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'AUTOMATION IN SOCIAL SECURITY: IMPLICATIONS FOR MERITS REVIEW?'

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I INTRODUCTION

Tribunals and their membership are no island insulated from the incoming tsunami tides on the technological sea. Information technology, and specifically artificial intelligence('AI'), is just the most recent technological advance to wash up on tribunal shores: AI is the 21st century's equivalent of the 1961 IBM golf ball electric typewriter, or the Osborne laptop of 1982.

Merits review is or will be impacted by AI in two main ways. First, in changing the way disputes present themselves for adjudication (changing their 'decisional character' and their 'evidentiary form'). Second, in altering the way tribunals 'hear' and 'decide' those disputes. In social security the first has long been present, though recently has become more complicated; while the second — as for other Australian tribunals — lies in the future, if perhaps a nearer future than many may appreciate.

As is obvious, then, AI embraces everything from its initial hints in the electric typewriter, through mere 'digitisation' (ie computerisation of records) and current use of algorithmic (but merely automated) expert system decision-making, on to its emergent and precocious 'newest kid on the block' — 'machine-learning' algorithms and big data-sets, able to 'best' and thus replace human decision-makers. In social

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Further, Terry Carney, 'Automating Australian Social Security: Boon, bane or just bungled?' a paper to be presented at ANU Public Law Weekend "Technology, Public Law and Public Administration" Canberra, 1 November 2019.

security, digitisation of records ramped up around a decade ago; this was when the paper records of claims, Centrelink letters or other documents were transferred to or created as computer records. Paper records were kept only to meet proof of identity and the needs of dinosaurs like the courts (eg for fraud prosecutions). Or (for a time) to service merits review bodies.² As robo-debt illustrates, *automated* algorithmic decision-making, drawing on long-standing provisions deeming the outcomes to be a 'decision' for review purposes, is now operating on a large scale in some Centrelink settings (over half a million robo-debts raised since mid-2016). Machine learning properly so-called, however, currently remains largely in the design or pilot stage (Carney 2019a).

Merits review by the now Social Services and Child Support Division of the AAT ('AAT1'; previously the SSAT, pre-amalgamation) has long had to grapple with review applications which present as an often very brief and sketchy authorised review officer's reasons for decision, supported by reams of what look like 'computer print outs' — looking this way because that is exactly what they are. Under neoliberal governance pressure of fiscal starvation, the AAT1 and its predecessor have almost completely abandoned multi-member panels, compressed hearing times, and increased the numbers of oral decisions (Carney and Bigby 2018); but to date AAT1 has not embraced either ADR in social security (due partly to legislative limitations³) or online dispute handling.

The principal driver of adoption of AI, whether in decision-making or in merits review processes, is of course the economic efficiency principle (eg, Palmgren 2018: 19-20). Thus Centrelink's online compliance initiative ('OCI', popularly known as robodebt) is projected to yield massive savings (up to \$3.7 billion over budget out-years) by

Thus the 2012-13 Annual Report of the Department of Human Services wrote that 'In 2011-12 the department created 233 837 paper customer files. As a result of digitisation, in 2012-13 we significantly reduced the number of new paper files created to 1086': p 248.

This would be rectified under measure 30 of the Callinan Report: Callinan, Hon IDF, 'Report: Review: section 4 of the Tribunals Amalgamation Act 2015 (CTH).' Canberra: Attorney-General's Department Australia https://www.ag.gov.au/Consultations/Documents/statutory-review-tribunals-act-2015/report-statutory-review-aat.pdf (December 2018, published July 2019), para 1.32.

capturing the 93% of ATO supposed data-match discrepancies⁴ previously not personally investigated by Centrelink officers because it was uneconomic to do so (further, Carney 2018a: 10). For its part, online dispute resolution is portrayed as not only more efficient but also as a major boon in widening access to justice (Palmgren 2018: 18-19, Cortes 2018), just as oral decisions are touted as promoting greater participation in or respect for the justice of outcomes. Yet there are always other actual or supposed objectives and benefits in play, which may out rank efficiency. Rigorous independent policy accounting of all such factors, however, has been neglected to date.

As discussed below, these social policy assessments of net outcomes are more complex and nuanced than mere superficial consideration of one or a few goals. For instance, discrimination against citizens who are technology poor is evident in many settings. It is seen in Centrelink's OCI robo-debts in the inability of some citizens to find and upload documents, in their lack of or unreliable technology and web connections, and in more subtle 'lock-in deflection' of citizens from appreciating the existence of or having the stamina to then utilise independent review avenues. And it is serious concern in online dispute resolution (Wing 2017).

Vulnerabilities for social security recipients include but of course are not limited to these issues of lack of tech confidence, or on-line stamina (Carney 2018b). Some of the issues and challenges in both of these fields will now be outlined in turn.

II ONLINE CHANGES TO THE CHARACTER OF REVIEW MATTERS

Online administration is a deliberately compendious term, intended to capture the variety of ways AI can impact what I earlier called the 'decisional character' or 'evidentiary form' of the matters presenting for merits review.

The so-called 'match' is of quite *incommensurate* data-types: ATO fortnightly averages of *supposed* income derived from total earnings of all employment, against the accuracy or otherwise of the fortnight by fortnight *actual* earnings as reported by the person as the basis for their legal rate entitlement. Further,

Terry Carney, 'The New Digital Future for Welfare: Debts without legal proofs or moral authority?' (2018) UNSW Law Journal Forum 1-16.

A. Computational 'jargon in' equals computational 'jargon out'?

For decades the bulk of the information in Centrelink 'files' has been presented in digital form, such as ADEX or Multi-Cal rate and debt calculation records; as the raw unformatted input fields used to generate actual Centrelink correspondence (but not the letter itself); and as 'file notes' keyed to screen, often using shorthand codes for events and transactions. The AAT now receives all these papers electronically (including the review officer's decision statement), printing off paper copies of them for despatch to the applicant and the tribunal member in advance of the hearing. These are a challenging read, even when Centrelink has put the print-outs into chronological order and grouped the material (eg by putting all letters, and all debt calculations together).

Establishing whether a person had received sufficiently full information in a letter about, say, a rate reduction now being challenged beyond the elapse of the automatic arrears correction period,⁵ always involved establishing the date of the advice letter and the actual words of advice generated to determine if it is sufficiently fulsome at law.⁶ Locating this information within the morass of verbiage and codes now is particularly challenging; it is 'buried-away' in unformatted data strings, since no formatted copy of the actual letter is stored or provided (though of course Centrelink could readily produce one by re-running the input information). File notes likewise not infrequently present not as a record just for each opening date of the record 'segments' appearing on the page, but with easily overlooked later annotations tucked away within each of these text blocks (calling for very close scrutiny to establish accurate event time lines). Tucked away in this material may be broader textual observations, crucial to understanding earlier or later events, or corroborating the version of events being advanced by an applicant.

Social Security (Administration) Act 1999 ss 109(1) [unlimited arrears if no adequate 'notice'], 109(2) [arrears of up to 13 weeks if challenged within that period of receipt of notice, otherwise only from date of correction].

The requirements to constitute adequate notice are set out in cases such as Secretary, Department of Family & Community Services v Rogers [2000] FCA 1447 Cooper J at paras [33]-[34]; Austin v Secretary, Department of Family and Community Services [1999] FCA 938, (1999) 92 FCR 138.

Some AAT1 members dispense with the AAT registry's paper print-off of file documents at hearings. Instead they bring only their tablet or laptop and rely on pdf 'tagging' and colour highlighting of the electronic-file forwarded to the tribunal. I remain unpersuaded of the justice or wisdom of this however. Too often in the course of a hearing a comment would be made that jogged my memory of something I'd marked in my papers and was then able to locate manually while talking to the applicant. This enabled me to introduce that information into the conversation for confirmation or otherwise. This is simply not possible by scrolling through what not uncommonly may be several hundred pages or more 'on screen' (a thousand or so pages in some cases).

AI initiatives such as fully electronic hearing papers, then, would come at a cost to the quality of justice.

B. Contextual features matter?

The evidentiary form of presentation of a merits review issue to AAT1 is indeed shaped by AI (as later explained) but regard must always be had to the other factors at play within the overall procedural and decisional context.

The history of social security merits review offers a classic example here. To channel Donald Rumsfeld on his 'unknown unknowns', the operational structure of the predecessor tribunal to AAT1 (the Social Security Appeals Tribunal 'SSAT') in the decades before being readied for amalgamation, enabled it routinely to discover such unknowables. For example that Centrelink had mistakenly recorded a client's required advice of their income in the wrong place (eg under family payments rather than the working age payment to which it actually related; now an impossibility because FTB papers would no longer be provided to AAT1). This was do-able because the SSAT for most of its life received *all* the file papers, not just those deemed relevant to the decision by Centrelink; and because it also had access to the Centrelink mainframe computer (helped further by members or support staff with knowledge of its multiple acronym

codes and processes⁷). That was all lost when mainframe access was cut off and only the section 37 'T document' papers forwarded, consistent with AAT processes in its other jurisdictions. In the result, the former SSAT's more extensive practical powers of inquisitorial inquiry were diminished in the interests of AAT uniformity and independence from the agency being reviewed. No longer can unknown unknowns be detected on review. Absolute purity of principle has its price.

Shifting to an AI context likewise changes the evidentiary *form* of the way issues present. For instance AI generated decisions may lack the 'explainability' quality (of giving reasons). Retention of this quality is insisted on under EU law, but it is not guaranteed elsewhere (Olsen et al. 2019).⁸ The most pertinent of contemporary examples of this within Centrelink is its development of a number of smart-phone app interfaces. These apps deliver information about payments, downloadable letters, advice about future appointments, and enable recipients to upload any required documents or information.⁹ The undoubted convenience and other benefits of such technology for the many, nevertheless comes at a cost. It comes at the price of blurring the way 'decisions' are made (now made 'virtually' in response to data flows) and changes the very geography of governance of clients — shifting its location from being transacted at or in contact with a Centrelink office, into the 'virtual' space (Sleep and

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The Callinan Report regrettably demonstrated little understanding of the skill set required of competent AAT members, or of their legitimate support needs from staff at and under member direction; instead opting for what I may term a 'judicial' model where a monopoly of legally qualified members would decide everything on a more adversarial than inquisitorial basis: Callinan, n 3, paras 1.8 [measure 6], 8.20, 10.34.

This is not the place to rehearse the major differences between Australian and European macro-level models of accountability for administrative action, beyond noting that investing principally in administrative courts in many EU countries elevates the importance of having reasons against which legality can be tested, while Australia's administrative review on the merits (stepping into the shoes of the primary decision-maker) renders reasons otiose: further, Michael Asimow, 'Five Models of Administrative Adjudication.' (2015) 63(1) American Journal of Comparative Law 3-31.

This, rather than say Centrelink failures to comply with protocols for what should be contained in reasons for the decision under review, remains most pertinent because AAT review is de novo and even if no or the wrong lines of reasoning are deployed, the decision generates its own 'presumed' grounding in the correct sub-set of reasoning possibilities.

Tranter 2017: 506). They also raise other challenges to traditional protections of rights of citizens (Henman 2019).¹⁰

Another case in point is the ParentsNext ('PN') program for sole parents at risk of long-term dependence. This was piloted in 2016 and rolled out nationwide in July 2018 at the same time as a revamped Targeted Compliance Framework ('TCF') for all working age social security recipients. PN targets clients in receipt of Parenting Payment for more than six months without receiving income from employment and with a child under 6 years. The reformed TCF now commendably fosters compliance mainly by suspending and then restoring payments with back-pay on compliance, reserving actual rate reductions or non-payment periods for those few 'wilfully' doing the wrong thing. However both PN and TCF have heavily embraced digital (e.g. smartphone) technology. Smart phones are the preferred mode of contact for reporting compliance (to be notified 'on the day') and communicating a person's compliance status (a 'traffic light' system for alerting being at risk of or in actual breach status). Associated with this, under their contract for service provision, the operational responsibility for coding the acceptability 11 or otherwise of reasons for non-compliance has been shifted entirely to the job matching agencies. Moreover, rather than being in the hands of skilled agency caseworkers (or passed on to a Centrelink delegate with a provider recommendation) the task is entrusted to front-desk clerical staff. This is because it is now 'constructed' as a checklist exercise against a list of standard excuses. It is further compounded by default rules allocating clients onto digital reporting without adequate assessment of their digital literacy or capacity to comply (giving rise to a state-generated liability to fail to comply).

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See for example, Paul Henman, 'Of Algorithms, Apps and Advice: Digital social policy and service delivery.' (2019) 12(1) *Journal of Asian Public Policy* 71 at 74-75 ['street-level' bureaucracy becomes 'screen-level' bureaucracy], 76-77 [some fundamental provisions of accountability were transformed under robo-debt].

The ultimate *legal* responsibility for determining acceptability of an excuse for a 'mutual obligation' or a 'work refusal' failure (as participation events are now labelled) remains that of a Centrelink delegate and is incapable to being delegated to an outside body: *Social Security (Administration) Act* 1999 ss 42AI [reasonable excuse], 42AJ [excuses must pre-date the activity requirement unless there are reasonable grounds for not doing so].

This all poses a host of new challenges for clients and AAT members (in deciding whether subsequent sanctions should be upheld or otherwise). For clients there is the anxiety and loss of confidence in review processes due to their inability formally to challenge notifications of the 'default points' building towards the trigger points for suspension or loss of payment. For tribunal members there are the difficulties of ascertaining whether document uploads or compliance notices and activities failed for technical reasons such as a drop-out, or were not ever actually initiated in the first place (generally, Casey 2019).

C. The powers and procedures of the tribunal matter

Of course the overall array of legislative powers within the review system design also has some part to play in accommodating the additional 'adjudication complexities' around AI, as now sketched.

Automated decisionmaking is fully legitimised in social security, unlike the NDIS where automated 'casework' decisions would be much more problematic (for elaboration, Carney et al. 2019). It is legitimised in social security by 'deeming' computerised decisions to be reviewable 'decisions', just as is the case for those involving human input.¹³ AAT review powers when dealing with rate and debt decisions fortuitously however are ample ones. It was the challenge of performing very

Unreviewable because the points in isolation do not result in an 'operable' decision but instead are simply steps along the path towards one, and thus have not matured to the stage of becoming a reviewable 'decision' as defined in *Australian Broadcasting Tribunal v Bond* (1990) 170 CLR 321.

This has been the case since 2001, though in 1999 general authority was given to make or record a decision by computer, and from 1989 to that date, to 'record' it by computer: Will Bateman, 'Automatic Public Law.' a paper presented at "Public Law Weekend" — Centre for International and Public Law, ANU, Canberra, 3 November 2018. Equivalent provisions of the *Social Security Act 1991* covering automatic rate adjustment or cancellation decisions existed earlier, such as s 75A:

⁷⁵A If:

⁽a) a person is receiving an age pension on the basis of data in a computer; and

⁽b) the pension is automatically terminated or the pension rate is automatically reduced by the operation of a provision of this Act; and

⁽c) the automatic termination or reduction is given effect to by the operation of a computer program approved by the Secretary stopping payment or reducing the rate of payment of the pension;

there is taken to be a decision by the Secretary that the automatic termination or rate reduction provision applies to the person's pension.

complex rate calculations (a product of a highly targeted system of payments) which led to empowering the AAT either itself to 'assess' a rate of payment when one is overturned, or to direct Centrelink to do so. 14 This proved necessary even though we deliberately rewrote the Social Security Act in 1991 so that, for the first time, it became possible for very patient citizens to calculate their rate of payment by following the 'steps' of the relevant rate calculators. Anyone familiar with the complexity of the reams of pages of Multi-Cal 'long form' rate calculations would understand why referral back to Centrelink is virtually always chosen by the tribunal. Absent this power, cases involving a rate determination quite simply would have become impossibly hard for the AAT to resolve.

In short, the powers and procedures with which the adjudicative tribunal is furnished are a critical component of its capacity to accommodate complexity such as that introduced by AI.

D. Machine learning is a different order challenge?

The largest challenge however is surely the one looming on the horizon: that of machine learning.

This is not the place for a definitive analysis of the benefits and potential difficulty posed by machine learning algorithms. Algorithms characterised both by their ability to *replicate* complex human decision-making and then adaptively to 'learn' how to do even better. A 'besting' of human systems not only on cost and reliability but also on 'quality', thus making their rapid adoption inevitable. So the task is to ensure machine learning is well designed (as robo-debt demonstrably was not, even though only a simple automation system) including its compliance with principles of legality, transparency and procedural fairness; and by rendering its decisions capable of review. Transparency of decision-making is of course critical to both of these objectives. Yet it is very challenging to achieve (Williams 2018: 4).

Now Social Security (Administration) Act 1999 s 177(a)(b) [previously s 149(2)(3) of that Act but originally Social Security Act 1991 s 1253(2)(a)(b)].

The EU (and thus presently the UK) applies the solution of requiring citizens to be advised when the decision lacks any human element and to have the right to request a human decision for a period of time after being advised of this (Veale and Brass 2019: 19). However this may prove to be an empty protection because, it has astutely been suggested, the human being will often simply defer to and confirm the complex computer-made outcome (Olsen et al. 2019: 4). Susan Morse for her part places store in hastening slowly. She speculates that, when unable to offer full transparency or confidence, governments will adopt a 'precautionary' approach of *undershooting* the potential legal mandate, confining machine learning to the 'safe' zones (Morse 2019). Surely a somewhat heroic assumption for Australia, given the unchecked robo-debt experience driven by maximising revenue yields (Carney 2019b).

Yet it is also important to remain grounded, and not attribute magical differences to machine learning (however mathematically complicated the weightings and algorithms) as compared to human decisions. As Olsen and colleagues recently so pithily put it, 'we argue that the inner workings of an algorithm is not what is in need of explanation, but rather, the human interaction with the *output* of the algorithm' (Olsen et al. 2019: 10). In an Australian merits review context, this boils down to whether the person understands the basis for the decision and the information taken into account in making it.

III ONLINE JUSTICE CHALLENGES

The previous section has identified a number of significant implications of AI regarding the ability of merits review, and tribunal members, to do 'justice' to applicants and themselves. However the 'digital' if not the 'virtual' tribunal may not be far away in merits review, given a recent spate of interest in and experimentation with online dispute resolution ('ODR'; further, Cashman and Ginnivan 2019).

In September 2018, VCAT engaged a firm called MODRON¹⁵ to run a small one month pilot of online dispute resolution of small claims, ¹⁶ with a view to a possible full roll-out in 2022 (Hendry 2018, Cashman and Ginnivan 2019: 42-43). Two months later, Churchill Fellow Katarina Palmgren's study report recommended, among other things, that Victoria '[e]stablish [an] online court as a division of the Magistrates' Court of Victoria with the jurisdiction to deal with low value civil claims up to \$10,000' (Palmgren 2018: 51, rec 2). As Palmgren reports, British Columbia Canada has a fully integrated online Civil Resolution Tribunal (further, Salter 2017, Cashman and Ginnivan 2019: 43-44),¹⁷ while similar but bolder proposals have been made for the UK (Palmgren 2018: 9) including the English, Civil Money Claims Online (Cortes 2018: 105, 113-118), along with other initiatives globally (Cashman and Ginnivan 2019: 43-47). Although ODR presently shrinks or attenuates rather than completely replaces the role of human adjudicators (such as by channeling parties into AI assisted self-managed settlements or conciliations or supplementing human adjudication), the shift away from human oversight is both very real (Sourdin 2018) and is 'trending' under the press for fiscal savings.

One of the many other choices in designing ODR is between court-oriented (ie parallel with paper-based adjudication) as in the Dutch Rechtwijzer for family divorce disputes (Smith 2018), and an 'integrated' or mainstreamed model as in BC Canada (as favoured by Palmgren). One of the bugbears with parallel systems is working out the gate-keeping between the electronic and the traditional pathways, with concerns expressed about too few (or even too many) entering the online justice arm. Volume of business of course is a very crude measure that conceals the value stance of the

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See https://www.modron.com/solutions_courts_tribunals.

VCAT's summary of the pilot reported: '65 cases using the technology, with 71 parties participating in online hearings and 21 cases settled beforehand, an indirect result of online dispute resolution case management showing that online dispute resolution is a fast, cost-effective option for people with civil disputes at VCAT': https://www.vcat.vic.gov.au/news/sharing-vcats-online-dispute-resolution-experience.

¹⁷ Hangzau China is another to be mentioned: https://www.nortonrosefulbright.com/en/knowledge/publications/71e0aa1e/online-dispute-resolution-and-electronic-hearings.

evaluator. For example the Dutch opt-in scheme was said to have drawn 'too few' customers, an outcome put down to the available options being too blunt and the time for deciding whether to opt in too pressured. But it surely is a concern if too many of the more vulnerable citizens opt into on-line justice systems lacking the presence of a face-to-face hearing to detect indicators of distress, lack of comprehension of proceedings, or other cues of inadequate participation. Mandating online justice options as standard parts of the process, as under an integrated model, certainly deals with caseload volume concerns, but it does not necessarily tackle such arguably much more important *compositional* equity concerns in the caseloads, or the many other justice system values in play (for a thorough review, Cashman and Ginnivan 2019: 47-61). ¹⁸

Of course similar compositional equity issues already crop up with the use of oral decisions or other more traditional procedural variations to hearings. Variations likewise often driven by neoliberal governance policies leaving the machinery of justice inadequately funded. For better or worse, these measures at least remain firmly in the hands of tribunal members rather than left to choices made by potentially vulnerable applicants themselves (as in parallel online justice) or being designed into the justice system (as in an integrated online justice model). I say for better or worse because members are not necessarily good judges of such matters. Prone to over-estimating their competence to dispense the same quality of analysis and reasoning when delivering ex tempore decisions compared to putting themselves to the discipline of writing (and the reflection that this entails). Or under-estimating the conscious or unconscious temptation to simply let self-interest dictate the picking of the less onerous option. So once again the policy balances are more complicated and nuanced than is obvious on a more superficial consideration, whether we are looking at the rather 'luddite' present or the more technologically 'utopian' future. Addressing these challenges of ODR futures will test us all, but they cannot be avoided. For otherwise it

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Administrative justice goals and values include 'openness, confidentiality, transparency, secrecy, fairness, efficiency, accountability, consistency, participation, rationality, equity and equal treatment', as well as human rights, discrimination, proportionality and 'manageability': Ibid, 11-12.

is surely true that '[w]ithout international standards, monitoring and global, cross-jurisdictional regulation of ODR, [risks] the software designer becoming a gatekeeper for access to justice' (Wing 2017: 19).

Yet in taking responsibility for ODR design rather than letting software designers set the values and principles, it is important not to over egg either present arrangements or their futurist technological alternative. Both are policy options. Both have merits and deficiencies. Nearly 70 years ago Alan Turing proposed pitting purely human and purely AI decision-making (and by implication decision review) to a blind face off. A blind face off before a jury of human beings who, without knowing which decision path was which, would assess the quality and acceptability of outcomes of the human and the AI processes. Without formalising this test (as intriguingly is proposed by Olsen, 2019: 25-26), we should at least adopt this as one key benchmark. As Cashman and Ginnivan (2019: 61) demonstrate, for all their attraction of speed, cheapness, efficiency and user satisfaction, '[I]n the design and implementation of such platforms, important objectives in terms of access to justice, open justice and procedural fairness need to be accommodated'.

IV CONCLUSION

Leah Wing rightly notes, '[t]he ways in which we design ODR systems and manage data within them are central to whether they magnify the risk or the opportunities for access to justice' (Wing 2017: 17). I have made the same point about AI, including sophisticated machine learning algorithms, within social security administration (Carney 2019b). In one sense it is trite to say that sound design is the difference between acceptable and unacceptable uses. Robo-debt for instance surely would not have been so problematic had it been designed in accordance with the principles laid down by the Administrative Review Council in 2004 (Administrative Review Council

2004),¹⁹ or had that oversight body not been 'unlawfully' purportedly wound up, as Callinan found (2018/19: para 1.27).

However social security is rather special in one important way. Citizens subject to primary decision-making by Centrelink (whether by human hand or by AI) and those aggrieved clients who turn to the AAT for merits review, are disproportionately comprised of vulnerable individuals, whether due to age, location, human capital resources, mental illness, education, or other markers (Carney 2018b). That is why very *particular* attention needs to be paid to avoiding discrimination either in primary decision-making or on review. Attention that is of course equally required in other settings where vulnerable client populations are served by review, including consumer claims, adult guardianship and mental health, to name but three.

In doing so, we need to be mindful of some wider or longer term issues, including that AI ultimately sings from a different, more didactic song sheet to the more discretionary justice administered by human beings. So although social security law has already lost much of its discretionary flexibility, a 'slower burn' risk remains. This is the risk that over time '[c]omputerisation is apt to *change the nature of an administrative process*, translating public administration from a person-based service to a dehumanised system where expert systems replace officials and routine cases are handled without human input.' (Harlow and Rawlings 2019: 19-20 [my emphasis]). There is also a synergistic risk. The phenomenon where AI decisions and ODR tribunals come to constitute a mutually reinforcing adaptive spiral, slowly ousting any vestiges of more equitable adjudication associated with traditional pathways (further, Re and Solow-Niederman 2019: 5).

If followed there would have been no doubt about the legality of all debts raised. It would have resulted in a two stage process, where data matches led to the perfectly reasonable invitation for alleged debtors to upload or otherwise provide fortnightly pay slips or bank records. But when unavailable or not provided for whatever reason, under stage two Centrelink would have continued to bear the legal responsibility of obtaining fortnightly data (using its powers to require employers or other institutions to do so) essential to meeting its onus of proof obligation.

However all this is already well in the wind. What is canvassed in this paper are some of the ways of further augmenting already disturbing winds of cultural change blowing through the AAT (Lucy 2017), including the way ADR and other initiatives may deteriorate rather than improve the quality of decision-making or distort access to justice (Donoghue 2017).

References

- Administrative Review Council. 2004. "Automated Assistance in Administrative Decision Making." Canberra: Administrative Review Council https://www.arc.ag.gov.au/Documents/AAADMreportPDF.pdf.
- Callinan, Ian Hon. 2018/19. "Report: Review: section 4 of the Tribunals Amalgamation Act 2015 (CTH)." Canberra: Attorney-General's Department Australia https://www.ag.gov.au/Consultations/Documents/statutory-review-tribunals-act-2015/report-statutory-review-aat.pdf.
- Carney, Terry. 2018a. The New Digital Future for Welfare: Debts without legal proofs or moral authority? *UNSW Law Journal Forum* (March): 1-16.
- Carney, Terry. 2018b. "Vulnerability: False hope for vulnerable social security clients?" *University of New South Wales Law Journal* 41 (3):783-817 [Advance: http://www.unswlawjournal.unsw.edu.au/wp-content/uploads/2018/09/CARNEY-Advance-Access.pdf].
- Carney, Terry. 2019a. "Automating Australian Social Security: Boon, bane or just bungled?" a paper presented at ANU Public Law Weekend "Technology, Public Law and Public Administration" Canberra, 1 November.
- Carney, Terry. 2019b. "Robo-debt Illegality: The seven veils of failed guarantees of the rule of law?" *Alternative Law Journal* 44 (1):4-10.
- Carney, Terry, and Christine Bigby. 2018. "Social Security and Welfare Rights What role for social work?" In *Social Work in the Shadow of the Law*, edited by Simon Rice, Andrew Day and Linda Briskman, 361-388. Sydney: Federation Press.
- Carney, Terry, Shih-Ning Then, Christine Bigby, Ilan Wiesel, and Jacinta Douglas. 2019.

 "National Disability Insurance Scheme Decision-making: Or when tailor-made caseplanning met Taylorism and the algorithms?" *Melbourne University Law Review*42 (3):Advance (available at https://law.unimelb.edu.au/mulr/issues/forthcoming-issue).
- Casey, Simone. 2019. Social Security Rights and the Targeted Compliance Framework. Social Security Rights Review February.
- Cashman, Peter, and Eliza Ginnivan. 2019. "Digital Justice: Online Resolution of Minor Civil Disputes and the Use of Digital Technology in Complex Litigation and Class Actions." *Macquarie Law Journal* 19:39-79 [Available at SSRN: https://ssrn.com/abstract=3415229].
- Cortes, Pablo. 2018. "Using Technology and ADR Methods to Enhance Access to Justice." *International Journal of Online Dispute Resolution* 5 (1/2):103-121. doi: 10.5553/IJODR/235250022018005102011.
- Donoghue, Jane. 2017. "The Rise of Digital Justice: Courtroom Technology, Public Participation and Access to Justice." *Modern Law Review* 80 (6):995-1025.
- Harlow, Carol, and Richard Rawlings. 2019. "Proceduralism and Automation: Challenges to the Values of Administrative Law." In *The Foundations and Future of*

- *Public Law*, edited by Elizabeth Fisher, Jeff King and Alison Young, forthcoming. Oxford: OUP.
- Hendry, Justin. 2018. "Victoria Looks to Settle Legal Disputes Online" *ITNews*, 10 September. https://www.itnews.com.au/news/victoria-looks-to-settle-legal-disputes-online-512159.
- Henman, Paul. 2019. "Of Algorithms, Apps and Advice: Digital social policy and service delivery." *Journal of Asian Public Policy* 12 (1):71-89.
- Lucy, Juliet. 2017. "Merits Review and the 21st Century Tribunal." *Australian Journal of Administrative Law* 24 (2):121-139.
- Morse, Susan C. 2019. "When Robots Make Legal Mistakes." *Oklahoma Law Review*:Forthcoming. Available at SSRN: https://ssrn.com/abstract=3340103.
- Olsen, Henrik Palmer, Jacob Livingston Slosser, Thomas Troels Hildebrandt, and Cornelius Wiesener. 2019. "What's in the Box? The Legal Requirement of Explainability in Computationally Aided Decision-Making in Public Administration " University of Copenhagen, iCourts Working Paper Series No. 162, 2019 Available at SSRN https://ssrn.com/abstract=3402974
- Palmgren, Katarina. 2018. "Use of Online Dispute Resolution to Resolve Civil Disputes."

 Canberra: Winston Churchill Memorial Trust

 https://www.churchilltrust.com.au/media/fellows/Palmgren_K_2017_Use_of_online_dispute_resolution_to_resolve_civil_disputes.pdf.
- Re, Richard, and Alicia Solow-Niederman. 2019. "Developing Artificially Intelligent Justice." *Stanford Technology Law Review*: forthcoming [Available at SSRN: https://ssrn.com/abstract=3390854].
- Salter, Shannon. 2017. "Online Dispute Resolution and Justice System Integration: British Columbia's Civil Resolution Tribunal." *Windsor Yearbook of Access to Justice* 34:112-129.
- Sleep, Lyndal, and Kieran Tranter. 2017. "The Visiocracy of the Social Security Mobile App in Australia." *International Journal for the Semiotics of Law-Revue internationale de Sémiotique juridique* 30 (3):495-514.
- Smith, Roger. 2018. "Online Dispute Resolution (ODR) and Access to Justice" *Law Technology and Access to Justice*, 1 May 2018. https://law-tech-a2j.org/odr/online-dispute-resolution-odr-and-access-to-justice/.
- Sourdin, Tania. 2018. "Judge v Robot? Artificial Intelligence and Judicial Decision Making." *University of New South Wales Law Journal* 41 (4):1114-1133.
- Veale, Michael, and Irina Brass. 2019. "Administration by Algorithm? Public Management meets Public Sector Machine Learning." In *Algorithmic Regulation*, edited by Karen Yeung and Martin Lodge, Ch. 6, in press. Oxford: Oxford University Press.

- Williams, Rebecca A. 2018. "Rethinking Deference for Algorithmic Decision-Making." Oxford Legal Studies Research Paper No. 7/2019, Available at SSRN: https://ssrn.com/abstract=3242482.
- Wing, Leah. 2017. "Artificial Intelligence and Online Dispute Resolution Systems Design: Lack of/Access to Justice Magnified." *International Journal of Online Dispute Resolution* 4 (2):16-20.