ADMINISTRATIVE LAW: REFORM OF THE BIAS RULE IN THE DIGITAL AGE

Artificial intelligence is changing government decision-making at an ever-increasing pace. Where governments wield decision-making authority over citizens, Ministers and executive agencies are increasingly using computer algorithms to automate the decision-making processes of millions of administrative decisions annually. Algorithmic decision-making is increasingly used to decide visa applications, welfare applications, taxation rulings, and other administrative decisions.

Where a decision is generated by an algorithm, it is becoming increasingly unclear how the decision is made, what information it is based on, who the decision-maker really is, and to whom that decision can be legally attributed. This raises questions of the transparency of the decision, impartiality and fairness, and where grounds of appeal may lie. This article examines the inherent biases programmed into decision-making algorithms, and argues that Australia's legal frameworks should embrace reform to uphold public confidence in the rule of law.

As technology outpaces the law by at least a generation, a research gap exists about the law which should encircle automated decision-making, and the outcomes where the decision is challenged in court. This paper cites examples from foreign jurisdictions to assist executive policymakers, academics and lawyers to understand the risks for Australia if reforms are not embraced, and suggests an alternative model law for the High Court to consider.

I INTRODUCTION

The administrative law rule against bias requires that an executive decision-maker must be, and be seen to be, impartial.[1] The rule against bias dates back centuries,[2] and is a cornerstone of public confidence in administrative law.[3] This paper will argue that reform is needed to accommodate emerging imputed biases inherent in computerised or algorithmic executive decision-making.[4]

A *Context*

Administrative law is premised upon the conceptual themes of the rule of law, that executive decision-makers must exercise their power within legal and Constitutional limits.[5] The rule of law posits that all people are equal before the law, and public officers who wield decision-making power on behalf of the people must be accountable to the law.[6] Government statutory decisions can be characterised as 'executive decisions of an administrative character.'[7]

Executive decisions of an administrative character are all those decisions, neither judicial nor legislative in character, which ministers, public servants, and government agencies make in carrying out Commonwealth statutes or schemes.[8] Examples include welfare applications, visa applications, and health directives.[9]

Representative and responsible government should impart public confidence, fairness, transparency, participation, impartiality, accountability, and access to grievance procedures.[10]

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[1] *Ebner v Official Trustee in Bankruptcy* (2000) 205 CLR 337 [6] (Gleeson CJ, McHugh, Gummow and Hayne JJ) ('*Ebner*').
[2] *Ebner* (n 1) 371 [111] (Kirby J); *Dr Bonham's Case* (1610) 8 Co Rep 113b; 77 ER 646; Lord Woolf et al, *De Smith's Judicial Review* (Sweet & Maxwell, 8th ed, 2018) 537-8 [10.008].
[3] Matthew Groves 'Clarity and Complexity in the Bias Rule' (2020) 44(2) *Melbourne University Law Review* 565, 569 ('*Groves: Bias Complexity*').
[4] Anna Huggins 'Addressing Disconnection: Automated decision-making, administrative law and regulatory reform' (2021) 44(3) *University of New South Wales Law Journal* 1048 ('*Huggins: Addressing Disconnection*').
[5] *Re Minister for Immigration and Multicultural Affairs; Ex parte Lam* (2003) 214 CLR 1 [72] (Gummow and McHugh JJ).
[6] *Hot Holdings v Creasy* (2002) 210 CLR 438, 467 (Kirby J) ('*Hot Holdings*').
[7] *Administrative Decision (Judicial Review*) *Act 1977* (Cth) s 3 ('*ADJR Act*').
[8] *Australian National University v Burns* (1982) 43 ALR 25; *Griffith University v Tang* (2005) 221 CLR 99*; ADJR Act* (n 7) s 3(1) (definition of 'enactment').
[9] Huggins, Anna, 'Executive power in the digital age: Automation, statutory interpretation and administrative law' in Janina Boughey and Lisa Burton Crawford (ed) *Interpreting executive power* (Federation Press Australia, 2020) 111, 111.
[10] *CNY17 v Minister for Immigration* (2019) 268 CLR 76, 98 [55] (Nettle and Gordon JJ) ('*CNY17*'); Mark Aronson, Matthew Groves and Greg Weeks, *Judicial Review of Administrative Action and Government Liability* (Thomson Reuters, 6th ed, 2017) 4.

Judicial review is an essential feature of liberal democracy, because it protects against arbitrary exercises of power.[11] Justice should be done, and be *seen* to be done.[12]

However, administrative law must balance *individualism* with *collectivism* – the protection of citizens' individual rights, and the efficiency of executive decision-making for society as a whole.[13]

II BIAS

Fair decision-making is enshrined in the 'rules of natural justice.' [14] 'Natural justice' obliges decision-makers to ensure that decisions which affect citizens' rights or interests are impartial.[15] The 'bias rule' is one rule of natural justice that requires 'fairness and detachment' in decision-making.[16] A breach of the rules of natural justice is a ground of judicial review of executive administrative decisions.[17]

A *What is bias?*

Bias is "inclination or prejudice for or against one person or group, especially in a way considered to be unfair."[18] Bias connotes the absence of impartiality.[19]

The rule against bias is founded upon the doctrine of *ultra vires*[20] ('beyond the power')[21] and aligns with administrative law values that restrict government decision-making power within

[11] Roger Douglas et at, *Douglas and Jones's Administrative Law* (The Federation Press, 8th ed, 2018) 624; Robin Creyke et al, *Control of Government Action: Text Cases & Commentary* (LexisNexis Butterworths, 5th ed, 2019) 287 ('*Creyke et al*'); AV Dicey, *Introduction to the Study of the Law of the Constitution* (10th ed, Macmillan, 1959) <187>-<196>.
[12] *R v Sussex Justices, ex parte McCarthy* [1924] 1 KB 256, 259 Lord Hewart CJ).
[13] *Creyke et al* (n 11) 5.
[14] *Re Minister for Immigration and Multicultural Affairs; Ex parte Lam* (2003) 214 CLR 1, 14 (Gleeson J); WB Lane and Simon Young, *Administrative Law in Australia* (Thomson Lawbook Co, 2007) 103; *Kioa v West* (1985) 159 CLR 550, 585 (Mason J), 601 (Wilson J) ('*Kioa v West*'); *Plaintiff S157/2002 v Commonwealth* (2003) 211 CLR 476, 490 [25] (Gleeson CJ); *Creyke et al* (n 11) 643.
[15] *Kioa v West* (n 14) 582 (Mason J); *Minister for Immigration and Border Protection v SZSSJ* (2016) 259 CLR 180; WB Lane and Simon Young, *Administrative Law in Australia* (Thomson Lawbook Co, 2007) 103; *Isbester v Knox City Council* (2015) 255 CLR 135, 146 [23] (Kiefel, Bell, Keane and Nettle JJ) ('*Isbester*').
[16] *CNY17* (n 10) 86 [16] (Kiefel CJ and Gageler J); *Isbester* (n 15) 146 [23] (Kiefel, Bell, Keane and Nettle JJ); *Plaintiff S157/2002 v Commonwealth* (2003) 211 CLR 476, 490 [25] (Gleeson CJ).
[17] *ADJR Act* (n 7) s 5(1)(a).
[18] *LexisNexis Concise Australian Legal Dictionary* (LexisNexis Butterworths, 4th ed, 2011) 59.
[19] *CNY17* (n 10) 97 [53] (Nettle and Gordon JJ); *Ebner* (n 1) 348 [23]).
[20] *Hot Holdings* (n 6) Kirby J, *Creyke et al* (n 11) 27.
[21] 'An act beyond the power or authority of a person, institution, or legislation' (*LexisNexis Concise Australian Legal Dictionary* (LexisNexis Butterworths, 4th ed, 2011) 591.

legal and constitutional limits.[22] The bias rule protects the public expectation of impartiality, ensuring that people over whom power is exercised *feel* that they have been treated fairly.[23]

The Australian Public Service values indoctrinate these principles[24] - being *impartial, ethical* and *accountable.*[25] These principles ensure transparency and public trust in modern democracies.[26]

B *Biases*

The High Court has subcategorised bias into *actual* and *apprehended* biases.[27]

Actual bias is assessed by reference to the *actual* views and behaviour of the decision-maker.[28] Actual bias occurs when a decision-makers' mind is so closed to persuasion that argument against that view is ineffectual.[29] This requires a serious adverse finding against the decision-maker, which courts may be reluctant to find.[30]

Apprehended bias is more commonly argued because the threshold is lower.[31] An apprehension of bias will be found 'if a fair-minded lay observer *might* reasonably apprehend that the decision-maker *might* not bring an impartial mind to the resolution of the question they are required to decide.'[32]

A third category of *imputed bias* should be introduced, where all or part of a decision has been automated by a computer system.

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[22] *Re Minister for Immigration and Multicultural Affairs; Ex parte Lam* (2003) 214 CLR 1 [72] (Gummow and McHugh JJ).
[23] *CNY17* (n 10) 97 [54] (Nettle and Gordon JJ); *Webb v R* (1994) 181 CLR 41, 53 ('*Webb*'); Justice Debbie Mortimer, 'Whose Apprehension of Bias?' [2016] AIAdminLawF 14; (Australian Institute of Administrative Law (NSW Chapter) Forum no. 84, Seminar 4, May 2016), [46].
[24] *Australian Public Service Commissioner's Directions 2016* ss 14, 16.
[25] *Public Service Act 1999* (Cth) ss 10, 13.
[26] Organisation for Economic Co-operation and Development (OECD), *Building Public Trust – Ethics Measures in OECD Countries*, Policy Brief No 7, September 2000, 32.
[27] *Webb* (n 23); *Ebner* (n 1); *Minister for Immigration and Multicultural Affairs v Jia Legeng* (2001) 205 CLR 507 ('*Jia Legeng*').
[28] Matthew Groves, 'The Rule Against Bias' [2009] UMonashLRS 10; (2009) 39(2) *Hong Kong Law Journal* 485 ('*Groves: The Rule Against Bias*').
[29] *Jia Legeng* (n 27).
[30] *Creyke et al* (n 11) 732; *Groves: The Rule Against Bias*' (n 28) 493.
[31] *Jia Legeng* (n 27) (Kirby J).
[32] *Ebner* (n 1)*; Jia Legeng* (n 27) (Kirby J).

III REFORM

This paper will argue:

(i) The bias rule should be reformed to accommodate a third, novel category of '*imputed bias*.'

(ii) The *Ebner* two-step test for raising and articulating bias is sufficiently versatile to remain the foundation test for claims of *imputed bias*.

(iii) The 'fair-minded observer' has become loosely-defined and requires reform.

IV 'IMPUTED' BIAS

A *Context*

Artificial-intelligence is changing society at a rapidly-increasing pace.[33] Government agencies are increasingly automating their decision-making processes to respond to the increased volume and complexity of the millions of administrative decisions made in Australia annually.[34] Automated decision-making systems raise ethical questions for administrative justice.[35]

Automated decision-making (ADM) occurs where a computer system is used to automate administrative decision-making processes.[36] An automated decision-making system (ADMS) is a computerised process which uses coded logic or algorithms to make all or part of an administrative decision.[37]

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[33] *Huggins: Addressing Disconnection* (n 4); Daniel Montoya and Alice Rummery, '*The use of artificial intelligence by government: parliamentary and legal issues*' (NSW Parliamentary Research Service Ebrief 02/20, September 2020) 1; Toby Walsh et al, 'Closer to the Machine: Technical, social, and legal aspects of AI' (Office of the Victorian Information Commissioner, August 2019) 7-22; Woodrow Barfield and Ugo Pagallo, *Research Handbook on the Law of Artificial Intelligence* (Cambridge University Press, December 2018).
[34] Melissa Perry J, '*Administrative Justice and the Rule of Law: Key Values in the Digital Era*' (Research Report, Rule of Law in Australia Conference, Sydney, 6 November 2010).
[35] Melissa Perry J, '*iDecide: Digital pathways to decision*' (FCA) [2019] FedJSchol 3; (2017) 91 *Australian Law Journal* 29; ('*Justice Melissa Perry: Digital Pathways to decision*').
[36] Commonwealth Ombudsman, '*Automated Decision-Making: Better Practice Guide*' (Parliamentary Guide, 2019) 5.
[37] Monika Zalnieriute, Lydia Moses and George Willians, 'The Rule of Law and Automation of Government Decision-Making' (2019) 82(3) *Modern Law Review* 425, 432-5.

B *ADM Risks*

Automation of decisions like social-welfare applications and tax-returns drives efficiency at unprecedented scale.[38] But within the efficiency of scale lies significant risks - errors in computer programming and in the translation of complex laws into binary code can result in flawed decisions on a population-wide scale if undetected.[39] When this occurred in Centrelink's *Online Compliance Intervention* in 2016 (*Robodebt*), erroneous translation of statutory provisions into computer code resulted in systemic departures from the true meaning of the *Social Security Act*.[40] Years of disastrous criticism seriously undermined the executive's public confidence, trust, transparency and fairness, and led to the scheme being abandoned. [41]

Developing ADMS's requires design choices, which reflect the inescapable conscious or subconscious biases of computer programmers.[42] Programmers engineer ADMS's that translate law and policy into code, yet they are not policy experts and seldom have legal training.[43] How can citizens and judges be confident that complex regulations are accurately programmed?[44] Assistance with legal interpretation and coding for organisations developing ADMS's for governments has been suggested.[45]

ADMS's inherit 'delegated' decision-making authority, which raises issues of accountability and transparency.[46] Who is the actual decision-maker? Has authority been 'delegated' to the computer programmer, or indeed the computer itself? To whom is the decision then attributable? Is the concept of 'delegation' used appropriately at all?[47]

[38] *Huggins: Addressing Disconnection* (n 4) 1056; Richard M Re and Alicia Solow-Niederman, 'Developing Artificially Intelligent Justice' (2019) 22(2) *Stanford Technology Law Review* 242, 255.
[39] *Justice Melissa Perry: Digital Pathways to decision* (n 35).
[40] *1991* (Cth); Anna Huggins et al, 'QUT Digital Media Research Centre submission to the inquiry into Centrelink's compliance program' (Submission, *QUT DMRC*, 18 September 2020) ('*Huggins et al: DMRC Submission*').
[41] *Huggins: Addressing Disconnection* (n 4) 1056; Senate Community Affairs References Committee, Parliament of Australia, *Centrelink's Compliance Program* (Second Interim Report, September 2020); Commonwealth Ombudsman, '*Centrelink's Automated Debt Raising and Recovery System'* (Implementation Report No 1/2019, April 2019) 27.
[42] *Huggins: Addressing Disconnection* (n 4) 1065; Batya Friedman and Helen Nissenbaum, 'Bias in Computer Systems' (1996) 14(3) *ACM Transactions on Information Systems* 330, 334.
[43] *Justice Melissa Perry: Digital Pathways to decision* (n 35).
[44] Ibid.
[45] *Huggins et al: DMRC Submission* (n 40).
[46] Anna Huggins, 'Automated Processes and Administrative Law: The Case of Pintarich' (November 2018) *Australian Public Law* (November 2018) ('*Huggins: The Case of Pintarich*').
[47] *Justice Melissa Perry: Digital Pathways to decision* (n 35).

Some statutes have attempted to solve this by legislating that automated-decisions are legally attributable to a human decision-maker. Take, for example, sections 495A(1)-(2) of the *Migration Act*:[48]

> **495A Minister may arrange for use of computer programs to make decisions etc.**
>
> (1) The Minister may arrange for the use, under the Minister's control, of computer programs for any purposes for which the Minister may, or must, under the designated migration law:
>
> (a) make a decision; or
>
> (b) exercise any power, or comply with any obligation; or
>
> (c) do anything else related to making a decision, exercising a power, or complying with an obligation.
>
> (2) The Minister is taken to have:
>
> (a) made a decision; or
>
> (b) exercised a power, or complied with an obligation; or
>
> (c) done something else related to the making of a decision, the exercise of a power, or the compliance with an obligation;
>
> that was made, exercised, complied with, or done (as the case requires) by the operation of a computer program under an arrangement made under subsection (1).

ADMS's are grounded in rules-based programming which responds poorly to subjective discretion required migration cases.[49] Consider an application for a protection visa, which requires the applicant be 'of good character' and 'not represent a danger to the Australian community.'[50] Can a decision be made or influenced by an algorithm determining 'good character?' In *CNY17*, a past infringement was an irrelevant consideration which led to the decision being infected with bias.[51]

Excluding criminal history as an input would render the algorithm ineffective, as there are other parameters correlated with criminality such as socio-economic variables, education, and

[48] *1958* (Cth).
[49] *Justice Melissa Perry: Digital Pathways to decision* (n 35).
[50] *Migration Act 1958* (Cth) s 501(6)(c)-(d).
[51] *CNY17* (n 10) (Kiefel CJ, Nettle, Gordon and Edelman JJ).

national origin.[52] Therefore, data must be *considered* but *weighted*. A human is arguably better suited to *considering* and *weighting* evidence than a computer.

C *'Decisions'*

A question for the court in *Pintarich*[53] was whether ADM constitutes a 'decision' in the legal sense. A letter sent to a taxpayer by a computer system advising a debt, which the taxpayer paid, was held not to be 'a decision' at all. The court held a decision requires 'a mental process of reaching a conclusion and an objective manifestation of that conclusion.'[54] The automated-decision in *Pintarich* was therefore not a binding decision. This undermines certainty and confidence in administrative justice.

D *Other Jurisdictions*

A US predictive-policing algorithm called COMPAS was used to predict rates of offender recidivism.[55] Mr Eric Loomis was criminally sentenced based, in part, upon COMPAS data which deemed him a high likelihood of reoffending.[56] Analysis showed that African-American defendants were incorrectly labelled as recidivists at almost *twice* the rate as Caucasians, even accounting for other factors such as criminal history, age, and gender.[57]

On appeal, the Court held that Mr Loomis could not challenge the process of calculating his risk assessment score, because the method was a trade secret of the developer company.[58]

The High Court should disavow this egregious violation of transparency and impartiality, which is incompatible with administrative law values of objectivity and independence.[59]

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[52] Lyria Bennett Moses, 'Artificial Intelligence in the Courts, Legal Academia and Legal Practice' (2017) 91 *Australian Law Journal* 561, 563 ('*Moses: AI in the Courts*').
[53] *Pintarich v Deputy Commissioner of Taxation* [2018] FCAFC 79 ('*Pintarich*').
[54] Ibid [64].
[55] Lyria Bennett Moses and Anna Collyer, 'When and How Should We Invite Artificial Intelligence Tools to Assist with the Administration of Law? A Note from America' (2019) 93 *Australian Law Journal* 176, 177-178 ('*Moses and Collyer: AI Tools*').
[56] Nigel Stobbs, Dan Hunter and Mirko Bagaric, 'Can Sentencing be Enhanced by the Use of AI?' (2017) 41 *Criminal Law Journal* 261.
[57]Allison Harris and Maya Sen 'Bias and Judging' (2019) 22 *Annual Review of Political Science* 241; *Moses: AI in the Courts* (n 52); *Moses and Collyer: AI Tools* (n 55).
[58] *State v Loomis*, 371 Wis 2d 235, 276 (2016).
[59] Monika Zalnieriute, 'Technology and the Courts: Artificial Intelligence and Judicial Impartiality' (Submission to Australian Law Reform Commission Review of Judicial Impartiality, 4 June 2021).

E *ADM Benefits*

Many automated processes *are* consistent with administrative law frameworks and principles, particularly for well-designed systems using appropriate datasets.[60] ADM can tremendously improve government efficiency, overhead costs, timeliness and accuracy.[61] Digital technologies can also support decision-making independence by reducing corruption, thereby increasing public trust.[62] These factors weigh in favour of *collectivism*, but don't override the *individualist* rights enshrined in the rule of law.[63]

V A THIRD CATEGORY OF BIAS

A *Why?*

Imputed bias cannot be categorised as actual nor apprehended bias. It requires its own third and distinct category.

Actual bias of ADMS's is impossible, because a computer program cannot have a vested pecuniary or other interest in an outcome. *Apprehended* bias relies on evidence of, or speculation about, the state-of-mind of the decision-maker and their objectiveness and impartiality. But a computer does not have a state-of-mind.

ADM is just computer code. That code is opaque and indecipherable to the lay observer. The internal decision-making logic of ADMS's, and the data-selection and programming choices are generally hidden.[64] Even if the algorithm were made public, few people could comprehend it, much less correlate its adherence to statute.[65] This goes to the heart of the values of transparency, openness and participation in the administrative justice process. How might a judge, hearing a judicial review, decide whether millions of lines of code promulgated an

[60] Marion Oswald, 'Algorithm-Assisted Decision-Making in the Public Sector: Framing the Issues Using Administrative Law Rules Governing Discretionary Power' (2018) 376(2128) *Philosophical Transactions of the Royal Society A* 1).
[61] *Huggins: Addressing Disconnection* (n 4) 1056; Richard M Re and Alicia Solow-Niederman, 'Developing Artificially Intelligent Justice' (2019) 22(2) *Stanford Technology Law Review* 242, 255.
[62] Monika Zalnieriute, 'Technology and the Courts: Artificial Intelligence and Judicial Impartiality' (Submission to Australian Law Reform Commission Review of Judicial Impartiality, 4 June 2021) 2.
[63] *Moses: AI in the Courts* (n 52) 563.
[64] Alice Witt, Nicolas Suzor and Anna Huggins, 'The Rule of Law on Instagram: An Evaluation of the Moderation of Images Depicting Women's Bodies' (2019) 42(2) *University of New South Wales Law Journal* 557.
[65] *Huggins: Addressing Disconnection* (n 4) 1065; Jenna Burrell, 'How the Machine "Thinks": Understanding Opacity in Machine Learning Algorithms' [2016] (January–June) *Big Data and Society* 1, 3-4.

inherent bias in the decision it generated? Or whether a lay-observer might apprehend such bias?

Only specialised experts would be aware of that substance. Therefore, a new category should be formed for *imputed bias*, which cannot be argued in the traditional sense of speculating about 'the decision-maker's mind.' It is a unique and emerging field which the law should recognise.[66]

B *The Bias Test*

The High Court's test for bias is premised objectively upon the apprehensions of bias that a fair-minded and reasonably-informed observer might reach.[67] The test adopted in *Webb*[68] and *Ebner*,[69] asks whether a fair-minded lay observer might reasonably apprehend that the decision-maker might not bring an impartial mind to the decision.[70] *Webb* and *Ebner* shifted towards the values of transparency and public perception by replacing judicial minds with lay-observers.[71]

Claimants must first identify what might lead a decision-maker to decide a case other than on its legal and factual merits. Secondly, the claimant must articulate the logical connection between the matter and the feared deviation from the course of deciding the case on its merits.[72]

C *Retaining the Test*

The two-step test from *Ebner* is versatile, contemporary and adaptable.[73] The test is of 'almost universal application.'[74] *Ebner* canvassed judicial decision-making bias, but the two-step test

[66] *Moses: AI in the Courts* (n 52).
[67] *Webb* (n 23) 51-52 (Mason CJ and McHugh J), 57 (Brennan J), 67-68 (Deane J), 87-88 (Toohey J); *Groves: Bias Complexity* (n 3) 3.
[68] *Webb* (n 23).
[69] *Ebner* (n 1).
[70] *Ebner* (n 1) 344 [6] (Gleeson CJ, McHugh, Gummow and Hayne JJ).
[71] *Groves: Bias Complexity* (n 3) 569.
[72] *Ebner* (n 1) [8].
[73] *CNY17* (n 10) 98 [55] (Nettle and Gordon JJ); *Groves: The Rule Against Bias*' (n 27) 485.
[74] *CNY17* (n 10) 98 [55] (Nettle and Gordon JJ).

has also been applied to executive decision-makers,[75] tribunal members,[76] jurors,[77] and administrative decision-makers.[78] The test's versatility can apply to all decision-makers.[79]

Some argue that the *Ebner* test appears clear in principle, but its application regularly gives rise to judicial disagreement.[80] Unanimous judgments are overruled unanimously the other way by superior courts.[81] Gageler J suggested a third step, of articulating the 'reasonableness' of a claim of apprehended bias in *Isbester*,[82] but this has drawn criticism as unnecessarily convolution,[83] and adding a commonsense judgement that should occur during the second step.[84]

Despite its criticisms, the strength of the *Ebner* two-step test is its promotion of public confidence in the administration of justice and cooperation of affected individuals.[85] The relevant issue is the *particular circumstances of each individual case*.[86]

The test should *not* be reformed. In review of ADM, the *Ebner* test remains usable - in an innovative way.

D *Evolving the Test*

The *Ebner* test should remain the touchstone for *imputed bias* claims, but instead of debating the decision-maker's state-of-mind, arguments should be about the veracity of the ADM and its data.

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[75] Ibid.
[76] *Re Refugee Review Tribunal; Ex parte H* (2001) 179 ALR 425, 435 [32] (Gleeson CJ, Gaudron and Gummow JJ); *Re Minister for Immigration and Multicultural Affairs; Ex parte Epeabaka* (2001) 206 CLR 128, 137 [27] (Gleeson CJ, McHugh, Gummow and Hayne JJ).
[77] *Webb* (n 23).
[78] *Isbester* (n 15).
[79] *Ebner* (n 1) 344 [4]; *Jia Legeng* (n 27) 563 [181] (Hayne J); *Isbester* (n 15) 146 [22] (Kiefel, Bell, Keane and Nettle JJ).
[80] *Groves: Bias Complexity* (n 3) 568.
[81] Matthew Groves, 'A Reasonably Reasonable Apprehension of Bias: CNY17 v Minister for Immigration and Border Protection' (2019) 41(3) *Sydney Law Review* 383 ('*Groves: CNY17 v MIBP*').
[82] *Isbester* (n 15) 155 [59] (Gageler J).
[83] *Groves: CNY17 v MIBP* (n 81) 388.
[84] Mark Aronson, Matthew Groves and Greg Weeks, *Judicial Review of Administrative Action and Government Liability* (Thomson Reuters, 6th ed, 2017) 651-2 ('*Aronson, Grove and Weeks: Judicial Review of Administrative Action*').
[85] *CNY17* (n 10) 98 [55] (Nettle and Gordon JJ).
[86] *Groves: Bias Complexity* (n 3) 571.

For claims of *imputed bias*, a judge should determine whether a reasonable observer, *imbued with an understanding of the algorithmic programming*, *might* reasonably believe that the ADMS's decision *might* have carried imputed bias from its algorithm.

Firstly, a claimant should state that ADMS imparted bias which generated all/part of the decision, or generated erroneous data upon which the human decision-maker relied.

The second step should require the claimant to articulate why a reasonable observer, who understands the algorithm, might believe the ADMS's decision to have been infected with imputed bias. This might involve arguing that discretion could/should have been used, or that data which cannot be interpreted in binary code has infected the decision. Perhaps the ADM relied upon irrelevant considerations?[87] If a human made the decision, would the bias would still exist? Expert testimony should be sought to inform the court of the algorithms methods.

E *The Hypothetical Observer*

The hypothetical observer is a fair-minded reasonable lay person,[88] averse to snap-judgements,[89] with knowledge of the judicial process,[90] and the circumstances of the case.[91] Use of an observer, rather than a judge, aligns with the values of transparency, public participation, and fairness - because it is the court's view of the public view, not the court's own view, which is determinative.[92] This fosters public confidence in the administrative justice process.[93]

However, the hypothetical observer will always be a 'glove that covers judicial hands.'[94] As a result, the hypothetical observer has become overloaded and loosely-defined,[95] and has been

[87] *CNY17* (n 10).
[88] *Isbester* (n 15) 146 [23] (Kiefel, Bell, Keane and Nettle JJ); *CNY17* (n 10) 99 [58]-[59] (Nettle and Gordon JJ); *Vakauta v Kelly* (1989) 167 CLR 568, 576 (Dawson J); *R v Watson; Ex parte Armstrong* (1976) 136 CLR 248, 263 (Barwick CJ, Gibbs, Stephen and Mason JJ); *Livesay v NSW Bar Association* (1983) 151 CLR 288, 300 (Mason, Murphy, Brennan, Deane and Dawson JJ).
[89] *British American Tobacco Australia Services Limited v Laurie* [2011] HCA 2.
[90] *Webb* (n 23) 73; *CNY17* (n 10) 99 [58]-[59] (Nettle and Gordon JJ); *Johnson v Johnson* (2000) 201 CLR 488 [53]; *Laws v Australian Broadcasting Tribunal* (1990) 170 CLR 70, 92 (Deane J).
[91] *Martin v Norton Rose Fulbright Australia (No 2)* [2020] FCAFC 42 [21] (Besanko, Flick and Abraham JJ); *British American Tobacco Australia Services Limited v Laurie* [2011] HCA 2.
[92] *Webb* (n 23) 52 (Mason CJ and McHugh J); *CNY17* (n 10) 88 [21] (Kiefel CJ and Gageler J).
[93] *CNY17* (n 10) 98 [55] (Nettle and Gordon JJ).
[94] *Aronson, Grove and Weeks: Judicial Review of Administrative Action*' (n 84) 670-1, Laura Beecroft and Peta Spender, 'Conflicts of Interest – The Rule Against Bias' (Research Submission, Council of Australia Tribunals, June 2018).
[95] Australian Law Reform Commission, *Judicial Impartiality – The Fair-Minded Observer and its Critics* (Background Paper JI7, April 2021) ('*ALRC: The Fair-Minded Observer*'); Australian Law Reform

criticised as merely being a thinly-veiled judge.[96] If the fair-minded observer is too 'internal' to the legal system, they risk blindness to faults that outsiders can easily see.[97]

We assume judges are able to resist the likelihood of bias because their training and oath enable them to 'discard the irrelevant, immaterial and prejudicial material.'[98] However, this should not be assumed.[99] The observer should retain 'basic scepticism about the abilities and habits of judges.'[100]

The hypothetical observer should remain, but should be better defined to discern precisely what legal and factual knowledge they are deemed to possess.[101] In cases of *imputed bias*, the hypothetical observer's knowledge of computer algorithmic assessment processes should be clearly stated.

F *Outcome*

A decision infected with imputed bias should be treated as a jurisdictional error.[102] A writ of mandamus might compel the decision to be re-made, or a writ of prohibition or injunction might prevent the executive from acting upon the decision. [103]

Commission, (*Judicial Impartiality – The Law on Judicial Bias: A Primer* (Background Paper JI1, December 2020); *Groves: CNY17 v MIBP* (n 81) 386; *Aronson, Grove and Weeks: Judicial Review of Administrative Action*' (n 84) 666.

[96] *ALRC: The Fair-Minded Observer* (n 95); *Groves: Bias Complexity* (n 3) 586; Abimbola Olowofoyeku, 'Bias and the Informed Observer: A Call for a Return to Gough' (2009) 68(2) *Cambridge Law Journal* 388; Anna Olijnyk, 'Apprehended Bias: A Public Critique of the Fair-Minded Lay Observer', *Australian Public Law* (3 September 2015).

[97] *ALRC: The Fair-Minded Observer* (n 95) 7-10 [28].

[98] *Vakauta v Kelly* (1989) 167 CLR 568, 584–5 (Toohey J); *Johnson v Johnson* (2000) 201 CLR 488, 493 (Gleeson CJ, Gaudron, McHugh, Gummow and Hayne JJ); *ALRC: The Fair-Minded Observer* (n 95) 7-10.

[99] Australian Law Reform Commission, *Cognitive and Social Biases in Judicial Decision-Making* (Background Paper JI6, 2021) [53].

[100] *ALRC: The Fair-Minded Observer* (n 95); Matthew Groves, 'Bias by the Numbers' (2020) 100 *Australian Institute of Administrative Law Forum* 60, 71–2; *CNY17 v Minister for Immigration and Border Protection* (2018) 264 FCR 87 [97]–[99] (Nettle and Gordon JJ), [111] (Edelman J) cf [43] (Kiefel CJ and Gageler J); *GetSwift Limited v Webb* [2021] FCAFC 26 [39]–[45] (Middleton, McKerracher and Jagot JJ).

[101] Australian Law Reform Commission, *Judicial Impartiality – The Law on Judicial Bias: A Primer* (Background Paper JI1, December 2020); Simon Young, 'The Evolution of Bias: Spectrums, Species and the Weary Lay Observer' (2017) 41 *Melbourne University Law Review* 928; Andrew Higgins and Inbar Levy, 'Judicial Policy, Public Perception, and the Science of Decision Making: A New Framework for the Law of Apprehended Bias' (2019) 38 *Civil Justice Quarterly* 376, 380–81.

[102] *Re Refugee Tribunal; Ex parte Aala* (2000) 204 CLR 82.

[103] Ibid.

VI ADDITIONAL REFORM CONSIDERATIONS

What constitutes a 'decision' should be better defined.[104] Although ostensibly defined in the *ADJR Act*[105] and common law,[106] the scope remains unclear.[107] Whether automatically-generated communications constitute 'decisions' should be clarified.[108] The 'mental process' required should be prescribed to give decision-makers and citizens certainty.[109]

Australia should adopt the international guidance in the *General Data Protection Regulation*.[110] Article 22 requires *meaningful human involvement*,[111] including consideration of the data used in automated decision-making.[112] Where ADMS's are used to decide administrative matters, their algorithmic logic should be publicly known, and detailed audit-logs maintained. [113] This would codify Australia's existing non-binding guidance,[114] which an independent watchdog should oversee.[115]

Following the *Robodebt* saga, Associate Professor Anna Huggins suggests a temporary moratorium on ADM for significant decisions, until appropriate safeguards are established.[116]

VII CONCLUSIONS

Australia's reliance on machine-driven qualitative assessments and decision-making will continue to rise.[117] As algorithms evolve, it is plausible ADMS's will actually *reduce* levels of

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[104] *Huggins: Addressing Disconnection* (n 4) 1077; *Huggins: The Case of Pintarich* (n 44).
[105] *ADJR Act* (n 7) s 3.
[106] *Australian Broadcasting Tribunal v Bond* (1990) 170 CLR 321.
[107] *Huggins: The Case of Pintarich* (n 46).
[108] *Pintarich* (n 53); Australian Law Reform Commission, *The Future of Law Reform: A Suggested Program of Work 2020-25* (Report, December 2019) 24 ('*ALRC: The Future of Law Reform*').
[109] *Huggins: Addressing Disconnection* (n 4) 1076.
[110] *Regulation (EU) 2016/679 General Data Protection Regulation: Regulation on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (Data Protection Directive))* OJ L 119/46, art 22 ('*General Data Protection Regulation*'); *Huggins: Addressing Disconnection* (n 4) 1074.
[111] Article 29 Data Protection Working Party, 'Guidelines on Automated Individual Decision-Making and Profiling for the Purposes of Regulation 2016/679' (Guideline No WP251, 6 February 2018) 25.
[112] *General Data Protection Regulation* (n 110) arts 22(2)(a)-(c), 22(3); *ALRC: The Future of Law Reform* (n 106); Australian Law Reform Commission, *The Future of Law Reform Update* (Report Update, October 2020).
[113] *Huggins: Addressing Disconnection* (n 4) 1075-1077; *Huggins et al: DMRC Submission* (n 39); *General Data Protection Regulation* (n 110) arts 13(2)(f), 14(2)(g).
[114] Digital Transformation Authority (Commonwealth), 'Make Source Code Open', *Digital Service Standard Criteria* (Report, 2019).
[115] *Huggins et al: DMRC Submission* (n 40); Sandra Wachter, Brent Mittelstadt and Luciano Floridi, 'Why a Right to Explanation of Automated Decision-Making Does Not Exist in the General Data Protection Regulation' (2017) 7(2) *International Data Privacy Law* 76, 98.
[116] *Huggins et al: DMRC Submission* (n 40).
[117] *Justice Melissa Perry: Digital Pathways to decision* (n 35).

bias in decision-making. Doctrinal and regulatory evolution is needed to ensure that administrative law values and protections remain meaningful in the digital age.[118] The cornerstone must be the same core public law values with which all administrative decisions must comply.[119]

Guarding against the erosion of procedural fairness safeguards the transparency and accountability of executive decision-making.[120] Access to judicial review of automated-decisions will maintain Australia's legal system as a beacon of dependability and trustworthiness, which citizens hold in high-confidence.[121] Lawyers, academics and courts must play a vital role.[122]

[118] *Huggins: Addressing Disconnection* (n 4) 1077.
[119] Commonwealth Attorney-General's Department, Administrative Review Council, *Automated Assistance in Administrative Decision Making* (Report No 46, 2004) ('*Attorney General's Administrative Assistance*').
[120] *Justice Melissa Perry: Digital Pathways to decision* (n 35).
[121] Ibid; *Attorney General's Administrative Assistance* (n 119).
[122] *Justice Melissa Perry: Digital Pathways to decision* (n 35).

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