (**Nordling, 2019**). An AI tool is only ever as good as its training data set, and for a tool such as ChatGPT, the training set is largely an unknown quantity. The algorithm is designed as a chat tool, not a tool for the analysis of information, and as such, text returned isn’t guaranteed to be accurate or correct. Instead, it is designed to generate a response that looks like it might have been written by a human based on information provided to it (**Zheng & Zhang, 2023**). The model is trained on vast amounts of information, but it is not able to assess that information for reliability, provenance, or accuracy. In short, the algorithm fails to engage with information literacy and without properly reporting or citing where the information was from, the user is unable to check the sources for themselves.

Depending on the rate at which the training set for the algorithm is updated, the results are also unlikely to be particularly timely. The version used in this test was already quite severely behind on current events. When asked in January 2023 who the UK Prime Minister was it answered Boris Johnson, two Prime Ministers out of date. In a fast-moving field, for example British politics in 2022, the answers would quickly be found to be wrong.

A further concern is that whilst ChatGPT is extremely proficient at creating writing that looks correct, when it is not, the errors can be hard to detect. Stack Overflow, a community forum for programmers, has temporarily banned any code created using the algorithm (**Vincent, 2022**). AI-created answers to user questions were being added in high volume, and although they looked like they might be correct, they were frequently not. If these AI generated answers which have a high likelihood of errors crowd out the human written answers, the platform could lose the trust of its users.

Bland, Uninspiring and Lacking Depth

One of the most frequently seen comments given by those who have trialled ChatGPT is that the output is bland and uninspiring (**Bogost, 2022**). Whilst the algorithm may well be able to write a mostly correct review article, the current output would not generally be thought to be adding quality research to the scholarly corpus. The algorithm also fails to add examples unless prompted and does a poor job of citing its work. Even when asked to include citations it frequently includes only one for the whole piece, or simply makes up suitable looking citations to works which do not exist.

Although AI looks to be improving at a rapid pace, the nature of algorithms such as this, trained on a set of data to produce results that look like those found within the corpus, mean that they will always tend towards the average. A human with a clear grasp of the subject matter will make new observations, or at the least write with flair. ChatGPT cannot do this, and so when used for academic writing, without serious editing, it may not be worth the effort.

Discussion

ChatGPT straight out of the box is not currently likely to replace academic writers and researchers. To get the most out of any tool it should be put to the use they were designed for. While a tool may be passable for other activities it almost certainly will not be producing the quality of result one might wish for. Some may use ChatGPT for writing research articles, however this is not its primary purpose, as such is likely to always provide subpar results. ChatGPT can certainly provide text which gives a good starting point for writing. It can give a mostly accurate overview of a

subject, or proofread and re-write an article. The algorithm is a remarkable jump forward in the technology which allows an AI to generate text as if written by a human, but new developments which change scholarly publishing are not infrequent, and on closer look ChatGPT may not be quite the revolution it initially seemed to be. It is always possible, however, that the next step forward in AI will be.

With the pressure on researchers to publish, some may look to ChatGPT as a miraculous way of churning out articles. Many researchers are pushed for time balancing teaching, research and administration responsibilities. Where guidelines are not clear about the extent that these tools can be used and how their use should be referenced, some may use them in way which crosses a line regarding research integrity. ChatGPT and similar tools will not, at present, help a researcher make exciting new leaps of thought as ChatGPT by design trends towards the mean. The tool is only able to replicate what looks like a brilliant thesis, not actually write one.

Accomplished writers, students, researchers and those outside of academia, will continue to bring their own ideas, nuance, and style to their writing, and are not yet in a position to be pushed out by an AI. However, for prosaic writing or formulaic documents, ChatGPT and similar tools may quickly find a place. Tools such as this may become part of the technology landscape for everyday use, and if so, new guidelines on academic and research integrity will need to be drawn up. Even with the current state of the technology publishers must all carefully assess what they consider to be reasonable use of the tool and what is not, and ideally come to a consensus on this. It may not be long before the academic world is once again transformed by a new technology.

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The Rise of Conceptual Association and Linguistic Register as Advertiser Persuasive Instruments: An Australian study of press artefacts 1800s–1950s

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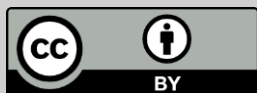
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Abstract

Consumer advertising is remarkable in its propensity to socially recalibrate and adopt new technology, thus providing a spectacular range of information-dissemination methodology in multimodal formats. Unsurprisingly then, the sensory-input phenomena of advertising language attract interdisciplinary interest. Despite researcher diversity, conceptual association presents as a premier audience-sensitive instrument deployed in relay of advertiser-intended meanings: in this dynamic, socio-culturally appropriate messaging is attempted via linguistic register (word choices) tied in semantic interdependency with non-linguistic elements. Compositional meaning-maker favourites include abbreviations, symbols, presupposition and implicature as facilitators of ‘hidden’ meanings. Here, an under-researched area emerges on the historical plane—namely the origin story of conceptual association as an operative in consumer-oriented rhetoric and its pragmatic transit from early-seller composition toward the kaleidoscope of today’s advertising broadband. In this vein, the evolutionary path of promotional discourse is traced via an Australian 1800s–1950s press dataset. The data evidences abbreviations and symbols in consumer advertising by the late 1840s and pegs the rise of presupposition and implicature to the 1850s. This finding, as historical backdrop, complements inquiries that illuminate how compositional choices work to generate non-evidence-based benefits that induce positive appraisal and, further, raises the formative journey of English as today’s global lingua franca of consumer advertising.

Keywords: advertising language; conceptual association; linguistic register; presupposition; implicature; persuasion

Introduction: State of the Art and Key Concepts

The fluidity of advertiser reflexivity and compositional ingenuity afford seemingly limitless data for exploration of seller persuasive tactics. Conceptual association is raised as a singular influencer of compositional choices in message creation, well-documented in scholarly works (including Barthes, [1957] 1977; Bruthiaux, 1996; Cook, [1992] 2001, 2008; Ghadessy, 1988; Goffman, 1979; Hermerén, 1999; Kelly-Holmes, 2005; Leech, 1966; Myers, 1994, 1998; O’Sullivan, 2019; Packard, 1957; Schmidt et al., 1986; Vestergard et al., 1985; Williamson, 1978). Similarly, linguistic register—that is, appropriate language choices depending on socio-cultural setting—surfaces as a core element in communication. In the canon of persuasive-language studies are those that illuminate form-and-function phenomena, such as Bhatia (1992) on English in advertising across cultures; Dafouz-Milne (2008) drawing on opinion pieces; Del Saz-Rubio (2018) on women’s toiletries in TV commercials; Fuertes-Olivera et al. (2001) on advertiser slogans and headlines in magazines; Gardner and Luchtenberg (2000) on posters and billboards; Ruellot (2011) on bilingual creativity in French advertising; Simmank et al. (2020) on cognitive reasoning and information processing as complementary elements in slogan interpretation; Van Compernelle (2008) on virtual-dating networks; Webster (1988) on religious language and solidarity in group identity; and de Silva (2020) on discourse markers in cartoon-strip advertising. Collectively, these highlight aspects of reference at the heart of meaning conveyance. Conceptual association and register are significant co-operators in health and beauty marketing (Diez Arroyo, 2013; de Regt et al., 2020; Goddard, 2015; Hermans, 2021; Myers, 1994, 1998; de Silva, 2018) where consumer benefits are indeterminate. Frequently, the promise of wellbeing is the marketing pillar of consumables that lack benefit verification: these include cosmetics, household cleaners, over-the-counter (OTC) pharmaceuticals, toiletries and tea.

This paper, via an 1800s–1950s press dataset (de Silva, 2021), contributes to an under-explored area in advertising-language studies by profiling how conceptual association and linguistic register gained prominence as persuaders. By tracing the formative trajectory of promotional discourse, this report illustrates the proliferation of misleading impressions embedded in consumer advertising. Here, the decline of fact-focused, utilitarian and provable information and the attendant rise of non-evidence-based claims point to a gradual shift that streamlined into the present-day multimedia adscape (which banks on visual stimulation, such as the evocative meme in digital marketing).ⁱ In this scenario where factual information-giving is diminished, it is pertinent to note how the core concept of information is defined in information science:

The understanding of the core concept of 'information' in information science is seen as:

- *a proposition, a structure, a message or an event*
- *as requiring truth or indifferent to truth*
- *as socially embedded and under perpetual re-interpretation, or as measurable in bits*
- *as a worn-out idea deserving of dispatch, or as an exciting conception understandable in terms of evolutionary forces (Bates, 2009: 2359).*

This four-way description of what information is—from the science of how information is stored and processed—accounts for commonly held understandings as well as those held across diverse social groups (including intellectual, legal, scientific and technology cultures). As a broad definition at semantic baseline (Bates, 2009), information is a proposition, a structure, a message or an event. The what-is-information key words of interest to the advertising copywriter are likely to be 'proposition', 'message', 'requiring truth', 'indifferent to truth', 'socially embedded', 'under perpetual re-interpretation', 'worn-out idea' and 'an exciting conception'. Of this lexical set, two sit in apposition: 'requiring truth' (bobbing as an inconvenience in copywriter compositional labour) and 'indifferent to truth' (presenting as solution to sedate the problematic 'requiring truth' element). Two discomfiting phrases in the lexical set are 'under perpetual re-interpretation' and 'worn-out idea'; however, these (and other) advertiser concerns can be overcome by socially embedding 'an exciting conception' (via positive values) to entice markets (Barthes, 1957 [1977]; Packard, 1957).

An 'exciting conception' is the copywriter goal, inferentially attainable. Concept association is a cognitive memory-based phenomenon usefully engaged as an instrument to relay advertiser-intended meanings: in this dynamic, socio-culturally appropriate messaging is attempted via linguistic register (word choices) tied in semantic interdependency with non-linguistic elements (like pictures). Compositional meaning-maker favourites include abbreviations, symbols, presupposition and implicature as facilitators of 'hidden' meanings. Simply put, conceptual association may be defined as cognitive phenomena drawing on a network of socio-cultural meanings where semantic boundaries intersect. The idea of conceptual association is first seen in Plato's Republic (c. 375 BCE), and unfolds as a polemic in philosophy through time (Rapaport, 1938). Dutch philosopher Baruch (Benedict) Spinoza (1632–1677) aptly describes it as 'man in remembering one thing straightaway remembers another either like it or which is perceived simultaneously with it' (Ibid: 49). In this vein,

Schoenlein and Schloss (2022), in their empirical study of colour-concept associations, found participants were sensitive to colour-concept co-occurrences in learning tasks where using colour was not essential to task completion. This finding points to simultaneous involuntary recall (remembering) of related information and suggests that people ‘continually form and update associations between colours and concepts’ (Schoenlein et al., 2022: 473). Accordingly, it can be extrapolated that to link a consumable strategically with positive values may bear desirable effects of some permanence.

Historically, overt positive-concept association—via attention-getters, iteration, memorability and testimonials as advertiser favourites—is traceable over centuries (Sage, 1916; Sampson, 1874; Turner, 1922). But the exaggerated commendations that characterise the “magnificent promises” of puffery’ (Burridge, 2018) have puffed out in favour of subtle messaging via devices like intertextuality and pictures (Goddard, 2015; Hermerén, 1999 *inter alios*). Copywriter retreat from hype and hyperbole is prompted largely by three catalysts:

- industry codes and legislative caveats (Crawford, 2008, 2021; Segraves, 2005; Petty, 2015)
- marketer interpretive reflexivity in decision-making to meet ever-changing socio-cultural dynamics and to address ‘jaded consumer’ scepticism (Myers, 1994: 25–27)
- *the push for corporate social responsibility and ethical practice* (Drumwright, 2007).

In transition from fact-focused information to covert promotional persuasion, two change phenomena are remarkable. First, images usurp words as principal conduit of meaning conveyance and brand identity. Second, facts relating to consumables are frequently omitted (such as ingredients, physical attributes, production sources) in favour of slogans and/or catchy phrases (linguistic fragment) that are fact-like. At this point, it is useful to define ‘fact’ in everyday use:

That which is known (or firmly believed) to be real or true; what has actually happened or is the case; truth attested by direct observation or authentic testimony; reality. (Oxford English Dictionary).ⁱⁱ

In the world of science, simply put, the idea of fact rests on the reality of a truth known from evidence-based records of actual observation. On the broader scientific, philosophical and sociological plane (Fleck, [1935] 1979), the concepts underpinning science result from an ongoing process of socio-scientific consolidations that continue to transform. These transformations are realised through language: a universal instrument of

communication in the hands of all, including the seller-advertiser. In this vein, the conceptual creations of consumer advertising, in social consolidation, can come to be accepted as fact—something known (or believed) to be real or true. In the words of Gardner and Luchtenberg (2000: 1808): ‘meaning is derived from the perceiver’s knowledge of language as system and the pragmatic ability to make sense of an emerging text in the context of the situation and of the sociocultural world in which the text occurs’.

Copywriters appropriately employ concepts and registers to create ‘Selling Power’ (Leech, 1966); here, in retrospective reflection, the question arises of how copywriting formatively transitioned from the compact classified marked by its fact-focused information-delivery purpose (Ambler et al., 2007: 30–32; Bruthiaux, 1996) to the ideational sophistication seen today. In this light, this paper seeks to illustratively articulate the developmental progression. Questions that guided analysis of the dataset include:

- What can be said of advertiser language choices in transition from fact-focused to ideationally available benefits?
- At what point did symbolic and inferentially available non-verifiable meanings begin to characterise advertising language?

At this juncture, it is helpful to define three central concepts—namely the ideas of *information*, *persuasion* and *linguistic register*. In the following discussion, ‘information’ is defined simplyⁱⁱⁱ as overtly or implicitly available ideas recoverable via discourse features. Given the historical association of printed matter with knowledge, science and the law (Hughes, 1988, 2000; Johns, 1998), it is reasonable to surmise that written information potentially carries the weight of credibility. Accordingly, advertiser-intended interpretations available in written composition are likely to escape consumer critical review in the everyday scenario. Today, words continue to be an advertiser tool, complementing the strategies of modern advertising (Crawford, 2008; Myers, 2009) that engage a semiotic chain of events relying on images as meaning-maker (Aitchison, 2012; Messaris, 1996). The semiotic operation of text–image relationships highlights the efficacy of an image to generate multiple ideas simultaneously (Bateman, 2014). Advertiser information may be verifiable (as fact or truth), or unverifiable (and thus may be false or misleading). It can be argued that elements of truth, at least thematically, underpin the presuppositions and implicatures of advertiser claims to mould impressions of real-world reliability (Dafouz-Milne, 2008; Fuertes-Olivera et al., 2001; de Silva, 2018).

The idea of persuasion in advertising language is broadly defined here as linguistic and non-linguistic elements embedded to get attention, be

positively memorable, be readable, and thus create ‘Selling Power’ (Leech, 1966). Persuasive devices over time typically include: the historic woodcut as placeholder to attract the reader’s eye; pictures with power to connect with personal memory; logos holding brand values; natural-language pragmatics elements (like deictics, information structure, implicature, presupposition, thematic information, turn-taking); and linguistic register choices on the paradigmatic and syntagmatic planes (Bolinger et al., 1981: 12, 81–2). Linguistic register is identifiable primarily by way of three attributes (Börjars et al., 2019; Yule, 2020) within the baselines of Wardhaugh’s (2006) ‘occupational’ and ‘social’ descriptors:

- occupational register (profession– and workplace–related language)
- topic, which may be specialist subject matter (like banking and finance, bio-medical, real estate) or everyday social exchanges (like salutations)
- style of expression (such as level of formality or colloquialism) appropriate to social circumstance.

The first and second attributes (professional and workplace language and topic) are related in that occupations generate topics relevant to their activities, and thus occupation and topic share recognition value in specialist vocabulary. The third focuses on social situation (including class hierarchy) and linguistic features (like slang and phonology, salient in studies of spoken expression). Collectively, these are pragmatically critical to advertisement composition. Given the press dataset, the first and second attributes are the focus here; but notably copywriters effectively employ conversation formats in print advertising as device to attract addressee participation (Cook [1992] 2001; Goddard, 2015; Hermerén, 1999; Myers, 1994, 1998).

The linguistic range within each of the three register-identification attributes, logically, is a variable rising exponentially in relation to augmentation in the English language within its historical socio-economic and cultural situations. This expansion is a mosaic mirrored in the occupational diversification that emerged as a corollary of commercial, scientific and technological advancements of the Industrial Revolution— which progression coincides with the spread of colonialism (Russell, 1793), and inter-cultural mixing and population growth (see Hughes, 2000; Morgan, 2011).^{iv} Eventually, into the 1900s, socio-economic progress resulted in definitive career and educational specialisations that created sets of discipline– and subject–specific registers and subsidiary varieties (sub-registers): the vocabularies of accountancy and book-keeping or stockbroking, for example, are sub-registers within banking and finance.

Occupational register as the ‘special language of the professions’ has been identified as formatively influential in the nationalistic and economic history of the United States (**Heath, 1979**). Workplace and specialist varieties are tools in market segmentation: register diversification as a strategy to access the pockets of the waged population is a premier advertiser instrument, expressly evident in linguistic adjustment from colonial settlement into the mid-1950s.

Consumer advertising today dually targets spending-stimulation and market retention, promoting items that often are indistinguishable in value. The ‘catchy syntax’ of advertising copy that ‘can lull us into staying vague about meaning’ (**Elbow, 2012: 255**) is the material of slogans. Typically, copywriters ingrain consumables with positive concepts that associate impressions of exclusive quality and/or sophistication that promise rewards. Perhaps curiously, the phenomenon of English fragments as glitter in today’s international adscape is firmly in place. English phrases are the global lingua franca in consumer advertising: they are active participants connotatively linking items with positive qualities via strategic cross-language blending (**Bhatia, 1992; Martin, 2007, 2008; Moody, 2020; Nickerson, 2020: 501–502; Piller, 2001; Ruellot, 2011**). This spotlights English as a language of prestige, with power to evoke ideas of excellence, technological sophistication and scientific integrity. This is evidenced even where the brand is exclusive to an economic power commensurate with England (and/or the United States). English fragments are an indispensable incentive embedded in localised French advertising, despite legal caveats that disallow English in French advertising (**Ruellot, 2011**).

Trove Digital Archive Dataset 1800s–1950s and Analytical Approach

Dataset 1800s–1950s

This paper draws on 1800s–1950s press data collected between 2015 and 2019 (**de Silva, 2021**). The data—sourced from the Trove Digital Archive^v—comprises both consumer advertising and socio-cultural artefacts (including opinion pieces and trade– and finance–related reporting), which contextually inform the analysis. Practical examples illustrate the language-adjustment journey of promotional language as it morphed from fact-focused to putative benefits. In data analysis, observations were conceptually inter-related and stylistically matched across the dataset (**informed by Crystal et al., 1969 and Sebeok, 1960**), and interpreted within a language-in-use approach to reveal variation in usage patterns. As done by Bhatia (**1992**), each advertisement is treated as a single discourse unit, and visual devices (like capitalisation, bolding, pictures) were recorded, along with close reading of body copy to holistically glean

textual, interpersonal and ideationally available information (de Silva, 2018, 2020, 2021).

Analytical approach

The analytical approach deals with advertiser compositional diversity (namely linguistic, literary, image and typography devices) at the levels of discourse, clause and phrase.^{vi} This diversity requires blending two or more approaches to uncover communicative functionality. Broadly, the approach here follows the discourse-analysis parameters of Gee (2011, 2014) within the language-in-use perspective (Austin, 1975; Crystal et al., 1969; Ghadessy, 1988; Halliday, 1985). Holistic and granular inspection of linguistic and non-linguistic elements is achieved by bringing together:

- the language communication model (Leech, [1974] 1981), which identifies the five social functions of Expressive, Informative, Directive, Phatic, Aesthetic
- the idea of cohesion in English (Halliday et al., 1976), which simply put is textual construction meaningful in socio-cultural communicative contexts.

In analysis, conceptual association and linguistic register rise as vehicles of persuasion, skilfully configured to encourage audience cooperation, gaining purposeful rhetorical sophistication. As precursor to the discussion here and its illustrative examples, a summary-in-brief of persuaders in developmental progression is shown in **Table 1**. The stages of this evolutionary path relate to language-adjustment (consumer) periods, from the simplicity of early-1800s promotions to the brand-identity emphasis of modern advertising (Myers, 1994; de Silva, 2021). In the discussion below, practical examples illustrate the operation of conceptual association and linguistic register as authenticators of advertiser claims. The pragmatic transit of promotional language is contextually elucidated as it morphed from a fact-focused delivery purpose toward socially constructed worlds accessible via symbolic values.

Table 1: Key advertiser devices of persuasion, 1800s–1950s: progressive deployment (Source: de Silva, 2021)

1800s–1950s	Key Advertiser Devices
From the early 1800s	<ul style="list-style-type: none"> • Typography (font enlargement, bolding, capitalisation, italicisation, punctuation marks) • Repetition (iteration) • Testimonials (as markers of authenticity) • Woodcuts
From the 1850s	<ul style="list-style-type: none"> • Expressive, narrative, descriptive, argumentative modes

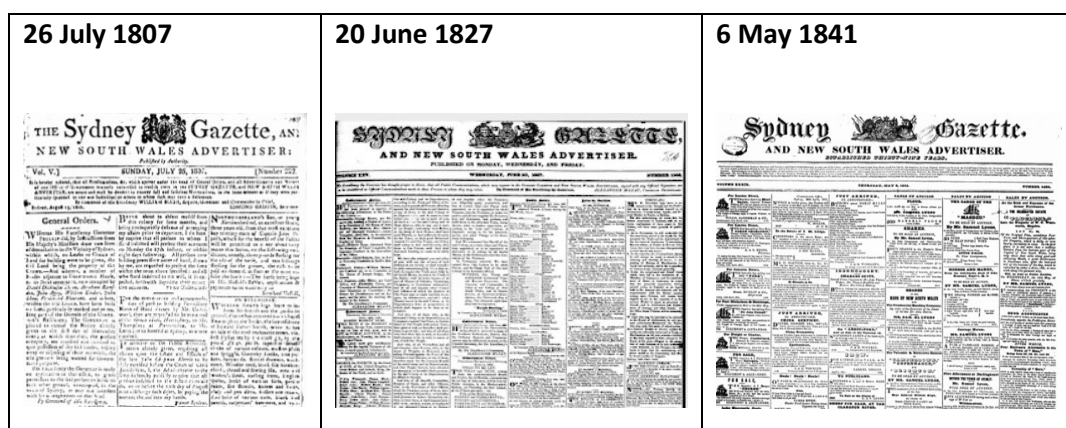
	<ul style="list-style-type: none"> • Register variation • Conceptual association with positive ideas • Presupposition, Implicature, Thematic Information • Aphorisms and slogans • Advertorials
From the 1880s	<ul style="list-style-type: none"> • Pronoun referencing, direct address • Grammatical mood • Pictures and elaborate portraiture, cartooning • Technical drawings • Metaphors, metonyms • Brand-building • Conversations (direct speech)

Transition from Fact-Focused Information to Putative Benefits

Two features deny early-1800s consumer advertising as distinctively persuasive:

- Newspaper layout was an uncategorised jumble where consumer-item availability is not distinguished (**Figure 1**).
- Advertisements were compositionally similar in register to other press language, marked by formality and respectful addressee social distancing (**Figure 2**).

Figure 1: Newspaper front pages (half-page extracts, including banner) from 1807, 1827, and 1841
(Source: The Sydney Gazette and New South Wales Advertiser, NSW 1803–1842)



In the 1807–1827–1841 front-page sequence of Figure 1, three incipient principles of readability and improved layout are progressively apparent by 1841:

- narrower column width (and more columns)
- adoption of bolded headlines
- woodcuts that signalled consumer-relevant information.

The latter two (headlines and woodcuts) are eye-catcher devices serving the message 'Look at me!' Decorative woodcuts, however small, were an outstanding attraction as '[t]he advertisement carrying even a small illustration had an advantage which often amounted to dominance of the page' (Presbrey, 1929: 93).

The woodcut, an historic tool of the printmaking artisan,^{vii} serves as the prototype of the semiotic in promotional texts, bringing to the reader a picture as meaningful symbol. The woodcut image meta-encoded availability of consumer-relevant information, repeatedly signalling marketplace opportunity; this visual re-occurrence operated in an emblem-like way, distinctively marking consumer information. It is worth noting this early-advertiser tactic in the light of today's digital marketing meme, recognised as capable of imitating and reiterating units of cultural information in brand promotion (McGrath, 2019; Murray et al., 2014). In this vein, advertising is a cultural medium and an imitative art, copying from artefacts in real life to innovate existing signifiers that then ideationally mint new meanings with intention to create attractive consumer worlds. In the longitudinal adscape, it is reasonable to equate in principle the woodcut with the advertiser meme (of commercials and digital platforms) as memorability devices that promote and consolidate marketer information. Advertiser practice of repetitive imitation is today the cultural norm, and it can be speculated that the centuries-old woodcut and the sophisticated meme are sibling psychological tools directly targeting consumers.

Early-1800s advertiser writing style: 'James-Squires-1807'

With respect to register in narrative tracts, early-1800s writing style is fact-oriented and august, as seen in 'James-Squires-1807' (Figure 2) for sale of 'the Hop'. James Squires offered bulk purchase of hops seedlings to the agriculturist. Identified in the headline is (1) the vendor in grammatical third person:

(1) J. SQUIRES Settler at Kissing Point

As 'settler', James Squires presents himself as a local, and Kissing Point is the point-of-sale utilitarian information. By employing the third person, Squires distances himself from the vendor (who he likely is). In the next two lines he:

(2) begs leave to acquaint those who

(3) are desirous of cultivating the Hop

Squires (2) appeals in respectful language to (3) the aspiring agriculturalist. Squires then provides contextual facts in advising:

(4) he has now from 12 to 1500 Plants

(5) to spare, the whole in a healthy state

Thus, he identifies (4) quantity available; followed by (5) the words ‘to spare’—suggesting supply is limited—and attests condition of the living plants as ‘in a healthy state’. These first five lines contain the most relevant buyer information in gentle persuasion. In the following five lines, he states (6) the seedling price as ‘6d’ each, (7) (8) his willingness to satisfy buyer needs at ‘any number’ required, and finally in (9) (10) advises the present time as the ideal season to bed the seedlings:

(6) And to be disposed of at the rate of 6d

(7) Each, for any number that may be re-

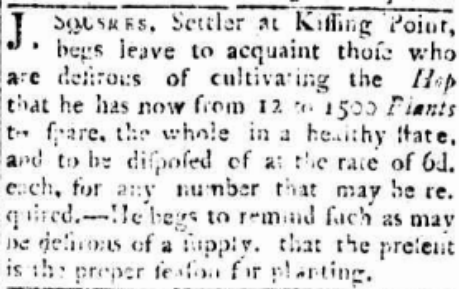
(8) quired – He begs to remind such that may

(9) be desirous of a supply that the present

(10) is the proper season for planting.

By declaring ‘the present is the proper season for planting’, he coaxes addressees to take immediate action to buy and plant.

Figure 2: : James-Squires-1807 sale of hops plants newspaper advertisement and transcription
(Source: The Sydney Gazette and New South Wales Advertiser, 27 July 1807: 1)

Original	Transcription ^{viii}
 <p>J. SQUIRES, Settler at Kissing Point, begs leave to acquaint those who are desirous of cultivating the <i>Hop</i> that he has now from 12 to 1500 <i>Plants</i> to spare, the whole in a healthy state, and to be disposed of at the rate of 6d. each, for any number that may be required.—He begs to remind such as may be desirous of a supply, that the present is the proper season for planting.</p>	<p>J. SQUIRES Settler at Kissing Point, begs leave to acquaint those who are desirous of cultivating the <i>Hop</i> that he has now from 12 to 1500 <i>Plants</i> to spare, the whole in a healthy state, and to be disposed of at the rate of 6d. each, for any number that may be required.— He begs to remind such as may be desirous of a supply, that the present is the proper season for planting.</p>





‘James-Squires-1807’ is high in factual utilitarian content, raising positive benefits of the sale item. A visual scan of newspapers through the decades reveals that products-and-services advertisements into the 1870s occupy a position identifiable as close to the information-delivery type on the

'continuum of text functions' (Fuertes-Olivera et al., 2001: 1290). At discourse level, early seller compositions tend to:

- provide fact-focused information
- lack headings that identify the sale item by name or category
- project personalisation (expressed by way of using names of people associated with sale, place, provision or manufacture of the sale item).

Market competition burgeoned over the decades with rapid growth in small trader numbers, expanding inland and regionally. By the 1820s, press devices to attract the eye are discernible, with readability improving into the 1830s. Narrative elements identifiable as persuasive are effected largely via attestations of trustworthiness. But by the 1840s, seller efforts to draw buyers are heightened, evident linguistically at sentence and word levels and in skilful typography and layout. Eye-catcher elements include use of italics, centred headings and subheads, capitalisation, innovative woodcuts, iteration, the exclamation mark, superlatives to suggest excellence, and commendatory adjectives to emphasise item attractiveness, affordability and accessibility. Two advertisements from 1848 by the small traders Henry O'Hara (**Figure 3**) and William Percivall (**Figure 4**) are representative of heightened persuasive effort.


Figure 3: Henry-O'Hara-1848 newspaper advertisement and transcription
(Source: The Argus, 24 November 1848: 3)

Original	Transcription
 <p style="text-align: center;">Tasmanian Store, SEYMOUR, GOULBURN RIVER.</p> <p style="text-align: center;">HENRY O'HARA</p> <p>INVITES the attention of the Squatting interest and others, to the <u>EXTENSIVE, CHOICE,</u> and carefully selected assortment of goods now on sale at the</p> <p style="text-align: center;">TASMANIAN STORE,</p> <p>adjoining the 'Seymour Hotel,' Goulburn River, which upon inspection will be found to consist of every article essential to the</p> <p style="text-align: center;">COMFORTS, CONVENIENCE, AND NECESSITIES OF A BUSH LIFE,</p> <p>and upon such terms as to obviate the necessity of sending to Melbourne for supplies.</p> <p>Amongst other articles may be enumerated:— Flour, groceries, slops, prints, cottons, worsted goods, haberdashery, tin and ironware, cutlery, Sorby's and Wilkinson's shears, Turkey stone, sweet oil, crockery, tether ropes and halters, silk pocket and neck hand kerchiefs, stationery, hobbles, blankets, gunpowder, shot and percussion caps, boots and shoes, copy and reading books for children, pickles, mustard, buckets and washing tubs, nails, slippers (Kilmarnock,) bazils, hemp and flax, straw hats, bacon, butter, pocket-books and slates, lead and slate pencils, pen and pocket-knives, hair and tooth brushes, glassware, wool-packs, twine and needles, perfumery, combs, shaving brushes and boxes, carpenter's rules, hand-saws, vials, Champion's best vinegar, oilmen's stores, loaf sugar, blacking, brooms, rope, bushmen's belts, saddle straps, girths, spurs, candle moulds, dog chains, bottled fruits, with a vast variety of other goods too numerous to particularize.</p> <p style="text-align: center;">WHOLESALE AND RETAIL.</p> <p> A first-rate Medicine Chest, fitted up by an eminent practitioner, from which the profession and others can be supplied.</p> <p>N.B.—Carriers and others supplied with provisions on most reasonable terms.</p> <p>•• Colonial produce bought or taken in exchange.</p> <p>Gentlemen and others can be supplied with cloth clothing, boots, shoes, &c., to measure; experienced workmen having been expressly engaged for that purpose.</p> <p style="text-align: right;">Seymour, 10th October, 1848.</p>	 <p style="text-align: center;">Tasmanian Store, SEYMOUR, GOULBURN RIVER.</p> <p style="text-align: center;">HENRY O'HARA</p> <p>INVITES the attention of the Squatting interest and others, to the <u>EXTENSIVE, CHOICE,</u> and carefully selected assortment of goods now on sale at the</p> <p style="text-align: center;">TASMANIAN STORE,</p> <p>adjoining the 'Seymour Hotel,' Goulburn River, which upon inspection will be found to consist of every article essential to the</p> <p style="text-align: center;">COMFORTS, CONVENIENCE, AND NECESSITIES OF A BUSH LIFE,</p> <p>and upon such terms as to obviate the necessity of sending to Melbourne for Supplies.</p> <p>Amongst other articles may be enumerated: Flour, groceries, slops, prints, cottons, worsted goods, haberdashery, tin and ironware, cutlery, Sorby's and Wilkinson's shears, Turkey stone, sweet oil, crockery, tether ropes and halters, silk pocket and neck hand kerchiefs, stationery, hobbles, blankets, gunpowder, shot and percussion caps, boots and shoes, copy and reading books for children, pickles, mustard, buckets and washing tubs, nails, slippers (Kilmarnock,) <u>bazils</u>, hemp and flax, straw hats, bacon, butter, <u>pocket-books</u> and slates, lead and slate pencils, <u>pen</u> and pocket knives, hair and <u>tooth brushes</u>, glassware, wool packs, twine and needles, perfumery, combs shaving brushes and boxes, carpenter's rules <u>hand-saws</u>, vials, Champion's best vinegar, oil men's stores, loaf sugar, blacking, brooms, rope, bushmen's belts, saddle straps, girths, spurs, candle moulds, dog chains, bottled fruits, with a vast variety of other goods too numerous to particularize.</p> <p style="text-align: center;">WHOLESALE AND RETAIL.</p> <p> A first-rate Medicine Chest, fitted up by an eminent practitioner, from which the profession and others can be supplied.</p> <p>N.B.—Carriers and others supplied with provisions on most reasonable terms.</p> <p>•• Colonial produce bought or taken in exchange.</p> <p>Gentlemen and others can be supplied with cloth clothing, boots, shoes, &c, to <u>measure</u>; experienced workmen having been expressly engaged for that purpose.</p> <p style="text-align: right;">Seymour, 10th <u>October</u>, 1848.</p>

Advertiser writing style 1840s: Henry-O’Hara-1848 and William-Percivall-1848

Henry O’Hara, proprietor of the ‘Tasmanian Store’ in Seymour, north of Melbourne, advertised using woodcuts, symbols and some 360 words (visually divisible into five blocks) (**Figure 3**). The copy is broken by centred headings and line spacing. Repetition, bolding, capitalisation and italics function to highlight key information.

At headline (1A) a sizable woodcut in the shape of a hand points down to (1B) the store name and (1C) location SEYMOUR, GOULBURN RIVER:

(1A)	
(1B)	Tasmanian Store
(1C)	SEYMOUR, GOULBURN RIVER

In ‘Henry-O’Hara-1848’, the woodcut as standalone visual (1A) functions as a wordless imperative that beckons with the message ‘Look!’ Communication relay operates here via ‘visual syntax’, a cognitive process:^{ix} visual syntax is the neurological concept of the ability to generalise symbols in the absence of natural language (**Weinrich, 1989**).^x

In the second block, a capitalised heading announces (2A) the proprietor name HENRY O’HARA, followed by a paragraph that ‘INVITES the attention of the Squatting’ to the ‘carefully selected assortment of goods’ available:

(2A) *‘HENRY O’HARA*

(2B) *INVITES the attention of the Squatting in-*

terest and others, to the EXTENSIVE, CHOICE,

and carefully selected assortment of goods now on

sale at the

The third block repeats (3A) the store name as primary information; followed by (3B) which emphasises choice in stock range as satisfying every need OF A BUSH LIFE; and (3C) draws attention to easy access and immediate availability of goods:

(3A) *TASMANIAN STORE*

(3B) *every article essential to the*

COMFORTS, CONVENIENCE, AND NE-

CESSITIES OF A BUSH LIFE

(3C) and upon such terms as to obviate the necessity of sending to Melbourne for Supplies.

The advantage of (3C) consumer accessibility and convenience is highlighted by declaring that the Tasmanian Store will ‘obviate the necessity of sending to Melbourne for Supplies’. Then, the fourth lengthy block, introduced by the words:


(4) Amongst other articles...

names some 60 items among a ‘vast variety of other goods too numerous to particularize’.


In the final part of the ‘Henry-O’Hara-1848’ advertisement, the proprietor identifies himself as wholesaler and retailer by way of a subhead (5A):

(5A) WHOLESALE AND RETAIL

Under (5A) are three separate eye-catchers: first (5B) a woodcut, then (5C) an abbreviation from Latin, and finally (5D) a mathematical symbol:

(5B)  a woodcut in the shape of a hand points to the words ‘A first-rate medicine chest, fitted up by an eminent practitioner’

(5C) N.B. the abbreviation for ‘nota bene’ (meaning ‘note well’) raises matters of import, notifying reasonable seller terms

(5D)  the three-dot symbol (from algebra) meaning ‘under the condition that’ signals colonial produce (commodity exchange) as acceptable payment.

These compact visual-syntax eye-catchers (a unique seller shorthand) economically relay meanings: they flag marketeer awareness of pictures as power to beckon and communicate. The innovative composition of ‘Henry-O’Hara-1848’ evidences that into the 1840s sellers deployed symbols to attract addressees in concert with natural language. This raises psychological strategy as a reflexive seller instrument emergent at mid-century when competitive demand-supply chains were evolving in nation-building and economic advancement.

‘William-Percivall-1848’ (**Figure 4**) —advertising from the town of Kilmore, north of Melbourne—shares the layout, typographical and linguistic features of ‘Henry-O’Hara-1848’. Place and proprietor identity are highlighted, as is merchandise variety, attractiveness, affordability and accessibility.

Figure 4: William-Percivall-1848 newspaper advertisement and transcription
(Source: The Argus, 24 November 1848: 3)

Original	Transcription
<p style="text-align: center;">KILMORE.</p> <p style="text-align: center;">THE LARGEST! BEST! AND CHEAPEST STOCK OF GOODS</p> <p style="text-align: center;">IN THE TOWNSHIP WILL BE FOUND IN WILLIAM PERCIVALL'S NEW STORE,</p> <p><i>Just completed, situated near Mr. Wheeler's Inn,</i></p> <p>WHERE Settlers, Families, Bushmen, and others, will find the largest Stock of Goods ever shown in a Bush Store, comprising nearly every article in Linen and Woollen Drapery, Haberdashery, Hosiery, Clothing of all kinds, Hats, Bonnets, &c., &c.</p> <p>Groceries of all kinds, furnishing and other ironmongery; together with a vast variety of articles too numerous to particularise in an advertisement.</p> <p>The whole of which having been purchased on the most advantageous terms, are offered with the smallest possible profit attached, and will be found equally as cheap as goods purchased in Melbourne.</p> <p>Purchasers may save 20 per cent by buying at THIS STORE.</p> <p>Settlers and others taking quantities, supplied on the most liberal terms.</p>	<p style="text-align: center;">KILMORE</p> <p style="text-align: center;">-----</p> <p style="text-align: center;">THE LARGEST! BEST! AND CHEAPEST STOCK OF GOODS</p> <p style="text-align: center;">IN THE TOWNSHIP WILL BE FOUND IN WILLIAM PERCIVALL'S NEW STORE,</p> <p><i>Just completed, situated near Mr. Wheeler's Inn,</i></p> <p>WHERE Settlers, Families, Bushmen, and others, will find the largest Stock of Goods ever shown in a Bush Store, comprising nearly every article in Linen and Woollen Drapery, Haberdashery, Hosiery, Clothing of all kinds, Hats, Bonnets, &c., &c.</p> <p>Groceries of all kinds, furnishing and other ironmongery; together with a vast variety of articles too numerous to particularise in an advertisement.</p> <p>The whole of which having been purchased on the most advantageous terms, are offered with the smallest possible profit attached, and will be found equally as cheap as goods purchased in Melbourne.</p> <p>Purchasers may save 20 per cent by buying at THIS STORE.</p> <p>Settlers and others taking quantities, supplied on the most liberal terms.</p>

In the headline the township name appears:

(1) *KILMORE*

Six phrases follow. First, (2A) and (2B) raise positive attributes, assisted by the superlative, the exclamation mark and capital letters:

(2A) *THE LARGEST! BEST! AND CHEAPEST*

(2B) *STOCK OF GOODS*

The next four highlight place and proprietor:

(2C) *IN THE TOWNSHIP Will DE FOUND IN*

(2D) *WILLIAM PERCIVALL'S*

(2E) *NEW STORE,*

(2F) *Just completed, situated near Mr. Wheeler's Inn*

Following these phrases are three paragraphs that (3) begin with words declaring the store as ‘the largest Stock of Goods’:

(3) *WHERE Settlers, Families, Bushmen, and others, will find the largest Stock of Goods*

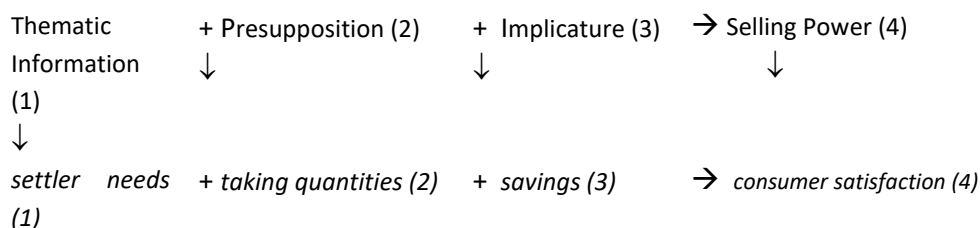
The narrative emphasises variety, convenience, accessibility and value for money. In the closing lines, ‘William-Percivall-1848’ introduces not only the notion of savings but also (4A) estimates ‘20 per cent’ gain for the buyer, and (4B) offers seller flexibility to supply ‘on the most liberal of terms’:

The seller appeals to addressees on the theme of ‘settler needs’. Two features are notable:

- the idea of financial gain is covert, moderated by the (cagey) modal of possibility ‘may’, rendering it less than a promise
- the implicature of consumer benefit (savings) is attempted by deployment of the present continuous ‘taking quantities’, presupposing buyer action as already under way and a reality (always true)—reinforced by the persuasive ‘the most liberal terms’.

Putatively, the settler has practical needs that can be satisfied at THIS STORE, with the additional (subjective) benefit of significant savings.

‘William-Percivall-1848’ compositionally incorporates the social functions and cohesive devices of natural language—primarily Thematic Information (1), Presupposition (2) and Implicature (3)—to create Selling Power (4):



Here, conceptual association is an adept instrument to bundle advertiser-intended meanings (de Silva, 2018). With respect to textual and interpersonal aspects of Implicature in social context, language makes fuzzy category distinctions; and the realities to which these categories conceptually apply are ‘often scalar or indeterminate’ (Leech, 1983: 225). Thus, while rules account for logical relations at the syntactic level, pragmatic applications determine how linguistic forms correspond to communicative function (Ibid: 171). This elasticity permits substantial freedom in advertisement composition, allowing embedded meanings that may not be verifiable.

By the 1840s advertiser ingenuity incorporated meaningful symbols (visual syntax), as seen in ‘Henry-O’Hara-1848’, and inferentially available meanings, as seen in ‘William-Percivall-1848’, raising covert messaging as device to conceptually connect with positive values. This pegs the mid-nineteenth century as a milestone in marketer consciousness, signalling expansion of language choices in copywriting. Here, a new mindset emerged that embarked on gradual departure from factual information toward a ‘poetic licence’ that embraced subjective consumer gain as a core marketing ingredient.

Conceptual Association and Linguistic Register as Authenticators of Advertiser Claims

Conceptual association relies on semantic ties. This associative principle underpins organisational labelling, which is effected by identification of shared characteristics for the purpose of classification. The now-common idea of categorisation originates from the specialist taxonomic hierarchy that arranged biological organisms by rank:

- ‘classification’ is recorded as entering the English language from the language of natural science in 1767 and
- ‘taxonomy’ from botany in 1819.^{xi}


These dates coincide with geographical exploration and scientific postulations reported in the press and antecede the advent of newspaper editorial categorisation in the wake of reportage variety. The classification process untangled the jumble of early content. By 1823 formal separation of consumer advertising is seen under the editorial heading ADVERTISEMENTS,^{xii} pegging the 1820s at the cusp of high systemisation normalised later that century.

By 1841 an increased variety of headings flagged socio-economic expansion, and conceptually isolated categories of human engagement (**Figure 1**). In semantic acts of categorisation, a superordinate wins its position only when (as principal of its group) it fulfils the function of introducing a family: here siblings associate by at least one shared characteristic. Shared characteristics are accepted traits and/or known facts and thus need not be articulated. If not articulated but known, then shared meanings qualify as covert. Associated meanings can be inferred only where already salient in the minds of addressees. With increased usage, the likelihood of an increased salient lexicon is probable. In this way, headings and headlines are semantic buckets: they are ‘economy registers’ (**Bruthiaux, 1996**) that—like nominalisation—increase noun density but reduce subordination and sentence length.

Headings impart their subordinate content, diminish information volume and facilitate a language that operates by association. For example, ‘REAL ESTATE’ signals land or dwelling for purchase, rendering redundant the words ‘for sale’, and raises the expectation of the seller as lawfully permitted to enter into commercial transaction. Similarly, ‘MEDICAL’ suggests ‘healing is at hand’, rendering benefits of wellness and recovery as presupposed, and suggests accreditation in the fields of diagnosis and pharmaceuticals manufacture. Semantically, a standalone ‘MEDICAL’ heading evokes the socio-professional prestige of medical doctors, linking concepts of trustworthiness, specialist knowledge and authority.

By the 1850s, press content reflected socio-economic, industrial and intellectual progress: this benefitted the seller-advertiser ambitious to emulate workplace-specific registers as a conduit to reach skilled earners. The copywriter pocketbook of writing styles included registers that permitted avoidant undermining of regulatory statutes, unendorsed association with the sciences in patent-medicine advertising and slogan-like aphorisms. This linguistic expertise is seen in the Holloway’s line of patent medicines (**Figures 5, 6 and 7**).

Figure 5: Holloway’s Pills, c. 1870: object name ‘OTC preparation’ (Source: Smithsonian Institute)

Holloway’s Pills, c. 1870	
	<p>SUBJECT</p> <ul style="list-style-type: none"> Blood & Liver Drugs Kidney & Urinary Drugs Infant & Children's Products - Pediatrics Nerve & Brain Drugs G.E. Damon Collection

Holloway’s Pills and Ointment in promotion of its ‘valuable medicaments’ were impressively packaged, watermarked and authoritatively stamped. The claimed benefits of the pills are catalogued by the Smithsonian Institute as a putative treatment drug for multiple organs and systems of adult humans, infants and children (**Figure 5**). The ingestible pills are now disclosed to be a compound of aloes, ginger and soap and the ointment primarily beeswax and lanolin: thus, Holloway’s ‘medicaments’ are not therapeutically appropriate for healing nor disease prevention.

The Holloway’s Pills and Ointment 1850 advertorial (**Figure 6**) mimics objective journalism or investigative reporting, drawing on legal register: it suggests lawful product manufacture, market prestige and efficacious

reliability. The product name 'Holloway's Pills and Ointment' is the main heading, followed by the sub-heading '*PREVENTION OF FRAUD*'. In its linguistic construction, the first paragraphs are running text (in complete sentences)—but, in layout, broken into blocks to isolate three capitalised phrases: 'BRITISH STAMPS BILL', 'A FELONY' and 'A WATERMARK'. The subsequent blocks highlight:

- the name of the distributing agent 'CHEGIN & MOORE', and their address 'Stationers, Collins street'
- a testimonial dated 'August 7, 1850', where the writer is identified as 'MARGARET JONES from 'Bacchus March' (a country township)
- 34 ailments that Holloway's 'medicaments' will purportedly remedy.

To summarise the lengthy Holloway's message (**Figure 6**): it relays product authenticity and warns imitation racketeers of severe retribution. The advertiser claims that 'the Right Honorable Earl Grey, Her Majesty's Secretary of State for the Colonies' has instructed the 'Local Government' to protect locals from 'counterfeiting of Holloway's Medicines'. Accordingly, to fulfil this lofty instruction, 'his Excellency the Governor has caused the BRITISH STAMPS BILL to be introduced into the Legislative Council'.^{xiii} Subsequently, the 'valuable medicaments' purportedly now bear the authoritative stamp of the British Crown. Seemingly, the 'medicaments' are protected by the highest authority, and it shall be a 'FELONY' to produce an imitation. Addressees are alerted to other precautions undertaken by 'Professor Holloway' to distinguish his Pills and Ointment: the wrappings and pamphlet are uniquely watermarked with the words 'HOLLOWAY'S PILLS AND OINTMENT' on every page (like a trademark).^{xiv}

A device of grandiose authenticity is located in the professed link between the 'medicaments' and the British Crown—and, contextually, its stamp duty law. The tie to the 'Stamp Act' is misleadingly implied via naming the British Stamps Bill that preceded it: consumers at large are unlikely to be aware that the legislation is for statutory revenue collection (unconnected with 'Professor Holloway'). The claim of a 'felony' prosecution against counterfeiters equates a 'medicaments' counterfeit event with serious crime (such as murder, rape or robbery). This threat is aimed at aspiring fraudsters to thwart their product-imitation schemes; additionally, the warning (allegedly backed by the legal system) suggests extraordinary product worthiness. The proposition put forward by 'Holloway's-Pills-1850' is 'Holloway's Pills and Ointment are so eminent among medicines as to be approved and protected by the British Crown and its legislative framework'.

Figure 6: Holloway's-Pills-Ointment-1850 newspaper advertisement and transcription
 (Source: The Argus, 26 September 1850: 1)

Holloway's Pills & Ointment, 1850	cont.	cont.	cont.
<p>HOLLOWAY'S PILLS & OINTMENT. PREVENTION OF FRAUD.</p> <p>THE Undersigned have the sincerest pleasure in being able to apprise the public of Victoria, that the Right Honourable Earl Grey, His Majesty's Secretary of State for the Colonies has been pleased, at the instance of Professor Holloway, to instruct the Local Government of this colony to take measures for protecting the inhabitants of the territory against the counterfeiting of Holloway's Medicines: that in conformity with such the directions, His Excellency your Governor has caused the</p> <p>BRITISH STAMPS BILL</p> <p>to be introduced into the Legislative Council, and that measures without a single dissentient voice, have adopted the views of the Imperial Government.</p> <p>Under the provisions of this law it will in future be</p> <p>A FELONY</p> <p>but in order to make "assuredly sure,"</p>	<p>A FELONY</p> <p>but in order to make "assuredly sure,"</p> <p>A WATER MARK</p> <p>on every leaf, the words "Holloway's Pills and Ointment" appear in such, it is believed, cannot possibly be imitated in this colony, in conformity with the Stamp Act of the valuable Medicines prepared by Professor Holloway.</p> <p>Of those Medicines that get up, the undersigned have just to send along engagements and they beg to announce that they are in course of supplying all their sub agents with parcels of the new mark: they therefore take this opportunity of expressing their hopes that the people of Victoria will appreciate the efforts of the Imperial and Local Governments, to preserve them from the deleterious effects of Counterfeit Treatments that they will regard the endeavours of Professor Holloway to give them the genuine Medicines, by</p> <p>Purchasing only of the Agents, CHURCH & MOORE, Stationers, Collins street,</p>	<p>REMOVABLE TABLETS</p> <p>Time should not be lost in taking this remedy for any of the following Diseases—</p>	<p>REMOVABLE TABLETS</p> <p>Time should not be lost in taking this remedy for any of the following Diseases—</p> <ul style="list-style-type: none"> Ague Asthma Bilious Complaints Hoarseness on the Throat Howel Complaints Colic Constipation of Bowels Consumption Debility Dropsy Dysentery Erysipelas Female Inflammation Fever of all kinds Flu Gout Head-aches Indigestion Inflammation Junction Liver Complaints Lumbago Pile Rheumatism Retention of Urine Road Thrusts Sorethoat, or King's Evil Stomach and Intestine Secondary Symptoms of the Venereal Tumors Ulcers Veneral Affections Worms of all kinds Weakness, from what ever cause, Ac. &c.

Another 1800s authenticity device is the patent-medicine manufacturer as celebrated personality, esteemed by name: this is seen in the proprietor of Holloway's Pills and Ointment's 'Professor Holloway'. The 'Hollowayan-System-of-Medicine-1856' artefact (Figure 7) is an advertiser testimonial mimicking the investigative style of medical reporting: here, the Holloway's product line is not mentioned. Instead, the brand name is attributively used to create 'the Hollowayan system' as the centrepiece of an 'Extraordinary case', namely that of the gravely ill 'Mrs Morgan, of Ermington, near Sydney' who reportedly was saved by intervention of the 'Hollowayan system'. The patient was stricken with 'Dropsical Swellings' and her life further 'endangered owing to a wrong treatment' by a health professional. Her husband 'therefore dismissed his medical attendant' (ostensibly a doctor) and adopted 'the Hollowayan system' of 'infallible remedies' which 'quickly produced' the desired 'Turn of life' and 'restored the blessings of health' to the once near-dead Mrs Morgan.

Figure 7: Hollowayian-System-of-Medicine-1856 newspaper advertisement and transcription
(Source: The Argus, 26 September 1856: 6)

Original	Transcription
<p>PREVENTATIVE is Better than a Cure.— Extraordinary case.—Dropsical Swellings—Turn of life. Mrs. Morgan, of Ermington, near Sydney, aged forty-five, was suddenly thrown on a bed of sickness; her feet, legs, and ankles, began to swell, strongly indicating dropsy; weeks passed away and she became worse instead of better; medical aid was called in and her life was endangered owing to a wrong treatment being adopted. Mr. Morgan, therefore, dismissed his medical attendant, and resolved to commence the Hollowayian system of medicine. This quickly produced a beneficial effect, and by a continuance with these infallible remedies, the husband had the satisfaction of again seeing his wife restored to the blessings of health. F. COOPER, agent, Collins-street, Melbourne. 3567</p>	<p>PREVENTATIVE is Better than a Cure. Extraordinary case.— Dropsical Swellings – Turn of life. Mrs. Morgan, of Ermington, near Sydney, aged forty-five, was suddenly thrown on a bed of sickness; her feet, legs, and ankles, began to swell, strongly indicating dropsy; weeks passed away and she became worse instead of better; medical aid was called in and her life was endangered owing to a wrong treatment being adopted. Mr. Morgan, therefore, dismissed his medical attendant, and resolved to commence the Hollowayian system of medicine. This quickly produced a beneficial effect, and by a continuance with these infallible remedies, the husband had the satisfaction of again seeing his is wife restored to the blessings of health. F. COOPER, agent, Collins-street, Melbourne.</p>

The attributive use of the product name to create the ‘Hollowayian system’ compound positions the remedy as orderly in operation, principled and progressive (where, allegedly, efforts by the ‘medical attendant’ had failed). Further, the adjective-making ‘-ian’ suffix functions to imbue the putative efficacious powers of Holloway’s ‘infallible remedies’ with the esteem of knowledge-based scientific discoveries that have advanced humanity. The noun compound:

Holloway [proper noun] + -ian [suffix] + system [noun]

implies a recognised significant contribution made to human knowledge by the patent-medicine seller (‘Professor Holloway’). The allusion is attempted by aligning ‘Hollowayian system of medicine’ with the prestige of knowledge-makers known in that time—possibly ‘the Copernican system’ in astronomy (dated to the 1500s) or even ‘Newtonian physics’ (pertaining to Newton’s Laws of Motion), which underpinned the scientific revolution of the seventeenth century. In alignment, ‘the Hollowayian system’ thus offers supremely efficacious treatment and slips into conceptual association with the most remarkable of scientific

achievements. Further, the opening words 'PREVENTATIVE is Better than a Cure', a slogan-like aphorism, implies 'the Hollowayian system' is additionally a preventative measure to ward off 'Dropsical Swellings' (and presumably death).

Into the 1850s, persuasive hidden-meanings association and specialist register are new phenomena expressed in wordy elaborations. These Holloway's specimens point to a semantic fault line that divides the linguistic landscape of advertising, juxtaposing two kinds of seller language: a pre-1850s and a post-1850s. The latter is marked by overt persuasion, embracing occupational register and conceptual association, heightening over time. While the research dataset gives credence to a swill of covert devices making their debut from the 1850s, evidence is patchy for some thirty years and can be determined only as emerging (**de Silva, 2021**). Nevertheless, vestiges of nearly all persuasive devices seen today are in deployment after the 1870s, and by the 1880s a default system of hypernym-like headings (such as 'ACCOMMODATION', 'MEDICAL' and 'REAL ESTATE') behave like lexical super-ordinates to distinguish types of products and services (grouped according to shared characteristics). This reduced word count and advertising cost, and increased advertiser freedom to exploit the suggestive powers of linguistic fragments in collaboration with pictures and intertextuality toward conceptual association. Into the 1900s and for some sixty years, global events catalysed advertiser copywriting, rendering innovative formats such as cartooning that relied exclusively on visual stimuli and inferentially available positive appraisals (**de Silva, 2020, 2021**).

Data Analysis 1800s–1950s: Summary and Conclusion

This study, drawing on Australian press data (**de Silva, 2021**), profiles the developmental path of consumer-advertising language as it morphed from fact-focused to inferentially available meanings that may be 'indifferent to truth' (**Bates, 2009: 2359**). To this end, practical examples from the 1800s ('James-Squires-1807', 'Henry-O'Hara-1848', 'William-Percival-1848', and Holloway's 1850s patent-medicine promotions) evidence departure from fact-focused to ideational seller meanings. In summary, the following can be said of advertiser messaging over time:

1. The austere social-distancing formality of early-1800s promotions is fact-focused and not characterised by unverifiable, socially embedded meanings.
2. Two new devices of propositional messaging appear by the 1840s: abbreviation (short form) and 'visual syntax' via symbols.

By the 1850s legal and medical registers are seen in health-related promotions. Here, occupational register operates as an authenticator of trustworthiness and knowledge-based attestations. At this time, British imperialism is marked by economic power, technological and scientific advancements and intercontinental reach. These markers of prestige, achievement and quality are evidenced today in the English phraseology of global marketing strategy: here, the critical substance of advertiser messaging is the inferential element with diminished regard for truth verification.

This paper makes a contribution to advertising-language studies by providing an evidence-based historical rear guard to complement research in the field. The deployment of conceptual association and linguistic register in progression over some fifteen decades and more points to skilful compositional refinement and suggests a long and incremental process that may robustly resist language reform efforts to curb and eliminate false and/or unverifiable claims of benefits available via consumption.

Constance de Silva completed her PhD (Linguistics) in 2020. Her dissertation, drawing on an Australian press dataset (1800s–1950s), documented the evolutionary journey of promotional rhetoric within the socio-cultural and economic settings of colonial nation-building. Primarily, her research centres on the developmental stages evident in the marketing and labelling of OTC (patent) medicines, nutritional supplements and mental health remedies. Her research interests include the pragmatic reflexivity of consumer advertising, the construction of social identity, the historical medicalisation of women, and the concept of the body perfect as a presupposition of wellbeing.



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ⁱ The advertiser meme is defined here as a visually accessible unit of imitation containing cultural information that functions as a persuasive tool (McGrath, 2017: 507–508; Murray, Manrai et al., 2014: 334).

ⁱⁱ Source: *Oxford English Dictionary*, online.

- ⁱⁱⁱ While acknowledging the relevant scholarly literature in semiotics, psychology, philosophy, and information sciences (see **Bates, 2009**).
- ^{iv} This opened the door to English as a global lingua franca and a language of power and prestige. Channell (**2018**) points to 18th– and 19th–century British discoveries and inventions as the catalyst of socio-economic improvement that laid the foundation stones of engineering science.
- ^v See <http://trove.nla.com.au>.
- ^{vi} In definition, ‘discourse level’ analysis involves investigation of language as a narrative in socio-cultural context including non-linguistic items (like colours, images, layout, typography), as opposed to analysing only linguistic features at sentence level (such as word choices, phrases, and clauses).
- ^{vii} The woodcut in its antiquity started as a tool to print images on textiles.
- ^{viii} The J (long s) is reproduced per the typesetting of the 1807 original.
- ^{ix} The term ‘visual syntax’ may have been coined in the 1980s by neurologist Michael Weinrich, appearing in several of his works.
- ^x The idea of visually accessible meanings is evident at least from the early 1900s onward in neurological (aphasia) studies concerning language and the brain (**Connor et al., 2007; Weinrich, 1989**).
- ^{xi} Source: Oxford English Dictionary, online.
- ^{xii} Source: The Sydney Gazette and New South Wales Advertiser, 6 November 1823, 3.
- ^{xiii} The Stamp Act 1675 was introduced to collect revenue from the colonies (not in protection of patent medicines). A physical stamp (being a sign that duty had been paid) on a product suggested royal approval—and was exploited as such by manufacturers (**Porter, 1986**).
- ^{xiv} Trademark recognition and protection in the modern world is traceable to 1783 in England, and the first American trademark case reported was decided in the year 1837 (**Rogers, 1910: 40–42**).

Sustainability: Getting everyone involved

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Abstract

Humanity is currently using the Earth's resources at a much higher rate than that at which the planet can regenerate them. Public awareness of this problem is increasing, especially with regard to issues such as the need to recycle waste, and to reduce our reliance on single-use plastic and on fossil fuels. However, the scale of the problem is still under-appreciated, and in many cases, there are no simple solutions to make our current systems truly sustainable. Meanwhile, the global human population is growing and despite higher awareness, our consumption of global resources is increasing rather than decreasing. This article explores some of the reasons why sustainability is such a complex problem and puts the case that an effective approach to sustainability will require effort from experts in fields ranging from economics to materials chemistry, as well as from legislators and leaders of industry.

Keywords: sustainability; circular economy; Life Cycle Analysis; recycling

Introduction

The only way forward, if we are going to improve the quality of the environment, is to get everybody involved. Richard Rogers, Architect (1933-2021)

Communities of human beings have always faced concerns about whether their lifestyle can be maintained. It is likely that even our distant ancestors worried about what would happen if they ran out of prey or water. However, the scale of our modern-day requirements dwarfs that of palaeolithic communities; the global population recently surpassed 8 billion individuals (**Sadigov, 2022**). We also have a tendency to expect improvements in lifestyle over time- this is particularly the case in developed nations. In his 1982 book *Overshoot*, (**Catton, 1982**) William Catton wrote that *'Human population, organised into industrial societies ... responded by increasing more exuberantly than ever, even though this meant overshooting the number our planet could permanently support'*. It is now clear that we have passed the point of an ecological 'overshoot', i.e., a point beyond which the planet cannot indefinitely supply our population (**Wackernagel et al., 2002; Fanning et al., 2022**). This concept is illustrated clearly by the Global Footprint Network, a non-profit organisation that generates a yearly estimate for Earth's 'Overshoot Day'. The Overshoot Day is the calendar day by which humans have consumed all of the resources that the Earth is able to regenerate in a year (**Global Footprint Network, 2022**). For 2022, the Overshoot Day was estimated at July 28, and the general trend over the last 3 decades has been for this date to become earlier each year. Even in 2020, the year when large parts of the global economy were effectively brought to a halt by the COVID-19 pandemic, the overshoot date for that year was pushed back only to August 22. This is a remarkable result; even with such an abnormal drop in production and consumption as occurred in 2020, we are still not able to sustainably provide for humanity from the resources that we have. Clearly, small changes in daily lifestyle are not going to effectively address this deficit; more fundamental restructuring of our resource consumption is needed, and any meaningful change is likely to affect all areas of daily life, including food, energy, materials, and healthcare.

Given this assertion, the need to fulfil humanity's needs more sustainably is arguably one of the most 'interdisciplinary' research goals of our current time, touching as it does upon so many areas. The aim of sustainable living goes further than simply making sure the electricity stays on in our houses; it has dramatic implications for the usage of raw materials, land, and water. For sustainability to become a realistic target, all manufacturing processes will ultimately need to be assessed in terms of the way in which resources are used, and waste material disposed of. More fundamentally,

we need to discuss what sustainability is, and how it can be measured. Insights from this type of analysis will inform our approach to questions such as *what do we need to improve, and how will we know whether we have succeeded?*

In everyday language, if we speak of something being sustained, we mean that it stays the same over time. We need a more nuanced definition than this when discussing environmental issues, however, because humanity's needs are fluid, and the planet is a dynamic system. A number of approaches have been taken to defining sustainability (Kuhlman & Farrington, 2010; Mensah, 2019; Ruggerio, 2021; Sakalasoorya, 2021). One of the most well-known arises from a report produced in 1987 by the 'World Commission of Environment and Development' a sub-organisation of the UN; this report became known as the Brundtland report, after the chair of the Commission (**World Commission on Environment and Development, 1987**). The Brundtland report set out a statement that *'Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs.'* While we can certainly be sceptical about the progress that humanity has so far made towards this goal, this statement does provide us with a useful definition; a *sustainable* process is one that we can carry out today, and use indefinitely, without preventing our descendants from using it also if they require it.

The Economics of Sustainability

It is tempting to see sustainable solutions as being rooted in the sciences, with the development of newer and 'greener' technologies and more efficient ways to use resources. This view has some merit, because considerable research effort is currently being expended on this type of research. However, any discussion on a sustainable future should arguably start with the field of economics since our current situation can be described as an increasing human population competing over finite available resources. Resource allocation can be analysed using tools developed in the field of game theory, which is a mathematical construct describing situations where (a) rational decision-makers (termed 'players') compete for outcomes that are beneficial to themselves, and (b) the optimal outcome for an individual player is affected by the decisions made by the other players.

The concepts generated in game theory are applicable to many global environmental problems, including man-made climate change. The current consensus among reputable scientists is that the atmosphere is warming due to carbon dioxide being released by human activities. If all countries co-operated to reduce CO₂ emissions, everyone would benefit as the atmosphere would return to its natural composition. However,

there is an upfront cost involved in limiting CO₂ emissions, and for an individual country this may be perceived as more significant than possible future benefits from reducing CO₂ emissions (which will only work if all other countries also co-operate) and so none of the countries involved choose to co-operate. The application of game theory to this type of scenario was described in detail by P. Wood (2012). A simple model described by Wood considers two neighbouring countries, A and B, who can make a straightforward decision to ‘Continue polluting’ or ‘Stop polluting’. Numerical values are assigned to each outcome. If both players continue to pollute, the outcome is poor for both, as both have to live with the outcome of pollution, so we allocate a low score for both A and B (1,1). If both choose to stop pollution, then the environment overall improves, so we allocate a higher score for each country (8,8). However, if A chooses to stop polluting while B continues as before, then B benefits from A’s action without incurring immediate costs (which will all be borne by A). For this outcome, we allocate a lower score for A and a higher one for B (0,10).

So, what is the most ‘rational’ decision here for each country? The answer is illustrated by table 1. If A continues to pollute, it gets 1 if B also pollutes and 10 if B stops; however, if A stops polluting, it only gets 0 if B pollutes and 8 if B stops. Therefore, the most ‘rational’ decision for each country is to continue to pollute, even though if both countries had chosen to stop, they could have achieved a better overall result (8 each). So, despite each player making rational decisions, and having full awareness of the possible outcomes, we still end up with the least ‘optimal’ result, in that both countries continue to pollute. This is a version of the well-known ‘prisoner’s dilemma’, in which two prisoners held in separate cells must decide independently if they will confess or deny their crime, knowing that their sentence depends on whether their confederate also confesses or denies it.

Figure 1: Simple ‘Prisoner’s Dilemma’ model of pollution consideration between two competing nations (Wood, 2012)

		A	
		Pollute	Stop polluting
B	Pollute	(1,1)	(0,10)
	Stop polluting	(10,0)	(8,8)

In the real world, more complex models are required, since in practice there are a range of options (e.g., each country can choose how much to decrease pollution, rather than a straightforward choice between ‘pollute’ and ‘stop polluting’) but this simple model illustrates the important principle that when the players act in their own self-interest the results are

not optimal for the group. There is ample evidence of this globally- from an overview perspective it seems obvious that countries should decrease carbon emissions, reduce plastic pollution, etc, but countries acting in their own self-interest have so far failed to do so sufficiently to solve the overall sustainability problem.

In a 'prisoners' dilemma', then, both parties engaged in the dilemma tend to lose out in that everyone gets a sub-optimal result. In order to produce a more desirable outcome, the game itself must be changed. In terms of a global environmental issue such as the effort to limit climate change resulting from carbon dioxide emissions, the players (nations) currently have a large incentive to 'freeload', keeping their own emissions high while hoping that other nations will reduce theirs. Strategies to combat freeloading in this game will involve incentives for players to reduce their emissions, and/or sanctions for freeloading (**Tavoni et al., 2011; MacKay et al., 2015; Schmidt & Ockenfels, 2021**). However, on a global scale, such measures cannot be forced on all nations by an outside party; therefore, this kind of approach relies on communication and co-operation between nations. An important goal is the 'self-enforcing' strategy, in which no player has an incentive to deviate from the optimal strategy (**Barrett, 1994; Dutta & Radner, 2004; Heitzig, Lessmann & Zou, 2011**). This can be enforced if players form coalitions where each member must meet an agreed carbon emission reduction target, with some punishment for failing to do so; however, nations are strongly disincentivised from joining such coalitions if they believe they may earn punishments. A possible solution was discussed by Heitzig et. al., (**2011**), which they termed 'linear compensation'; punishments earned by the members are related to how well other members are also performing. So, if all nations in the coalition find it difficult to reduce emissions, all punishments will be lowered. This considerably alleviates the uncertainty involved in predicting how much a nation will be able to reduce emissions.

Of course, in practice it will still be difficult to persuade national governments to sign up to such coalitions if the only possible outcome is that they can be punished for failing to meet environmental targets. For a collaborative approach to be politically palatable, there needs to be some possibility of reward for meeting the target, as well as sanctions for failing. An example of this type of approach is in carbon trading, which is a system that aims to reduce CO2 emissions. Carbon markets allow trading of carbon credits and carbon offsets (**Newell, Pizer & Raimi, 2014; Shen, Zhao & Deng, 2020; Chai et al., 2022**).

Carbon credits and carbon offsets work via two different mechanisms:

Carbon credits- Government regulators set a limit on CO₂ emissions, and issue carbon credits to companies. Each carbon credit allows the company to emit a unit of CO₂ into the atmosphere. If a company is likely to exceed the emissions that it is allowed, it must either purchase extra carbon credits (from other companies that have not reached their maximum allowed level of emissions) or be fined. This mechanism provides an incentive for organisations to reduce their level of CO₂ emissions, since they can be fined if they do not comply but can be rewarded (by selling their extra carbon credits) if they manage to reduce their emissions below their cap.

Carbon offsets involve activities that are considered to remove CO₂ from the atmosphere, such as planting forests or developing renewable energy capacity to replace fossil fuels. Organisations that carry out such activities issue carbon offsets, which are then purchased by CO₂ emitting companies and used to 'offset' their CO₂ production.

The main difference between these two mechanisms is that carbon offsets are largely a 'voluntary' trade in carbon while carbon credits are non-voluntary and subject to the government or regulatory body setting the carbon reduction targets.

Allowing the carbon markets to regulate and, over time, improve CO₂ emissions is an appealing idea and has the benefit that it provides incentives for 'good behaviour' on the part of governments and organisations, rather than simple punishments for exceeding CO₂ emissions targets. However, there may be unintended consequences of using carbon trading in this way. There is, indeed, a risk that organisations will make exaggerated claims of their 'environmental friendliness' based on carbon offsetting and this will allow complacency on the part of governments who should be pursuing every possible avenue to increase sustainability in this area (**Trouwloon et al., 2023**). Furthermore, there is a risk that the use of carbon offsetting can create ethical injustices, such as the creation of polluted 'hotspots' where organisations have simply continued to pollute their local areas while paying for carbon credits so as to avoid repercussions (**Lejano, Kan & Chau, 2020**). However, the use of carbon trading is one of the more sophisticated instruments we currently have for encouraging businesses and governments to adopt 'sustainable' practices in terms of carbon emissions.

Scientific Approaches to Sustainability

Economic and political strategies are therefore a viable way to encourage countries to adopt sustainable behaviours. A second, and complementary, approach is to develop new technologies that make it easier for communities to live sustainably. A clear example of this is in the field of

energy generation- if we can develop better methods for generating energy from renewable sources, such that those methods become more commercially viable, then it will become easier to persuade governments and communities to adopt these methods and reduce their carbon dioxide emissions. Developing new technologies is traditionally the preserve of so-called 'hard' science (physics, engineering, materials science, chemistry...) and currently there are massive research efforts being undertaken in all of these fields. However, developing a new and sustainable technology is not enough in itself. For the new technology to have an impact, it also must be commercially viable and ideally it should not come with environmental disadvantages of its own.

There are numerous ways in which we could judge whether a system is 'sustainable'. Bell and Morse have substantially reviewed the concept of 'sustainability indicators', which are quantitative measures of sustainability (Bell & Morse, 2008, 2013). Relevant indicators are highly system-specific; e.g., if studying the health of an ecosystem, one might measure the number of species present or the number of individuals of a key species; if studying climate change, one might measure total carbon emissions or average atmospheric temperature, etc. The main issue with selecting indicators in this way is that governments (or corporations, or individuals...) will have some natural motivation to select the indicators that present their results in the best possible light, thus reducing the objectivity of the measurement. Despite this, however, it is still worth attempting to quantify efforts towards sustainability, otherwise no judgement is possible and future efforts to improve sustainability cannot be optimised.

Sustainability indicators do have limitations. A single sustainability indicator may give some idea of whether a particular part of a system is doing 'well' but may be too simple to form a judgement about the whole system. In the context of efforts to make manufacturing processes more sustainable, analysing the sustainability of a given process is likely to be rather complex, depending on the materials used for the process, energy sources used, and how waste is disposed of. The idea of 'circularity' is becoming prevalent here and is illustrated in figure 2; in a 'circular' economy, once a product reaches its end-of-life it is either re-used or else the raw materials are extracted from it and recycled, such that resources are not discarded as waste but recirculated indefinitely (Blomsma & Brennan, 2017; Korhonen, Honkasalo & Seppälä, 2018; Arruda et al., 2021). Many of our current manufacturing processes are far from this ideal, but it is increasingly becoming recognised that circularity is a worthwhile and even necessary goal. A circular economy can provide financial gains as well as environmental ones; there is a significant cost involved in extracting raw materials from their natural state, and having

paid that cost it makes economic sense to keep the raw material in use for as long as possible. This idea is becoming more prevalent in decision-making by governments and businesses.

Figure 2: Diagram to illustrate the difference between (top) a traditional, 'linear' economy, in which raw materials are extracted from the environment, used in manufacturing, and then disposed of; and (bottom) a 'circular' economy, in which materials are kept in use for as long as possible by reusing or recycling products at their end-of-life.



Having acknowledged that circular processes are preferable to linear ones (in which raw materials are extracted, used, and discarded), we need to develop tools in order to analyse the 'circularity' of a particular manufacturing process. Modern manufacturing processes are often highly complex, involving many components or materials obtained from multiple different sources. In order to quantify the overall environmental impact of a particular manufactured product, we increasingly turn to a set of data analysis tools termed 'Life Cycle Analysis' (LCA) (Ayres, 1995). As the name suggests, this involves an attempt to quantify the materials and energy used at all stages of the product's life (manufacturing, distribution, use, disposal at end-of-life). The history of this type of approach has been summarised by Guinée et. al., (2011) who noted that LCAs have become more complex over time and have been applied to a wider range of potential products and processes (including in some areas that are non-manufacturing, such as tourism). LCA is not an infallible, objective tool; it relies on the analyst to make a thorough inventory of material and energy flows, and to quantify these. We can ask legitimate questions about the objectivity of the human analyst making this inventory- if we were to ask X different analysts to perform LCA on a particular product, would they

produce x different results? To what extent can LCA be standardised? International standards for LCA have been introduced (**Finkbeiner et al., 2006; Heijungs, Huppes & Guinée, 2010; Klöpffer, 2012**), which go some way to addressing this issue, but do not completely nullify it. There is always a risk that the outcome of a particular LCA is affected by biases on the part of the analyst, in terms of which material and energy flows they consider most important and how these are measured. However, this does not make LCA useless; it should be regarded as an imperfect, but useful, tool for making value judgements about products and processes.

Put like this, LCA sounds like a rather abstract concept, so let us consider it in the context of a problem that is currently of considerable interest in the 'real world'- electric cars. There is increasing public awareness that electric cars are potentially better for the environment than 'conventional' cars powered by petrol or diesel. Electric cars are better for the environment because driving an electric car causes a lower level of carbon dioxide emission into the atmosphere than does the conventional car (over the course of the whole life cycle of the car- manufacturing, use and disposal). However, there can be confusion about *why* electric cars are an improvement. After all, their batteries must be charged from somewhere, and if that somewhere is the national grid, then some fossil fuel must be used to generate electricity to charge the battery (with corresponding CO₂ emissions). Furthermore, electric car batteries themselves seem like rather environmentally 'unfriendly' objects- they are complex items that require rare metals and toxic chemicals in their manufacture, and they are difficult to dispose of/recycle at their end-of-life. However, against this, we should consider that electric cars are on average more efficient than conventional ones, so less fuel is required at the electric power generator to charge the car battery than would be used by a conventional combustion engine inside a car (over the course of the car's life). Furthermore, the national grid draws on energy from renewable sources and nuclear power, as well as from fossil fuels; charging batteries from these sources also reduces the associated amount of carbon dioxide released into the atmosphere over the car's lifetime. So, how can we judge whether an electric car is indeed a 'greener' option than a conventional one? Clearly, this is a question that LCA analysis can help to clarify, and the number of these analyses available in the literature is increasing rapidly. For the reasons outlined above, the value of LCA will be increased if analyses from several sources are compared in order to draw meaningful conclusions. A recent review by Temporelli et. al., (2020) compared 17 LCAs on the subject of electric vehicles. These authors evaluated the LCAs against a series of criteria (does the LCA consider all parts of the battery, does it consider all stages of the battery's lifetime 'from cradle to grave', etc) and concluded that while there was a great deal of variability across

the studies, overall electric cars had a lower impact on the environment than conventional ones.

Estimates of environmental impact are rarely simple, which is why so much variation occurs in the numerical values that will be produced as part of a single LCA. In the case of carbon dioxide emissions, the relevant values even depend on the country where a car is being used. In a report by Hall and Lutsey (2018) an electric car running in the UK (where the national grid runs on approx. 30% renewable energy sources) was estimated to produce 125 g of carbon dioxide per km driven by the car over the course of its lifetime. For contrast, a similar car driven in Norway (where a large percentage of electric energy is generated by hydropower) was estimated to produce approx. 75 g/km, while an average 'conventional' (petrol/diesel powered) car produced >250 g/km. The question of how to increase the proportion of the UK's energy produced from 'low carbon' sources (i.e., renewables and nuclear) is in itself very demanding, and will be a matter for policymakers as much as for engineers (MacKay, 2008). However, decarbonising the UK's energy supply is not the only way to reduce the environmental impact of electric cars. Ideally, we would also like to improve the efficiency and performance of car batteries, and to increase the amount of car batteries that are recycled, making the car manufacturing process more circular.

Most modern electric cars use batteries that are based on lithium-ion chemistry (Goodenough, 2018; Kim et al., 2019a). These batteries have a number of advantages, including high energy density and the ability to be charged and discharged over many cycles with minimal loss of performance. Further improvements in battery performance and battery life can come either from improved engineering (making use of the power provided by the battery) or from changes to the chemistry of the materials used in the batteries. Batteries are electrochemical storage systems and so any step changes in improved battery performance are likely to come from changes in the chemistry of the system, and there are a large number of possible research directions in this area (Kim et al., 2019b; Grey & Hall, 2020)

Meanwhile, the chemistry that makes batteries effective power sources also poses problems in terms of their environmental impact. The operation of lithium-ion batteries relies on metals that are in finite supply on Earth (this includes lithium, but also the cathode of the battery incorporates other metals such as cobalt, nickel, and manganese) and are extracted by mining, which in itself consumes a large amount of energy. If car batteries could be effectively recycled, then the energy cost of manufacturing the batteries could be reduced, along with the drain on the planet's resources; furthermore, an effective recycling strategy is needed to prevent end-of-

life batteries having to be sent to landfill (which will become ever less desirable as the number of electric cars in use increases). Since the expensive part of a lithium-ion battery is the metal(s) incorporated into the cathode, initial methods for dealing with spent lithium-ion batteries focused on extracting those metals. However, for a truly circular system, it would be optimal if the batteries could be taken apart and the components separated so that the whole battery can be re-used, and there is increasing awareness of this (**Huang et al., 2018; Harper et al., 2019; Marshall et al., 2020**). It remains to be seen whether that process can be made economic and scaled up for industrial use.

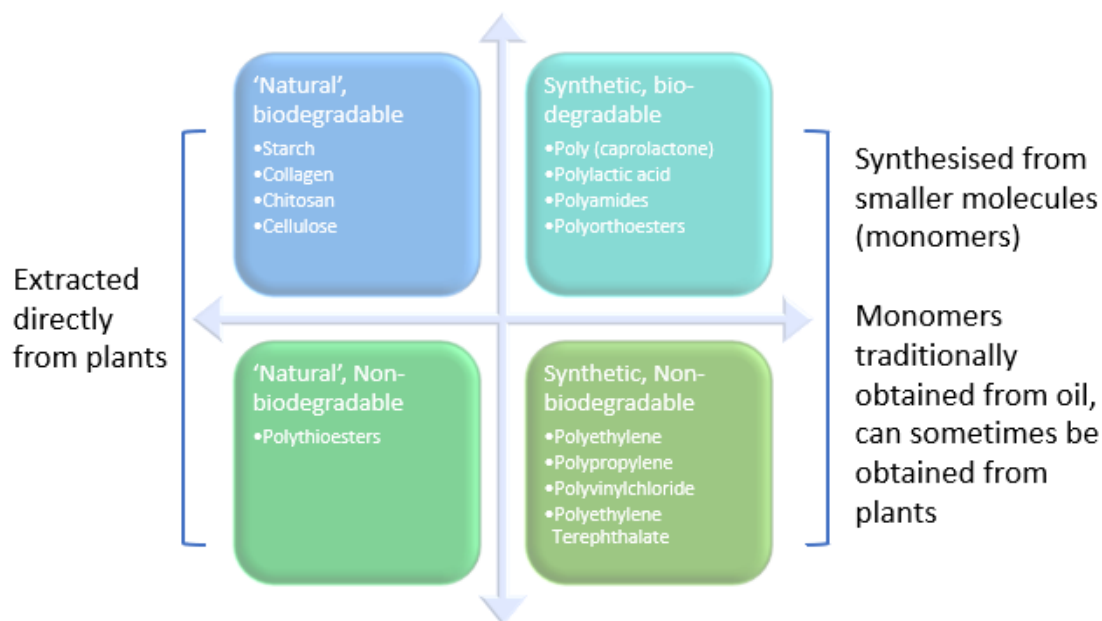
Car batteries are a particularly interesting example of a manufactured component that is difficult to recycle, because they are complex objects containing chemicals that may be hazardous, and the treatment of each component requires specialist knowledge and facilities. However, humanity is not coping particularly well even in recycling much simpler objects, and the ideal of a truly 'circular economy' currently seems some way off. For example, one estimate indicated that in 2015, 60-99 million metric tonnes of plastic waste were dumped into the environment globally (**Lebreton & Andrady, 2019**). Plastics are particularly useful materials due to their durability and the fact that they can be so easily moulded during the manufacturing process; however, their very durability makes plastic waste into an environmental disaster because once discarded, plastics will not degrade on a useful timescale. Plastic objects discarded into the world's oceans may remain there for centuries (**Wayman & Niemann, 2021**) with very deleterious effects on marine life and the health of the world's oceans.

As with other global environmental problems, this challenge requires more than one solution. One obvious approach is to try to stop using so much plastic in the first place; could we use other materials instead? This sounds logical- but as ever, things are not so simple. There are good reasons why plastic may be used as the material of first choice in some applications. In food packaging for example, if all current plastic bottles were replaced by glass bottles, their 'recyclability' could improve, but they would (cumulatively) be much heavier and would require more energy to transport (and therefore result in higher carbon dioxide emissions from the vehicles currently being used to transport them). Lightweighting is a significant environmental benefit of plastic, as is the reduction of food waste by the increased shelf life that is a result of wrapping food in plastic. These benefits do not negate the harmful effects that plastic can have on the environment, by being manufactured from fossil fuels and by causing waste material to remain in the environment long after it has been used and discarded. LCA can be a useful tool to examine whether the use of plastic in a particular application is worse than the use of an alternative

material (Vann, 2020; Deeney et al., 2022). The analysis does not always disfavour the use of plastics in an application, especially if the plastic can be made re-useable instead of single-use (Moretti et al., 2021; Deeney et al., 2022). However, the LCA approach has its critics here, who argue that the negative effects of plastic waste are too often downplayed in LCAs (Kousemaker, Jonker & Vakis, 2021).

Given that plastics do have very useful properties, but are major contributors to an environmental disaster, attempting to make plastics themselves less harmful is a reasonable approach. There is a significant current research effort into the synthesis of ‘bioplastics’ and ‘biodegradable plastics’. These are not necessarily the same thing; a bioplastic is one that is manufactured from renewable feedstocks (i.e., from plant matter such as corn, rather than from fossil fuels such as oil) whereas a biodegradable plastic is one that will degrade in the environment over a short timescale after it is disposed of. To complicate the issue further, bioplastics may be obtained by direct extraction from plants, or may be synthesised from smaller molecules that are obtained from plants. The distinction between ‘natural’ (directly plant-derived) and ‘synthetic’ (artificially made from smaller molecules) polymers is illustrated in **Error! Reference source not found.**

Figure 3: Diagram to illustrate polymers that are directly derived from natural sources, and ones that are synthesised artificially from smaller molecules. Not all biodegradable polymers are derived directly from plants.



To derive plastics from plants rather than oil may deliver gains in sustainability, since oil is a non-renewable fossil fuel. However, we have a limited amount of land on the surface of the Earth, and a large land area is currently being used for agriculture already (often to the detriment of ‘pristine’ habitats such as rainforest) so that using more land to cultivate

crops for plastics manufacture may not prove optimal. Careful analysis will be required to determine whether plastics derived in this manner are overall better for the environment (**Bishop, Styles & Lens, 2022**).

Biodegradable polymers also have the potential to make modern life more sustainable. A truly 'obedient' plastic could be manufactured, used for its purpose, and then simply degrade into harmless smaller molecules in the environment once disposed of. This would overcome many current problems with plastic packaging- for example, a lot of plastic packaging thrown out by households cannot be currently recycled because it is contaminated by food, but if the packaging were compostable then the food waste could be composted along with the packaging. The chemistry of biodegradable large molecules has been enthusiastically developed recently, and gains have been made; (**Filiciotto & Rothenberg, 2021**) some of these polymers have even got as far as commercial use, with a rise in the availability of 'compostable' drinks cups being sold at various venues. As is often the case, however, the solutions so far are imperfect; many commercially available 'compostable' cups are based on polylactic acid (PLA), which is technically compostable but only in an industrial facility. Throwing PLA on to an average garden compost heap would not work, because it requires specific conditions (e.g., high temperatures and pressures) to degrade. However, commercial interest in compostable packaging is high and is likely to deliver substantial improvements in this area.

Conclusion

Human civilisation is now completely unsustainable at its current level, and the scale of measures needed to make it sustainable are gargantuan. In this review it is possible to give only a flavour of the scale of the problems facing our global society. In describing some select examples, however, it is hopefully made clear that the solutions will not come from one specific sector or academic field but will require input from experts in diverse areas from economics and data analysis to engineering and materials science. Such an integrated effort is a true multidisciplinary approach. We must hope that it will be enough.

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Emerging from the COVID-19 Cocoon: A critical reflection on pedagogical changes in Higher Education

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Abstract

Since March 2020, teaching and learning in UK higher education has undergone a period of metamorphosis. With campus closures, lecturers and tutors could no longer rely on the teaching and learning style honed over years of in-person delivery. Despite the initial uncertainty of transformation, academic staff have adapted to the new situation, embracing new technology to assist lecture recording, seminar delivery and meetings with colleagues and students. Many will feel that they have become different teachers. Perhaps even, improved teachers, able to work in unique ways and address new challenges. For a while it appeared that teaching in higher education had been completely altered as a result. Yet student voices continue to advocate for in-person delivery. Can, and should, lecturers and tutors revert to their 'old' pedagogy, when the opportunity arises to return fully to the lecture theatre, classroom, or laboratory? Or have we emerged from the COVID-19 cocoon completely, and permanently, altered? This article reflects on my own experiences, based on returning to exclusively face-to-face delivery from September 2022, after two and a half years of online and blended learning.

Keywords: metamorphosis; pedagogy; COVID-19; blended learning; active learning; challenge

Emerging from the COVID-19 Cocoon: A Critical Reflection on Pedagogical Changes in Higher Education

One definition of metamorphosis is the complete alteration of something: in appearance, character, or circumstances (**Cambridge Dictionary, n.d.**). Since March 2020, teaching and learning in the UK higher education system has certainly undergone a period of metamorphosis; from face-to-face teaching – the ‘default position’ of higher education delivery (**Department of Education, 2022**) – to online teaching, or at least blended teaching, because of the COVID-19 pandemic. What about the academics who have taught throughout this unprecedented period of transition? Have we also been completely altered from our original pedagogical approaches? And if so, can we, and should we, ever revert?

Metamorphosis is not always a pleasant experience. As we commence any new career role, we nervously change our identity in response; how we define ourselves, how we appear to the outside world, how we structure our lives. In the natural world it is seen as a necessary development; the process by which a creature matures. Yet in those early days of COVID-induced online teaching, I floundered in the uncertainty of my expected transformation and how it would affect me. Should I change? Could I change? How do I grow the necessary knowledge and skills in time to emerge, and guide students, into a world of online teaching?

It was clear that academics could no longer rely on the styles and methods of teaching and learning that had been honed over years in the lecture theatre, classroom, or laboratory. I remember lecturers from my own undergraduate studies who could enrapture a 200-capacity room, simply through their presence, their facial expressions, and the transmission of well-chosen words. During my teacher training, they called this chalk and talk teaching. It’s often derided as a pedagogy in Western education today, although there can be benefits from acquiring knowledge through direct verbal instruction (**Donnolly, 2014**). My personal pedagogy is based instead on active learning, which is ‘talking in groups, making things, being creative, doing things. [In active learning] passive methods get an emphatic thumbs-down’ (**Petty, 2004: 139**). Over the years, I have taught Law through flipped learning, debates, role plays, quizzes, poster presentations, games, case galleries and polls. Most of these activities require physical space and resources. They were never designed with online teaching in mind. Regardless of your preferred style – chalk and talk, active – or your past successes, being face-to-face with students was key. Online teaching, therefore, required all staff to undergo an overwhelming transformation.

It's surprising how quickly we all adapted to the new situation. For me, this meant embracing new technology, making familiar friends of software that had once had no use to me. In the past, I have relied on non-verbal communication to gauge interest, engagement, enjoyment, contemplation of new information, confusion about new information, distraction or even sleep. Suddenly, I found myself talking into the webcam in an otherwise empty office space, recording lectures to be watched asynchronously by students who may now be in locations around the world. Any interactivity was gone. I suddenly found a need for: a designated space at home for lecture-recording, Screencast-o-matic or *Microsoft Teams* software, Moodle participation statistics, H5P interactivity and transcripts.

It wasn't just lectures that required training and experimentation with unfamiliar tools and software. My active learning strategies were straightforward to set up when students were together in one physical space and using readily available, tactile resources. Now there was an online void to navigate around. Anything I wanted to do, other than just talk to someone via the computer, became a challenge that had to be carefully planned for. YouTube videos could not be relied upon to provide an introductory input for flipped learning, as some countries do not allow students to access the website. Poor internet connections made group work unreliable; someone could leave at any moment and may not reappear. I designed quizzes using Kahoot, only to realise at the last moment that it could not be used with more than 10 students at the same time unless I paid for a premium account. Even a virtual whiteboard presented a series of conundrums: Which app is best for this task? How do I share the whiteboard with students? Can they contribute to it as well, or only view it?

If I wanted to ask a colleague for assistance or opinion, this had to be done online too. Today, Teams is so essential to my communication with colleagues that it is set to automatically open when my laptop switches on. But in 2019, when it was first introduced within my department, its uses seemed so limited. The occasional sharing of documents or office chat when we were too busy (or lazy) to physically attend a colleague's office. Following the move online, Teams now presented a plethora of tiles; one for each module and each course I delivered on, plus a general team. We even had a weekly virtual coffee break via Teams, although conversation was stunted by the awkwardness of webcam anxiety, the queue of virtual hands up to speak and 'you're on mute' notifications. By July 2020 I was a different teacher. I had been teaching online for only two months but found myself settling into my new role. I developed a resilience to teaching and learning hurdles and was continuously planning strategies to work around the difficulties encountered in online delivery (Kowalczyk, 2020), knowing that further online teaching was likely:

Table 1: Online Delivery Challenges & Potential Resolutions

Challenge	Possible ways to resolve this
<p>1. Students do not like to switch on their webcams in whole group seminars, and it is odd to deliver to a laptop screen that only displays the initials of the other people in attendance</p>	<ul style="list-style-type: none"> • Set up a Padlet wall where students can introduce themselves online and upload a photograph, so they become familiar with each other from the outset despite the physical distance • Using student avatars • Demonstrating how to blur a webcam background or upload a different background on <i>Microsoft Teams</i> • Using breakout rooms to create smaller working groups • Having online office hours where a student can meet me ‘face to face’ (via webcam) without all the other students present
<p>2. Linked to the above, you don’t realise how much you rely on non-verbal feedback such as facial expressions until it is not there</p>	<ul style="list-style-type: none"> • Using apps such as <i>Polly</i> or <i>Vevox</i> to get quick and easy feedback from students on levels of confidence in a topic • Encouraging students to use emojis to indicate their feelings e.g., thumbs up, happy face, confused face
<p>3. Some students are happy to ‘lurk’ in seminars – in attendance, but not contributing in any way; just listening to others and seeing the work that others produce</p>	<ul style="list-style-type: none"> • Break down a question or topic into smaller areas and allocate sections to individual students who will then have to feedback to peers • Using written chat functions rather than expecting verbal contributions – this avoids connectivity issues/excuses or the fear or interrupting someone else • Use software such as <i>Kahoot</i> quiz, <i>Vevox</i> / <i>Mentimeter</i> polls or Padlet boards which allow anonymous contributions – this may encourage students who aren’t sure to have a go in a public space without fear of criticism or judgement

<p>4. You can't replicate online the style and method of teaching and learning that you would have used if teaching in person to a group of students</p>	<ul style="list-style-type: none"> • Don't try to replicate the lesson online – think instead about how you can adapt what you've done previously to work in a new way. This might involve completely changing the style of delivery or the activities set for the students. • Embrace online teaching and use it as an opportunity to expand the repertoire of software that you can use – there are so many training sessions and step-by-step instruction videos on how to use different tools. • Speak to colleagues who already have experience of software / buddy up with a colleague to do a test-run of a planned activity
<p>5. Working from home can cause 'burnout' – the damage of mental health by excessive and unreasonable working conditions (NASUWT, 2022)</p>	<ul style="list-style-type: none"> • Video calls can be used to just chat to colleagues, as well as to conduct formal work-related activities • Take opportunities to meet with colleagues in person where possible. Chat while walking outside. Don't do all communication via email / online unless you have to • Remember there is a whole range of Wellbeing Support available through the university, as online teaching and learning is lonely / isolating for staff and students

For a while, it appeared that higher education may have been completely altered by the COVID-19 pandemic. Despite suggestions that face-to-face teaching could resume in the autumn of 2020, early attempts to implement this were scuppered by further outbreaks of COVID-19 (Hubble & Bolton, 2021). Subsequently, it was suggested that most teaching and learning activities should revert to, or continue with, online delivery for the foreseeable future. Hybrid teaching – or blended learning, as it is also called – is now used by many universities (Office for Students, 2022), even following the removal of COVID-19 restrictions. The concept is that of mixing in-person learning with online delivery options. In 2021, it was reported that the University of Manchester would be retaining blended learning permanently (BBC News, 2021).

There are benefits to this pedagogical approach. It has been highlighted, for example, that the increased use of interactive and assistive technology in hybrid teaching has particularly benefitted students with disabilities and learning conditions (Wilkinson, 2022). Similarly, my own foundation-level international students have welcomed the availability of asynchronous

lecture recordings, accompanied by written transcript or captions. Hybrid teaching allows flexibility and the recognition of students as a group of individuals, rather than a single mass of attendees in a lecture theatre. Individuals can listen at their own pace, play the recording multiple times for clarity if needed, and learn in comfort.

On the other hand, face-to-face delivery is a priority for most students in higher education. In 2017, a survey of 60,000 university students suggested that experiencing university life, meeting people from different countries and having a fresh start in a new location were all key reasons for wanting to go to university (**Hobsons, cited in Bhardwa, 2017**). Online and hybrid teaching are claimed to provide a 'sub-par service' (**Dunleavy, as cited in Barnes & Hicks, 2022**). Student complaints reached record highs in 2021 (**Sands, 2022**), with course delivery, centred on the suspension of some or all face-to-face delivery, being the main source of discontent (**Office of the Independent Adjudicator, 2022**). In November 2022, it was announced that legal action is being taken against 18 universities by their own students, amidst dissatisfaction with the continued use of online and hybrid teaching (**Barnes & Hicks, 2022**). It was hardly unexpected, therefore, when my own department announced that all teaching and learning provision would revert to exclusively face-to-face delivery. The days of having two seminars online and two seminars in person are in the past. The hours of transcribing lecture videos are finished.

Have academic staff been fazed by this sudden return to a pedagogy that we haven't fully embraced since March 2020? In some ways, yes. Hybrid teaching allowed a flexibility of working that became expected. Suddenly, we are grumbling about the hours lost by commuting to campus. I am panicking whether I can navigate rush-hour traffic in time to pick the children up from school. We are wondering whether training sessions and meetings need to be in person. I am missing the flexibility of a timetable which allowed the recording of lectures at a time and location of my choice. We are having to question whether the tools that we have become accustomed to over years of online delivery are suitable for continued use.

Therefore, in a similar fashion to my 2020 reflections, I have thought about the challenges that I am now facing, and the possible ways to resolve them:

Table 2: Emerging Delivery Challenges & Resolutions

Challenge	Possible Ways to Resolve This
<p>1. Students may expect online delivery to be an option. Remember that they have become accustomed to the availability of online options during high school / further education over the last 2 years</p>	<ul style="list-style-type: none"> • Have clear policies in place regarding the availability of online learning and apply these consistently • Retain some use of pre-recorded lecture materials from previous years. These may be useful for revision purposes, or for a student who has missed a session due to illness, visa delays, personal circumstances • Use <i>Moodle</i> as an interactive tool, rather than a resource storage space. Forums, quizzes and H5P interactivity can complement face-to-face learning well
<p>2. Linked to the above, don't assume that all students desire for face-to-face delivery to resume</p>	<ul style="list-style-type: none"> • Remind yourself of the benefits of online learning materials for students with physical and mental health conditions, learning conditions and English language barriers • Demonstrate to students how Blackboard Ally can produce alternative formats for resources • Include online options within face-to-face seminars and lectures – polling software and collaborative platforms can be tailored to cater for individual needs
<p>3. Don't aim to revert to your 'old' pedagogy</p>	<ul style="list-style-type: none"> • Reflect on the changes you made during the years of online teaching and ask yourself: • Which of these improved the learning outcomes of students? Keep these things! Online tools are not exclusively for online delivery • Which of these did not work? Consider alternative methods of delivery - chalk and talk, different software, active learning • Engage in peer dialogue with your colleagues. Discuss what changes they are making (if any) and why

4. Be prepared for surprises! In-person students, particularly when bolstered by the presence of peers for the first time in years, may engage with seminar activities in unexpected ways	<ul style="list-style-type: none">• Advise students on suitable pseudonyms for online activities that invite participants to create a one-off username for classroom display• Maintain control over the broadcast of responses submitted:• Software like Mentimeter allows you to 'hide' responses so that they do not automatically display to the lecture theatre when received• Some software can automatically filter out profanities• Avoid word clouds as these can allow too much flexibility with responses. Using polls with pre-determined answers (e.g., how much do you agree with the following statement?) allows the tutor to have more control
5. Physical tiredness	<ul style="list-style-type: none">• Don't forget to prepare lunch or make lunch plans before leaving for work!• Take breaks, including getting away from the desk when eating lunch• Practice mindfulness when walking between classrooms / campuses

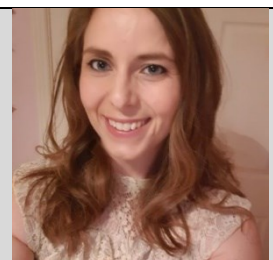
Looking at this new list, one thing that hasn't challenged me at all is the prospect of entering a lecture theatre or classroom full of students and delivering in-person again. Like an old friend, once we were reunited, it was as if no time had passed. On campus, directly interacting with individuals and groups of students from all over the world, is where I've always wanted to be. Even donning a mask and face visor, as one of the first teaching fellows in my department to volunteer for a timetable that included face-to-face delivery after COVID-19, it felt natural.

I started this reflection wondering whether metamorphosis of teaching is reversible. Could we, and should we, revert to our previous pedagogy when the opportunity arises? For my department, the opportunity has presented itself and I'm able to suggest an answer to that question. Certainly, we have had the time and opportunity – whether we wanted it or not – to metamorphose. But did we completely alter? It's unlikely. In truth, we merely found new ways of working within our pedagogical parameters. We have enhanced, rather than transformed, our teaching. We understand the importance of the current group of students more, recognising that not every university student needs the same experience as those who came before them. What they need, more than ever, is a

consideration of their situation and the willingness of academics to adapt to this.

I still advocate for active learning. What I have found, however, is that there are more ways to actively engage students now; software has developed, and I have prioritised the time needed to consider and embrace some of it. Rather than asking, 'How did I teach this last year?', I have instead opened my mind to the question of, 'What is the most effective way to achieve that learning outcome?' I have matured within the COVID-19 cocoon and emerged with improved features and an open mind to finding resolutions to novel problems, however and whenever they may arise.

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Table 2: Emerging Delivery Challenges & Resolutions

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Reflections on AI in Humanities: Amplifying marginalised voices of women

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Abstract

As artificial intelligence (AI) continues advancing rapidly, there is growing potential for its application in the humanities to uncover new insights and perspectives from the historical archives. However, it is also important to consider how AI tools themselves may unintentionally perpetuate existing biases if not developed conscientiously. This critical reflection reflects on the opportunities and challenges of utilising AI to amplify marginalised voices that have been traditionally excluded or underrepresented in mainstream historical narratives, with a focus on women. Through natural language processing and computer vision techniques, AI shows promise in automating the analysis of large volumes of text, image, and multimedia sources to bring to the surface female narratives previously overlooked due to limitations of manual research methods. However, issues such as training data bias, problematic stereotypes learned from legacy sources, and a lack of diversity among AI researchers threaten to replicate the very inequities they are seeking to overcome if not addressed proactively. Collaborative frameworks and design principles centred on representation, accountability and community oversight are needed. By critically examining its social responsibilities and impacts, this reflection argues that AI possesses great potential in the service of feminist and intersectional scholarship when guided appropriately. It calls for continued multidisciplinary dialogue to help ensure technologies amplify marginalised voices rather than risk their further marginalisation.

Keywords: AI; humanities; marginalised voices; women; amplify

Artificial intelligence (AI) is the study and development of computer systems' ability to perform tasks normally requiring human intelligence, such as visual perception, decision-making, translation between languages, and scientific research. If used correctly, digitalisation can help enhance transparency and accountability, amplify marginalised voices, and disrupt entrenched systems of power and patriarchy. While we are seeing an AI revolution now that its research and development are advancing rapidly, AI's conceptual and research origins can be traced all the way back over seventy years to the pioneering work of scientists, such as Alan Turing, John McCarthy, and others. AI has deep-seated roots even if recent advances have been staggering. AI is a new way of doing research, where massive data processing is made possible by techniques of machine and deep learning, offering new perspectives for analysis.

There are many ways that AI is being applied in the humanities. Natural language processing (NLP) allows AI to analyse large text corpora, such as books, articles, and historical documents to identify themes, topics, and ideas, as well as how these evolve over time. In this respect, AI assistants answer questions from digitised archives and suggest related resources, which help disseminate humanities knowledge more broadly and thereby aid humanities research. Computer vision (AI) also facilitates the digitisation and analysis of visual elements, such as old photos, paintings, manuscripts and diagrams for easier access and preservation of humanities resources. A further noteworthy point in relation to the visual features of AI is that its generative models also produce new texts, images, and music in styles of historical periods or individual artists, which in turn extends creative works and enhances cultural exploration. Furthermore, AI is used in sentiment analysis and emotion recognition by analysing literary texts, such as novels, poems and plays to understand how authors portray and evoke different emotions over time. In doing so, AI not only provides insights into cultural and historical trends, but also studies viewers' emotional responses to artworks including paintings, sculptures, performances, and films to better understand human experiences and cultural impacts over eras.

Moreover, it helps determine emotions conveyed through images, ornamentation and symbolism in artefacts from different eras and cultures including by tracking emotional arcs and character development in plays as well as novels in order mechanically to validate or challenge literary theories. This can be done by using facial recognition and physiological sensors, which help interpret artistic intent and its impact. For instance, digital humanities scholars often employ AI tools and methodologies to study and analyse cultural artefacts. They may use AI to examine emotional patterns, symbolism, and character development in literature, plays, and the visual arts, aiming to gain insights into cultural

and historical contexts. Literary theorists and critics may also collaborate with AI researchers to validate or challenge literary theories using computational approaches. They provide the theoretical framework and expertise in interpreting literary works while leveraging AI tools to analyse large volumes of texts and identify patterns related to emotions, symbolism, and character development. Art historians and curators may also utilise AI to analyse visual artworks, including paintings, sculptures, and artefacts from different eras and cultures. Therefore, AI-based techniques can help to identify and interpret emotional cues, symbolism, and stylistic features, providing insights into the artistic intentions and cultural contexts of the works. Yet, collaborations between these professionals and others from related fields allow for interdisciplinary investigations into the emotional and artistic aspects of cultural artefacts. By combining AI technologies with domain-specific expertise, researchers can gain new perspectives and insights into the emotional dimensions of literature, plays, visual arts, and other forms of cultural expression; since AI helps to survey public reaction on social media to cultural events, exhibitions, films, and suchlike gauging sentiments and how they vary across demographics.

However, there are some key constraints on an AI's ability fully to recognise and understand emotional dimensions. One of the significant problems that AI perpetuates and faces is data limitations because marginalised groups have often left fewer records. Historical records and archives, which are valuable sources of data for AI research, may have significant gaps and underrepresentation of marginalised groups, such as black women, immigrants, and refugees. This can be due to factors such as limited access to education, cultural biases, and exclusionary practices. As a result, AI models trained on historical data may fail to capture the full range of experiences and perspectives of marginalised communities, perpetuating biases and reinforcing existing power imbalances.

Besides, most AI systems are trained on texts, images, and other data that do not necessarily capture the full complexities and subtleties of human emotion and social context. Therefore, more diverse data is needed. Another problem is the subjectivity of emotions; since what emotions mean can vary greatly between individuals, cultures, and situations based on personal experiences. Yet, AI generalises from patterns, which limits its ability to recognise nuance. In addition, emotions are often expressed and experienced via multiple channels such as speech, facial expressions, and physiology which current AI is not sufficiently integrated to apprehend holistically. Moreover, the same emotion expressed may carry very different meanings depending on cultural norms, relationships between people, and the events that give rise to it, which AI struggles with. It is worth considering here that emotions in real life are often ambiguous,

mixed, conflicting, or evolving – harder characteristics for AI reliably to discern compared to clear labels. Thus, for an AI truly to understand how emotions function and impact humans it would likely need a kind of internal experiential model and self-awareness that has yet to be achieved. Hence, while AI can identify surface expressions, it does not have access to the deeper interconnected web of emotional knowledge that humans intuitively possess from living as emotional, social beings. Thus, more human-aligned data and progress on general AI is still needed for machines to recognise emotional realities properly.

Despite its inability to understand complex human emotions and while many histories and stories from marginalised groups have been underrepresented or overlooked in traditional scholarly works, AI has the potential to amplify marginalised voices including women's voices. This is done by analysing and processing historical documents shared by women in different languages and so exposing narratives that have remained untapped, such as letters, diaries and newspapers at a scale that exceeds human capabilities. In the last few decades, a significant body of work has been done to expose these narratives through gender studies and queer studies. However, AI algorithms can analyse large volumes of text data much faster than human researchers. While a human researcher may take a significant amount of time to read and understand a single document, AI models can process thousands or even millions of documents in a relatively short period. This enables researchers to examine a broader range of materials and identify patterns, themes, and narratives more efficiently. In addition, AI-powered natural language processing (NLP) techniques allow algorithms to understand and interpret text in multiple languages. With the ability to analyse diverse linguistic sources, AI can overcome language barriers and enable researchers to access historical documents written in different languages, including those shared by women. This expands the scope of available data and provides a broader understanding of untapped narratives across cultures and regions. AI models can be also trained to categorise and extract relevant information from documents, for example by identifying dates, locations, names, and themes. This automated process can help researchers organise and index large collections of historical documents, making it easier to search for specific narratives or topics of interest. Furthermore, AI algorithms can identify connections and relationships between documents, uncovering hidden narratives that may have been overlooked by human researchers. In so doing, AI can facilitate the cross-referencing and linkage of information across various sources. By connecting related documents and data points, AI algorithms can provide a more comprehensive understanding of historical events, movements, and individuals. This capability allows researchers to uncover connections and narratives that

go beyond the limitations of human memory and manual analysis. While AI offers significant advantages in processing historical documents and exposing untapped narratives, it is important to note that human interpretation and contextual understanding remain essential. Hence, the use of AI in historical research should be complemented by human expertise to ensure accurate interpretation, critical analysis, and nuanced understanding of the historical context.

AI serves as a tool that enhances human capabilities, enabling researchers to explore a broader range of historical narratives and shed light on previously overlooked perspectives. The technologies of optical character recognition, machine translation and named entity recognition are often used to do so. Amplifying marginalised women's voices allows for more inclusive discovery and thus diverse telling of history that acknowledges the experiences and contributions of all people, for AI generates both structured metadata and summaries synthesising AI insights from vast distributed collections in order to guide new feminist and intersectional scholarship. Additionally, it identifies sentiments, speech patterns, and emotional arcs within first-person women's narratives using stylistics, sentiment analysis, and natural language generation techniques. AI also helps to classify genres of music based on decoded emotions to explore their historical evolution and how styles reflect lived experiences, thereby detecting emotion in marginalised voices of women in oral histories to better understand oppressions of the past from an empathetic standpoint. Consequently, it democratises access to women's histories globally through multilingual and interdisciplinary digital frameworks grounded in feminist practices.

However, there are also potential downsides to consider when it comes to the use of AI in this context. The digitisation and analysis of historical documents, particularly personal materials such as letters and diaries, raise ethical concerns regarding privacy, consent, and the ownership of personal narratives. Thus, care must be taken to ensure that women's histories are handled with sensitivity and respect, obtaining appropriate permissions and considering the potential impact on individuals and communities connected to those narratives. Additionally, AI models may struggle with capturing the full range of cultural and linguistic nuances present in historical documents, especially across different languages and regions. These complexities of language, context, and cultural references may be challenging for AI algorithms to interpret accurately, and so can result in misrepresentations or oversimplifications of women's histories, potentially erasing important subtleties and nuances from the narratives. AI algorithms may also struggle with the nuanced interpretation and analysis of historical documents, particularly those with complex symbolism, metaphor, or cultural context. Human researchers often bring

contextual knowledge, critical thinking, and interpretive skills that AI models may not fully replicate. Thus, it is important to consider AI as a tool that augments human expertise rather than replacing it entirely. To mitigate these downsides, it is crucial to adopt transparent and inclusive practices in AI development. This includes ensuring diverse representation in data collection, involving domain experts and historians in the curation and interpretation of data, and regularly evaluating as well as addressing biases and limitations in AI models. This can be done by engaging in ongoing dialogue and collaboration with communities and stakeholders, who can help ensure that the digitisation and analysis of women's histories are conducted ethically and responsibly.

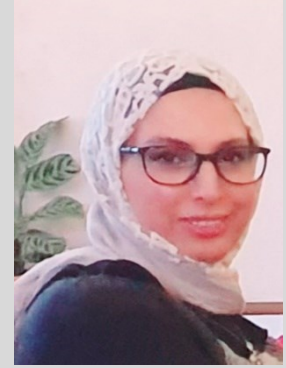
Alternative stories and perspectives challenge dominant patriarchal narratives, which have often excluded or misrepresented women's voices. Moreover, AI helps to track the shifting of societal moods and viewpoints regarding critical social and political issues, such as war, sexuality, politics, and social change. As a result, it will enrich understanding of lived experiences from an empathetic perspective and so help to address exclusion and to revise prevailing versions of events. It is worth mentioning here that gaining new perspectives and engaging with voices from diverse backgrounds not only enhance our ability to think broadly and critically about history, society, and culture from multiple vantage points, but also help us to avoid the repetition of biases. If such marginalised voices are not heard, the viewpoints and biases that have traditionally marginalised these groups risk being perpetuated. Hence in many ways, AI expands the discovery, access, analysis, and enjoyment of humanities knowledge through an unbiased lens if a combination of strategies and practices across various stages of AI development has been adopted. Some of these key approaches include ensuring that the training data is diverse and representative; data pre-processing and cleaning; interdisciplinary collaboration; and ongoing monitoring and evaluation. By adopting these approaches, we can strive towards developing AI systems that are more equitable, fair, and unbiased. AI itself is not inherently biased or unbiased. The biases in AI systems arise from the data used to train them, the design choices made during their development, and the potential biases of the human creators involved in those processes. Addressing the issue of bias in AI requires careful attention throughout the entire development pipeline. It involves collecting diverse and representative datasets, ensuring inclusive and fair annotation processes, applying rigorous testing and evaluation procedures, as well as implementing fairness-aware techniques in algorithm design. Ethical considerations, transparency, and accountability are essential in mitigating biases and ensuring that AI systems are developed and deployed in an unbiased manner. It is important to note that achieving

completely unbiased AI systems is challenging and may prove not entirely possible.

Indeed, in some ways AI systems may unintentionally perpetuate gender or ethnic bias. For example, if training datasets are disproportionately made up of information about, or from one gender, algorithms can learn inherent biases that reflect current or historical imbalances. In addition, machine learning systems trained on large corpora can inadvertently pick up on problematic or offensive stereotypical gender associations from language over time. If systems are optimised for metrics like user engagement, they may autonomously leverage known arbitrary preferences that happen to advantage one gender. Also, making decisions based strictly on correlations in data without awareness of societal biases could disadvantage groups subjected to historical discrimination. When systems exhibit unexplained behaviours, it becomes difficult to audit, correct, or mitigate any gender harms that may unintentionally emerge. Compounding this if women are underrepresented in the AI field and in datasets during system development, their unique perspectives on design risks and harms are less likely to be considered. Therefore, careful consideration of these factors during development helps to reduce unintended bias, but ongoing monitoring and evaluation of AI systems for biases are still important. This involves auditing the data, assessing the model's performance across different subgroups, and conducting fairness assessments to identify and mitigate any biases that may emerge during deployment.

To conclude, the goal of AI should be to empower women's voices both for the benefit of women and to increase diversity of perspective in general rather than to have a technology that speaks for them. Broader issues of inclusion and power structures still demand human interventions as technology alone cannot undo systemic marginalisation. Ongoing critical examination of how AI systems themselves reflect or perpetuate gender biases is also still needed. AI produces opportunities but also carries responsibilities towards marginalised groups if it is to be developed responsibly by multiple stakeholders who play important roles at different stages of AI development including AI developers and researchers, data providers and curators, as well as regulators and policymakers.

Raad Khair Allah is a PhD candidate at the Faculty of Arts/ Department of English and Comparative Literary, University of Warwick, UK. Her thesis title is 'Contemporary Arab Women Writers, Filmmakers, and Artists in an International Frame'. Her research interests include Women's Studies, Gender, Feminism, Sexuality, War and digital humanities. She is also a Senior Teaching Assistant at the Faculty of Arts/ Department of English Literary Studies and a former member of the seminar series organising committee at CSGW/Center for the Study of Women and Gender at the same institution. She was shortlisted for the Paula Svonkin Creative Art Award at the Pacific Ancient and Modern Language Association (PAMLA) conference in Los Angeles, USA, 2022 for her project on the use of Miro software in Humanities titled "Marginalization of Arab Women and Revolutionizing Patriarchy". Prior to joining the University of Warwick, she worked as an English lecturer at Damascus University (part-time, 2009-2012) and the Syrian Private University (full-time, 2014-2018).



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Review: The Body in Twilight: Representation of the Human Body, Sexuality and Struggle in Contemporary Arab Art

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Abstract

Art can be particularly an effective means of building transnational understanding across cultural divides. Specifically, the act of making art to express conflict, sexuality and identity is significant as Arab women have frequently been marginalised and excluded from such a site of visibility and meaning. Contemporary Arab women artists not only contribute to global feminist theory but also deal with their aesthetic, visual and personal concerns. The Body in Twilight: Representation of the Human Body, Sexuality and Struggle in Contemporary Arab Art is a book by the Syrian professor of visual art and design Fassih Keiso. In this book, Keiso explores the representation of the human body in contemporary Arab art and its relationship to issues of sexuality and struggle. He argues that the representation of the body in Arab art reflects broader societal changes and struggles and that the use of the body as a site of resistance and political commentary is a common theme in contemporary Arab art. Despite the lack of images of artworks by the artists discussed in this book, the book provides a compelling contribution to comparative gender and feminist art and the broader international art on the centrality of sexuality in politics and society.

Keywords: Contemporary Arab art; gender; sexuality; body; Arab world

This book (Keiso, 2008) is a well-crafted and necessary contribution to scholarship on contemporary Arab art.ⁱ Whereas researchers continue to investigate traditional Islamic art and the ancient monuments of the Arab world, art produced in the modern Arab world has fallen into utter oblivion. The importance of this book lies in its gendered exploration of whether expressions of sexual desire, displays of nudity and eroticism in Arab art are still taboos. It also investigates the extent to which contemporary Arab artists released themselves from such taboos. Keiso's book enables us to understand the central role of gender and sexuality in the construction of modern and contemporary Arab society in terms of not only norms of sexual behaviour but also of power relationships in general and political and military power struggles in particular.

This book is based on the work of five Arab female artists who live and work outside the Arab region and who use various media to reflect and represent the human body. The Egyptian Ghada Amer, the Iraqi Jannane Al-Ani, the Palestinians Mona Hatoum and Emily Jacir and the Algerian Zineb Sedira are brought together for the first time in a research context. Keiso addresses these visual artists' use of the human body as a subject or object as they attempt to create new forms within a contemporary international dialogue. The guest artist for this book is the Iranian Shirin Neshat, whose work explores issues of her native Islamic society, especially the status of women. Neshat concentrates on the complicated relations between the body and the veil. Although most, if not all, of these female artists do not consider themselves to be feminists, Keiso notes that their commentaries seem to suggest otherwise, and their artworks, in any case, express a radical sensibility. However, as acknowledged by Keiso in the introduction, given the limitations of data about the representation of sexuality in the Arab world, Akram Zaatari, who lives and works in Beirut, is introduced as a second guest. He is a video artist whose most of his themes reflect the issue of sexuality in Arab (Lebanese) society.

Keiso's primary source of data is the information he collected during his travels to New York, Europe, Lebanon and Syria, where he met most of the artists discussed in this book. Keiso has also drawn extensively on art and literary criticism in the periodical press to analyse the reception of the work of Arab artists in global culture, disregarding geographical locations and gender. In addition, he has made use of the network of contacts he established using Internet searches and the few English-language books dealing with modern Arab art that he purchased from England, again via the Internet. Most of his data was collected through direct contact with New York art galleries and art organisations. In both Lebanon and Syria, he relied on literature, social and political studies and other publications in Arabic, and he also attended some conferences there on Arab art practice.

The book is well-organized. It is comprised of four coherently ordered chapters, which are Chapter One: Introduction; Chapter Two: Ghada Amer; Chapter Three: Zineb Sedira and Jannane Al-Ani with Shirin Neshat; Chapter Four: Mona Hatoum and Emily Jacir; followed by a Conclusion. Each chapter in this book begins with an overview, stating the methodology that Keiso follows in order to define the topic under investigation. I was particularly struck by the aptness of the subtitles in each chapter, such as 'Welcome to Amer's "Private Rooms"', 'Power of the Gaze', 'Fortified Body' and 'Olive Branch...a Metaphor for Peace'. The brevity of the articles and the deft movement within the same chapter help the reader remain focused.

In order to cover the central theme, Keiso sets several secondary questions to be answered in each chapter besides the main questions that he raises: What is it to be an Arab artist expressing one's body freely in France, Britain or the United States? What is it to be an Arab woman? What does the experience of war mean to Australian, British or American artists from an Arab background? What are the effects of past and present colonialism on the image of the human body? What are the complexities of remotely witnessing the never-ending wars in the Arab world or the Palestinian Intifada far away from where these events are happening? To what extent does an Arab artist living in the West express their body and sexuality in art? Moreover, to what extent can Arab artists transcend the strict morality that has dominated the Arab psyche? Answering these questions is achieved partly through close and serious analysis of the work of the artists under study. Although the book focuses on the work of artists other than himself, one rarely finds images of their works as opposed to his own.

The book studies the impact of Arabic classical erotic literature on Arab art and artists, and focuses on the exploitation of Arab and Islamic culture for the benefit of Western ideologies. At its heart, it presents a critical and historical analysis of the issue of the veil, demonstrating its importance and place within Islamic societies. It also focuses on colonial theories in its discussions of stereotypes, examining the term Orientalism and the impact of the media on gender and on stereotyping and marginalising Arabs as well as Islam. Investigating the Palestinian-Israeli conflict and looking into the issues of war and dispersion that have affected Arabs physically and spiritually, the book deals with the way Arab visual artists reflect struggle, confrontation and the resistance of the human body to war and death. Keiso concludes his book with a critical evaluation, showing the relation of his work to the issues addressed by the book. Like Keiso, the artists covered in this study produce political art that articulates resistance to the conflict and exposes stereotypes advanced by the West and other dominant global powers.

In many ways, most of the issues explored in the book remain highly relevant in today's social and political context. While the controversial, complex issues of identity, representation, power and clash of civilisations continue to be debated in some circles, I argue for a more nuanced and intersectional understanding of cultural differences, one that recognises the complex ways in which different forms of oppression intersect and reinforce one another. The issue of objectification of women's bodies also continues to be deeply relevant in contemporary Arab societies and beyond. This is because the #MeToo movement and other feminist movements continue to raise awareness of gender-based violence and inequality around the world. Similarly, the book's analysis of the ways in which art can be used as a means of resistance and empowerment in the face of political and social oppression maintains its importance in today's context of ongoing political conflicts, as there are many social and political upheavals in many parts of the world, such as the Arab Spring.ⁱⁱ

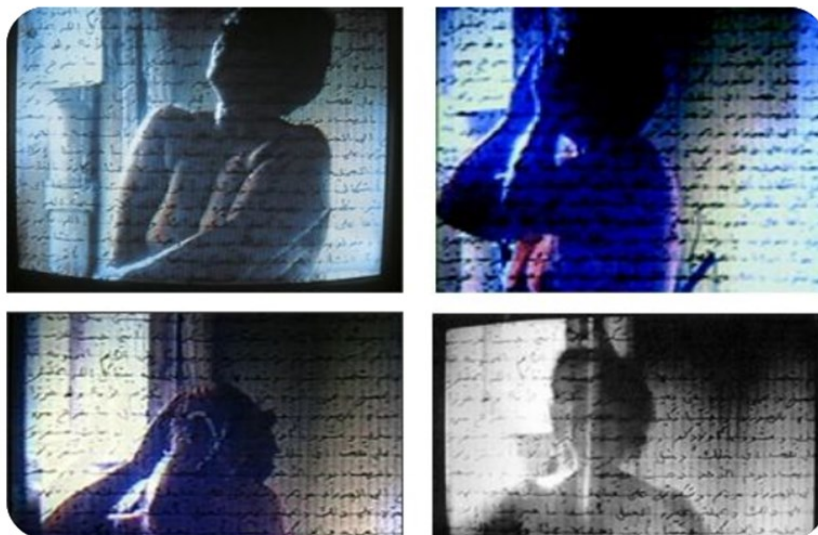
Nonetheless, there are also aspects of the book that may not be as relevant in today's context. For example, the book was published in 2008, and some specific cultural and political references may be somewhat dated or less relevant to contemporary readers. Since the early 2000s, there have been significant changes in the global social and political landscape, including the rise of social media and the emergence of new political movements and conflicts. The book's focus on contemporary Arab art was ground-breaking at its publication. However, the global art world has become more diverse and inclusive in recent years, and there are now many more opportunities for artists from the Arab world to exhibit their work and participate in international art events. The art world is constantly evolving, and there are now many more Arab artists who are gaining international recognition and contributing to global conversations about art and culture.

The issues discussed in this book seem at first glance to be different, but they are connected by the notion of revolution. In his book, the visual artist Keiso argues that the human body is a site of struggle in Arab society, where traditional values, religious beliefs, and political forces often clash with more progressive and liberal ideas. He contends that contemporary Arab artists use the body to explore issues such as gender, sexuality, identity, and power and that their artworks challenge dominant cultural norms and offer alternative narratives and visions of the future. He also discusses how the use of the body in contemporary Arab art is influenced by the long and rich tradition of Islamic art, which has always celebrated the human form but also placed certain restrictions on its representation. He shows how contemporary Arab artists have negotiated these restrictions and developed new culturally rooted and socially engaged forms of expression. In this way, the book offers a fascinating insight into

the complex and diverse world of contemporary Arab art and the ways in which it reflects and responds to the challenges and opportunities of the modern world.

Keiso supports this argument through a detailed analysis of the artworks of several contemporary Arab artists and their use of the body as a means of expression. For example, he features Mona Hatoum's autobiographic artwork *Measures of Distance* (1988), which speaks of displacement, disorientation, estrangement and a tremendous sense of loss due to the separation caused by the bloody Lebanese civil war (1975-1990). I concur with Keiso that this work is a deeply powerful critique of the ways in which women's bodies are often objectified and commodified in Arab society and a testament to the resilience and strength of women in the face of oppression and violence. Through Hatoum's use of personal and intimate images and texts, Hatoum creates a powerful sense of connection and empathy with her mother, sharing this experience of longing and loss with the viewer. The work reflects the experiences of many Arab women displaced or separated from their families due to conflict, political oppression, or economic hardship. It also, as Keiso argues, challenges the traditional norms and expectations around the representation of Arab women's bodies in art. Furthermore, by overlaying the images with handwritten Arabic letters, Hatoum creates a sense of intimacy often absent from traditional representations of Arab women's bodies. This also highlights the cultural specificity of the work, emphasising the importance of language and cultural identity in the representation of the body.

Figure 1: Captured images from 'Measures of Distance' (Daily Motion, 2007).



One potential weakness regarding Keiso's argument could be the lack of consideration of the broader socio-political context in which Hatoum's work was created. While Keiso does discuss the personal and emotional aspects of the work, he does not delve deeply into the historical or political

context that informed Hatoum's artistic choices. The work was created during the height of the Israeli-Palestinian conflict, and Hatoum's family was forced to flee their home in Beirut due to the conflict. This broader context undoubtedly played a significant role in shaping the themes and imagery of this work, and a more in-depth analysis of this context could provide a deeper understanding of the work's meaning and significance. Additionally, although Keiso does discuss the ways in which the work challenges traditional societal norms and expectations around women's bodies and sexuality, he has not benefited from a more intersectional analysis that takes into account the ways in which these issues intersect with other forms of oppression, such as race, class, and nationality.

Furthermore, Keiso's argument focuses primarily on the personal and emotional aspects of the work and neglects the formal and aesthetic qualities of the installation. While Keiso briefly mentions the use of video and sound in the work, he does not delve deeply into the formal elements of the installation, such as the composition, lighting, and camera angles. A more thorough analysis of these formal elements could provide a deeper understanding of how the work functions aesthetically and creates meaning beyond the personal and emotional themes that Keiso focuses on. Finally, a more comparative analysis of the work of other contemporary Arab artists working with similar themes and techniques could have been beneficial. This could have given a more in-depth analysis of how Hatoum's work fits within the larger context of contemporary Arab art, providing a more nuanced understanding of the work's significance and impact.

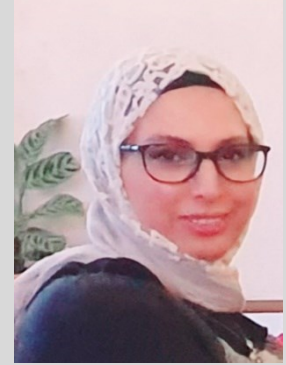
Keiso's use of precise language, an empathetic tone, and a dynamic style contributes to the overall effectiveness of his argument by making complex ideas and arguments more approachable and relatable for a general audience. The academic rigour, personal connection, and engaging style make the book compelling and thought-provoking. Numerous images of artworks illustrate and illuminate the ideas presented in the text. Personal anecdotes and stories also add a humanising and relatable dimension to the book, making it more accessible and engaging for the reader.

Despite its few limitations, *The Body in Twilight* offers a nuanced and thought-provoking look at the role of contemporary Arab art in addressing some of the most pressing social and political issues of our time. This appears to be written in the hope that Arab and international scholars will take greater account of contemporary Arab art in their future research and publications.

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Raad Khair Allah is a PhD candidate at the Faculty of Arts/ Department of English and Comparative Literary, University of Warwick, UK. Her thesis title is 'Contemporary Arab Women Writers, Filmmakers, and Artists in an International Frame'. Her research interests include Women's Studies, Gender, Feminism, Sexuality, War and digital humanities. She is also a Senior Teaching Assistant at the Faculty of Arts/ Department of English Literary Studies and a former member of the seminar series organising committee at CSGW/Center for the Study of Women and Gender at the same institution. She was shortlisted for the Paula Svonkin Creative Art Award at the Pacific Ancient and Modern Language Association (PAMLA) conference in Los Angeles, USA, 2022 for her project on the use of Miro software in Humanities titled "Marginalization of Arab Women and Revolutionizing Patriarchy". Prior to joining the University of Warwick, she worked as an English lecturer at Damascus University (part-time, 2009-2012) and the Syrian Private University (full-time, 2014-2018).



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ⁱ Fassih Keiso is known for his video, photographic, installation and performances. He was born in Syria, migrated to Australia in 1993, currently lives between Damascus and Melbourne. Having dual citizenship and dual culture, Keiso developed a dual perspective in his artworks and themes. As an interdisciplinary artist, his work spans cross cultural genres, employing a variety of materials and techniques. He focuses on cultural polarity, the diaspora, migration, dislocation and global political warfare. In the past few years, Keiso's inspiration has derived from the cultural contexts of his home country of Syria, largely shaped by issues relating to colonialism, war and post-colonial trauma. His most recent subject matter spans the destruction of archaeological heritage as an outcome of the ongoing conflict in Syria.

ⁱⁱ The Arab Spring was a series of protests and uprisings that began in Tunisia in December 2010 and quickly spread to other countries in the Middle East and North Africa, including Egypt, Libya, Syria, and Yemen. The protests were largely driven by a desire for political and economic reform, as well as greater social justice and democratic participation.

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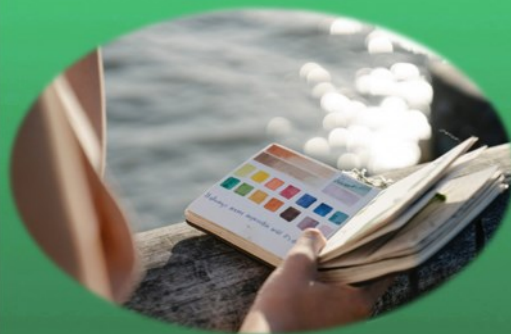
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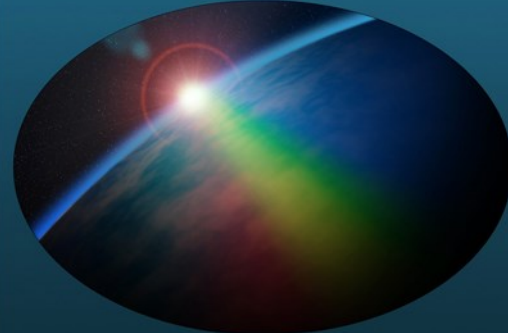
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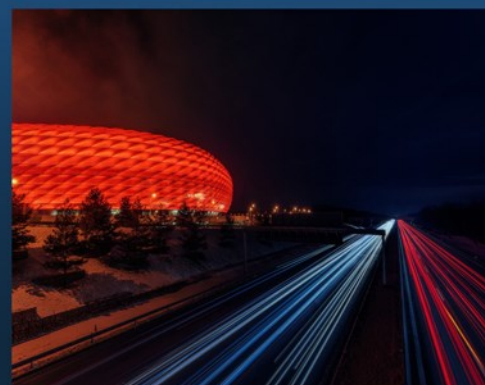
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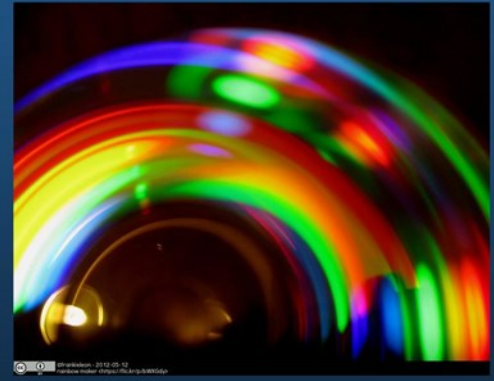
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Prof. Randy Schekman

THE UNIVERSITY OF
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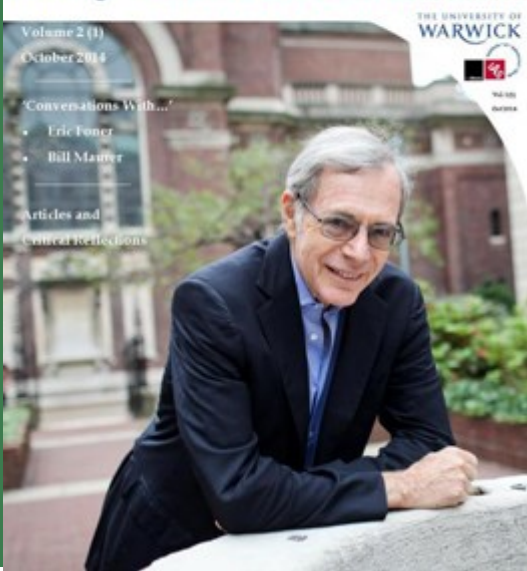


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