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Zombie Isaacs designed by Joe Mikus
If you’re ready for a zombie apocalypse, then you’re ready for any emergency

emergency.cdc.gov

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Canberra Law Review

Welcome to the 2016 edition of the Canberra Law Review. No apology is needed if you skipped the foreword and went straight to the articles, it is after all the human thing to do (though it may be an incorrect assumption that all our readers are human).

The 2016 Canberra Law Review was an opportunity to experiment with the teaching of law. On one level, it was an opportunity to conduct a *Gedankenexperiment*, encouraging students and colleagues to consider how a global zombie apocalypse would impact Australian law. On a second level, it allowed University of Canberra staff to experiment with teaching law through the usage of social media and with continued reference to and incorporation of popular media.

Over an initial four-week period during Winter Semester 2016, the students met with the unit convenor to rough out their expectations for the unit. In consultation with other UC staff, the unit convenor developed a ‘Zombie Apocalypse Timeline’ and a series of assumptions about the nature of the zombie apocalypse, that enabled a series of ‘flashpoints’ to be created.

Each of these flashpoints then served as triggers for looking at contemporary Australian legal issues through the somewhat distorted lens of the zombie apocalypse. For the first six weeks of Semester 2, students were encouraged to apply existing legal precedent and procedure to the novel situation, first by focusing on the principles that underlay contemporary law and legal institutions and then seeing how much of that law was applicable to the world of the ‘Walking Dead’, the regency romance of ‘Pride and Prejudice and Zombies’ and finally that of the Zombie Apocalypse Timeline.

For the last six weeks of the semester, students prepared a research paper on a topic that had had engaged them in the earlier discussions. Each week students brought their progressively improving draft research papers to the class forums and the group collectively analysed the issues raised and suggested ways that the paper could be improved.

As external comments and papers were received, the students began to expand their editing and citation skills, all the while seeing glimpsing alternate legal philosophies in the dark mirror that is the zombie apocalypse.

Did it work as a means of teaching law? These papers are one way of answering that question. I could also cite the high student engagement levels and the subsequent positive feedback the unit received. Perhaps the best answer lies in the number of students who have subsequent gone on to honours dissertations and post graduate study, though sadly none in the burgeoning field of ‘zombie law’

I would like to thank the University of Canberra Law School for this opportunity to explore the extremities of law and society and hope that other academics find similar opportunities in future. The underlying legal issues associated with ‘the rise of the machines’ and the associated ‘robo-apocalypse’ are still out there!

Rob MacLean
Unit Convenor and Staff Editor
ZOMBIE APOCALYPSE TIMELINE

First Movement – *Tardo*

- Isolated zombie outbreaks outside of Australia.
- No issues with the supply of water, electricity, food or information.
- International travel is severely restricted by Governments
- Strong Federal and State governments.
- Solid and consistent rule of law.
- Economy is based on electronic funds.

First Movement – Flashpoint – ‘Ashes to Ashes’.

The Australian men’s cricket team tour of England is abandoned due to a zombie pitch invasion at Lords. The Australian Cricket Board plans to fly the team back to Australia, however the Minister for Health imposes a 24 day quarantine period on Manus Island, before the team can re-enter Australia. The Australian Cricket Board launches immediate legal action to overturn the administrative decision.

Second Movement – †*Affrettando*

- Cities outside of Australia are overrun by Zombies.
- Refugees from the Zombie Apocalypse seek entry to Australia.
- Isolated instances of Zombies in Australia, which are initially contained by police.
- Minor issues with the supply of water, electricity, food and information.
- Federal government grows in power – some civil liberties suspended, military units mobilised to secure key resources.
- Intermittent and short duration instances of the breakdown of the rule of law (restored by Federal and State Government).
- Economy moves from electronic funds transfer to cash.

Second Movement Flashpoint – ‘Turn back the planes’.

A QANTAS 747-400 en-route from Los Angeles to Sydney, is 90 minutes out from arriving in Sydney when the pilots radio that a passenger has transformed into a zombie and has attacked the other passengers. In the background of the transmission can be heard guttural moans and thumping sounds on the cockpit doors. The pilots subsequently radio that no one else was ‘infected’.

A prominent Sydney shock jock becomes aware of the crisis and re-broadcasts the radio transmission. A social media storm flares, with calls for the Royal Australian Air Force to shoot down the plane over international waters. The plane has enough fuel to be diverted to Newcastle or Canberra, but local citizens break down fences and park their cars on the runways to prevent the plane landing.

* A musical instruction meaning to play slowly.
† A musical instruction meaning to hastily increase the tempo in an impatient manner.
Third Movement – Mosso

- Some countries outside of Australia are overrun by Zombies.
- Efforts to aid or prevent further refugees are abandoned.
- Zombies are now present on the streets of all Australian cities and major towns.
- Federal Government fails, with State and Local Government actors becoming the primary agents for anti-zombie action.
- Consistent electrical failure, internet and mobile phone networks fail, no food in supermarkets and minimal international news.
- Breakdown of the rule of law in Australian cities and country regions (wide spread theft and looting).
- Economy moves from cash to barter.

Third Movement – Flashpoint – ‘Well may they say God save the Queen, because nothing will save the Governor General’.

With the disappearance and presumed death of 32 members of the House of Representatives and 15 Senators, the Prime Minister and the Leader of the Opposition decide to form a government of National Unity. The new cabinet is sworn in at a ceremony at the Governor General’s residence in Yarralumla. However due to an unfortunate security lapse, during the post ceremony photograph the Governor General transforms into a zombie and kills the newly formed cabinet.

Fourth Movement – Prestissimo

- Australia cities and countryside overrun by Zombies.
- Fortified community groups become the primary agents for anti-zombie action.
- Isolated solar power, survivors scrounging for food, some community radio stations.
- Local dictatorships and oligarchies assume legal power.
- Economy is limited to barter.

Fourth Movement – Flashpoint ‘Australia’s got talent’.

Former music talent show winner Wolfgang Silverhair proclaims the nation of Bertoota in the Hunter Valley. President for Life Silverhair ‘nationalises’ the remaining food, military and medical resources and announces that any non Bertootians will be shot on sight. Road barriers are placed across the New England and Pacific Highways and the unanimated corpses of local citizens who opposed Bertootian rule are suspended from nooses at cross-roads.

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1 A musical instruction meaning with motion or animation.
2 A musical instruction meaning with as fast a tempo as possible.
Coda – Allargando**

- Zombies threat is broken.
- Consolidation of power from community / local government level to a mix of regional and state levels.
- Discussion about whether to reform the Commonwealth of Australia, however various regions are lobbying for formal statehood and some regions are seeking independence or special indigenous status.
- A suppressant is discovered by an Australian start up that prevents anyone infected from transforming into a zombie. (The search for a permanent cure continues)
- Restoration of electrical power, centralised food distribution, state and national television and radio.
- Economy moves from barter to cash.
- Rule of law is restored, with a Truth & Reconciliation Commission established.

Coda – Flashpoint ‘Lowest prices are just the beginning’.

Alongside the Truth and Reconciliation hearings a range of Australians are charged with offences and sued under tort. These range from property offences (theft, destruction of public/private property, most prominently bought by Wesfarmers on behalf of their Bunnings Hardware chain) and defamation (‘he failed to prevent the apocalypse’) through unlawful killing and offences against the state (sedition, treachery) or crimes against humanity. The charged raise a range of defences including self-defence, necessity and that the re-formed Australian government does not have the jurisdiction to bring charges for offences committed during interregnum of the zombie apocalypse and potentially in non-Australian legal jurisdictions (due to local areas succession.

** A musical instruction meaning in a gradually broadening style with decreasing tempo.
Zombie Apocalypse – Base assumptions for contributors

What causes Zombies?
For the purpose of the journal, the answer is uncertain. The zombie apocalypse is most commonly considered created by an infectious virus, which is passed on via bites and contact with bodily fluids. Dr Stanley Blum, a neurodevelopmental biologist, researcher and zombie expert for the CDC (Centers for Disease Control) theorises the cause as Ataxic Neurodegenerative Satiety Deficiency Syndrome.1 However some theorise zombies are a result of supernatural curses or a sign of the ‘end of days’.

Stages of Infection

For those who subscribe to Blum’s virus theory, the typical pattern of infection is below:

Infection

As stated above, infection is typically transferred through contact in particular being bitten. In this sense transfer works similar to the transference of Rabies and is possible to be related to the disease, though unconfirmed2. After being bitten the infection similar to rabies enters through the nervous system towards the brain3. Detection at this stage is difficult if not impossible. The virus will typically travel towards the brain and upon reaching the brain the stage of Pre-Zombification begins.

Note: As no one has yet to be brave enough to test, it is theorised that similar to rabies and other diseases spread through bodily fluids, it may be possible for sexual transmission of the virus.4

Duration: Typically, 12 hours before Pre-Zombification sets in.

Pre-Zombification

Once being bitten Pre-Zombification will occur. The infected body will try and fight the infection. Symptoms begin to resemble that of influenza, high fevers and weakness is typical at this stage5. Delirium and aggression have also been reported, though unconfirmed. At the Coda stage of the Apocalypse it is possible to suppress and possibly cure the Zombification through medical treatments6. The duration of Pre-Zombification is dependent on the health and strength of the individual.

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1 Steven C. Schlozmon, ‘The Zombie Autopsies: Secret Notebooks from the Apocalypse’ (Grand Central Publishing 2012).
4 https://rabiesalliance.org/rabies/what-is-rabies-and-frequently-asked-questions/exposure-prevention-treatment (Details on the possibility of sexual transmission, may be adapted to apply to zombie virus.)
6 <http://deadrising.wikia.com/wiki/Zombrex> (Zombrex is an example of a suppressant Zombification Drug)
Note: On death Zombification begins immediately, as the body no longer fights infection.

**Duration:** Generally, 1-12 weeks (Possibly longer or shorter depending on the individual.)

**Zombification**

Once the body fails to resist the virus transformation occurs. Typically the infected dies and once dead, rises as a zombies within 2 – 15 minutes of their death. The Center for Disease Control and Prevention have advised that symptoms during transformation include slow movement, slurred speech, and violent tendencies⁷. The Center for Disease Control and Prevention are recommending that people distance themselves from anyone displaying these symptoms⁸. Upon reaching Zombification, there is currently no cure as the infected seems to be rendered neither alive or dead.

**Is there a cure?**

Research indicates that there is a way to supress Zombification, until the beginning of the Coda stage there is no cure. If Zombies are caused by a virus, it is imaginable that there will be a cure. Suppression of the virus is possible at Pre-Zombification stage, however treatment must occur regularly.⁹ Due to the fast acting nature of the trigger it is possible that treatments would be daily if not more frequent.

**Are Zombies intelligent?**

The walking dead are not intelligent. They have no instinct for self-preservation, no knowledge of their past, and no ability to learn or use tools. They have rudimentary senses, primarily based upon hearing. They seem to be able to differentiate between living humans and other walking undead.

To the extent that the walking dead has any motivation, it is to feast upon flesh. These cravings can never be sated and a zombie will attack any human or animal in the quest for flesh.

**Can animals become zombies?**

Yes, evidence indicates that animals can become zombies, though the exact mechanism is unknown. Undead dogs are particularly dangerous, due to their comparatively fast movement, vicious bite and their animalistic drive.

Eating zombie ‘infected’ flesh appears to lead to the transformation. In some areas authorities conduct mass animal culls to cut down the chances of zombie attacks. Some scenarios have

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⁷ [https://www.cdc.gov/phpr/zombies.htm](https://www.cdc.gov/phpr/zombies.htm)
⁸ [https://www.cdc.gov/phpr/zombies.htm](https://www.cdc.gov/phpr/zombies.htm)
depicted airborne transmission, which results in a far greater casualty and more widespread area of infection.\textsuperscript{10}

**Killing zombie animals?**

The normal aversion to killing another ‘human’ can usually be put aside if one was to find themselves being gnawed on by a zombie human. However, human beings may find it much harder to kill an animal, whether it has entered the zombification phase of it’s existence or not. Mass culls of animals could be contra-survival as many animals will act as predators or function as cleaning crew for decomposing human flesh, when the zombie apocalypse comes.\textsuperscript{11}

**How can I kill a zombie?**

The ‘Zombie Combat Manual – A Guide to Fighting the Living Dead’ states that the only proven method of stopping an advancing undead attacker is to sufficiently destroy its brain.\textsuperscript{12} Any penetration into the skull, past the dura, through the grey matter and into the white matter, will stop a walking corpse.\textsuperscript{13}

Decapitating a zombie will stop the body, but the head will keep attacking, until the brain is destroyed.

**Can Zombies run?**

There has been no evidence of ‘running’ zombies in the current apocalypse. Estimated top speed for a zombie with two ‘functioning’ legs is 4 kilometres per hour, though across an hour a zombie is unlikely to move in one direction.

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\textsuperscript{10} See for example the Krippin Virus which was genetically engineered from the Measles Virus in I am Legend. \url{http://imlegend.wikia.com/wiki/Krippin_Virus}.

\textsuperscript{11} National Wildlife Federation naturalist David Mizejewski explains how nature would deal with a zombie outbreak and that animals could be a driving force in removing large herds of zombies. David Mizejewski, Zombie vs animals? The living dead wouldn’t stand a chance, \url{http://boingboing.net/2013/10/14/zombiesvsanimals.html}.


\textsuperscript{13} Ibid 26.
PROPOSED ZOMBIE APOCALYPSE LAW REFORMS

1) ‘The implications of this during a zombie outbreak are that since the existence of a communicable disease is one of the exceptional categories identified in Lim, the state would be able to detain persons who were alleged to be infected without having to prove that they actually were infected, without the person having the right to contest the reasonableness of their detention before the courts and with the detention potentially continuing ad infinitum.’

A non-derogable right to personal liberty needs to be included in the Constitution.

2) ‘To ensure a full High Court bench, it is suggested that in the event of an ‘emergency’, where the Governor General in Council is not able to immediately appoint a replacement, a reserve commission is activated for the longest serving State or Territory Chief Justice. The termination of this commission would not require the operation of s72 of the Constitution and would be triggered by the normal appointment of a successor to the High Court.’

A succession mechanism convention be implemented, in the event that High Court justices cannot be appointed in a timely manner.

3) ‘In the event of a zombie apocalypse wiping out the Federal Parliament, it would seem we need to expand the scope of the NATCATDISPLAN to become an Unnatural National Catastrophic Disaster Plan (UNNATCATDISPLAN) ... The UNNATCATDISPLAN would allow the Federal Government to appoint state or regional coordinators, whose role is to co-ordinate the use of Federal assets (such as those shown within Table 1: Key Capabilities of Australian Government agencies in relation the Zombie Apocalypse) within the revised State or Territory Emergency Management Plan.’

Consideration be given to amending the existing NATCATDISPLAN to cover a failure of the Federal Executive Government.

4) ‘The refugee definition provided for by the Convention contains a number of obstacles for those seeking protection for reasons either unforeseen or not prioritised by the

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1 Bede Harris, ‘Constitutional Implications of a Zombie Outbreak’ (2016) 14(1) Canberra Law Review.
1951 drafters, including those people that would be displaced by the effects of the zombie apocalypse.\textsuperscript{4}

The definition of ‘refugee’ in the 1951 Refugee Convention relating to the Status of Refugees and the 1967 Protocol, be expanded to cover reasons foreseeable in the twenty first century.

5) ‘If someone was to lose capacity and control due to the fact they had turned into a zombie, and yet rights are extended to them, the Public Trustee could be extended to the zombies so that their final wishes are protected and society cannot take advantage of the vulnerable.’\textsuperscript{5}

The role of the Public Trustee be expanded to accommodate a wider range of human states, consistent with the loss of legal capacity.

6) ‘Expanding the Patents Act to allow immediate licencing of patents during a national emergency or other circumstances of extreme urgency, or in cases of public non-commercial use.’\textsuperscript{6}

An immediate right for emergency use (and corresponding remuneration) needs to be incorporated in the Patents Act.

7) ‘Addition of clauses in the Patents Act regarding fair payment in acquiring a patent during times of emergency would be essential in preventing issues of ambiguity.’\textsuperscript{7}

A provision for the calculation for remuneration in emergencies needs to be incorporated in the Patents Act.

\textsuperscript{4} Isabella Heilikmann, ‘Escaping the Sea of Zombies: Lessons learned from Climate Change Refugees’ (2016) 14(1) Canberra Law Review.

\textsuperscript{5} Erina Fletcher, ‘To What Extent Should We Extend Human Rights to Zombies’ (2016) 14(1) Canberra Law Review.

\textsuperscript{6} Benjamin Duff, ‘Protecting the Infected. Government Acquisition of Patents during the Zombie Apocalypse’ (2016) 14(1) Canberra Law Review.

\textsuperscript{7} Benjamin Duff, ‘Protecting the Infected. Government Acquisition of Patents during the Zombie Apocalypse’ (2016) 14(1) Canberra Law Review.
CONSTITUTIONAL IMPLICATIONS OF A ZOMBIE OUTBREAK

Bede Harris*

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ABSTRACT

A zombie apocalypse would require an unprecedented exercise of constitutional powers relating to defence and the maintenance of the Constitution. It would also have implications for civil liberties, in particular the detention of people to prevent the spread of the disease – in this regard it is disturbing to note that, so weak is current constitutional protection of the right to personal liberty, once detention a person would have no recourse to the courts for release. As governmental authority broke down, practicality would require that authority be exercised extra-constitutionally, and this makes relevant interesting precedents from the Commonwealth which determine such exercises of power are justifiable. Finally, it may well be the case that, in the aftermath of a zombie apocalypse, the old Commonwealth and State governments would not be re-established. This would raise questions concerning the legitimacy of successor regimes. It would also provide an opportunity for thoroughgoing constitutional reform - which has proved elusive in pre-zombie Australia - as well as the re-establishment of Indigenous sovereignty over parts of the country.
I INTRODUCTION

This article explores the constitutional of a zombie apocalypse, focusing on issues which are likely to arise during selected periods of the outbreak. Some of these relate specifically to issues particularly relevant to periods when society faces an existential threat, while others are perennial. Part II addresses the executive and legislative powers of the Commonwealth to address a threat to the nation taking the form of a zombie outbreak. Part III discusses the implications of a national threat for the right to personal liberty. Part IV discusses whether, in exigent circumstances, the reserve powers of the Governor-General (or any authority acting in his or her stead) include a power to rule without regard to the Constitution. Part V examines the foundations of constitutional law by questioning upon what basis the legitimacy of a post-apocalyptic constitutional order would be determined and explores the opportunities that would be presented to reform Australian constitutional law and to revive Indigenous sovereignty.

II EXECUTIVE AND LEGISLATIVE POWER

The first issue to consider is what executive power would be available to the Commonwealth to take steps to deal with an outbreak of zombism, and what legislative authority the Commonwealth Parliament could use to enact laws for that purpose. These matters would be relevant during the tardo and affretando stages of the plague, but which would become of academic interest once governmental authority broke down during the mosso stage.

A Executive power

The executive power conferred on the Commonwealth under s 61 of the Constitution extends to the execution and maintenance of this Constitution, and of the laws of the Commonwealth.

The power to maintain the Constitution includes the ‘protection of the body politic or nation of Australia.’¹ Section 61 also incorporates the common law prerogative powers of the Crown, among which is the power to defend the country against external and internal threat.² As both the express s 61 power and the common law prerogative power are inherent executive powers, they do not require statutory authorisation for their exercise.³ However,

¹ Pape v Commissioner of Taxation (2009) 238 CLR 1, 83 [215] (Gummow, Crennan and Bell JJ).
the prerogative in relation to domestic threats is now governed by provisions contained in the Defen
ce Act 1903 (Cth), which regulate the use of defence forces in aid of civil power.\footnote{For a comprehensive examination of the powers of the executive to deploy the defence forces domestically see Margaret White, ‘The Executive and the Military’ (2005) 28 University of New South Wales Law Journal 438.}

Section 51A of the Act provides that if the authorising ministers designated under the Act\footnote{Defined in s 51 as the Prime Minister, the Attorney General and the Minister of Defence.} determine that Commonwealth interests are threatened by domestic violence against which a State or Territory is unable provide protection, the defence forces may be called out on ministerial advice to the Governor-General and the Chief of the Defence Forces directed to protect Commonwealth interests against the violence.

Apart from threats to the nation as a whole, s 119 of the Constitution imposes a duty on the Commonwealth to defend the States. Section 119 provides as follows:

\begin{quote}
The Commonwealth shall protect every State against invasion and, on the application of the Executive Government of the State, against domestic violence.
\end{quote}

Consistent with this duty, s 51B of the Act provides that the authorising ministers may, upon application by a State, advise the Governor-General to direct the Chief of the Defence Force to protect the State against the domestic violence.\footnote{Section 51C has parallel provisions relating to defence of Territories against domestic violence.}

Finally, s 51CA of the Act provides for an expedited procedure that can be used where the conditions specified in s 51A or 51B exist, but because ‘a sudden and extraordinary emergency’ exists, it is not practicable to use the procedures contained in those sections. The various provisions of 51AC authorise either the Prime Minister acting alone, the other two authorised ministers, or one of the authorising ministers along with the Deputy Prime Minister, the Minister of Foreign Affairs or the Treasurer to issue an order calling out the defence forces.

From the above it is clear that there is a firm constitutional basis upon which the Commonwealth could use executive power to deploy forces to meet a domestic zombie threat. Of course, once the provisions contained in the Defence Act were exhausted (because of the demise and / or zombification of the Governor-General and ministers) and the constitutional order destroyed, defence against the threat would of necessity devolve down to people not specifically authorised to manage it. Although acts they took directly related to suppressing zombies would be lawful under criminal law doctrines of defence and defence of others, the collapse of the constitutional order would raise the different problem of who would wield lawful governmental authority. This is discussed in Part IV of this article.
B  Legislative power

There are two sources of legislative power, which would support laws directed towards addressing the zombie threat.

The s 51(vi) defence power confers upon the Commonwealth Parliament the power to legislate with respect to

the naval and military defence of the Commonwealth and of the several States; and

the control of the forces to execute and maintain the laws of the Commonwealth.

The first limb of s 51(vi) (relating to the naval and military defence of the Commonwealth) has been interpreted as including a capacity to legislate with respect to defence against threats both external and internal.\(^7\) However, whether a non-military threat such as that posed by a zombie pandemic would fall within the ambit of this limb of the power is moot. Some suggest that those words support only laws directed towards the suppression of insurrection\(^8\) which offence, if interpreted as requiring specific intent, could arguably not be said to be committed by zombies.

This difficulty can however be overcome as the second limb of the defence power (relating to the control of forces to execute and maintain the laws of the Commonwealth) empowers Parliament to legislate for domestic law-enforcement, and so would certainly provide a basis for any legislative measures necessary to counter a national threat posed by zombies.

A key feature of the defence power is that it varies in scope,\(^9\) and thus the legislation it supports varies according to the circumstances in which the nation finds itself. Because s 51(vi) is a purposive power, a court assessing the validity of a law based on the power must determine whether the law is appropriate and adapted to the purpose of defence.\(^10\) The court in Australian Communist Party v Commonwealth\(^11\) identified three phases through which the power may expand and contract: (i) a core stage, always available, even in peacetime, (ii) an expanded stage, available both during times of tension falling short of war and during periods when the power contracts during the aftermath of war and (iii) the most expansive stage, available during times of war. Because the scope of the power depends upon prevailing conditions, a court’s determination of whether a law is *intra vires* the power will depend upon its assessment of the facts that gave rise to those conditions. The High Court has held that courts may take judicial notice of such facts as are sufficiently notorious to be within the realm of public knowledge.\(^12\) One would therefore predict that, as the zombie outbreak

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\(^7\) Thomas v Mowbray (2007) 233 CLR 307.
\(^8\) John Pyke, Constitutional Law (Palgrave Macmillan, 2013) 218.
\(^9\) Farey v Burvett (1916) 21 CLR 433.
\(^11\) (1951) 83 CLR 1.
\(^12\) Stenhouse v Coleman (1944) 69 CLR 457 and Australian Communist Party v Commonwealth (1951) 83 CLR 1.
spread and its effects became more serious, the defence power would expand to meet it, with implications for civil liberties. These are considered in Part III of this article.

Finally, apart from the defence power, the nationhood power, which is based on the s 61 executive power coupled with the s 51(xxxix) express incidental power, could also be used as a source of legislative authority. It confers upon the Commonwealth Parliament legislative power to enact laws on topics falling peculiarly within the responsibility of a national government. In Burns v Ransley\textsuperscript{13} and R v Sharkey\textsuperscript{14} the High Court held that the nationhood power could be used to protect the Commonwealth from internal attack and subversion. More generally, the nationhood power has been held to enable the Commonwealth to enact legislation pertaining to national celebrations\textsuperscript{15} and to overcome the effects of the Global Financial Crisis.\textsuperscript{16} There is therefore no doubt that it would extend to dealing with the existential threat posed to the nation by a zombie outbreak. Nevertheless, given that the High Court has held that the expenditure of money for a programme must be specifically authorised by appropriations legislation,\textsuperscript{17} and that the no such item would have been included in Appropriations Acts given the speed of the outbreak, it is more likely that the Commonwealth would rely on the second limb of the defence power to address a zombie epidemic, as expenditure of money for the protection of the public from internal violence however caused, would fall within the ordinary annual appropriation for the defence force and the Australian Federal Police.

\section*{III \hspace{1em} PERSONAL LIBERTY DURING – AND BEFORE - A TIME OF OUTBREAK}

Although one might expect that the right to personal liberty will be curtailed in the event of a zombie outbreak, perhaps what is more disturbing is that the is not that well protected under Australian constitutional law even in the absence of such a catastrophe.

As is notorious, the right to personal liberty, arguably the most important right apart from the right to life receives no express protection in the Commonwealth Constitution. In other words, we still await the fulfilment in our Constitution\textsuperscript{18} of the promise of Magna Carta of 1215, clauses 39 and 40 of which provide as follows:

\begin{footnotesize}
\begin{enumerate}
\item\textsuperscript{13} (1949) 79 CLR 101.
\item\textsuperscript{14} (1949) 79 CLR 121.
\item\textsuperscript{15} Davis v Commonwealth (1988) 166 CLR 79.
\item\textsuperscript{16} Pape v Commissioner of Taxation (2009) 238 CLR 1.
\item\textsuperscript{17} Williams v Commonwealth (No. 1) (School Chaplains Case) (2012) 248 CLR 156.
\item\textsuperscript{18} It was a terrible irony that in the very week of the 800th anniversary of Magna Carta last year, the principal concern of the government was the drafting of legislation to allow deprivation of citizenship without the need to go to court – the very antithesis of due process promised by Article 39 of Magna Carta - see Eleanor Hall, ‘What can Tony Abbott learn from the Magna Carta?’ Australian Broadcasting Corporation – The World Today, 15 June 2015, \texttt{http://www.abc.net.au/news/2015-06-15/modern-australian-politicians-could-learn-from/6546728}.
\end{enumerate}
\end{footnotesize}
(39) No free man shall be seized or imprisoned, or stripped of his rights or possessions, or outlawed or exiled, or deprived of his standing in any way, nor will we proceed with force against him, or send others to do so, except by the lawful judgment of his equals or by the law of the land.

(40) To no one will we sell, to no one deny or delay right or justice.

In the absence of textual protection of the right to liberty in the Constitution, such protection as the right has rests on the thin foundation of an implied right to due process under Chapter III as enunciated in Lim v Minister for Immigration, Local Government and Ethnic Affairs.\(^\text{19}\) In that case, the High Court held that as the adjudication and punishment of criminal guilt was punitive in nature, it was an exclusively judicial function and for that reason the executive has no common-law power to detain citizens other than as part of a process in which the ultimate validity of detention is determined by the courts.\(^\text{20}\) Similarly, the court held that the where statutory power to detain is conferred upon the executive, that too had to be overseen by the courts.

The right to due process as formulated in Lim is however subject to significant shortcomings: First the court found that the power to detain non-citizens who do not have permission to be in Australia for the purpose of deportation or the determination of an application to enter Australia is non-punitive and so a power to detain in those circumstances could be conferred upon the executive by Parliament. Yet it is difficult to see how detention of persons who have committed no offence and have sought to exercise the right to apply for asylum can be anything other than punitive. The objectively punitive nature of such detention is confirmed by the fact that even though decisions taken by officers of the Commonwealth under migration detention legislation is subject to review under s 75(v) of the Constitution, that review does not give the courts the power to engage in substantive review of the reasonableness of a decision and, as was shown in Al-Kateb v Godwin,\(^\text{21}\) which can lead to a person being detained \textit{ad infinitum} – and surely no detention can be more punitive. Furthermore, in Behrooz v Secretary, Department of Immigration and Multicultural and Indigenous Affairs,\(^\text{22}\) the court held that the fact that the conditions of detention were inhumane (indeed, one can argue that detention in the absence of criminal guilt is inherently psychologically inhumane) did not make detention punitive.

The other shortcoming in Lim derives from the fact that the court held that non-punitive detention by judicially-unsupervised executive order is permissible in ‘exceptional cases’, which the court did not define but said would include the detention of persons who were mentally ill or who were carrying communicable diseases. Subsequently, in Kruger v Commonwealth,\(^\text{23}\) Gummow J added the detention of children for their own protection to the

\(^{19}\) (1992) 176 CLR 1.

\(^{20}\) Ibid 114 (Brennan, Deane and Dawson JJ).


\(^{23}\) (1997) 190 CLR 1.
list of exceptions and also stated that ‘The categories of non-punitive, involuntary detention are not closed’. This approach is troubling for three reasons:

First, if categories of non-justiciable detention exist, how is a person (or someone acting on their behalf) to engage the courts in determining whether their detention actually falls within one of those categories? In Lim the court held that while Parliament could authorise detention under the Migration Act 1958 (Cth) of categories of person alleged to be in Australia unlawfully, the executive could not be given an unreviewable power to determine whether a person fell into one of those categories, as that would be to vest judicial power in the executive. Presumably therefore a writ of habeas corpus can be sought and a challenge to detention brought on the basis that it does not fall within one of the exceptional categories such as carrying a communicable disease which would be relevant in the case of a zombie plague, but it is unfortunate that the court in Lim did not qualify its statement to reflect that entitlement. If Lim is read as meaning that related to one of the exceptional categories fell wholly outside the ambit of judicial scrutiny, it could lead to black-hole detention into which a person could disappear without any remedy.

Second, ought there ever to be circumstances in which detention by executive order is ever justifiable in a free society? Why, even in cases of mental illness, communicable disease or child protection should there not be a requirement for judicial confirmation that reasonable grounds for detention exist? The consequences of not having a constitutionally-protected right to due process for all types of detention were illustrated by the cases of Vivian Alvarez Solon, deported from Australia even though she was an Australian citizen, and Cornelia Rau, who was also an Australian citizen and who was held in immigration detention after she was unable to identify herself because of mental illness. Both women were able to be detained because neither the State laws relating to the detention of people with mental illness nor the deportation provisions of the Migration Act 1958 (Cth) require judicial authorisation for deprivation of liberty - which would certainly lead such laws to be invalidated if we had a constitutional right to individual liberty and due process. Perhaps the most worrying aspect of the Rau and Solon cases was that they were found to be only two of more than 247 cases of unlawful detention over 14 years.

Third, the fact that in Lim the court excluded detention in certain circumstances from the ambit of judicial oversight means that in those circumstances the proportionality standard which applies in cases where constitutional rights are limited has no application. In other words, detention of persons falling into one of those categories is potentially open-ended.

24 Ibid 162.
because no court would be able to inquire whether the use of detention or, when justified, its duration, was a proportionate response to the circumstances supposedly justifying the detention.  

The implications of this during a zombie outbreak are that since the existence of a communicable disease is one of the exceptional categories identified in Lim, the state would be able to detain persons who were alleged to be infected without having to prove that they actually were infected, without the person having the right to contest the reasonableness of their detention before the courts and with the detention potentially continuing ad infinitum. Of course, the mechanisms of judicial review would no longer be available once constitutional authority had broken down, but it is concerning that even during the tardo and affretando stages people could be detained without due process. Indeed, one can go further and state that even in the absence of a zombie threat Australian constitutional law vests the state with an unreviewable power to detain, which is surely a sign that the inclusion of a non-derogable right to personal liberty needs to be included in the Constitution.

### IV ABROGATION OF THE CONSTITUTION UNDER THE DOCTRINE OF NECESSITY

Where would lawful authority to govern reside once governmental structures had broken down during the prestissimo stage of the outbreak? Although it has never become a live issue in Australia, the courts in several Commonwealth jurisdictions have recognised the existence of a doctrine of necessity under which unconstitutional acts may be taken for the purpose of securing constitutional government in the future. The doctrine was first recognised in 1955 in Pakistan in the case of *Federation of Pakistan v Maulvi Tamizuddin Khan* in which the court validated the acts of the Governor-General, who had permanently dissolved the

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27 Perhaps this should come as no surprise, given that limitless immigration detention was held to be lawful in *Al-Kateb v Godwin* (2004) 219 CLR 562.

28 A suitable model is provided by the South African Constitution, the relevant provisions of which state as follows:

12 Freedom and security of the person

(1) Everyone has the right to freedom and security of the person, which includes the right

(a) not to be deprived of freedom arbitrarily or without just cause;

(b) not to be detained without trial;

(c) The right is made effective by the procedural right contained in s 35(2)(d) which provides that any person is detained has the right to challenge the lawfulness of the detention in person before a court and, if the detention is unlawful to be released;

Significantly, while s 37 of the Constitution permits derogation from some rights during a state of emergency, s 37(5) lists s 35(2)(d) as one of the rights declared which is non-derogable.

29 PLD 1955 FC 240.
Constituent Assembly (which had been elected both to draft a Constitution for the country and to serve as its first legislature) in what he claimed were extraordinary ground that the Parliament was no longer representative of the people. The court based its decision on Bracton’s maxim ‘what is otherwise not lawful is made lawful by necessity’.  

A number of points emerge from this precedent: First, in so far as it purports to allow unconstitutional action, the doctrine obviously lies outside the normal scope of the reserve powers, which are part of the mechanism of responsible government. Second, care is needed in determining whether exigent circumstances warranting use of the doctrine actually exist - the Pakistan example was heavily criticised, as it is a truism to say that almost every legislature will, at some point in its life, no longer represent the popular will. Third, although an assumption of power under the doctrine is supposedly subject to the requirement that it occur for the purpose of protecting the constitutional order – in other words, the doctrine appears to justify a trade-off between a breach of constitutionalism the short term against the protection of constitutionalism in the long term – that will not always be the case, as the example of Fiji (discussed below) demonstrates.

A contrasting judicial pronouncement on the doctrine occurred in Grenada, in the wake of a military coup in 1983 which had overthrown a regime led by Maurice Bishop, which had itself seized power unconstitutionally in 1979. Members of the armed forces who had conducted the coup were charged with murder before courts which had been established by the Bishop regime and which had been declared lawful by the Governor-General after the coup. In *Mitchell v Director of Public Prosecutions* the Grenada Court of Appeal upheld the legality of the courts on the basis of the doctrine of necessity, finding that, in the absence of constitutionally-valid courts, the courts established by the Bishop regime were temporarily valid, pending the re-establishment of courts in accordance with the Grenada Constitution of 1973.

Haynes P laid down five conditions which needed to be satisfied in order for the doctrine of necessity to validate otherwise unconstitutional action:

1. an imperative necessity must arise because of the existence of exceptional circumstances not provided for in the Constitution, for immediate action to be taken to protect or preserve some vital function to the State;
2. there must be no other course of action reasonably available;
3. any such action must be reasonably necessary in the interest of peace, order, and good government; but it must not do more than is necessary or legislate beyond that;
4. it must not impair the just rights of citizens under the Constitution;
5. it must not be one the sole effect and intention of which is to consolidate or strengthen the revolution as such.

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31 [1986] LRC (Const.) 35.
32 For an analysis of *Mitchell* see Simeon McIntosh, *Kelsen in the "Grenada Court": Essays in Revolutionary Legality* (Ian Randle Publishers, 2008).
In 2000 in the aftermath of one of four coups to occur in Fiji in recent decades, the Fiji Court of Appeal was called upon to determine whether the assumption of power by Commodore Frank Bainimarama in the wake of a coup by George Speight was lawful. In *Republic of Fiji v Prasad* the court applied the criteria established in *Mitchell v Director of Public Prosecutions* to hold that while Bainimarama’s exercise of power in the immediate aftermath of the coup to re-establish order was justified under the doctrine of necessity, his subsequent actions in abrogating the Constitution were not. The same reasoning was again applied by the Fiji Court of Appeal in *Qarase v Bainimarama*, in which the court held that the acts of the then President, Ratu Josefa Iloilo, and Commodore Bainimarama in dissolving Parliament and dismissing the Prime Minister could not be justified under the doctrine of necessity because they were directed towards the usurpation of constitutional authority, not its preservation. Unfortunately, however, the Bainimarama regime then abrogated the Constitution and dismissed the judges.

In light of the above one can say that during an outbreak of zombiism an assumption of governmental power by the Governor-General (or, after his demise and that of the Executive Council, anyone else who was in a position of wielding *de facto* authority over police and military forces) would be lawful, so long as that assumption of power was directed towards the ultimate restoration of constitutionalism. It would also be true to say that as the institutions of government progressively failed, the power that could be wielded unconstitutionally would become proportionately greater.

Ultimately, in the final stages of the *mosso* period, once centralised governmental authority (both State and Commonwealth) had broken down, one could predict conflict between competing groups of bureaucrats and military personnel trying to assert authority. The most likely end-point of this process would likely be the coalescence of survivors around defended strong-points, in which authority was wielded by those with the physical means to do so. Whether the acts of those people would be justifiable in accordance with the rules formulated by Haynes P would vary from case to case, but one would imagine that in many instances the temptation to retain power indefinitely, rather than to wield it only pending the restoration of constitutional government and with respect for human rights, would be overwhelming. In other words, in many places authority would devolve to petty tyrants.

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34 Two coups occurred in 1987, followed by coups in 2000 and 2006.
37 Noting that there is no prescribed hierarchy of authority under either common law or statute which would determine where lawful lay in such circumstances.
V A NEW POST-APOCALYPTIC GRUNDNORM?

A related but separate issue to the doctrine of necessity (where unconstitutional acts directed towards the ultimate re-establishment of constitutional government may be justified) is that of legitimacy (which involves whether an unconstitutional regime is lawful). It would be a mistake to assume that, even if the zombie plague is overcome - which would take a long time as it would require the killing of all zombies - the constitutional status quo ante would automatically be restored. Indeed, it would be extremely difficult for a single political authority to be re-established over a country as large as Australia in the allargando phase, taking into account the destruction of transport and communication infrastructure, the significant decrease in population and the rise of local polities that would have occurred during the prestissimo stage. How would the legitimacy of new polities be assessed?  

There are two main approaches to legitimacy. The first has its origins in the positivist theories of Hans Kelsen and in particular the doctrine of effectiveness, in terms of which legal rules are deemed to be legitimate if issued by a law-maker or institution whose authority is recognised in the sense of being generally obeyed by the ruled. According to this theory, the moral content of law is irrelevant to its legitimacy, the sole criterion of which is effectiveness. Furthermore, it matters not whether general obedience is obtained by maintaining the support of the ruled or only their unwilling acquiescence. Kelsen’s theory has the advantage that the existence of a law-making authority will be able to be identified simply by observing whose rules are generally obeyed. Its disadvantages are that even a tyranny can be legitimate in accordance with its terms. It also allows a regime to take power unconstitutionally and for its dictates to become law, so long as that regime is successful in displacing the authority of the old regime – indeed the theory encourages ruthlessness in so doing, because a successful stamping out of the authority of the old, constitutional, regime is critical to the legitimacy of the new regime.

The other approach to legitimacy can be described as a natural law theory because it has in common with natural law the idea that law is valid only if it complies with some external moral norm and if the authority producing it rules with the consent (not mere acquiescence) of the population. The advantage of this theory is that it is consistent with human dignity in

40 For examples of the application of this theory see R v Ndhlovu 1968 (4) SA 515 (RAD) 532 [B-D] (Beadle CJ) and Mokotso v The King [1989] LRC (Const.) 24, 131-3 (Cullinan CJ).
41 An illustration of the consistency of this approach with natural law is provided by the cases which arose in post-Nazi Germany, when courts refused to apply laws that were contrary to fundamental norms of justice – see Lon Fuller, ‘Positivism and Fidelity to Law - A Reply to Professor Hart’ (1957-58) 71 Harvard Law Review 630 and Thomas Mertens ‘Nazism., Legal Positivism and Radbruch’s Thesis on Statutory Injustice’ (2003) 14(3) Law and Critique 277.
42 The requirement of genuine consent of the population as a requirement for legitimacy was applied by the Fiji Court of Appeal in a decision where it was called upon to assess the legitimacy of the regime established by Commodore Frank Bainimarama – see Republic of Fiji v Prasad [2001] NZAR 385, [72-74] (Casey, Barker, Kapi, Ward and Handley JJA).
that under it regimes which grossly infringe human rights (and thus they laws they purport to enact) are illegitimate. The disadvantage of the theory is that as compliance with human rights norms is a matter of degree, it is difficult to determine the point at which a regime fails the test. Furthermore, even in cases where a regime is plainly illegitimate under the test, declaring it so would usually leave a legal vacuum with no competitor regime in existence – although a solution to this lies in courts which are faced with questions over the validity of laws enacted by such regimes validating those laws which are not offensive to fundamental rights.

Although the assumption of sovereignty over Australia by the United Kingdom, and thus the enactment of all laws subsequently passed by colonial, Commonwealth, State and Territory governments was legitimate in Kelsinian terms, the fact that it was achieved through the dispossession, displacement and, in many instances, the massacre, of Indigenous people means that it would not be seen as such under natural law. Nevertheless, given the passage of time since the assumption of sovereignty, it is unsurprising that the courts have held the Crown’s acquisition of authority to be unchallengeable before Australian courts in *Mabo v Queensland (No. 2)*, and that Indigenous law was extinguished as a consequence.44

Similarly, the courts have rejected any argument that laws might be invalid on grounds that they fail to meet external norms of justice, holding that within the scope of its legislative powers (and subject to the few rights protected by the Constitution) statutes enacted by the Commonwealth Parliament may not be challenged on substantive grounds. There are numerous decisions to the same effect at State level.

Things would be very different in the wake of a zombie apocalypse in which Commonwealth and State governments had been swept away with little or no change of being re-established. This break in legal continuity would mark a change in the grundnorm in Kelsinian terms, as legal authority would now be traced to the acquisition of power by a number of new law-making authorities exercising effective control in various parts of the country. While all these regimes would pass the Kelsinian test of legitimacy, those which were tyrannical would fail the natural law test. It is unreasonable to expect that courts in the latter type of polity would have the courage (and perhaps unwisdom) to pronounce negatively on the validity of the regimes of which they are a part. However, one would predict that the courts of other polities in which norms of justice were in operation would be confident to pronounce upon the validity of such regimes and of the laws promulgated by them, an issue which would arise when such courts were called upon to decide whether to enforce the laws of other polities in cases involving conflict of laws. Here it is likely that a distinction would be drawn between laws offending against fundamental rights and quotidian laws regulating matters such as contracts.

43 (1992) 175 CLR 1, 60 (Brennan J).
One of the most significant consequences of the breakdown of previous constitutional structures would be the opportunity it would provide for the re-establishment of Indigenous sovereignty over large parts of Australia. The fact that a significant proportion of the Indigenous population lives in widely-dispersed remote settlements would mean that it would to some extent be protected from the zombie apocalypse and would therefore be well-placed to re-assert the sovereignty that was lost at the time of settlement. This would also mean a resurgence in the application of Indigenous law which, despite claims to the contrary, has remained immanent in Indigenous communities even though not recognised by the legal system established after 1788.45

The emergence of new polities throughout what was once the Commonwealth of Australia would require the drafting of new constitutions ab initio. This would provide an opportunity for comprehensive constitutional reform such as has not been politically possible under the current Commonwealth Constitution with its inhibiting amendment process. Drafters of constitutions would be able to implement new electoral systems, provide for proper legislative scrutiny of the executive and offer effective protection for human rights, matters in relation to which the current Constitution is so manifestly deficient.46 It is a mark of how difficult constitutional reform is in Australia that a zombie apocalypse may offer the best chance of its taking place.

IS THE ZOMBIE MY NEIGHBOUR? THE ZOMBIE APOCALYPSE AS A LENS FOR UNDERSTANDING LEGAL PERSONHOOD

BRUCE BAER ARNOLD*

ABSTRACT

This article explores the nature of legal personhood through reference to the zombie apocalypse. It discusses what constitutes a legal person, something that is not restricted to the live human animal. It considers who determines whether an entity, undead or otherwise, is a legal person before going on to discuss both legal authority and criteria for that determination. It draws on Australian and overseas statute law and jurisprudence regarding death and personhood in human animals, nonhuman animals and other entities before discussing questions about dignity, capacity, rights and responsibilities in relation to Schmitt, Atkin, Rawls, Nussbaum, Fineman and Agamben.

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I HEY, HEY WE’RE THE ZOMBIES (AND PEOPLE SAY WE ZOMBIE AROUND)

The Zombie Apocalypse – a fictive pandemic in which the Undead pose an existential threat to the contemporary liberal democratic state and indeed to humanity – offers a lens for understanding legal personhood, an entity that is so fundamental as to be frequently unrecognised. The Apocalypse also provides a lens for viewing law as a coherent system of rules that are both enforceable and deemed to be legitimate by society in times of crisis or otherwise.

The 2016 special issue of Canberra Law Review – consistent with the University’s commitment to innovative, practical and socially relevant teaching – explores that Apocalypse, with contributors responding to a scenario in which the preconditions for day by day existence in a liberal democratic state disappear through the collapse of public/private institutions as a zombie pandemic reduces much of the population to ghouls that are both aggressive and frighteningly-resilient.


It is a scenario in which both the High Court and national legislature may have ‘turned’ (that is ceased to be human in the eyes of ordinary people), with authority becoming a matter of rule by force rather than rule of and by law. It is a scenario in which individuals and scattered communities of survivors engage in the most visceral form of self-help with an imperative to kill (or radically incapacitate) their neighbours on the basis of ‘kill or be killed’, a self-help that disregards legal expectations about the sanctity of property, the state’s monopoly on lawful violence, a hierarchical distribution of power in a federal system, recourse to the courts for the resolution of disputes, and other matters that we take for granted.

This article considers the law and the Apocalypse by asking a simple question: ‘is the zombie my neighbour’? That question is an echo of the query voiced in Donoghue v Stevenson by Lord Atkin, the UK jurist whose early childhood was spent in colonial Queensland. The following pages are concerned with whether zombies are legal persons – entities with rights and responsibilities – rather than nonhuman animals or ambulatory cadavers that by lacking the personhood of states, corporations and humans are accordingly at best regarded as potential chattels and at worst as dangers that must be destroyed without hesitation.

Part One identifies premises and uncertainties. Part Two asks are zombies human animals? Part Three asks whether zombies more broadly are legal persons. Part Four asks what are the consequences of the answers to the preceding questions. Part Five concludes by asking what do the answers in Parts Two through Four tell

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4 Donoghue v Stevenson [1932] UKHL 100.

II LIFE, JIM, BUT NOT AS WE KNOW IT?

In the parodic 1987 *Star Trekkin* Captain Kirk is advised by Dr Spock that what they have encountered is ‘life, Jim, but not as we know it, not as we know it’. Zombies have a quality of liveness, although not in a familiar form.

They are organic – creatures of flesh (skin, muscle, sinew, bone) – with the associated vulnerabilities rather than being mechanical devices such as the automata in the *Terminator* and *Star Wars* series or dyspeptic movies such as Spielberg’s 2001 *AI* and Garlán’s 2015 *Ex Machina*. The ‘walking dead’ are capable of movement, of basic tool/weapon use and of at least rudimentary communication – ‘braaains’ –despite having died (that is, not having a discernable pulse). They have some sociability and cognitive skills, evident in their mobbing of the people that they encounter. It is unclear whether they have a social structure – some depictions imply leadership roles, independent of the zombie’s status in previous life. They appear to spend some time asleep or in stasis; sources vary on whether they engage in recreation. Significantly, they appear to be free of the need to eat and drink. They are highly resilient, persevering after experiencing injuries – for example the loss of an arm or leg, damage to viscera or a severe chest wound and subsequent necrosis – that would incapacitate, if not immediately kill, a person. They appear to be indifferent to the arts or reason, immune to boredom or persuasion through negotiation.

To the extent that the term is applicable, given that we do not have a clear view of zombie consciousness, their motivation appears to be asexual reproduction. They engage in what might be dubbed a parody of ethnic cleansing, with any people that they encounter either being killed outright or ‘turned’ into zombies through a little understood and regretably undocumented process that resembles infection. Epidemiological modeling suggests that propagation would be swift and large-scale, meaning that as in the scenario major metropolitan centres and even nations would ‘turn’ quickly with a consequent disappearance of the public/private institutions that are axiomatic for

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7 Some depictions, such as Danny Boyle’s 2002 *28 Days Later* and 2007 *28 Weeks Later*, indicate that people may become zombies while still alive, rather than returning from being substantively or merely apparently dead.

8 Readers should note the caution provided by Thomas Nagel, ‘What is it like to be a bat?’ (1974) 83(4) *The Philosophical Review* 435 and Peter Godfrey-Smith, *Other Minds: The Octopus, the Sea, and the Deep Origins of Consciousness* (Farrar Straus Giroux, 2016) regarding our interpretation of non-human cognition. Although we can make inferences about what drives zombies we cannot know for sure. Uncertainty about their thought processes raises questions about legal capacity.

maintenance of the contemporary liberal democratic state.\textsuperscript{10} They have agency, albeit of a low order, in dealing with obstacles in the course of pursuing their prey – that is, us.\textsuperscript{11}

Most importantly, zombies begin as people. They are not born as zombies, nor are they manufactured. They result from exposure – notably in the form of bites or other minor flesh wounds – of humans to zombies, a concatenation that has led some observers to see zombies in popular culture as metaphors for the spread of communism or AIDS.\textsuperscript{12} That origin has two consequences.

The first is that we are thus not required to consider zombie non-human animals, such as dogs, cats, kangaroos, pigs or sheep, irrespective of whether those creatures serve as vectors for infection of potential readers of the \textit{Canberra Law Review}.\textsuperscript{13} The notion of the zombie budgerigar, pet mouse or hamster has not gained traction in popular culture. If such creatures were to exist they could be addressed under law regarding animal quarantine and dangerous animals without raising questions about what is (or should be deemed to be) human.\textsuperscript{14}

The more salient consequence is that the zombie’s origin as a human animal raises questions about legal personhood.

Do for example they remain people, continuing to hold property (perhaps under an individual or collective guardianship relationship) alongside the enjoyment of civil rights and responsibilities? Are they instead a novel form of legal person, akin to a non-human animal and thus – unlike persons such as corporations – devoid of both rights and responsibilities? Are they cadavers, albeit of a uniquely ambulant variety, and thus neither persons nor property? Are they objects, necessarily devoid of personhood? If they are persons, should we regard them as neighbours and thus entitled to a respect, akin to that enjoyed by human animals with a severe intellectual disability, that involves minimising


\textsuperscript{13} For reference see New Zealand director Jonathan King’s 2006 film \textit{Black Sheep}, in which ‘an experiment in genetic engineering turns harmless sheep into bloodthirsty killers that terrorize a sprawling New Zealand farm’.

\textsuperscript{14} See for example \textit{Biosecurity Act 2015} (Cth); \textit{Biosecurity Act 2015} (NSW); and \textit{Biosecurity Act 2014} (Qld).
harm to any zombie? Does the apocalypse foster a conclusion that legal personhood, more than patent law, is a ‘rather artificial, highly complex and somewhat refined subject’\(^\text{15}\) – a matter of convenience and convention, even a luxury that is irrelevant in a Schmittian exterminationist war of us against them.\(^\text{16}\)

### III SOME ANIMALS ARE MORE EQUAL THAN OTHERS

A succession of rights agreements since the horrors of the 1940s – a pre-zombie apocalypse – have articulated a global norm founded on the notion that all humans possess inalienable rights, irrespective of ethno-religious affinity, education, wealth, gender, sexuality, nationality or political affiliation.\(^\text{17}\) Those rights are universal: they are to be enjoyed by all humans because all humans are members of the same species, sharing a common identity as human animals. The agreements are reflected, albeit unevenly, in Australian rights statutes and jurisprudence.\(^\text{18}\) Implementation of the norm remains subject to contestation, with for example recent disputes in Australia about full recognition of sexual affinity through same-sex marriage\(^\text{19}\) and rectification of past punitive regimes criminalising consensual homosexual activity.\(^\text{20}\)

That contestation has served to obfuscate a public discourse regarding legal personhood. Put simply, human rights are in essence a matter of rights and consequent statutory protections for human animals. Rights are species-specific,\(^\text{21}\) with non-human animals permanently on the wrong side of the

\(^{15}\) Commissioner of Patents v The Wellcome Foundation Limited (1983) 2 IPR 156, McMullan J.


\(^{18}\) See for example Charter Of Human Rights And Responsibilities Act 2006 (Vic) s 8; Human Rights Act 2004 (ACT) s 8; and Australian Human Rights Commission Act 1986 (Cth) s 47.


\(^{20}\) Martin Pakula, ‘Putting Right Past Prejudices And Expunging Homosexual Convictions’ (Attorney-General Media Release, 1 September 2015); and Sentencing Amendment (Historical Homosexual Convictions, Expungement) Act 2014 (Vic).

‘thick legal wall’ separating humans (and surrogates such as corporations) from members of other species,\textsuperscript{22} even though on an instance by instance basis a non-human animal such as an ape or African Grey parrot may have greater cognitive and communicative abilities than a severely handicapped child or adult who is ‘brain dead’.\textsuperscript{23} The Victorian \textit{Charter of Rights and Responsibilities},\textsuperscript{24} for example does not accommodate rights for non-human animals (perhaps consistent with a popular taxonomy in which the world is construed in terms of ‘people’ and ‘animals’).\textsuperscript{25} It does not provide human rights for corporations, although developments overseas suggest that some rights for corporate entities are conceivable\textsuperscript{26} and Australian corporations as property owners have the vote in some local government elections.\textsuperscript{27} Recognition of the Whanganui River as a legal person in New Zealand law remains exceptional, a model that has not been embraced in most jurisdictions or accommodated in Australian national and state/territory law.\textsuperscript{28}
Ontologists in characterising legal persons over several centuries have relied on language such as ‘intelligence’, ‘actor’, ‘will’, ‘alive’, ‘reasoning’, ‘human’, ‘autonomy’, ‘animal’, ‘thinking’, ‘volitional’, ‘non-mechanistic’ or ‘in the image of God’. In tacitly building legal taxonomies some thinkers have concentrated on similarities in relation to appearance or capability. Others have parsed entities into groups on the basis of differences, for example using skin colour or ethno-religious affinity or gender (or species markers such as hooves, horns and fins) to exclude particular categories of animal from personhood. All categorisations – and by implication all of the identities discernible in Australian law – involve both some subjectivity and some difficulty in dealing with inconsistencies.

A child with a severe neurological disorder, for example, may have lower problem solving and communication skills than a monkey or crow but in law that deficit does not mean that the child ceases to have the legal identity of a human. Pigs and cows can be sold for conversion into dog food, on the basis that they are non-human animals and are accordingly devoid of dignity and consequent rights not to be commodified. In contrast, vegetative seniors share in the legal identity of ‘human’ and thus cannot be so treated as an asset – or as a source for organ-harvesting – rather than a person. Their qualities of advanced communication and ratiocination are latent, sometimes fictively latent, but their former exercise of ‘human’ attributes privileges them by providing a legal identity that categorically cannot be enjoyed by non-human animals.

Should we regard zombies as legal persons because they once were human, or because they have enough human attributes to deserve in principle recognition as legal persons? In articulating what he characterizes as ‘social cartesianism’ – ‘a strong claim about the existence of a radical difference between humans and other entities’ – Collins comments that

Humans differ from animals, trees and sieves in having a unique capacity to absorb social rules from the surrounding society – rules that change from place to place, circumstance to circumstance, and time to time … It is only humans who have the ability to acquire cultural fluency. It is only humans who possess what we can call ‘socialness’ … As opposed to humans there are no groups of vegetarian dogs, arty dogs, nerdy dogs, dogs that believe in witches and dogs that understand mortgages – they are all just dogs. That one dog is different in ‘personality’ from another dog is beyond dispute, it is just that these personality traits do not correspond to any significant cultural differences.

Are zombies like dogs: insufficiently ‘social’ and ‘individual’, and consequently denied personhood? Being alive, or what appears to be alive, is insufficient. Plants, for example, although described by one author as enjoying a ‘non-cognitive, non-ideational and non-imagistic mode of thinking’, lack the engagement with their environment that is an attribute of human animals as a class and that makes for legal identity. Their responses to variations in their environment are autonomic (for example phototropism is involuntary). We might act to protect particular species or specific environs (in the

29 For a perspective see Geoffrey Bowker and Susan Star, Sorting Things Out: Classification and its Consequences (MIT Press, 1999) and works on taxonomies noted in preceding pages.
30 Powers of Attorney Act 1998 (Qld) s 36(2)(a)(ii); Consent to Medical Treatment and Palliative Care Act 1995 (Tas) s 7; MC, Re [2003] QGAAT 13, [2]; and Tu Tran v Dos Santos [2008] NSWSC 1216, [191].
same way that we might seek to preserve an architectural precinct, artifact or geological formation) but that does not mean the Australian legal system equates vegetation with legal personhood\(^{34}\) or that we must recognise zombies as legal persons. We might indeed deem zombies to be a discrete life form that misleadingly resembles human animals and exhibits autonomic behaviour (“braaaains!”) that should not be dignified through legal personhood.\(^{35}\)

A rejoinder is that zombies are human beings with severe disabilities, deserving respect as legal persons because of a shared humanity and recognition that they lack responsibility. Such a recognition would not preclude acknowledgment that zombies are dangerous, an attribute shared with some people confined in psychiatric and correctional institutions (on occasion in correctional institutions on a preemptive basis).\(^{36}\) In Australia we do not execute humans merely because those animals are perceived as violent or otherwise harmful, instead typically resorting to confinement. We do however sanction the destruction of wildlife, the industrialised death of livestock and the killing of ‘dangerous dogs’.\(^{37}\) That violence, in contrast to the intentional death of a human animal, is not deemed to be murder.

Could we usefully differentiate zombies from humans on the basis that when a zombie comes into existence it loses the personhood enjoyed by all humans? (In parenthesis, it is striking that we objectify the walking dead by disregarding the gender that is so important for feminist legal scholarship.) Such a differentiation is complicated by disagreement in accounts of the zombie apocalypse. Do humans become zombies while still alive? Does zombiedom instead involve the death of a human and consequent ‘birth’ of a zombie in the form of what was formerly a legal person? Those questions offer perspectives on the characterisation of life and its consequences.

In contemporary Australian law the life of a natural person commences at birth, rather than conception.\(^{38}\) That categorisation is culturally contingent. It is problematical for those bioethicists and civil society advocates who characterise the life of the human animal (sometimes conceptualised as having a soul and thus privileged over non-human animals) as beginning at the moment of conception or at a certain stage of development prior to birth. That characterisation is reflected in references to the ‘rights of the unborn child’\(^{39}\) and to abortion as murder, an illustration that how we characterise

\(^{34}\) Christopher Stone, ‘Should Trees Have Standing - Toward Legal Rights for Natural Objects’ (1972) 45(2) Southern California Law Review 450.


\(^{37}\) See for example Animal Management (Cats and Dogs) Act 2008 (Qld) ss 89 and 197A; and Domestic Animals Act 1994 (Vic) s s34, 84TB and 84TC.


identity potentially has substantial consequences. It is also reflected in claims that law relies on anachronistic medical information.\textsuperscript{40}

That life might be attributable to \textit{in vitro} fertilisation or other assisted fertility,\textsuperscript{41} with law recognising the parentage of children born through assisted fertility technologies.\textsuperscript{42} Unsurprisingly, law has addressed questions about ‘the stuff of life’, for example requiring the disposal of unimplanted fertilized oocytes and stored gametes,\textsuperscript{43} restricting postmortem extraction of gametes\textsuperscript{44} and restricting some experimentation.\textsuperscript{45}

Law does not regard a foetus as being autonomous\textsuperscript{46} and thus having a legal identity; action that causes a foetus to ‘die’\textsuperscript{47} in utero may be treated as a grievous bodily harm on the basis that the interests of the mother and potential child are intertwined\textsuperscript{48} and a child may take action for injury suffered as a foetus.\textsuperscript{49} The unborn child is not a citizen, cannot engage in commercial transactions or hold property but can prospectively be a beneficiary of a trust if it is born. The ‘if’ is important; Australian law allows the termination of a pregnancy in particular circumstances, so that the foetus does not become a legal person.\textsuperscript{50}

\textsuperscript{40} In particular see Clarke Forsythe, ‘Homicide of the Unborn Child: The Born Alive Rule and Other Legal Anachronisms’ (1987) 21(3) Valparaiso University Law Review 563. See also Sara Dubow, \textit{Ourselves Unborn: A History of the Fetus in Modern America} (Oxford University Press, 2011) regarding the legal status of the unborn as a subject of contestation in US law and politics.


\textsuperscript{43} For example \textit{Infertility Treatment Act 1995} (Vic) and \textit{Assisted Reproductive Treatment Act 2008} (Vic).


\textsuperscript{46} \textit{Paton v British Pregnancy Advisory Service Trustees} [1979] QB 276.

\textsuperscript{47} See \textit{Barrett v Coroner’s Court of South Australia} [2010] SASCFC 70 and \textit{Barrett v The Coroner’s Court of South Australia & Anor} [2011] HCATrans 165.

\textsuperscript{48} See for example \textit{Crimes Act 1900} (NSW) s 5; \textit{Crimes Act 1958} (Vic) s 15; \textit{Criminal Code 1924} (Tas) s 184A; and \textit{Criminal Code 1899} (Qld) s 313(2). Criminalisation of action that causes death of the child during birth, for example by strangulation after the child has uttered its first breath but is still attached to the mother, is covered in statutes such as \textit{Crimes Act 1900} (NSW) s 20; \textit{Crimes Act 1900} (ACT) s 42; \textit{Criminal Code Act 1924} (Tas) s 165; \textit{Criminal Code 1899} (Qld) s 313(2); and \textit{Criminal Code (NT)} s 170.


\textsuperscript{50} See for example \textit{Criminal Code 1924} (Tas) s 164; \textit{Health Act 1911} (WA) ss 5(a), 7(b) and 334(a); \textit{Criminal Law Consolidation Act 1935} (SA) s 82A. Among works on decriminalisation of abortion, consistent with theorising pregnant women as having possessive individualism, see Gideon Haigh, \textit{The Racket: How Abortion Became Legal in Australia} (Melbourne University Press, 2009).
Birth is what brings the person into existence. It is typically recognised through a birth certificate, a registration mechanism under state/territory law. People are assumed to be alive until they die, although as noted above their sentience and agency on an instance by instance basis may vary considerably during that time, with the death of human animals being formally noticed by the ‘information state’ through a death certificate and inclusion in a state/territory deaths register.

Life may be evanescent. The Court in *R v Iby* thus indicated that

Authority is clearly in favour of a conclusion that the common law ‘born alive’ rule is satisfied by any indicia of independent life. There is no single test of what constitutes ‘life’. The position is well-stated by one author: A child is live-born in the legal sense, when, after entire birth, it exhibits a clear sign of independent vitality; in practice, at least the evanescently persistent activity of the heart.

A consequence of that conceptualisation is that causing death of a freshly delivered baby, an older infant in a crib, a young person in a nightclub or an adult in an aged care home all potentially attract criminal or civil penalties, including those characterised through the concept of murder. What the court in *Iby* alluded to as ‘tokens of vitality’ – such as breathing, circulation and some brain activity – might be quite evanescent. In contrast to speech or written communication, however, they do need to be discernable in order for life to be recognised. Do zombies have sufficient vitality? They walk, they talk (“Braaaains”), they engage in purposive activity.

Forsythe characterized the ‘born alive’ rule as a legal anachronism attributable to a lag in judicial reception of recent medical knowledge. Australian courts are however aware of new medical conceptualizations of when life starts and the extent to which premature infants can be supported, with jurisprudence instead being informed by public policy concerns. Australian courts, along with overseas peers, are grappling with advances in knowledge and technologies regarding death. Does life – or the life needed for recognition in terms of legal identity – cease when a person’s heart stops beating? What if circulation is attributable to a mechanical device? What if circulation continues unassisted but, as appears to be the case with the *Canberra Law Review* zombies, all higher functions in the person’s brain have ceased and will not reappear.

Those questions pose conundrums for people who conceptualise life in terms of a pulse and enough breath to fog up a mirror or that someone is dead because a medical practitioner has said so. In the years preceding the apocalypse Australian legislatures have helpfully provided statutory definitions

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52 *Births, Deaths & Marriages Registration Act 1997* (ACT) s 7; *Births, Deaths & Marriages Registration Act 1995* (NSW) s 13; *Births, Deaths & Marriages Registration Act* (NT) s 13; *Births, Deaths & Marriages Registration Act 2003* (Qld) s 6; *Births, Deaths & Marriages Registration Act 1996* (SA) s 13; *Births, Deaths & Marriages Registration Act 1999* (Tas) s 12; *Births, Deaths & Marriages Registration Act 1996* (Vic) s 13; and *Births, Deaths & Marriages Registration Act 1998* (WA) s 13.
53 See for example *Births, Deaths & Marriages Registration Act 1996* (SA); *Births, Deaths and Marriages Registration Act 1996* (Vic); and *Registration of Deaths Abroad Act 1984* (Cth).
55 For a provocative analysis see Michael Potts, Paul Byrne and Richard Nilges (eds), *Beyond Brain Death: The Case Against Brain Based Criteria for Human Death* (Kluwer Academic, 2000).
that accommodate practices such as organ transplantation and elective ventilation\(^57\) and might be reflected in a regime that embraces ‘assisted dying’,\(^58\) given the tenet that the state reserves a monopoly on lawful ending of life.\(^59\)

Lawmakers have also recognised that bodies sometimes are not available and have accordingly embraced assumptions such as the ‘seven year rule’, in other words the convention that an absence for seven years means the person is dead.\(^60\) That convention has implications for marriage, insurance and other law relevant to the apocalypse, given that a collapse of public order will immediately be manifested through a disregard of statutory requirements regarding the comprehensive registration of death. During the apocalypse many people will be preoccupied with survival rather than seeking death certificates. In the aftermath of the apocalypse there are likely to be a large number of missing persons in the form of dispatched zombies, akin to absences after natural disasters such as tsunamis or military activity such as the bombing of Dresden, Hamburg and Hiroshima.\(^61\)

Australian has not yet had to address questions about property disputes, misrepresentation and negligence in relation to postmortem freezing for cryonic preservation and supposed eventual ‘resuscitation’ of dead humans,\(^62\) cadavers whom cryonics enthusiasts characterise as ‘in suspension’ rather than dead, privileging a latency that if applied consistently would give personhood to embryos

\(^57\) Transplantation and Anatomy Act 1978 (ACT) ss 30 and 45; Human Tissue Act 1983 (NSW) ss 26 and 33; Transplantation and Anatomy Act (NT) ss 21 and 23; Transplantation and Anatomy Act 1979 (Qld) s 45; Death (Definition) Act 1983 (SA) s 2; Human Tissue Act 1985 (Tas) ss 25A and 27A; and Human Tissue Act 1982 (Vic) ss 26(7) and 41.


\(^59\) That monopoly is most commonly exercised by the armed forces in military conflict. See also Death Penalty Abolition Act 1973 (Cth); Lynne Forsterlee, ‘Death penalty attitudes and juror decisions in Australia’ (1999) 34(1) Australian Psychologist 64; William Schabas, The abolition of the death penalty in international law (Cambridge University Press, 2002); and James Wyman, ‘Vengeance Is Whose: The Death Penalty and Cultural Relativism in International Law’ (1996) 6(2) Journal of Transnational Law & Policy 543, with the latter indicating the usefulness of a Rawlsian test in addressing cultural contingency.


from the moment of fertilisation. It also has not had to face conundrums involving undead humans who, like corporations, may exist in perpetuity.

Why do we care about whether zombies are alive or dead? One answer, as highlighted by Naffine, is that those states are freighted with metaphysical values that are important to individuals in making sense of their own existence and that by linking people to communities form a basis for a sense of belonging, rights and responsibilities. People define themselves through their relationships with past, current and prospective members of their society.

A more functionalist answer is that life and death bring into being or extinguish the rights, responsibilities, entitlements and obligations. As legal inflection points in liberal democratic states they invoke registration and investigation processes administered by state bureaucracies (such as the Australian state/territory registrars of births, deaths and marriages and coroner’s offices that have a statutory basis) and that involve nongovernment entities such as medical practitioners acting for the state.

Death has consequences, for example regarding the end of entitlement to income support (reflected in identity offences such as people illegally receiving the pension of a dead relative), potential disagreements about disposition of the decedent’s assets or body, opportunities for insurance fraud through fake deaths and a changed status under defamation law. Dead people cannot sue for injury to reputation, irrespective of the pain experienced by their grieving survivors, because in legal terms that reputation dies with them.

70 Civil Law (Wrongs) Act 2002 (ACT) s 122; Defamation Act 2005 (NSW) s 10; Defamation Act 2006 (NT) s 9; Defamation Act 2005 (Qld) s 10; Defamation Act 2005 (SA) s 10; Defamation Act 2005 (Vic) s 10; and Defamation Act 2005 (WA) s 10.
Death takes the individual, although not the individual’s estate (which is held to pass to heirs), out of Australia jurisdiction: the person has migrated to death’s kingdom, a jurisdiction from which – contrary to exponents of quantum mysticism – there is no return.

IV TAXONOMIES OF LEGAL IDENTITY

Personhood – a legal fiction endowing an entity with rights and responsibilities – is a building block of contemporary Australian law and the law of other liberal democratic states. As Part One suggested, it is something that we take for granted.

Cotterell dubbed the legal person as the foundation of all legal ideology, something that

allows legal doctrine to spin intricate webs of interpretation of social relationships, since the law defines persons in ways that empower or disable, distinguish and classify individuals for its special regulatory purposes.72

Personhood is evident in legal understandings of the world since at least the time of Gaius, Ulpian and associated Roman theorists.73 Justinian’s Digest for example explained

All our law relates either to persons, or to things, or to actions. Let us first speak of persons; as it is of little purpose to know the law, if we do not know the persons for whose sake the law was made.74

According to the compilers of that Digest, a ‘must have’ item on the shelves of what Stein perceptively dubs the supermarket of Roman law, persons engaged in actions relating to each other, themselves or things.75 Personhood was founded on notions of sentience, reason and agency – attributes that we might deem are insufficiently evident in the activity of zombies. Unlike things, persons had both rights and responsibilities, albeit some had fewer rights (and commensurate responsibilities) than others, on the basis for example that they were female, non-citizens and/or slaves. Personhood for the Romans excluded non-human animals and what we might now characterise as ‘nature’ or ‘the environment’, irrespective of the sentience and thus potential suffering of creatures such as cats, dogs, apes, octopi and parrots. It however encompassed the state, an entity that is not of woman born and that unlike a zombie cannot be dispatched with a shotgun, chainsaw, hoe or sharpened stake. Over time it came to encompass entities such as religious or other corporations that both existed beyond the life of a particular founder or member and were formally distinct from that individual or group of individuals.

Legal personhood, as students of company law have discovered over several decades, is thus not bounded by the life of an individual human or restricted to a creature with the capacity to engage in

71 Death similarly does not vanquish debt or bankruptcy; see Bankruptcy Act 1966 (Cth) s 63.
74 Alan Watson (ed), The Digest of Justinian (Alan Watson trans, University of Pennsylvania Press, 1998) vol 1, 1:III.
75 Peter Stein, Roman Law in European History (Cambridge University Press, 1999) 2.
discourse. Law, as a set of administratively convenient fictions, has long recognised the existence of entities that are ‘undead’ because they potentially act (and have responsibilities) in perpetuity. When readers of this article are mouldering in the ground, or are otherwise only a faint memory in the minds of subsequent generations, many of the artificial persons – states and corporations – with whom you have interacted will continue to enjoy the uninterrupted manifestations of legal good health such as buying/selling assets, defending their rights as persons through litigation, formally individuating themselves from other persons through exclusive names and other identifiers. Personhood is not exclusively a matter of a pulse. It does not require a soul, an absence highlighted by Lord Chancellor Thurlow’s anecdotal comment ‘Did you ever expect a corporation to have a conscience, when it has no soul to be damned, and no body to be kicked?’. It is instead a fiction, with Lawrence Solum succinctly commenting

The question whether an entity should be considered a legal person is reducible to other questions about whether or not the entity can and should be made the subject of a set of legal rights and duties.

Could and should we deem zombies – as humans with a severe disability or as a life-form readily distinguishable from humans through lack of a pulse and higher functions – as appropriately the subject of rights and duties?

A pragmatic response is to ask where zombies fit into contemporary law, the law in place immediately prior to the Apocalypse and likely to be used as a frame of reference in the reconstruction of civil society as the zombie menace abates? Survivors of the Apocalypse are likely to adapt rather than invent de novo. Many legal theorists or civil society advocates, who might have suggested a fresh start and possess sufficient social capital to persuade legislators, are alas likely to have become early casualties. The answer to the question is that the Apocalypse represents a zombie-shaped hole in Australian jurisprudence. How we might fill that hole, as discussed in the final part of this article, tells us something about Australian legal practice and values.

Zombies are not expressly referred to or addressed by implication in the Australian Constitution. That absence is unsurprising, given the role of the Constitution as a straitjacket or High Victorian legal corset – statute rather than whalebone and gutta-percha – intended to protect parochial interests and foster a liberal democratic state affiliated with the United Kingdom. It does not refer to non-human animals or the environment and as scholars such as Harris have astutely observed is disquietingly silent on human rights. It does not enshrine a notion of human dignity, instead addressed through the nation’s commitment – uncertain in practices such as offshore detention – to a range of human rights agreements. It is silent on questions about capacity, for example the absence of responsibility for children under the age of ten in relation to criminal law, that have been left to Commonwealth, state
and territory enactments. Australian law assumes that there is agreement about what is a human and what is not; there is no need to voice what is commonly understood and uncontested.

Zombies are similarly not recognised in international law, unsurprising given the absence of recognition in that law for the rights of non-human animals, which are instead addressed in terms of property, phytosanitary regimes and protected species. There is no global convention on when human life begins or the determination of its end, in contrast to specific international agreements on slavery (that is criminalisation of people trafficking and non-recognition of live humans as property).

Statute law in Australia identifies rights and duties for human animals. It differentiates those living things from non-human animals, with creatures in the latter category for example being animate objects, to use the Roman taxonomy, and accordingly without rights or standing in legal proceedings. Absent personhood they lack legal agency, acted upon rather than acting irrespective of sentience. They are, if fortunate, the subjects of our compassion or concern to preserve an asset or to inhibit behaviour by humans that is distressing.

We could regard zombies as non-human animals, organisms that originated as humans and now resemble people (a resemblance centred on appearance rather than behaviour) but are no longer legal persons and are accordingly – as discussed below – civilly dead irrespective of whether they exhibit a ‘liveness’ in the form of walking, monosyllabically talking, biting and eating.

We could regard them as ambulatory cadavers, entities addressed in terms of public health (with humans being authorised, if not statutorily required, to dispose of the walking dead whenever that can be done without harm to the human) and in terms of respect for the dead (building on statute law regarding interference with a corpse and thus for example prohibiting use of the post-apocalypse undead for entertainment purposes). As cadavers of an exceptional kind their status as legal persons would have ceased when they ‘died’, that is when they became zombies, irrespective of whether death involved heart and/or brain death.

A more radical taxonomy, unlikely to gain public support during the apocalypse, involves construing zombies as humans – humans with disabilities, needs and rights. Such a taxonomy does not preclude the incapacitation or outright destruction of zombies on the basis of self-defence, a reasonable response – consistent with current Australian law – to a substantive imminent threat to what we would characterise as non-zombie human animals. As discussed below, it does not mean that zombies would be eligible to stand for election to legislatures during or after the apocalypse, could vote, would be entitled to all social welfare support available to their human peers or could not be confined. Legal personhood in Australia is a construction rather than something transcendent. Law has accommodated limitations on the rights and duties of classes of people (for example the intoxicated, young, bankrupt, demented and blind) without denying the citizenship or humanity of those individuals.

80 See for example Children (Criminal Proceedings) Act 1987 (NSW) s 5.
82 Convention to Suppress the Slave Trade and Slavery (signed 25 September 1926; entry into force 9 March 1927) and subsequent Protocols. Domestically see Criminal Code Act 1995 (Cth) Div 270.
83 See for example R v NQ [2013] QCA 402, Crimes Act 1958 (Vic) s 34B and Criminal Code 1899 (Qld) s 236.
V IS THE ZOMBIE MY NEIGHBOUR?

In the zombie apocalypse many of your neighbours, if not yourself, will have become zombies. Some will have been dispatched: novels, short stories and feature films are replete with depictions of survivor self-help involving the use of crowbars, chainsaws, axes, shovels, nailguns and molotov cocktails.85 Some of the undead will instead have merely been physically incapacitated. That incapacitation for example encompasses containment behind a strong door, freezing or injury to a limb. The website Guns And Ammo helpfully comments

A powerful kick to the front or side of a zombie’s knee is likely to cause considerable damage. The severity of damage will vary depending on the amount of force generated in the kick, the type of footwear worn by the kicker and the extent to which the zombie’s leg has deteriorated through decomposition. Stomping the back of the knee, while not as likely to severely injure, is a good way to take an attacking zombie down a notch. Remember, zombies are undead, not superhuman. A powerful kick to its knee could very well render one immobile.86

In understanding legal personhood it is useful to eschew questions about whether a shotgun or axe is most efficacious and instead ask whether the zombie is your neighbour, an entity that has a legal status akin to your own and for which you have some responsibility. The notion in the law of Australia, the United Kingdom and New Zealand is not extraordinary. It is traceable to precepts in the New Testament and more broadly to much religious teaching that acknowledges that we share common attributes irrespective of wealth, lineage, education and other advantages or disadvantages. It is consistent with a recognition of vulnerability, the vulnerability highlighted by legal theorists from Hobbes87 to Waldron,88 Fineman89 and Minow.90 It is implicit in landmark judgments such as Donoghue v Stevenson91 and Liversidge v Anderson92 where Lord Atkin was concerned to foster both individual and collective flourishing by addressing disparities in power.

It is axiomatic in Australian law that you do not need to like your neighbours but are required to respect them. Respect encompasses an acknowledgement of difference, care not to cause reasonably foreseeable unjustifiable harm, and recognition of rights on the part of neighbours and yourself. That recognition, intrinsic to the legal personhood that is foundational in the contemporary liberal

democratic state, means that humans are not subjects who can hope for no more than ‘bare life’, to use the term familiar to readers of Agamben.93

Utilitarian Jeremy Bentham in considering the identity of non-human animals in English law claimed The question is not, “Can they reason?” nor “Can they talk?” but “Can they suffer?” 94

Let us consider whether Bentham asked a wrong legal question about life-forms, potentially including zombies.

If we think of vulnerability we can see that non-human animals are vulnerable because they are not legal persons. They are, in essence, no more than toasters, tea towels, tractors or other chattels. Unlike a corporation, or you or I, they cannot call on the law for protection of their personhood, given that law does not recognise them as persons. That non-recognition is administratively and economically convenient but along with historical non-recognition of personhood (women, slaves, apostates, heathens) is arbitrary.

We do not know whether zombies suffer or, along with survivors of the Apocalypse, are traumatised.95 The facts in the Canberra Law Review apocalypse scenario indicate that zombies can talk, can walk and have some ability to reason. They began as humans, retain indicia of liveness and consequently in the eyes of the law should be regarded as humans. Their defects are common to many Australians in aged care, in correctional or psychiatric institutions, and in special classrooms or sheltered workshops. We treat those people as neighbours and legal persons – with allowance for particular attributes – rather than as non-humans beyond respect. In doing so we remember that those people were often loved by others and linked to the wider community through bonds of care and affection. Respect for a zombie is a reflection of respect for the zombie’s peers.96 Becoming a zombie does not mean that the son, partner, uncle, parent or sibling must necessarily cease to be a legal person and instead become an object, particularly an object of hatred rather than of compassion.

We might want to recognise zombies as legal persons, rather than objects or livestock, merely out of self-interest. Consider a Rawlsian test. When the veil of ignorance97 is hauled aloft and you discover that you have been fated to become a zombie you might regret an enthusiasm for disregarding personhood. As the Apocalypse unfolds it would be much better for you to practice an ethic of care, knowing that during the crisis or its aftermath you may become one of the walking dead, in the same way that in contemporary Australia you may experience vicissitudes associated with unforeseen

96 The 1998 United Nations Guiding Principles on Internal Displacement (Office of the High Commissioner on Human Rights, E/CN.4/1998/53/Add.2), which do not have the force of law, state that persons displaced by natural disasters have ‘the right to know the fate and whereabouts of missing relatives’, with authorities accordingly expected to endeavour to ‘to collect and identify the mortal remains of those deceased, prevent their despoliation or mutilation, and facilitate the return of those remains to the next of kin or dispose of them respectfully’. In the event of an apocalypse such respect is likely to be seen as a luxury or simply impractical.
disability – a workplace accident, assault, stroke, dementia. Put simply, care for zombies on the basis that you may join their numbers.

A self-confident liberal democracy, one that is resilient in the face of disasters and does not resile from its values, could in the aftermath of the apocalypse engage in the forgiveness that we see in post-Apartheid South Africa and Germany after the Berlin Wall.98 There would be no need to enshrine the denial of personhood that is evident in Carl Schmitt’s eschatological ‘us against them’ characterisation of the Jews,99 a denial manifested through systematic campaigns of zombie extermination under state auspices or – as with the 1830 ‘Black Line’ in colonial Tasmania100 – the complicity of the authorities. There would be no investigation and prosecution of any killing of a zombie during the period of emergency.

If we were to regard zombies as disabled persons, entitled to respect but with legal disabilities, we would not engage in ‘culls’, unlike environmental management measures such as state ordered reduction of the kangaroo population in the Australian Capital Territory.101 (If zombies do not live in perpetuity, they will eventually disappear if denied scope for propagation through exposure to non-zombie humans. Remember, they do not engage in sexual reproduction, so population increase is not an issue.)

Zombies could be contained, in a legal regime similar to contemporary confinement of people who are deemed to be dangerous because of infection or violence. That incapacitation is not a denial of personhood or a fundamental erasure of the emphasis on flourishing (‘the good life’) articulated by philosophers such as Rawls,102 Nussbaum103 and Gewirth.104 As disabled humans zombies would not be entitled to vote or be elected to representative bodies, would be ineligible for public office or any position of responsibility (again consistent with disabilities relating to bankruptcy,105 incarceration for a serious criminal offence,106 insanity, treason107 or a fundamental learning difficulty).


99 Carl Schmitt, On the Three Types of Jurisdict Thought (Joseph Bendersky trans, Praeger, 2004) [trans of Über die Drei Arten des Rechtswissenschaftlichen Denken (first published 1934) 82-83


105 Australian Constitution s 44(iii); Constitution Act 1975 (Vic) s 5; Local Government Act 2009 (Qld) s 156; Local Government (Elections) Act 1999 (SA) s 17(5); Local Government Act 1989 (Vic) s 29; City of
As humans they would not be regarded as property, chattels to be bought and sold for investment purposes or as labour. They would instead be deemed to have continued ownership of real and other property held prior to the Apocalypse or that passed to them during/after the Apocalypse as heirs of people who died (for example through suicide) or were definitively killed (for example those zombies beheaded with a chainsaw or reduced to cinders through a molotov cocktail in an act of self defence). Continued ownership of assets would require administration on behalf of all disabled persons through a collective trustee or guardianship regime. Such a regime might feature the equivalent of institutionalisation, with what one colleague wryly described as ‘zombie parks’. Post-Apocalypse respect for personhood would prohibit hunting of zombies in such parks for entertainment purposes and would be reflected in sanctions against zombie abuse, for example causing gratuitous injury or sexual exploitation. Those sanctions are readily adaptable from contemporary animal welfare and criminal law. They are a manifestation of the axiom that a society is known by how it treats its most vulnerable members, restated as

the moral test of government is how that government treats those who are in the dawn of life, the children; those who are in the twilight of life, the elderly; those who are in the shadows of life; the sick, the needy and the handicapped.

VI APOCALYPSES AND PERSONS

The preceding paragraphs have been an academic romp. They do however tell us something about law, particularly law in the contemporary liberal democratic state where there are recurrent calls to wind back civil liberties on the basis that rights are contrary to success in an ongoing war on terror or that rights are inordinately expensive and administratively inconvenient.

An initial bleak conclusion is that a legal culture of respect depends on resilience and existence of the state. If things truly fall apart, notions of rights and the exercise of care are likely to be disregarded as luxuries or simply unconceptualised. Few people will fend off their zombie neighbours with a chainsaw in one hand and a copy of Martha Nussbaum’s *Anger & Forgiveness* in the other.

An apocalypse, by its nature, is exceptional. In pre-modern Western thinking it was that historical moment when time either came to an end or – with final victory over the Prince of Darkness – ceased to matter when the lion lay down with the lamb, death had no dominion, suffering was no more and

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106 Brisbane Act 2010 (Qld) s 156; and *Nile v Wood* (1988) 167 CLR 133 at 140. See also *Motor Dealers and Repairers Act 2013* (NSW) s 25; *Medicines, Poisons and Therapeutic Goods Act 2012* (NT) s 118; *Greyhound Racing Act 2009* (NSW) s 6; *Renmark Irrigation Trust Act 2009* (SA) s 13; and *Security and Investigation Agents Act 2002* (Tas) s 8.
109 *Fido* (dir. Andrew Currie), a Canadian zombie film released in 2006, zombies are fitted with a specially invented collar that renders them harmless to humans.
neither rich nor poor needed to worry about tax collection.\textsuperscript{112} As other articles in this issue of \textit{Canberra Law Review} suggest, the Zombie Apocalypse does not necessarily mean the end of history or even the existence of Australia as a liberal democratic nation state.\textsuperscript{113} In rebuilding that state we benefit from drawing on Rawls’ characterisation of justice as fairness,\textsuperscript{114} promoting the flourishing of all – disabled and advantaged alike – rather than merely those privileged through accidents of survival, location, skill and access to resources.

A further conclusion, one of salient value for legal practitioners and policymakers alike, is that personhood is a protean concept. Personhood is culturally contingent rather than something that is stable and self-evident. It has changed over time. It is a concept that needs to be revisited, irrespective of whether we are considering rights for non-human animals, the status of sentient systems or the responsibilities and rights of corporations.\textsuperscript{115} Revisitation may inform movement towards a coherent national Bill of Rights whose legitimacy is accepted by most Australians rather than merely cited by the superior courts recently damned by Senator Rod Culleton.\textsuperscript{116}

Australia is not precluded from recognising zombies as legal persons. It might choose to do so, although recognition is unlikely in the immediate aftermath of an existential crisis in which the viability of the state has come into question, individuals have taken the law into their own hands, people are sceptical about the legitimacy of a post-Apocalypse government, and fear overrides popular respect for notions of human rights.

Australia is not required to recognise zombies as legal persons. International agreements do not refer to zombies. Personhood in international law is a matter of convention; the Universal Declaration of Human Rights for example in referring to humans does not explicate what is meant by human and does not extend rights to artificial persons such as corporations. In a world where states have fallen apart or in the words of Thornton Wilder are surviving ‘by the skin of their teeth’ it is unlikely that there will be persuasive calls in international fora for respecting the undead and that there will be international sanctions determining Australian policy in favour of zombie personhood.\textsuperscript{117} A zombie advocate might be forgiven for thinking that rights for zombies, as so often for humans, will be regarded as an absurdity or an inconvenient fiction espoused by the privileged. Atkin’s judgment in Liversidge is however a reminder that desperate times and the aftermath of existential threats to the liberal democratic state do not justify the arbitrary exercise of power or, by extension, state violence that is indistinguishable from the undifferentiated havoc wrought by the walking dead. \textit{Liversidge} is a

\textsuperscript{112} Eugene Weber, \textit{Apocalypses: prophesies, cults, and millennial beliefs through the ages} (Random House, 2011); and Frances Carey (ed), \textit{The Apocalypse and the Shape of Things to Come} (British Museum Press, 1999).

\textsuperscript{113} C T Davies, K J Cheshire, R Garratley and J Moore, ‘Another Zombie Epidemic’ (2016) 15(1) \textit{Physics Special Topics} A2-6 models human survival (on the basis that humans are vulnerable but more adaptable than the undead) and recovery.


\textsuperscript{117} Thornton Wilder, \textit{The Skin Of Our Teeth} (Perennial Classics, 2003).
point of reference in an epoch where state terror fosters private terror and an abandonment of liberties in a perpetual war on terror that eludes critique on the basis that disclosure of government action will assist the groups that are targeted by defence/security services.

A final conclusion is that Australian law since first European contact has accommodated difference through legal personhood that features a range of disabilities. We have gone beyond ‘mere life’ and forms of ‘civil death’ do not preclude flourishing. Given the arbitrariness of legal personhood it is conceivable that a post-Apocalypse Australian society, perhaps one in which the states and territories have fused, would regard zombies as disabled humans. We should be conscious of and, in seeking to foster flourishing of both individuals and society at large, prepared to query ‘the conceptual apparatus with which society assigns some human beings to darkness and others to light’.118 That capacity to query the apparatus of personhood and its consequences is a rationale for the teaching, study and practice of law.

UNNATURAL DISASTERS:
EMERGENCY MANAGEMENT IN A TIME OF ZOMBIES

ROB MACLEAN

ABSTRACT

At least in its initial stages the zombie apocalypse will involve co-ordinated emergency management actions from the three spheres of Australian government. As the zombies become more widespread across Australia, it is likely that both the rule of law and effective communication networks will break down. Consequently, it will be significantly harder for the Commonwealth government to project its power and effective zombie resistance will depend on effective use of people and resources at State, and then potentially regional or local government levels. In the worst-case scenario, all the current recognised forms of government may fail and survival will depend on new polities created out of desperate need.

This paper explores the hypothetical stages of Australian zombie apocalypse and discusses the range and legitimacy of effective emergency management plans and legislation (at least until cohesive emergency management passes from the hands of the government to individuals.)
I THE ZOMBIE APOCALYPSE TIMELINE

The editors of the Canberra Law Review have proposed a notional timeline from an initial outbreak of zombies in an unspecified overseas location, through their arrival in Australia and the subsequent breakdown of the rule of law in Australia. This paper uses the early stages of this notional timeline as chapters, with each chapter discussing the scope for emergency management and identifying potential shortfalls in current emergency management approaches.2

II FIRST MOVEMENT ‘TARDO’3

‘ISOLATED ZOMBIE OUTBREAKS OUTSIDE OF AUSTRALIA’

In the first stage, the impact of the zombie apocalypse is felt exclusively outside of Australia. Australian domestic actions primarily involve the planning and preparation in case the zombie apocalypse should reach Australian shores.

A Emergency Planning

At a federal level, emergency management planning for the zombie apocalypse would primarily be the responsibility of the Attorney-General’s Department. The two key emergency management organizational divisions of the Attorney General’s Department are:

1) The Emergency Management Australia (EMA) division, which is responsible for preparing for emergencies and disasters through the development and maintenance of national plans and coordination of Australian Government crisis response and recovery efforts; and

2) The National Security Resilience Policy (NSRP) division, which would provide policy advice on emergency management and critical infrastructure protection.

Within the EMA Division is the Australian Government Crisis Coordination Centre (AGCC), which is responsible for a whole-of-government situational awareness service. This includes the coordination of physical assistance as well as briefing and support to executive decision-

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1 Canberra Law Review 2016 14(1) 4.
2 Acknowledgement needs to be made up front to the research material published by Michael Eburn. While the author has developed disaster recovery plans for several Canberra institutions (including Australian Parliament House), he continually finds himself referring to Michael Eburn, Emergency Law (Federation Press 4th ed, 2013).
3 A musical instruction to play slowly.
makers in the Australian Government, the State and Territory governments and non-government agencies. The AGCC:

- centralises and coordinates information across the Australian Government, states and territories during a crisis in Australia;
- supports the Department of Foreign Affairs and Trade during major emergencies and events overseas;
- coordinates Australian Government physical and financial assistance for disaster relief; and
- maintains Australian Government response plans and arrangements for responding to domestic and international incidents.

The key response plans and arrangements maintained by the EMA, the NSRP and the AGCC are:

- The Commonwealth Disaster Plan (COMDISPLAN);
- The National Catastrophic Disaster Plan (NATCATPLAN); and
- The National Strategy for Disaster Resilience.

When the ‘total resources (government, community and commercial) of an affected jurisdiction cannot reasonably cope with the needs of the situation the nominated official can seek non-financial assistance from the Australian Government under COMDISPLAN’. The current version of the COMDISPLAN confirms that the ‘COMDISPLAN can be activated for any disaster or emergency regardless of the cause’. The COMDISPLAN can serve as legitimate vehicle for the use of executive power to prepare for the zombie apocalypse. Potential forms of aid and the agency that can provide that assistance are identified at Annex 1 to the COMDISPLAN. Table A of this paper summarises avenues of assistance in relation to the zombie apocalypse.

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5 Section 1.3.1 of COMDISPLAN 2014,
### Table A: Key Capabilities of Australian Government agencies in relation the Zombie Apocalypse

<table>
<thead>
<tr>
<th>Agency</th>
<th>Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airservices</td>
<td>• extensive national footprint and communications network including both terrestrial resources and digital radio communications.</td>
</tr>
</tbody>
</table>
| Attorney-General’s Department | • Advice on legislation, interpretation and other legal aspects.  
• Centralised coordination of the provision of Australian Government non-financial assistance within Australian jurisdictions.  
• All hazards crisis management.  
• 24/7 monitoring of all hazards and the first point of contact for security and emergency management events. |
| Emergency Management Australia (EMA) | • Provide maritime and aviation search and surveillance support to Australian Maritime Safety Authority (AMSA), if requested and within Border Protection Command operational capabilities; and  
• Operation of secure detention centres. |
| Australian Customs and Border Protection Service | • Access to national Police communications networks for transmission of urgent traffic when other communications are restricted or unavailable. |
| Australian Federal Police (AFP) | • Marine and aviation search and rescue planning and response.  
• Maritime ship casualty response. |
| Australian Maritime Safety Authority (AMSA) | • Advice and expertise on biosecurity, animal health and welfare, epidemiology, aquatic animal health, plant pests and diseases, introduced marine pests, food residues, pesticide use and response, and native and pest animal issues. |
| Department of Agriculture | • Emergency broadcasting arrangements. |
| Department of Communications | • Capabilities include: airlift (fixed and rotary wing aircraft); engineering support, search and support teams, temporary accommodation and general support; health and psychological support; aviation refuelling, and communications. |
| Department of Defence | • Preparation of national health plans including: environmental health, communicable disease, mass casualty and CBRN guidelines.  
• Epidemiologists and communicable disease experts to assist with epidemic prevention, response and recovery.  
• Provide information flow with state and territory emergency operations centres and links with State/territory health departments.  
• Long term mental health responses. |
| Department of Human Services | • National Emergency Call Centre Surge Capability  
• Allied health professionals, field staff and approximately 650 social work staff resources. |
| Department of Infrastructure and Regional Development | • Provide advice on transport security matters  
• Assistance in facilitating additional commercial airline resources or access to airport. |

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7 As modified from Annex 1 to COMDISPLAN
Under Section 1.4.6 of the COMDISPLAN, before a request is made under COMDISPLAN a jurisdiction must have exhausted all government, community and commercial options to provide that effect. It would seem likely that in the event of a zombie apocalypse, particularly in the early stages, federal support would be made available before all available resources had been overwhelmed. It is worth noting that the COMDISPLAN has no authority to compel an agency to provide the requested resources. The decision to commit resources would likely be made at cabinet level or at least Federal Minister level in the early stages of the apocalypse. How such decisions can be made after the disintegration of the Federal Government is addressed in the discussion of later stages.

The COMDISPLAN vests authority to request Federal assistance in one nominated official for each jurisdiction. In that person’s absence, the officer performing their role holds this delegation. The current jurisdictions and the nominated official is shown in Table B.

Table B: COMDISPLAN NOMINATED OFFICIALS

<table>
<thead>
<tr>
<th>STATE/TERRITORY</th>
<th>NOMINATED OFFICIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>New South Wales</td>
<td>State Emergency Operations Controller</td>
</tr>
<tr>
<td>Victoria</td>
<td>State Emergency Response Coordinator (Chief Commissioner of Police)</td>
</tr>
<tr>
<td>Queensland</td>
<td>Executive Officer State Disaster Management Group</td>
</tr>
<tr>
<td>South Australia</td>
<td>State Coordinator</td>
</tr>
<tr>
<td>Western Australia</td>
<td>Chair of the State Emergency Coordination Group</td>
</tr>
<tr>
<td>Tasmania</td>
<td>Executive Officer, State Emergency Management Committee and Executive</td>
</tr>
<tr>
<td>Northern Territory</td>
<td>Executive Officer, Northern Territory Counter-Disaster Council</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td>Chair of the Security and Emergency Management Senior Officials Group</td>
</tr>
<tr>
<td>Norfolk Island</td>
<td>Chair of the Norfolk Island Emergency Management Committee</td>
</tr>
<tr>
<td>Cocos (Keeling) Islands</td>
<td>The Territory Controller, Cocos (Keeling) Islands</td>
</tr>
<tr>
<td>Christmas Island</td>
<td>The Territory Controller, Christmas Island</td>
</tr>
<tr>
<td>Jervis Bay</td>
<td>The Territory Controller, Jervis Bay</td>
</tr>
<tr>
<td>Australian Antarctic Territory</td>
<td>Department of Regional Australia, Local Government, Arts and Sport</td>
</tr>
</tbody>
</table>

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8 Section 2.1 of COMDISPLAN
The officials identified in Table B generally have the corresponding emergency management-planning role at the State or Territory level. Legislation in each State and Territory provides for emergency planning at the State or Territory, a district or regional level and at a local government level. Due to their comparatively small areas, Norfolk Island and the Australian Capital Territory plan only at the Territory level.

At the State and Territory level, emergency management planning authority vests in a range of entities. Comprehensive details of the administrative arrangements for all States and Territories are beyond the scope of this paper. As a general principle, a ‘Security and Emergency Committee’ is present at a cabinet level, composed of the relevant State or Territory Ministers and the heads of the relevant police, health and emergency services organisations.

A key element of these committees is the integration of the high-level management of the police, ambulance, urban fire, bush fire and emergency rescue services.

III SECOND MOVEMENT ‘AFFRETTANDO’

‘ISOLATED INSTANCES OF ZOMBIES IN AUSTRALIA, WHICH ARE INITIALLY CONTAINED BY POLICE’

At the second stage, the impact of the zombie apocalypse is beginning to be felt within Australia. Outside of Australia, the zombie apocalypse has resulted in the collapse of major cities and the full scope of the apocalypse is apparent and undeniable. Refugees begin to migrate to places of hoped for safety and the Australian Border Force interdiction capabilities are called into play. Within Australia isolated and small-scale instances of zombies occur. Initially these incidents are handled by local police but as the stage progresses, civil panic within Australia increases and co-ordinated military and police responses are called for.

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9 State Emergency and Rescue Management Act 1989 (NSW); Disaster Management Act 2003 (Qld); Emergency Management Act 2004 (SA); Emergency Management Act 2006 (Tas); Emergency Management Act 1986 (Vic); Emergency Management Act 2005 (WA); Emergencies Act 2004 (ACT); Emergency Management Act 2013 (NT); Disasters and Emergency Management Act 2001 (NI).
11 A musical instruction to play ‘hurrying’.
13 At the Affrettando stage circumstances have not moved to the level of desperation attributed to an unnamed U.S. officer by AP correspondent Peter Arnett in his writing about Bến Tre city on 7 February 1968: ‘It became necessary to destroy the town to save it’.
A Initial Responses

At the Federal level actions move beyond the planning level. The Federal actions detailed in Table A began to be implemented by the respective departments and agencies. Dr Bede Harris has addressed the constitutional legitimacy of federal executive action in his paper. ‘Constitutional Implications of Zombies’. In summation, existing executive powers under s61 of the Constitution and legislative powers, such as under s 51(vi) defence power, will encompass many possible actions and use of the ‘implied nationhood powers’ will provide a legitimacy for actions which fall outside the scope of current executive or legislative authority.

B Police Powers

In the Affrettando stage the range of zombie incidents can be quite wide but are characterized by any one incident being of a small or localized scale. Such incidents are more likely to be dealt with by local area resources, most likely those of the impacted State or Territory. Single zombie incidents would likely trigger emergency calls, which would be responded to by local police. It seems likely that given the ineffective nature of regular police weapons (pistols, batons and tasers), police call out vehicles would quickly be supplemented by fire brigade resources. The use of high pressure water cannons and fire axes would seem to offer better effectiveness at breaking up zombie groups and then dispatching individual zombies.

More serious incidents (but still localized ones) could center on the arrival of multiple infected zombies at one location, potentially as part of cruise ship load of zombies beaching on the Australian coastline or due to a crashed passenger aircraft. Assuming Federal border surveillance resources are functioning, these should be able to identify the location and initial scale of the zombie penetration. State or Federal resources could then be vectored to the penetration. These could be composed of Australian Defence Force (ADF) units or Special Weapons and Tactics (SWAT) units from State and Territory police forces. These serious incidents might involve the establishment of a perimeter by urban and bush fire services with an emergency evacuation corridor (and potentially subsequent containment area) coordinated by State and Territory health services. ADF and SWAT units would then actively patrol the contained area, hunting down zombies and directing uninfected citizens to secure evacuation sites.

Where such a serious incident to happen within New South Wales, as was potentially envisaged in the Affrettando flashpoint, the response would fall under The State Emergency and Rescue Management Act 1989 (NSW). The Commissioner of Police (or another senior

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15 The definition of ‘Special Weapons’ may undergo some evolution. Interested students are directed to Roger Ma, *The Zombie Combat Manual: A Guide to Fighting the Living Dead* (Penguin, 2010), particularly with reference to hand to hand weapons.
executive of the NSW Police Force) would operate as State Emergency Operations Controller (SEOCON) and would appoint regional and local area operation coordinators, required by statute to be police officers.\textsuperscript{16}

Under The \textit{State Emergency and Rescue Management Act}, those police officers have the statutory authority to make safe an ‘area in which an emergency is causing or threatening to cause injury or death’\textsuperscript{17} (danger area).

The scope of the police officer’s authority encompasses:

\begin{itemize}
  \item [a)] ordering people to remain or to evacuate a danger area;
  \item [b)] the closure to traffic of any street, road, lane thoroughfare or footpath or place open to or used by the public, in the danger area or any part of the danger area;
  \item [c)] the removal of vehicles in the danger areas or any part of the danger area;
  \item [d)] the closure of any other public or private place in the danger areas or any part of the danger area;
  \item [e)] the pulling down, destruction or shoring up of any wall or premises that have been damaged or rendered insecure in the danger areas or any part of the danger area;
  \item [f)] the shutting off or disconnecting of the supply of power and water, gas, liquid, solid, grain, powder or other substance in or from any main, pipeline, container or storage facility in the danger areas or any part of the danger area;
  \item [g)] the taking possession of, and removal or destruction of any material or thing in the danger areas or any part of the danger area that may be dangerous to life of property or that may interfere with the response of emergency services to the emergency;
  \item [h)] the protection or isolation of any material or thing in the danger area, by preventing a person from removing or otherwise interfering with the material or thing.\textsuperscript{18}
\end{itemize}

The above powers authorise the physical quarantining a zombie infected area (sections b, c & d) and the ‘destruction’ of things that may be ‘dangerous to life and property’ (section g), which I suspect is broad enough to encompass a marauding zombie horde.

The powers extend to the entry of premises using reasonable force and potentially without providing notice, but only to the extent required by the danger.

Were the NSW Premier to declare the ‘danger area’ the subject of a ‘state of emergency’\textsuperscript{19} then functionally equivalent powers would extend to those authorised by the Minister for

\begin{footnotes}
\item[16] The \textit{State Emergency and Rescue Management Act} 1989 (NSW), s24 and 30.
\item[17] Ibid s60I.
\item[18] Ibid s61.
\item[19] Ibid s33.
\end{footnotes}
Police and Emergency Services. Most notably, in addition and within the area covered by a state of emergency:

a) the minister may take possession and use any property belonging to any person. The owner of the possession or property may then seek compensation from the minister.\textsuperscript{20}
b) members of the emergency services are authorised to do anything that is reasonably necessary, including using force, to ensure compliance with a direction to leave or not to enter the area covered by the state of emergency.\textsuperscript{21}

At least at the Affrettando stage command and control systems, as well as transportation infrastructure, are not sufficiently compromised that Federal, State and Territory assets cannot be effectively deployed to negate individual zombie incidents. However as those who have watched zombie movies know, somebody always leaves the morgue door unlocked, desperate (and unknowingly infected) parents manage to avoid police roadblocks to evacuate their children from the danger areas and greedy bio-pharmaceutical companies stop the zombie menace from being eradicated, which inevitably leads us to the Mosso stage.

**IV THIRD MOVEMENT ‘MOSSO’\textsuperscript{22}**

‘ZOMBIES ARE NOW PRESENT ON THE STREETS OF ALL AUSTRALIAN CITIES AND MAJOR TOWNS – THE FEDERAL GOVERNMENT FAILS’

At this third stage, the challenge becomes to effectively utilize the tremendous resources of the Federal Government at a time when the normal operation of the executive is curtailed. This section of the paper will examine three possible challenges that may confront federal executive government.

**A The loss of Executive Power**

The timeline presumes that at some stage the Governor General becomes a zombie and this triggers a depletion of the ranks of cabinet as senior members of the executive are either killed or zombified. Bruce Arnold and Erina Fletcher have considered whether zombies are still human\textsuperscript{23} but for the moment let us assume that being turned into a zombie is treated as ‘death’ and precludes you from holding public office.

The death of the Governor - General does not result in the position becoming vacant. Section 4 of the Constitution permits the Queen to appoint an administrator to carry out the role of

\[\textsuperscript{20}\text{Ibid s37.}\]
\[\textsuperscript{21}\text{Ibid s60I.}\]
\[\textsuperscript{22}\text{A musical instruction to play ‘with motion or animation’.}\]
\[\textsuperscript{23}\text{Bruce Baer Arnold, ‘Is the Zombie my Neighbour? The Zombie Apocalypse as a Lens for Understanding Legal Personhood’ (2016) 14(1) Canberra Law Review; and ‘Erina Fletcher, ‘To What Extent Should We Extend Human Rights to Zombies’ (2016) 14(1) Canberra Law Review.}\]
Governor-General when there is a vacancy, however it seems likely that her Majesty may be focussing on zombie matters closer to home. By convention, the longest-serving state governor holds a dormant commission as ‘Administrator of the Commonwealth’, allowing an assumption of office in the event of a death, resignation or absence from Australia. In 1961, the then Governor- General. Viscount Dunrossil died in office\(^{24}\) and General Sir Reginald Alexander Dallas Brooks, KCB, KCMG, KCVO, DSO was appointed as Administrator.

The role of the Governor - General, as derived from executive power through the United Kingdom monarchy, is steeped in the tradition of the transfer of power enshrined in the phrase ‘the king is deed, long live the king’. Even where a series of Administrators of the Commonwealth to suffer unfortunate zombification, a succession of state governors and lieutenant governors stand ready to fill the role.

The situation is not so clear with replacement for a zombified cabinet. On the death of a Prime Minister, the Deputy Prime Minister can be sworn in as Prime Minister by the Governor General. On the death of Harold Holt in 1967, the then Governor-General, Lord Casey, swore in the leader of the Australian Country Party, John McEwen, as Prime Minister, on the understanding that McEwen’s commission would continue only so long as it took for the Australian Liberal Party to elect a new leader.

Assuming the death of an entire cabinet, or even a significant part of the cabinet, questions of Prime Ministerial and Ministerial succession become significantly less clear.

The Prime Minister is the head of the Government and achieves this position by being the elected leader of the party in government (in the case of a coalition Government, the major party). The Cabinet consists of senior Ministers presided over by the Prime Minister and would serve as the key executive decision-making body during the zombie apocalypse (at least as long as the cabinet lasts). The Prime Minister selects Ministers for Cabinet positions. Ministers outside of the Cabinet are also selected by the Prime Minister.\(^{25}\)

Ministers outside of Cabinet do not have an innate line of succession and the appointment of a new Prime Minister would require at least a party meeting to determine the new Prime Minister. The new Prime Minister could then appoint ministers from the remaining members of the Senate and from the House of Representatives.

It is worth noting that a newly appointed Prime Minister is not required to:

a) wait until vacant parliamentary positions are occupied to establish a cabinet; and
b) vest the decision-making powers to a full cabinet.

\(^{24}\) From natural causes.
In 1972, Gough Whitlam defied parliamentary convention and did not wait until the final election results were released, before having a cabinet sworn in by the Governor-General. An interim two-man cabinet, composed of the incoming Prime Minister and the governing party’s Deputy Leader, was sworn in and operated until the election results were finalized.

In 1939, Sir Robert Menzies formed a War Cabinet, which originally consisted of six Ministers where:

… full Cabinet remained responsible for general policy and the function of War Cabinet was detail and execution; however, in practice War Cabinet tended to become the first formulator of general policies having a relation to the war, which came to mean most issues of political significance.\(^{26}\)

It is also worth noting that during World War II, an Advisory War Council that operated in Australia consisted of senior ministers and senior opposition members.

It would seem that the mass death of cabinet can be accommodated within existing Constitutional and parliamentary frameworks, due in part to the undefined nature of parliamentary conventions. That said, a mechanism for expediting the replacement of Members of the House of Representatives in emergencies, like that currently in place for the Senate, in promoting the previous House of Representative member’s party next pre-selected candidate of the impacted electoral area could shore up the chains of both executive and parliamentary power.\(^{27}\)

**B Loss of Parliamentary Power**

*It is well known that Australia’s written Constitution is silent on many important aspects of government. It says nothing about the Prime Minister, the Cabinet, responsible government, ministerial responsibility, electing a government, dismissing a government, parliamentary control, what is to be done if the Senate refuses to pass an appropriation Bill (or a supply Bill), and so on. In reality this void is filled-in by well established practice, methods, habits, maxims, usages, many of them of long-standing, which were inherited from colonial Parliaments, which in turn inherited them from Westminster. It is these practices, methods and usages which tend to be referred to, albeit vaguely, as ‘conventions of the Constitution’.\(^{28}\)*

Where a member of the Senate dies in office, a new Senator can be appointed without a new electoral process. Where a member of the House of Representatives dies in office, convention is that the replacement parliamentarian can only be appointed by a by-election. The death and the subsequent delays in the appointment of replacement Senators and Member of the House of Representatives may cause issues with current parliamentary conventions. Given the

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\(^{27}\) This would require the Australian Electoral Office to be notified of the ranking of pre-selection candidates.

current era of small majorities in the House of Representatives and no clear majority in the Senate, it seems likely that the death of twenty or more Senators and Member of the House of Representatives from the ruling party would change the balance of power in Parliament.

Cabinet is collectively responsible to the people, through the Parliament, for determining and implementing policies for national government. This is referred to as the ‘Collective Cabinet Responsibility’ convention. This convention has been considered as requiring that the loss of a vote on a no-confidence motion in the House of Representatives or on a major issue to lead to the resignation of the whole Government (including Ministers not in the Cabinet) or, alternatively, the Prime Minister is expected to recommend to the Governor-General that the House be dissolved for an election. In contemporary practice, it is generally considered that the should a Government lose a vote on a major issue, it would be entitled to propose a motion of confidence to test or confirm its position, before resigning or recommending an election.

While party discipline usually prevents the loss of such motions, the death of an entire cabinet has the potential to mean that votes of no-confidence could be lost solely on party grounds. The question becomes whether a government is bound by conventions, or has a discretion to set a convention aside (particularly in an unprecedented national emergency).

In his consideration of constitutional conventions, A.V Dicey determined that:

conventions of the constitution are (in the main) rules for determining the exercise of the prerogative, we may carry our analysis of their character a step farther. They have all one ultimate object. Their end is to secure that Parliament, or the Cabinet which is indirectly appointed by Parliament, shall in the long run give effect to the will of that power which in modern England is the true political sovereign of the State — the majority of the electors or (to use popular though not quite accurate language) the nation.

Restating Dicey, where a conventional constitution does not give effect to the will of the majority of the electors, then that convention does not meet the test of parliamentary legitimacy and can be set aside. Similarly, Chapter 2 of House of Representatives Practice state states that ‘Conventions are subject to change by way of (political) interpretation or (political) circumstances and may in some instances be broken’.

It seems likely that an incumbent government in a time of national emergency would seek to set aside the Collective Cabinet Responsibility convention and it is also unlikely that the Australian electorate would view favourably a rotating succession of elections, as parliamentarians fall prey to the zombie hordes.

The author’s contention is that further constitutional conventions would be set aside and a ‘National Government’ would likely be formed. Normal political imperatives would be set aside in the interest of national survival and ministerial appointments would be made from a

31 Ibid
range of political parties, primarily based on a parliamentarian’s experience in the portfolio. This would be consistent with Winston Churchill’s World War II all party coalition government, as shown in the cabinet papers of the time where:

[T]wo out of five members of Churchill’s 1940 War Cabinet were Labour politicians, one was National and two were Conservatives. Domestic political fighting was put on hold and all three parties worked together with the common aim of defeating Nazi Germany. 

B Loss of Judicial Power

The Australian Constitution vests judicial power in the High Court and by extension the justices of the High Court. Section 71 of the Constitution empowers the High Court to interpret and apply the law of Australia; to decide cases of special federal significance including challenges to the constitutional validity of laws; and to hear appeals, by special leave, from Federal, State and Territory court.

In a time of national crisis, it is also likely that irregular parliamentary procedural matters would be referred to the High Court for urgent consideration. Much as there is a risk of the crown’s ministers falling foul of the zombie hordes, the same risk applies to High Court justices and hence it is necessary to consider the existing succession rules.

Under section 72 of the Constitution, Justices of the High Court:

- are appointed by the Governor-General in Council;
- cannot be removed except by the Governor-General in Council on an address from both Houses of Parliament in the same session, justifying removal on the grounds of proved misbehaviour or incapacity;
- must retire on attaining the age of 70 years.

Appointment by the Governor-General in Council means that the Governor-General makes the appointment, acting on the advice of the Prime Minister and Cabinet. As established above, this could create a delay where the positions of Prime Minister and Cabinet Ministers are vacant.

Section 72 also addresses the legitimacy of undead High Court judges, providing a mechanism for their removal from office on the grounds of ‘incapacity’, as well as ‘misbehavior’ if they eat the brains of their supplicants.

Reinstatement of age retired High Court judges is precluded by the mandatory age exclusion in the Constitution. To ensure a full bench, it is suggested that in the event of an ‘emergency’, where the Governor-General in Council is not able to immediately appoint a replacement, a reserve commission is activated for the longest serving State or Territory Chief Justice. The termination of this commission would not require the operation of s72 of the Constitution and would be triggered by the normal appointment of a successor to the High Court.

<http://www.nationalarchives.gov.uk/cabinetpapers/cabinet-gov/winston-churchill-1940.htm>
V THIRD MOVEMENT ‘MOSSO’

‘STATE AND LOCAL GOVERNMENT ACTORS BECOMING THE PRIMARY AGENTS FOR ANTI-ZOMBIE ACTION’

It would be nice to think that the final act of the Federal Parliament would be to declare a state of national emergency, as the Serjeant at arms and Black Rod use their ceremonial weapons in a desperate last stand before the doors of a joint sitting of parliament. Sadly, that is currently not possible. There is no current Commonwealth counter disaster or emergency legislation and hence no appropriate legislative power.\footnote{34}

The ‘last, best hope’ for Federal assistance seems to lie in an extrapolation of the National Catastrophic Disaster Plan (NATCATDISPLAN). Under the NATCATDISPLAN, the Prime Minister is able to appoint someone to act as the Administrator of the affected State of Territory, to coordinate between the affected state and the Commonwealth to ensure the delivery of the required assistance.

The NATCATDISPLAN is predicated on two assumptions:

a) that it is the State or Territory government that fails and that the Federal Government is still in existence; and

b) that the disaster ‘affects one or more communities, resulting in widespread, devastating economic, social and environmental consequences, and that exceeds the capability of the existing State or Commonwealth government emergency and disaster management arrangements.

In the event of a zombie apocalypse wiping out the Federal Parliament, it would seem we need to expand the scope of the NATCATDISPLAN to become an Unnatural National Catastrophic Disaster Plan (UNNATCATDISPLAN).

The UNNATCATDISPLAN could be activated if the Federal government fails and State and Territory governments are still in existence. The UNNATCATDISPLAN would allow the Federal Government to appoint state or regional coordinators, whose role is to co-ordinate the use of Federal assets (such as those shown within Table A: Key Capabilities of Australian Government agencies in relation the Zombie Apocalypse) within the revised State or Territory Emergency Management Plan.

Under current Defence policy guidance, local military commanders may authorise the deployment of ADF personnel and resources ‘in localised emergency situations when immediate action is necessary to save human life, alleviate suffering, prevent extensive loss

\footnote{33}{A musical instruction to play ‘with motion or animation’.}
\footnote{34}{Michael Eburn, 'Responding to Catastrophic Natural Disasters and the Need for Commonwealth Legislation’ 2011 10(3) Canberra Law Review.}
of animal life or prevent wide spread loss / damage to property. This guidance is intended to cover a short-term emergency, where delays in communicating through the chain of command may result in a greater harm. This discretion is not meant to cover a protracted disaster, where the chain of command may have become extinct. The implementation of an UNNATCATDISPLAN would extend local military officers discretion to use ADF personnel and resources to apply to the ongoing struggle, which is the zombie apocalypse.

The Federal Government appointed state or regional coordinators could then become members of the State or Territory ‘Security and Emergency Committee’, in a similar manner to the representatives of the Police and Emergency Services. Where the command and control infrastructure subsequently breaks down to a regional or local level, it is possible that the local military commander would be granted emergency police powers and become the local area operational coordinator.36

VI CONCLUSION (BUT NOT THE END OF HUMANITY)

If we believe mass media, the American cultural vision of the zombie apocalypse is based in the individual survivor, armed with a firearm, headed out into a lawless wasteland. Similarly, if we believe Simon Pegg, the English cultural vision of the zombie apocalypse involves you and your chums, wielding cricket bats (utilising both front foot and back foot offensive shots) in defence of your local pub.37

The Australian version of the zombie apocalypse is significantly different. A culture of responding to ‘natural disasters’ will likely see greater reliance on local groups conducting co-operative efforts. In regional areas, there is significant evidence of community alignment behind emergency services and that has been repeated in urban areas.38

The Australian cultural vision of the zombie apocalypse is potentially based on being a member of your local bush fire brigade, parents and teachers’ association or community club, with lines of volunteers systematically moving forward, chain saws and hedge trimmers in hand.

The role of the Federal and State Governments will be to provide logistical support and overall leadership for locally co-ordinated activities. To that end the emergency planning and the supporting legislation needs to provide clear lines of authority to commit resources and specialise skills in support.

35 Defence Instructions (General) OPS 05-1 ‘Defence Assistance to the Civil Community – policy and procedures’ 13.
36 The author is specifically thinking of regional centers, such as Nowra and Townsville, with significant military resources.
38 Specifically, the public response to the 2011 Brisbane floods.
In practice, current parliamentary procedures are flexible enough to support a range of executive and parliamentary responses to zombies, based upon historical evidence that contemporary parliamentary conventions can be legitimately suspended in times of national emergency.

However, no system is perfect and consideration should be given to Federal Emergency Management legislation, which would provide succession rules in the event of truly national disasters or where federal leadership is effectively targeted and decapitated.
ESCAPING THE SEA OF ZOMBIES: LESSONS LEARNED FROM CLIMATE CHANGE REFUGEES

ISABELLA HEILIKMANN *

ABSTRACT

It stands to reason that where a country is overrun or is in the process of being overrun by zombies the inhabitants of that country are not likely to want to remain there. If there is any hope of safety in another state, there will be largescale movement of people trying to reach it.

Under international law, States will only owe protection obligations to people deemed refugees, stateless persons, and those entitled to complementary protection. Any individuals who do not fit this narrow scope can find themselves in a legal and normative gap in the international protection regime. This is the current situation for those facing cross-border displacement as a result of natural disasters and the effects of climate change, and would also be the predicament faced by zombie apocalypse refugees.

The purpose of this article is to examine the ability of existing international law to respond to the likely refugee surge that the zombie apocalypse would create. Current legal and normative gaps and the possibility for future developments and expansion are identified. To achieve this, international legal principles, jurisprudence and state practice are examined in order to determine where gaps exist, and the most appropriate ways to address them.

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I INTRODUCTION

‘If you had a loved one, a family member, a child, who was infected, and you thought there was a shred of hope in some other country, wouldn’t you do everything in your power to get there?’ ¹

‘No matter how devastating may be epidemic, natural disaster or famine, a person fleeing them is not a refugee within the terms of the Convention.’ ²

Even in a zombie free world, there were an estimated 65.3 million forced migrants as of 2015.³ Under international law States will only owe protection obligations to people deemed refugees, stateless persons, and those entitled to complementary protection. Any individuals who do not fit this narrow scope can find themselves in a legal and normative gap in the international protection regime. This is the current situation for those facing cross-border displacement as a result of natural disasters and the effects of climate change,⁴ and would also be the predicament faced by zombie apocalypse refugees.

This article examines the ability of existing international law mechanisms to respond to the likely refugee surge that the zombie apocalypse would create. Current legal and normative gaps and the possibility for future developments and expansion are identified. To achieve this, international legal principles, jurisprudence and state practice are examined in order to determine where gaps exist, and the most appropriate ways to address them.⁵

The article begins with an examination of the present analogous situation for climate change refugees and how current international law fails to protect them. Section III considers whether people displaced by the zombie apocalypse would be considered refugees for the purposes of the 1951 Refugee Convention. Following this, section IV explores to what extent these refugees would be eligible for complementary protection and engage a state’s non-refoulement obligations. Finally, section V provides some of the attempts that have been made to fill the legal gap for climate change refugees and suggests that similar measures would be needed to provide protection for zombie apocalypse refugees.

² Applicant A v Minister for Immigration and Ethnic Affairs (1997) 190 CLR 225, 248 (Dawson J).
⁴ Jane McAdam, Climate Change, Forced Migration, and International Law (Oxford University Press, 2013) 1.
⁵ Ibid 7-8.
II CLIMATE CHANGE REFUGEES

As there is currently no actual zombie apocalypse jurisprudence, climate change migration is used throughout this article as a way of identifying the gaps in existing legal refugee protection frameworks, which apply for climate change refugees and would potentially apply for zombie apocalypse refugees. There is no internationally agreed definition of ‘climate change refugee’, however the term is used throughout this article to describe people forcibly removed from their homes as a result of climate change impacts, and encompasses environmental migrants, refugees and/or displaced persons.  


One situation within the wide concept of environmental displacement is the small island nations at risk of disappearing as a result of rising sea levels. This is one of several categories identified by the former UN Secretary-General’s Representative on the Human Rights of Internally Displaced Persons, Walter Kälin. Kälin’s typology of climate-change related movement also included: Hydro-meteorological disasters such as flooding, hurricanes and mudslides; Government-initiated planned evacuations from high-risk disaster areas; Environmental degradation and slow-onset disasters such as water shortages and increased salinity prompting ‘voluntary’ migration; and Risk of conflict over scarce essential resources: Walter

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7 McAdam, above n 4, 4, 7, 39.
9 McAdam, above n 4, 24.
12 This is one of several categories identified by the former UN Secretary-General’s Representative on the Human Rights of Internally Displaced Persons, Walter Kälin. Kälin’s typology of climate-change related movement also included: Hydro-meteorological disasters such as flooding, hurricanes and mudslides; Government-initiated planned evacuations from high-risk disaster areas; Environmental degradation and slow-onset disasters such as water shortages and increased salinity prompting ‘voluntary’ migration; and Risk of conflict over scarce essential resources: Walter
five Solomon Islands have already reportedly been lost to rising sea levels, with a further six experiencing severe shoreline recession resulting in the destruction of villages and community relocation. Small and low-lying territories, prevalence of natural disasters and climate extremes, open economies and low adaptive capacity means that small island countries, such as Kiribati and Tuvalu, are particularly vulnerable and less resilient to climate change effects. It is predicted that Tuvalu may become the first country to be ‘swallowed by the ocean’, causing Tuvaluans to face a ‘tragic ending to their pictorial way of life.’ Rising seas have the potential to render a territory no longer inhabitable, for example because of an inability to produce crops or acquire fresh water. In this case, permanent relocation to other countries would be necessary however, current international law provides no protection status for such people.

Furthermore, it is probable that the impacts of climate change - and likewise the zombie apocalypse - will be felt disparately in different communities, as people’s ability to cope and adapt to the situation will be affected by underlying political, economic, and social conditions. These factors will likely impact a country’s resilience and ability to assist its people, which will influence mobility decisions. Thus, although the effects of both climate change and the zombie apocalypse will be indiscriminate and disregard national borders, the effects will be felt more acutely in some parts of the world than others, depending on the level of development and so the level of ability to adapt.


McAdam, above n 4, 8.

As the IPCC has observed, ‘[w]hile physical exposure can significantly influence vulnerability for both human populations and natural systems, a lack of adaptive capacity is often the most important factor that creates a hotspot of human vulnerability’: Martin L. Parry et al., Cambridge University Press, Climate Change 2007: Impacts, Adaptation and Vulnerability: Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (2007) 317; McAdam, above n 4, 1, 3-4.

International Organisation for Migration, Assessing the Evidence: Environment, Climate Change and Migration in Bangladesh (2010) 8; McAdam, above n 4, 4-5; Duong, above n 15, 1241.
Existing legal regimes do not provide adequate protection for climate induced inter-State migration. The current international protection framework is grounded in the idea of a person’s forced exile, where a non-origin State must extend legal protection if that person engages the State’s non-refoulement obligations. Reaching an agreed definition of a ‘climate change refugee’ in international law is crucial as it will assist to systematically develop discussions relating to the appropriate multilateral legal and institutional responses. This would determine whether climate-related movement should be dealt with at an international, regional, or local level and through which channel, for example within the present refugee protection framework or under the United Nations Framework Convention on Climate Change (UNFCCC). This legal gap would also need to be overcome for zombie apocalypse refugees.

III The Refugee Convention

The legal definition of a refugee and the rights and entitlements that ensue are set out in the 1951 Refugee Convention relating to the Status of Refugees, read in conjunction with its 1967 Protocol (together, the Convention). A refugee is defined as someone who:

Owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion (the five Convention grounds), is outside the country of his nationality and is unable, or owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such a fear, is unwilling to return to it.

Whilst the individualized approach of the Convention has been commended in its endorsement of individual human rights, it fails to encompass less well-defined situations of need. The refugee definition provided for by the Convention contains a

21 For definition and discussion on non-refoulement see section IV Complementary Protection; Ibid 6.
23 Convention Relating to the Status of Refugees, opened for signature 28 July 1951, 189 UNTS 137 (entered into force 22 April 1954) Art 1A(2) read in conjunction with the Protocol Relating to the Status of Refugees, opened for signature 28 July 1951, 606 UNTS 267 (entered into force 4 October 1967); McAdam, above n 4, 42.
number of obstacles for those seeking protection for reasons either unforeseen or not prioritised by the 1951 drafters, including those people that would be displaced by the effects of the zombie apocalypse. Consequently, the following difficulties make it very problematic to argue that people displaced by the impacts of the zombie apocalypse are refugees within the meaning of the Refugee Convention.

A Outside the Country of Nationality

The Convention only applies to people who have already crossed a national border, and so does not facilitate direct resettlement. This significantly limits the scope of affected people who can be afforded protection.

B Zombie Apocalypse as Persecution

Characterising the zombie apocalypse as persecution will be integrally problematic. ‘Persecution’ is not defined by the Convention or any other international instrument, but is generally agreed to involve particularly serious violations of human rights. Relevant factors to be assessed include the nature of the right at risk, the severity of its restriction, and the likelihood of this eventuating in the individual case. Despite the undeniable level of harm that the zombie apocalypse would inflict, including risk of infection, exposure to attacks and the probable breakdown of public services and livelihoods causing a lack of food and water security and welfare, it would be hard to argue that the harm suffered meets the definition of persecution as it is currently understood in international law. Furthermore, it has been held that Convention protection does not extend to people in pursuit of better living conditions or victims of natural disasters, even if ‘both of these cases might seem deserving of international

25 McAdam, above n 4, 42; María José Fernández, ‘Refugees, Climate Change and International Law’ (2015) 49 Forced Migration Review 42.
26 It is worth noting here that there would also be significant internal migration, but this is outside the scope of the paper; McAdam, above n 4, 43.
30 This is also the case for the current impacts of climate change, such as rising sea levels, increasing salination and extreme weather events; McAdam, above n 4, 43.
sanctuary.’ This is so ‘even when the home state is unable to provide assistance.’\textsuperscript{31} It may be assumed then that this would apply to those fleeing the disaster of the zombie apocalypse.

The difficulty of arguing that the impacts of a disaster amount to persecution is exemplified by climate change refugee cases. Unlike the obvious urgency of fleeing a zombie apocalypse, there are particular difficulties for pre-emptive movement away from the slow-onset impacts such as climate change. Although the risk assessment of persecution is forward-looking and risk of harm can be less than 50 percent, the fear must be shown to be plausible and reasonable.\textsuperscript{32} Consideration is given to the relation between the persecution feared and the degree of likelihood of its occurrence, which involves an assessment of the imminence of harm if the person is returned.\textsuperscript{33} This has created significant barriers for climate change-related cases. For instance, in 2001, the Tuvaluan government requested Australia provide special migration assistance to relocate citizens impacted by climate change but were refused on the grounds that the situation was not urgent enough.\textsuperscript{34} Contrastingly, in the event of a zombie apocalypse the fear of harm would undoubtedly be considered plausible and reasonable as well as sufficiently imminent.

The New Zealand case of \textit{Teitiota v Chief Executive Ministry of Business, Innovation and Employment},\textsuperscript{35} was the first climate change refugee case to reach the High Court and Court of Appeal.\textsuperscript{36} The case exemplifies the difficulties when the cause of displacement, in this case climate change, is not human. Reaching the Convention definition requires an identifiable, human actor to cause the harm.\textsuperscript{37} The Court of Appeal ultimately concluded that the Refugee Convention ‘is quite simply not the solution’,\textsuperscript{38} although the High Court did expressly acknowledge humanitarian protection as another avenue for relief.\textsuperscript{39}

\begin{thebibliography}{99}
\bibitem{can} \textit{Canada (Attorney General) v Ward} [1993] 2 SCR 689, 732; McAdam, above n 4, 46.
\bibitem{sen} Senate Foreign Affairs, Defence and Trade Committee, Commonwealth of Australia, \textit{A Pacific Engaged: Australia’s Relations with Papua New Guinea and the Island States of the South-West Pacific} (2003) para 6.78; McAdam, above n 4, 32; Duong, above n 15, 1240.
\bibitem{ioane} \textit{Ioane Teitiota v Chief Executive Ministry of Business, Innovation and Employment} [2013] NZHC 3125.
\bibitem{ioane2} Ibid 338.
\bibitem{ioane3} \textit{Ioane Teitiota v Chief Executive Ministry of Business, Innovation and Employment} [2014] NZCA 173, 21, 40, 41; Ibid 344.
\bibitem{ioane4} \textit{Ioane Teitiota v Chief Executive Ministry of Business, Innovation and Employment} [2013] NZHC 3125, para 43; Ni, above n 36, 360; for further discussion on the possibility of humanitarian protection see sections IV Complementary Protection and V Filling the Gap.
\end{thebibliography}
C Discriminatory Element

For the deprivation of a right to amount to persecution, a discriminatory element is required. The persecution must have been inflicted because of an attribute related to at least one of the five Convention grounds, whether real or perceived, of the person being persecuted, rather than it being a random attack. Furthermore, the person facing persecution’s government must be unable or unwilling to provide protection from it.40

The need for a discriminatory element was highlighted in a New Zealand Refugee Status Appeals Authority case.41 The court determined that refugee claimants from Tuvalu who were experiencing extreme economic hardship were not refugees as they had not been treated differently from everyone else. The environmental problems, economic difficulties, and lack of social services applied indiscriminately to all Tuvalu citizens.42 There have been a number of other Australian and New Zealand cases of Bangladesh applicants on the basis of natural disasters,43 drought and destitution in Fiji,44 and later citizens from Tuvalu, Kiribati and Tonga seeking refugee protection from climate change effects.45 All claims were unsuccessful as they failed to establish that the harm caused involved the necessary element of discriminatory persecution.46

It may also be the case that governments of zombie infected nations are not responsible for the apocalypse, and are not developing policies to increase its negative impacts on particular segments of the population. They may even remain willing to protect their citizens, but lack the ability to do so. This scenario creates a ‘delinking of the actor of persecution from the territory from which flight occurs’,47 which is a total reversal of the customary refugee paradigm. Convention refugees traditionally escape their own government; whereas zombie apocalypse refugees are not fleeing their government, but rather may even be seeking refuge in countries which have

40 McAdam, above n 4, 44.
42 The court expressed that ‘[t]his is not a case where the appellants can be said to be differently at risk of harm amounting to persecution due to any one of these five grounds. All Tuvalu citizens face the same environmental problems and economic difficulties living in Tuvalu... As for the shortage of drinkable water and lack of hygienic sewerage systems, medicines and appropriate access to medical facilities, these are also deficiencies in the social services of Tuvalu that apply indiscriminately to all citizens of Tuvalu and cannot be said to be forms of harm directed at the appellants for reason of their civil or political status.’: Refugee Appeal No 72189/2000, RSAA (17 August 2000) para 13; McAdam, above n 4, 44-45.
44 Refugee Appeal No 70959/98, RSA (27 August 1998); Refugee Appeal No 70959/98, RSA (27 August 1998).
45 See cases provided in McAdam, above n 4, 47.
47 McAdam, above n 4, 45.
contributed to the apocalypse. However, the premise that a State’s contribution to a disaster could be considered discriminatory persecution has been rejected by the Australian Refugee Review Tribunal (RRT). The RRT held that there must be evidence that a country’s contribution had ‘any motivation to have any impact on residents… either for their race, religion, nationality, membership of any particular social group or political opinion.’

Thus, an undeniable difficulty is that the impacts of the zombie apocalypse will be essentially indiscriminate. Although, as was established earlier, less developed countries may experience the effects more adversely as a result of their geography and resources, the reasoning behind this is not premised on any attributes of the country’s inhabitants. Moreover, whilst it may seem reasonable to argue that a group of people affected by the zombie apocalypse constitutes a ‘particular social group’, the law requires the group be connected by a fundamental, immutable characteristic rather than the risk of persecution itself. It is the particular attribute ascribed to them, not the persecutory acts per se, that establishes a group of people as a ‘particular social group’.

Furthermore, even if it could successfully be argued that a person displaced by the zombie apocalypse would meet the definition requirements of the Convention, the non-refoulement obligation in Article 33 is not an absolute principle. For example, ‘national security’ and ‘public order’ have been recognised as potential justifications for derogation. It is expressly stated by Article 33(2) that non-refoulement may not be claimed by a refugee, ‘whom there are reasonable grounds for regarding as a danger to the security of the country.’ National security is not defined in international law, making the assessment of whether an individual is a security risk up to the

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48 This of course would depend on the facts surrounding the origins of the zombie apocalypse.
49 The case concerned climate change refugee applicants who attempted to argue that developed country’s contribution to climate change amounted to persecution. This was rejected by the Tribunal: ‘In this case, the Tribunal does not believe that the element of an attitude or motivation can be identified, such that the conduct feared can be properly considered persecution for reasons of a Convention characteristic as required… There is simply no basis for concluding that countries which can be said to have been historically high emitters of carbon dioxide or other greenhouse gases, have any motivation to have any impact on residents of low lying countries such as Kiribati, either for their race, religion, nationality, membership of any particular social group or political opinion’: 0907346 [2009] RRTA 1168 (10 December 2009) para 51; McAdam, above n 4, 43.
50 McAdam, above n 4, 46.
52 Applicant A v Minister for Immigration and Ethnic Affairs (1997) 190 CLR 225, 341 (McHugh J); McAdam, above n 4, 46.
53 See definition of non-refoulement in section IV(A).
judgement of the State involved.\textsuperscript{55} Considering the nature of infection involved in the zombie apocalypse, it is conceivable that this will result in a further protection barrier.

The necessity of a persecution element thus restricts the Convention’s ‘humanitarian scope and does not afford universal protection to asylum seekers,’\textsuperscript{56} but instead ‘has a more limited objective, the limits of which are identified by the list of Convention reasons.’\textsuperscript{57} Hence, whilst there is nothing implicit in the Refugee Convention to preclude a person seeking protection as a result of harms caused by the zombie apocalypse, the requisite elements of Article 1A(2) would need to be established. Consequently, as the examination of difficulties has shown, a refugee claim based generally on the impact of the zombie apocalypse will most likely not succeed.\textsuperscript{58} However, although a person may be outside this particular refugee definition, this does not make them unworthy of protection, and will not necessarily mean they will be denied it in another form.\textsuperscript{59}

**IV COMPLEMENTARY PROTECTION**

This section will examine to what extent protection is provided for by existing international and regional standards on complementary protection for those forcibly displaced across international borders as a result of the zombie apocalypse.\textsuperscript{60} Complementary protection is an alternative human rights law basis on which protection may be sought if a minimum standard of human rights is at risk,\textsuperscript{61} named so because it provides protection that is complementary to that provided for by the Refugee Convention.\textsuperscript{62} Under human rights law, a State’s protection obligations are extended beyond the Convention to include people at risk of arbitrary deprivation of life or torture, or cruel, inhuman or degrading treatment or punishment, among others.\textsuperscript{63} The focus in a complementary claim is on the potential harm to the applicant if they are returned.\textsuperscript{64} A zombie outbreak in a country will undoubtedly impact on the

\begin{itemize}
\item \textsuperscript{56} *Applicant A v Minister for Immigration and Ethnic Affairs* (1997) 190 CLR 225, 248 (Dawson J); McAdam, above n 4, 46.
\item \textsuperscript{57} *Horvath v Secretary of State for the Home Department* [2001] 1 AC 489, 499-500 (Lord Hope).
\item \textsuperscript{58} McAdam, above n 4, 44.
\item \textsuperscript{59} Ibid 42.
\item \textsuperscript{60} McAdam, above n 4, 55.
\item \textsuperscript{61} Jane McAdam, *Complementary Protection in International Refugee Law* (Oxford University Press, 2007); McAdam, above n 4, 52; In Australia this is provided for by the *Migration Act 1958* (Cth): *Migration Amendment (Complementary Protection) Act 2011* (Cth).
\item \textsuperscript{62} McAdam, above n 4, 53.
\item \textsuperscript{63} Ibid 53.
\item \textsuperscript{64} Ibid 60.
\end{itemize}
citizens’ enjoyment of their human rights and has potential to cause considerable harm.65

A Non-Refoulement

The principle of non-refoulement is contained in a number of international law instruments and stipulates that a person must not be returned to a place where they will be at risk of certain types of harm.66 Theoretically, any human rights violation can give rise to a non-refoulement obligation.67 However, most human rights provisions also permit a balancing of interests between the individual and the State; hence protection from refoulement is usually only available in exceptional cases.68 The two primary rights invoking non-refoulement obligations are the right to life and the right to be free from torture or cruel, inhuman or degrading treatment. Although they are not the only possible rights, the two have been incorporated into a number of domestic complementary regimes.69

B Right to Life

The right to life has been pronounced by the United Nations Human Rights Council (UNHCR) as the ‘supreme right’ which is ‘basic to all human rights’.70 It is protected in Article 3 of the Universal Declaration of Human Rights,71 Article 6 of the International Covenant on Civil and Political Rights (ICCPR),72 Article 6 of the Convention of the Rights of the Child (CRC),73 and in all regional human rights treaties.74 State’s also have a duty ‘to ensure to the maximum extent possible the

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65 This is also the case for climate change refugees, whose rights will be affected by ‘coastal erosion, flooding, drought, and sea-level rise, together with more frequent and intense severe weather events, such as storms and cyclones.’ These climate-related events will have negative impacts on ‘agriculture, infrastructure, services, and the continued habitability of certain parts of the world’: McAdam, above n 4, 52; see also Human Rights Council, Report of the Office of the United Nations High Commissioner for Human Rights on the Relationship Between Climate Change and Human Rights, UN Doc A/HRC/10/61 (15 January 2009).
66 Jane McAdam, Complementary Protection in International Refugee Law (Oxford University Press, 2007) 8-10; Goodwin-Gill & McAdam, above n 55, 201.
67 R v Special Adjudicator, ex parte Ullah [2004] UKHL 26, paras 24-5 (Lord Bingham), 48-50 (Lord Steyn), 67 (Lord Carswell).
68 McAdam, above n 4, 53.
69 Ibid 55.
survival and development of the child under the CRC and the Inter-Agency Standing Committee Operational Guidelines on the Protection of Persons in Situations of Natural Disasters. The right is non-derogable and is recognised as imposing a non-refoulement obligation.

The right to life is connected to other related human rights, such as an adequate standard of living, and not to be deprived of a means of subsistence. These rights are particularly relevant to people affected by climate change for example, who’s ability to hunt, fish or undertake subsistence farming has been compromised, and would also apply to those affected by the zombie apocalypse. Furthermore, it ‘encompasses existence in human dignity with the minimum necessities of life.’ It is easy to imagine a zombie apocalypse situation where the necessities of life are no longer readily available.

In Budayeva v Russia, the European Court of Human Rights (ECtHR) held that the right to life extends to an onus on States of protection from natural disasters where the risk is known. The case involved a complaint against a Contracting state for not properly preparing against foreseeable disasters. According to the court, authorities must enact and implement laws and set up the necessary mechanisms for disaster risk mitigation, supervise potentially dangerous situations, inform the inhabitants about possible dangers and evacuate the affected population. The reasoning in this case could arguably also extend to removal cases where there is a real risk the applicant would suffer the impacts of the zombie apocalypse in a State that failed to mitigate against it. Furthermore, the obligation is more onerous for human-induced harms than

76 Inter-Agency Standing Committee Operational Guidelines on the Protection of Persons in Situations of Natural Disasters (Brookings-Bern Project on Internal Displacement 2011); McAdam, above n 4, 56.
79 International Covenant on Civil and Political Rights, opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976) Art 1(2); ibid Art 1(2).
80 McAdam, above n 4, 55.
82 Budayeva v Russia App nos 15339/02, 21166/02, 20058/02, 11673/02, and 15343/02 (ECtHR, 20 March 2008).
natural ones,\textsuperscript{83} which a zombie apocalypse might be.\textsuperscript{84} The ‘origin of the threat and the extent to which one or other risk is susceptible to mitigation’ will also be taken into account.\textsuperscript{85} The protection obligation may also extend to protection from environmental harm.\textsuperscript{86} The realisation of the right to life has been recognised as inherently connected to and dependant on the physical environment,\textsuperscript{87} and the right to a safe environment is specifically recognised in African and Latin American human rights treaties.\textsuperscript{88} It could be argued that a zombie infested country does not constitute a safe environment.

Thus, the right to life has the potential for further utilisation and progressive development for removal cases. However, claims will still fail in some countries that do not accept cases if the threat is generalised.\textsuperscript{89}

C \textbf{Torture or Cruel, Inhuman or Degrading Treatment}

Torture and cruel, inhuman or degrading treatment or punishment is prohibited by Article 3 of the United Nations Convention Against Torture,\textsuperscript{90} and Article 7 of the ICCPR, which also invoke a non-refoulement obligation.\textsuperscript{91} Only one removal case

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{83} McAdam, above n 4, 59-60.
  \item \textsuperscript{84} This would depend on the facts surrounding the origins of the zombie apocalypse. For example, in the Resident Evil movies the zombie ‘T-Virus’ is created in a lab. \textit{Budayeva v Russia} App nos 15339/02, 21166/02, 20058/02, 11673/02, and 15343/02 (ECtHR, 20 March 2008) para 137; McAdam, above n 4, 60.
  \item \textsuperscript{85} See Oneryildiz v Turkey (2005) 41 EHRR 20, paras 71-2.
  \item \textsuperscript{87} Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights, opened for signature 17 November 1988, OAS TS69 (entered into force 1999), Art 11, which states that ‘[e]veryone shall have the right to live in a healthy environment and to have access to basic public services. The States Parties shall promote the protection, preservation, and improvement of the environment.’; \textit{1981 African Charter on Human and People’s Rights}, adopted 27 June 1981 (entered into force 21 October 1986) OAU Doc CAB/LEG/67/3 rev.5, 21 ILM 58 (1982), Art 24, declaring that all people’s ‘shall have the right to a general satisfactory environment favourable to their development’; McAdam, above n 4, 61.
  \item \textsuperscript{88} McAdam, above n 4, 62.
  \item \textsuperscript{89} \textit{Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment}, opened for signature 10 December 1984, 1465 UNTS 85 (entered into force 26 June 1987).
\end{itemize}
\end{footnotesize}
based on a violation of the provision has been successfully established, however.\textsuperscript{92} Regionally, the right is also protected by Article 3 of the European Convention on Human Rights (ECHR).\textsuperscript{93} Unlike the other provisions, Article 3 of the ECHR has been recurrently utilised in the ECtHR in non-refoulement jurisprudence. The provision ‘has been recognised as precluding removal to a place where an applicant would face a real risk of being subjected to torture, or inhuman or degrading treatment or punishment’\textsuperscript{94} since the case of \textit{Soering v United Kingdom}.\textsuperscript{95}

The phrase ‘inhuman or degrading treatment’ has been carefully constrained by courts so as not to apply remedially to general poverty, unemployment, lack of resources or medical care except in the most exceptional circumstances.\textsuperscript{96} Inhuman treatment has been defined as involving ‘a minimum level of severity’ of ‘actual bodily injury or intense physical or mental suffering’.\textsuperscript{97} It does not need to be deliberate.\textsuperscript{98} Degrading treatment ‘humiliates or debases an individual, showing a lack of respect for, or diminishing his or her human dignity, or arouses feelings of fear, anguish or inferiority capable of breaking an individual’s moral and physical resistance’.\textsuperscript{99} A lack of intent will not necessarily disprove a violation,\textsuperscript{100} and the threat can be from non-State actors against whom ‘the state has failed to provide reasonable protection.’\textsuperscript{101} A breach of Article 3 will be more easily established where a case involves deliberate action or inaction by a State.\textsuperscript{102}

The case of \textit{D v United Kingdom}\textsuperscript{103} provides encouraging precedent to argue for complementary protection claims based on socio-economic zombie apocalypse impacts such as the difficulties that would be incurred in finding fresh water, food and safe shelter.\textsuperscript{104} The ECtHR stated that:

\begin{quote}
Although it cannot be said that the conditions which would confront him in the receiving country are themselves a breach of the standards of Article 3…
\end{quote}

\textsuperscript{94} McAdam, above n 4, 64.
\textsuperscript{95} \textit{Soering v United Kingdom} (1989) 11 EHRR 439.
\textsuperscript{96} McAdam, above n 4, 54.
\textsuperscript{97} \textit{Pretty v United Kingdom} (2002) 35 EHRR 1, para 52, referring to \textit{Ireland v United Kingdom} (1979-80) 2 EHRR 25, para 167.
\textsuperscript{98} \textit{Labita v Italy} (2008) 46 EHRR 1288, para 120.
\textsuperscript{99} \textit{Pretty v United Kingdom} (2002) 35 EHRR 1, para 52; McAdam, above n 4, 64.
\textsuperscript{100} \textit{Peers v Greece} (2001) 33 EHRR 51, para 74.
\textsuperscript{101} \textit{R v Secretary of State for the Home Department, ex parte Bagdanavicius} [2005] UKHL 38, para 24 (Lord Brown); McAdam, above n 4, 65.
\textsuperscript{102} \textit{Sufi and Elmi v United Kingdom} App nos 8319/07 and 11449/07 (ECtHR, 28 June 2011) para 292.
\textsuperscript{103} \textit{D v United Kingdom} (1997) 24 EHRR 423.
\textsuperscript{104} McAdam, above n 4, 66.
his removal would expose him to a real risk of dying under most distressing circumstances and would thus amount to inhuman treatment.\textsuperscript{105}

Furthermore, it was held in \textit{N v Secretary of State For the Home Department} that a want of resources would be a breach of Article 3 in extreme cases which demand one’s sympathy on pressing grounds.\textsuperscript{106} Similarly, in \textit{MSS v Belgium and Greece}, the court found that the Belgium government had breached its Article 3 non-refoulement obligations when it returned an asylum seeker to ‘living in a state of the most extreme poverty, unable to cater for his most basic needs: food, hygiene and a place to live. Added to that was the ever-present fear of being attacked and robbed and the total lack of any likelihood of his situation improving.’\textsuperscript{107} These living conditions were held to amount to degrading treatment,\textsuperscript{108} and could likely occur in a zombie infected nation.

The threshold for the severity of deprivation in removal cases is particularly high.\textsuperscript{109} For climate change cases, this high threshold will mean that the slow-onset negative impacts which exasperate socio-economic vulnerabilities may be a long way from constituting an Article 3 violation and so necessitating non-refoulement protection. As Article 3 does not provide protection for pre-emptive movement, those affected will be unable to move until the conditions are considered intolerable. Thus, reliance on the ECHR for protection against climate change-related impacts is imperfect and more appropriate protection is needed.\textsuperscript{110} Whilst existing jurisprudence does not explicitly exclude climate change effects as inhuman treatment, more development is needed for it to qualify.\textsuperscript{111} Zombie apocalypse refugees may be more fortunate, in that their plight will be comparatively more rapid and overt.

It is clear from the analysis in this section that although there is certainly potential for complementary protection availing in non-refoulement obligations, significant gaps remain in the existing normative framework. This is particularly so for protection against the slow-onset process of climate change impacts compared to rapid-onset

\textsuperscript{105} \textit{D v United Kingdom} (1997) 24 EHRR 423, para 53.
\textsuperscript{106} The court explained, ‘[t]he application of Article 3 where the complainant in essence is of want of resources in the applicant’s home country… is only justified where the humanitarian appeal of the case is so powerful that it could not in reason be resisted by the authorities of a civilised State… an Article 3 case of this kind must be based on facts which are not only exceptional, but extreme; extreme, that is, judged in the context of cases all or many of which… demand one’s sympathy on pressing grounds’: \textit{N v Secretary of State for the Home Department} [2008] ECHR 453 paras 38-40; McAdam, above n 4, 68.
\textsuperscript{107} \textit{MSS v Belgium and Greece} App no 30696/09 (European Court of Human Rights, Grand Chamber, 21 January 2011), para 254.
\textsuperscript{108} McAdam, above n 4, 69-70.
\textsuperscript{109} \textit{Bensaid v United Kingdom} (2001) 33 EHRR 205 para 40.
\textsuperscript{110} McAdam, above n 4, 76.
disasters.\textsuperscript{112} Thus, existing international refugee and complementary protection frameworks are insufficient to address necessary pre-emptive and staggered movement. Any new protection or migration agreement would need to remedy this gap.\textsuperscript{113}

V \textbf{FILLING THE GAP}

A considerable amount of work has been done to redress the legal and normative gap for climate change-related protection. This section explores these efforts and proposes that the same measures could be used to provide protection for people displaced by the zombie apocalypse.

\textbf{A \hspace{1em} Expanding the Definition of Refugee}

There is support in academic circles to extend the logic of the Convention definition to incorporate climate change impacted individuals.\textsuperscript{114} The expansion of the refugee definition has even been described as an easy extension of human rights policy. As the 1951 Convention definition is heavily imbued with human rights notions, using human rights concepts should have natural appeal. As Musalo et al. comment, “[t]he realities of the human condition have continued to exert powerful stretching forces upon the traditional refugee definition,” creating a need for an expanded definition to “more fully respond to the broad range of individuals who flee in fear.”\textsuperscript{115}

Examples of expanding the refugee definition beyond the Convention definition can be found in the Regional Organisation of African Unity (OAU) Convention Governing the Specific Aspects of Refugee Problems in Africa (OAU Convention) and the Cartagena Declaration on Refugees in Latin America (Cartagena Declaration).\textsuperscript{116} The OAU Convention includes as refugees people displaced on account of ‘events seriously disturbing public order.’\textsuperscript{117} Similarly, Article III(3) of the Cartagena Declaration explicitly considers the need to enlarge the concept of a refugee to include not only the elements of the Refugee Convention but also:

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\textsuperscript{112} McAdam, above n 4, 83.
\textsuperscript{113} Ibid 84.
[R]efugees persons who have fled their country because their lives, safety or freedom have been threatened by generalized violence, foreign aggression, internal conflicts, massive violation of human rights or other circumstances which have seriously disturbed public order.

Whilst scholarly debate has questioned whether environmental disasters could be included in this category, it has been deemed unlikely that involved States would readily accept such an expansion beyond its conventional meaning of ‘public disturbances resulting in violence’.118

B Expanding Human Rights Law Protection

There may be a need to move away from traditional approaches of dealing with forced migration to accommodate the new and unforeseen refugee problem created by the zombie apocalypse.119 The benefits of a human rights-based approach have been addressed by the International Law Commission:

A rights-based approach deals with situations not simply in terms of human needs, but in terms of society’s obligation to respond to the inalienable rights of individuals, empowers them to demand justice as a right, not as a charity, and gives communities a moral basis from which to claim international assistance when needed.120

Any approach to creating a new, specific instrument would need to involve a comprehensive human rights framework,121 combining protection, assistance and responsibility and the incorporation of principles of proximity, proportionality and non-discrimination.122 Alternatively, extending protection to people displaced by the zombie apocalypse could be seen as developing a right of temporary protection on humanitarian grounds under international law, rather than under a treaty.123


121 Duong, above n 15, 1251.


One solution could be the negotiation and creation of a new international agreement that specifically addresses the issue and provides a suitable protection framework. This approach however, is not without problems. Attributing the international rights and responsibilities of displaced persons is integrally a state sovereignty matter and the contentious nature would certainly impede universal agreement.\(^{124}\)

Consequently, addressing the issue may be better coordinated through a regional agreement, operating under an international umbrella framework. A regional cooperation and bilateral agreement could expand upon existing geopolitical relationships and allow states to develop appropriate policies to respond to the situation within the relative capacities of the countries involved. An agreement in this form will be more likely to achieve a greater degree of commitment from participating states compared to what may be achieved at a global level.\(^{125}\)

Direction could be taken from the recently endorsed ‘Agenda for the Protection of Cross-Border Displaced Persons in the context of Disasters and Climate Change’, which highlights State efforts to adopt a more flexible approach to ‘applying “regular migration categories”, granting “temporary stay arrangements”, and wider applications of current refugee law.’\(^{126}\) A number of other approaches that could be used as a guide for zombie protection have been proposed to fill the climate change legal protection gap, ranging from binding multilateral instruments to policy recommendations and commitment statements by multilateral bodies.\(^{127}\) The Cancun Adaptation Framework was negotiated by the Ad Hoc Working Group on Long-term Cooperative Action under the UNFCCC in 2010.\(^{128}\) The framework explicitly recognised climate migration and the inadequacy of current protection. It promotes the need for parties to enact ‘[m]easures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at the national, regional and international levels’.\(^{129}\)

The following year, the Nansen Conference on Climate Change and Displacement in the 21st Century developed a set of 10 recommendations known as the Nansen

\(^{124}\) Williams, above n 119, 517.

\(^{125}\) Ibid 518.


\(^{129}\) Ibid, para 14(f).
Principles. These principles address the protection gap that exists for externally displaced persons and the need for international action. The resulting Nansen Initiative aimed to develop state consensus on how to most affectively address the issue. Additionally, the UNHCR hosted the 2011 Bellagio Deliberations which were a series of expert roundtables on climate change and displacement. Both the Nansen Initiative and the Bellagio Deliberations emphasise the importance of regional responses and recognise the international community’s vital role in assisting and coordinating such regional efforts.

These regional proposals provide an encouraging platform on which to base a zombie apocalypse refugee protection framework. However, it is important not to forget that even if resettlement is successfully facilitated, issues of identity, culture and self-determination will arise for people who have lost their homes and homelands. Any new policy should therefore also address these fundamental issues through a comprehensive human rights framework.

VI CONCLUSION

The movement of people away from a threat toward actual or perceived safety has been occurring since time immemorial. Whilst the concept of migration is not new, over time people have faced a range of both new and continued threats such as war, famine, persecution, severe economic hardship, climate change impacts and perhaps one day the threat of the zombie apocalypse. Regardless of the threat faced, people fleeing their homes for the sake of survival, deserve to be legally protected.

This article has sought to assess the ability of existing international law frameworks to provide legal protection for zombie apocalypse refugees. It has found that the Convention definition of refugee is mired in the strict categories prioritised by the 1951 drafters and it seems unlikely that states will be willing to expand it. Alternatively, complementary protection based on human rights principles and the ensuing non-refoulement obligations has the potential to provide protection, although this is also not guaranteed. Most likely a new form of instrument or agreement to address the issue will be needed. The best protection will arise from incorporating regional cooperation between states and ‘building on existing geopolitical, economic, cultural, and environmental relationships that already exist within many regional

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131 See in particular, ibid Principle IX.
132 Ni, above n 36, 347.
134 Ni, above n 36, 348.
135 McAdam, above n 4, 36.
136 Williams, above n 121, 523.
frameworks. In this way the international community can provide the much-needed protection for zombie apocalypse refugees as their homes are lost to the waves of undead.

137 Ibid 524.
WILL THE REAL ZOMBIE TAX PLEASE STAND UP!
A RANGE OF TAXING OPTIONS DURING AND AFTER THE ZOMBIE APOCALYPSE.

OLIVIA HUME*

ABSTRACT

While possibly not the first thing most people think of when it comes to a zombie apocalypse, various forms of taxing will play an important part throughout, but especially in the rebuilding phase. With frequent discussions of zombie taxes in the media, it is important to understand what taxing methods, such as consumption taxes, death taxes or income taxes, may be useful and achievable at certain stages of the apocalypse, should of course any organised government survive it. An apocalypse is likely to send society backwards and therefore more rudimentary options such as barter and tithing are also discussed.

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INTRODUCTION

'This is the way the world ends. Not with a bang but a whimper.'

If ‘taxes are what we pay for civilised society’, what happens when society is no longer civilised? As evidenced by the many pop culture comics, books, zombie movies and TV shows, breakdown of society is inevitable during the zombie apocalypse and this is also assumed in the timeline proposed for this edition. With a zombie apocalypse underway and the threat of brain eating monsters lurking around every corner, paying your taxes will likely be the last thing on your mind. Combine personal survival with a lack of government to pay your taxes to, and the result is that revenue stops flowing, while the blood starts!

Once the immediate threat is over and the zombie menace is eradicated or at least under control and it is clear that humanity will in fact survive, how do we collectively return to the civilised society that we once had? This article starts by examining why we have taxes and explores some of the taxing options available at various stages of the apocalypse in chapter II, aligning scenarios along the way with the experiences of the characters of The Walking Dead. Chapter III looks beyond the apocalypse and whether a state/territory income tax is a legally viable option for rebuilding, while chapter IV discusses how a state/territory income tax could work, including an overview of potential models.

II WHY DO WE HAVE TAXES AND WHAT OPTIONS ARE AVAILABLE DURING AN APOCALYPSE?

The power to tax is the one great power upon which the whole national fabric is based. It is as necessary to the existence and prosperity of a nation as is the air he breathes to the natural man. It is not only the power to destroy, but it is also the power to keep alive.

A Revenue & Social Services

Without revenue, governments cannot fulfil their policies. Tax plays an important role in society, as it is the means of generating that revenue. It pays for the roads we drive on, Medicare, education, hospitals, public service employees to serve the community, and much more. In 2014-15 the Australian Taxation Office (ATO) collected

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2 Oliver Wendell Holmes Jr, Compania General De Tabacos De Filipinas v. Collector of Internal Revenue, (1927) No. 42.
3 The Walking Dead, World War Z, Fear the Walking Dead, and many more.
$368.9 billion in tax revenue\textsuperscript{6} of which $183.6 billion was from individual income tax,\textsuperscript{7} and a further $75.3 billion from company and resource rent taxes.\textsuperscript{8} This was used for ‘health care, education, social security and welfare payments, defence force funding and other government-funded services’.\textsuperscript{9} $145.8 billion or approximately 40% of revenue collected, funds social security and welfare payments to support unemployment and our ageing population.\textsuperscript{10}

Post apocalypse, revenue will be needed to rebuild government, infrastructure, homes, schools and perhaps even exclusion zones where zombies can be locked up in the hope that a cure will be found. State and federal governments already provide funding in the event of national emergencies, or declared disaster zones,\textsuperscript{11} but if these governments no longer exist, temporarily or permanently, where will the funding come from? In addition, during and immediately after the zombie apocalypse, there is unlikely to be essential services or an economy to speak of. This means survivors will need to look to other ways of getting the essential items they need, and those ways will vary depending on which stage of the apocalypse we are at.

\textbf{B Stage One – Mosso}

‘... in this world nothing can be said to be certain, except death and taxes’\textsuperscript{12}

During the Mosso stage the Federal government fails, and state and territory governments must step up, becoming the primary defence against the zombies. There is no food left in the supermarkets, internet and mobile phones have been rendered useless, and electricity is patchy at best. Panic has set in with theft and looting becoming the norm, any semblance of the rule of law has gone out the window. With no economy to speak of, there are few options left for those who want to legitimately purchase goods. At this stage barter becomes the primary mechanism of trade.

It is likely survivors will band together under the direction of a leader, for example Rick in The Walking Dead. We have seen the development of the Alexandria community under the leadership of the now deceased Deanna, which resulted in the shift of responsibility to Rick, Maggie, Glenn and Michonne.\textsuperscript{13} They have realised that their community must trade with others (such as the Hilltop) in order to survive.


\textsuperscript{7} Ibid.

\textsuperscript{8} Ibid.

\textsuperscript{9} Ibid.

\textsuperscript{10} Ibid and Australian Government, above n 6.


\textsuperscript{13} Season 6 of \textit{The Walking Dead}, AMC.
Trade or barter dates back for centuries\textsuperscript{14} and is defined as ‘a process of exchange in which a person or organisation directly exchanges (swaps) one form of goods or services for another instead of using money as a medium of exchange’.\textsuperscript{15} It is also a form of countertrade which developed in the 1960s as a means of importing for countries with non-convertible currencies (examples include the Soviet Union and other Communist States in Eastern Europe).\textsuperscript{16} Barter was most commonly used where there was a ‘continued absence of reliable money’,\textsuperscript{17} which we saw most recently in the mid-2000s during the Zimbabwe hyperinflation crisis.\textsuperscript{18} During the height of the apocalypse there would be no reliable currency and barter would become the default.\textsuperscript{19}

No new laws would need to be implemented as there is a market for barter transactions even now through companies like Bartercard,\textsuperscript{20} which perform an agent like role,\textsuperscript{21} and the ATO considers barter transactions to be assessable income and therefore subject to tax.\textsuperscript{22} It is worth noting that it is unlikely there would be any formal commercial processes available in an apocalyptic event, so this would mean utilising the simplest forms of barter, through private and direct exchange of goods and services.\textsuperscript{23} For barter to be profitable, the establishment of a market place where people could bring their goods would be the most effective option. As a way to make a profit/tax, the organisers could charge a fee (in the form of goods themselves) to the stallholders.

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\textsuperscript{14} Trischa Mann (ed), \textit{Australian Law Dictionary} (Oxford University Press, 2010) ‘Barter’ [63].


\textsuperscript{17} Citing Bloom, R. and Solotko, J, (2004), ‘Barter Accounting in the US during the late Eighteenth and early Nineteenth Centuries’ 9(1) \textit{Accounting History} 91-108, Garry Carnegie, ‘Re-examining the determinants of barter accounting in isolated communities in colonial societies’ (2004) 9(3) \textit{Accounting History} 73, 75.

\textsuperscript{18} Since 1914 there have been hyperinflation crises in, inter alia, Germany, Austria, Poland, Hungary and the Soviet Union. Zimbabwe ended up in a situation where they dollarized their currency and introduced a number of other currencies including the US and Australian dollars. Jayson Coomer and Thomas Gstraunthaler, ‘The hyperinflation in Zimbabwe’ (2011) 14(3) \textit{The Quarterly Journal of Austrian Economics} 311, 312.

\textsuperscript{19} Zimbabwe sinks into hell of hyperinflation: The world is running out of time to prevent a failed state (15 March 2007), Financial Times.


\textsuperscript{21} Trischa Mann (ed), \textit{Australian Law Dictionary} (Oxford University Press, 2010) ‘Barter’ [63].

\textsuperscript{22} Australian Taxation Office, above n 15.

C Stage Two - Prestissimo

’No king should rule absolutely, like a dictator.’

During the Prestissimo phase of the outbreak even the state and territory governments have temporarily disbanded. Instead we see fortified but isolated groups of people working together to fight the zombies. Power lies with dictatorial or oligarchical style leaders like the Governor in season 3 of The Walking Dead, or the newly introduced Negan in season 6. These groups are scrounging for whatever food, weapons or valuables they can lay their hands on and their main goals are survival and security. In this phase, the economy has returned to bartering but trade cannot be the only form of obtaining necessary goods and the establishment of communities has led to the need for more. This is where historical taxing options of tithing and feudal systems may be utilised.

1 Tithing

Tithing is considered to be one of the earliest forms of tax, and its origins date back to biblical times, the concept being one of moral Christian obligation. There are many bible references discussing tithing or almsgiving, which weren’t always monetarily based, and were often given directly to the poor. In an apocalyptic world, tithing could be likened to Yakuza or mafia style payment for protection, and enforced through a percentage of money or valuables found during scouting expeditions, or even on food produced as was expected by Negan in season 6 of The Walking Dead. It could be used to pay troops to protect the borders from zombies or other hungry survivors in the style of feudalism. Given the immediacy of tithing, it could be a viable form of obtaining goods or raising funds in smaller communities.

2 Feudal taxes

Feudalism in England existed for centuries from the time of William the Conqueror in 1066. It seems to have several meanings, being variously described as a social system where nobility exchanged military services for lands, and peasants owed their nobles ‘homage, labour and a share of the produce … in exchange for protection’. Comninell referenced a further two meanings, the first covering only the relationship

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27 References to herds, flocks, crops etc. J. M. Powis Smith ‘The Deuteronomic Tithe’ (1914) 18(1) The American Journal of Theology 119-126, 120.
28 Shuler, above n 25, 47.
between lords, the second confirming the idea of a social structure. This also aligns with references to a pyramidal arrangement, with the sovereign at the top, the lords next, free subjects and then dependent tenants (the peasants) at the bottom, resulting in everyone being ranked and having some form of master.

Marx went one step further suggesting that feudalism was actually the basis of the class system that allowed the lords to exploit the peasants. Noting that under the feudal system, noblemen were given plots of land to look after on behalf of the sovereign, in exchange for specific services, which included aid, financial and military support, as well as an obligation to collect the sovereign’s taxes from the tenants of the land. Peasants were restricted in their ability to move and were obliged to fight on behalf of their noble lord to whom they owed fealty or loyalty.

In the latter stages of season 6 of *The Walking Dead*, Negan adopts a feudal like arrangement whereby the other communities are working to provide for him, as he sees himself as sovereign. Though currently in *The Walking Dead* it is not by choice, smaller council style governments or communities could set themselves up in this way by making specific areas safe from zombies, and allowing other survivors to live there in return for their labour and a portion of any goods they find, or valuables they bring with them.

### D Stage Three - Allargando

‘Qui vult dare parva non debet magna rogare.

Translation: He who wishes to give little shouldn't ask for much.’

In the *Allargando* phase, the aftermath of the apocalypse, rebuilding will be a priority and rebuilding takes money. At this phase, there is no centralised government to assist in the rebuilding efforts, nor to collect or redistribute funds, however the states and territories have started to resume services. Restoration of electrical power, television and radio has occurred and centralised food distribution has been set up in each state and territory. The economy is in the process of shifting away from barter and returning to cash. Jobs are being re-established, though mainly essential services initially. To ensure this rebuilding effort continues to operate effectively, the states

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33 Comninel, above n 30, 9.
35 Comninel, above n 30, 17.
36 Ibid 27.
37 This was made clear in the opening episode of season 7 where he brutally killed two Alexandrians to prove the rest of the survivors and anything they have belongs to him.
and territories will need to consider the possibility of instituting death duties or a zombie consumption tax.

1 Death taxes
Chodorow believes that ‘the zombie apocalypse will create an urgent need for significant revenues to defend the living, while at the same time, rendering a large portion of the taxpaying public dead or undead’ and asks whether a death/estate tax is the answer? Estate taxes were one of colonial Australia’s first direct taxes, and were considered an easy form of taxing wealth as they ‘inflicted the least pain of all taxes’. Death/estate taxes are not currently imposed in Australia, but were up until the late 1970s/early 1980s when both state and federal level duties were abolished.

The 2010 Henry review into our taxation system, suggested death taxes should be reconsidered saying ‘A bequest tax would be an economically efficient way of raising revenue and would allow reductions in other, less efficient taxes.’ The Organisation for Economic Co-operation and Development (OECD) notes that there are some practical difficulties in imposing death taxes, including issues of double taxation, and requirements for specific rules on gifts. The practical difficulties in a zombie apocalypse would centre around the questions of who is actually dead, are they only undead (and can they be cured?), and do they have any living relatives who may have claim on their estates? All questions which are outside the scope of this article.

2 Consumption taxes
Perhaps we could establish a zombie currency where you catch a zombie and trade it for goods, the zombies get locked up waiting for a cure, and you get to eat that night. If you have a family you’d like cured at some stage you can decide to lock them up, ala Hershel in season 2 of The Walking Dead. If things get desperate, you could trade your zombie family for food and other essentials. This would have the added bonus of having them kept somewhere safe so they don’t hurt others, and a fee could be

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40 Smith, above n 5, 24.
45 Given in these circumstances, the original owner of the estate is either likely dead or undead, gift issues and double taxation would be relatively minor concerns, above n 42, 88.
46 See Chodorow’s article for a good discussion of this, above n 39.
imposed for their upkeep. Penalties could be applied if they escape and consume other potential taxpayers.

In all seriousness, as trade expands, and money becomes a viable aspect of the economy, consumption taxes such as a goods and services tax (GST) or value added tax (VAT) are an efficient and sustainable option. Australia introduced a consumption tax in the form of the A New Tax System (Goods and Services Tax) Act 1999. The GST is collected by the federal government and then redistributed back to the states and territories under the section 96 grants power in the Constitution. A state/territory based GST would require some law changes to be effective, as currently the states/territories are prohibited from enacting their own consumption taxes.

A consumption tax during the zombie apocalypse wouldn’t necessarily be a tax on regular goods and services, it would likely be linked to items that are necessary for survival like food, weapons or medication, and items considered to be a luxury could be the price paid. If there is a zombie cure or suppressant medication, the government could set a price and charge a consumption tax to each person that takes it.

### III BEYOND THE APOCALYPSE

‘The only thing that hurts more than paying an income tax is not having to pay an income tax.’

As society returns to normal, revenue will become even more important. In the continued absence of a federal government, can the states and territories legally impose income taxes to raise this revenue? To answer this question, it is important to firstly provide some historical context for income taxes in Australia, while also looking at the legal basis and powers for tax imposition.

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47 Australian Government, above n 43, Chapter 7: Taxing consumption.
49 It can only be imposed under the Constitution, ibid.
50 See Benjamin Duff, ‘Protecting the infected. Government acquisition of patents during the zombie apocalypse’ Canberra Law Review 14(1).
51 Thomas Dewar, BrainyQuote.com, Xplore Inc (2016) [https://www.brainyquote.com/quotes/quotes/t/thomasdewa158142.html].
A Income Tax In Australia

1 Early colonial times
Prior to 1901 and the Federation of Australia, the States were separate colonies with individual economic objectives and taxing policies,\(^\text{52}\) which were based on what was easy and readily available, designed to progress the 'economic and social needs' of each colony.\(^\text{53}\) In the earliest days of colonial Australia, laws were made at the whim of the Governor of the day.\(^\text{54}\) Money, food and other goods were provided by the Monarchy.\(^\text{55}\) Taxes were usually indirect excise and customs type duties.\(^\text{56}\)\(^\text{57}\) While some taxes were required to supplement the insufficient provisions from England,\(^\text{58}\) they were not of great concern.\(^\text{59}\)

2 Representative government
This changed in 1818 with the legalisation of collection of duties in New South Wales (NSW), which authorised the NSW Governor to impose customs duties.\(^\text{60}\) Next came laws in 1823 allowing representative government in NSW and Western Australia (WA),\(^\text{61}\) followed by the Australian Colonies Government Act 1850 (Imp),\(^\text{62}\) and then self-government.\(^\text{63}\) There was a 'high degree of economic and political tension and competition between the…colonies and their governments',\(^\text{64}\) with each colony charging import taxes and taxes on goods traded between the colonies.\(^\text{65}\)

3 Income taxes – a latecomer to the tax party
Income tax was a late introduction in the colonies, with SA introducing it in 1884,\(^\text{66}\) Tasmania in 1894,\(^\text{67}\) and both NSW\(^\text{68}\) and Victoria\(^\text{69}\) in 1895. Both Queensland (Qld)

\(^{53}\) Ibid, 112.
\(^{54}\) Peter A Harris, 'Metamorphosis of the Australasian Income Tax: 1866 to 1922' (Australian Tax Research Foundation, Research Study No. 37, 2002) 13.
\(^{55}\) Dick, above n 52, 108.
\(^{56}\) Which is due to the lack of organised administrative infrastructure, ibid, 106.
\(^{57}\) Also often due to the lack of a taxable capacity (i.e. no land ownership, no wealth and imports were appropriated on arrival for distribution). Smith, above n 5, 9.
\(^{58}\) Dick, above n 52, 107.
\(^{59}\) When there were so many other things that were taking up the time and attention of the colonies, such as ‘an uncertain economy, a disinterested British government, unrest and dissatisfaction of prisoners and settlers, the irregularity of shipments, and the lack of local industries and business’, ibid, 109.
\(^{60}\) By an Act of the British Parliament 59 Geo. III., c.114, ibid.
\(^{61}\) 4 Geo. IV., c.96, ibid.
\(^{62}\) After which government was formed in NSW, Tasmania (then Van Diemen’s Land), South Australia (SA) and Victoria, ibid.
\(^{63}\) During the period 1855-1859. Act 59 Geo. III., c.114, ibid 109.
\(^{64}\) Citing C D Allin, A History of the Tariff Relations of the Australian Colonies (Bulletin of the University of Minnesota, 1918), 1, ibid 110.
\(^{65}\) Which were removed during the Federation processes, ibid.
\(^{66}\) Stephen Mills, Taxation in Australia (MacMillan and Co Limited, 1925), 142.
\(^{67}\) Ibid 191.
\(^{68}\) Ibid 66.
\(^{69}\) Ibid 89.
in 1902,70 and WA in 1907,71 introduced income tax after federation. Their methods of collection were limited to flat rates of income tax,72 only collectable on income derived from that state.73 With federation came the centralisation of customs and excise duties74 that the colonies previously had control over, a concern as these were seen as their ‘major tax base’.75 Vitally, they were allowed to hold on to their income taxing powers,76 in an effort to keep as much fiscal independence as possible.77

4 Federation and taxing powers in the Constitution
With federation in 1901, came Australia’s Constitution. There are a number of sections within the Constitution that provide the taxing powers for the Commonwealth. Section 51(ii) provides power for taxation, but qualifies that it cannot be used to discriminate between the States or parts of States,78 which is supported by the section 99 prohibition on preference being given to any state over another.79 Section 96 provides the grants power that allows the federal government to allocate financial assistance to the states.80

5 Post-federation
Federal income tax was introduced in 1915, at the same time Australia was involved in World War I.81 It was a progressive tax from the start,82 allowing deductions for taxes already paid to the states,83 however attempts made to introduce uniformity at this stage failed.84 A Royal Commission in the early 1920s attempted harmonisation of income taxes85 but faced difficulties86 with their recommendation that the

70 Though Queensland had earlier introduced a Dividends Tax in 1890 imposing a 5% duty on Company dividend payments, ibid 116-117.
71 Ibid 165.
73 Ibid 5.
74 Through section 86 of the Constitution of Australia. This also brought the first effective grant to the States through the Braddon clause, which mandated certain percentages of the excise and customs duty to be returned to the States for a period of ten years post Federation. Dick, above n 52, 116.
75 Ibid 115.
76 Quoting Julie P Smith, ibid.
78 Australian Constitution s 51(ii).
79 Ibid, s 99.
80 Ibid s 96. Interestingly this is set as a period of 10 years after federation, or until Parliament provides otherwise. There is much that has been written about the increasing power of the Commonwealth in relation to the States and the grants power is one way of continuing that. Ss 81 and 83 also relate to revenue but are not as important to this discussion. S 55 limits the subject matter of a law dealing with taxation to taxation.
81 Australian Treasury, above n 72.
82 To protect low income earners from paying more than was necessary, ibid 4.
83 Ibid 15-16.
84 As the laws of each State were too different, ibid 6.
85 Ibid 30.
86 Those difficulties being the powers of direct taxation were held by the Commonwealth and the States, the significant revenue requirements of each, and the differences in the taxation Acts themselves, ibid 43.
Commonwealth hold sole power to impose income taxes resulting in only bringing the various laws closer in line.\textsuperscript{87} Another Royal Commission held in 1932-1934\textsuperscript{88} made a number of recommendations\textsuperscript{89} however also failed to get to the desired level of uniformity.\textsuperscript{90} What was agreed was that any government wishing to alter its income tax laws must consult with the other governments first.\textsuperscript{91}

\textbf{6 The sole domain of the Commonwealth?}

Australia’s involvement in World War II brought about the changes in states being able to impose income tax. With the extra revenue required to fund Australia’s war effort,\textsuperscript{92} income taxes became the easy target by which to raise funds,\textsuperscript{93} with an immediate 15\% rate increase.\textsuperscript{94} Increases continued until it became impossible for federal and state taxes to continue side by side.\textsuperscript{95} In 1942 a committee was established to consider uniform taxation, again with the Commonwealth as the ‘sole taxing authority’, with the committee suggesting this should be implemented, but only until after the war had been over for one year.\textsuperscript{96}

\textbf{7 The First Uniform Taxation Case}

The Commonwealth government then tried to introduce a package of four laws which, inter alia, included priority for the Commonwealth over state income taxes and made grants conditional on states not imposing income tax at all.\textsuperscript{97} Despite state rejection, and the subsequent High Court challenge by SA, Victoria, Qld and WA,\textsuperscript{98} the laws were enacted in June 1942.\textsuperscript{99} The High Court upheld the legality of the Commonwealth imposing taxes and states abstaining from doing so, as well as the priority of income tax to the Commonwealth, through the use of the constitutional taxing and defence powers.\textsuperscript{100} Despite the one-year condition, after the war ended the Commonwealth legislated again in 1946 to make the changes permanent.\textsuperscript{101}

\textbf{8 The Second Uniform Taxation Case}

\begin{itemize}
\item \textsuperscript{87} Ibid 44.
\item \textsuperscript{88} The Royal Commission was charged with ‘simplifying and standardising the Commonwealth and State taxation laws, where the taxes covered substantially the same subject matter,’ ibid 64.
\item \textsuperscript{89} Some of which were taken up and implemented with the Income Tax Assessment Act 1936, ibid 68.
\item \textsuperscript{90} For the same reasons as the 1920s Commission, ibid 78.
\item \textsuperscript{91} Ibid 79.
\item \textsuperscript{93} Australian Treasury, above n 72, 81.
\item \textsuperscript{94} Ibid 82.
\item \textsuperscript{95} Which in some cases, the two taxes resulted in 90\% of the income being taxed, though there were rebates where this was the case, ibid 89.
\item \textsuperscript{96} Ibid 91.
\item \textsuperscript{97} South Australia v The Commonwealth (First Uniform Tax Case) (1942) 65 CLR 373, 375-377.
\item \textsuperscript{98} A challenge which failed, ibid 374.
\item \textsuperscript{99} Australian Treasury, above n 72, 92.
\item \textsuperscript{100} Ibid.
\item \textsuperscript{101} Again ‘unanimously opposed by the States’, ibid 117.
\end{itemize}
This case was heard in 1957, with Victoria and SA attacking the *State Grants (Tax Reimbursement) Act 1946-1948*\(^{102}\) for requiring grant funds to be spent for specific purposes, and the *Income Tax and Social Services Contribution Assessment Act 1936-1956*\(^{103}\) for the requirement that federal taxes were given priority over state taxes. The High Court held that the *State Grants Act* was constitutional, saying that the Commonwealth could make grants with inducements for the states but they could not be coercive, with Dixon CJ stating ‘...there is nothing which would enable the making of a coercive law. By coercive law is meant one that demands obedience.’\(^{104}\)

It was a different story in regards to the social security laws however, with the relevant section being struck down by the court, effectively overturning the Commonwealth’s ability to enforce priority. This result allowed the states to continue to impose income tax should they choose to do so; however, they would likely lose any Commonwealth grants they may have otherwise received.\(^{105}\)

**IV A STATE & TERRITORY INCOME TAX**

**HOW WOULD IT WORK?**

*Why not just eliminate the federal income tax?*\(^{106}\)

While the Commonwealth was allowed to keep their income tax control in 1942 and 1957, there is no constitutional barrier to prevent states/territories from imposing their own income tax again now.\(^{107}\) Carling suggests the barrier is more of a practical one now, based on the growing dependency the states have on the federal government for funding.\(^{108}\) Harris suggests it is also political in nature, with the Commonwealth government being able to encourage state compliance through the use of the section 96 grants power.\(^{109}\) Post zombie apocalypse there should be few barriers left with no federal government to intervene, however the question remains, how would it work and what are the advantages and disadvantages?

**A How Would It Work?**

1 **What models are there?**

Despite being a ‘decentralised federation by Constitution’, centralisation within the taxation system, and other areas, has been increasing since federation as the powers of

\(^{102}\) *States Grants (Tax Reimbursement) Act* 1946-1948 s 5 and 11.

\(^{103}\) *Social Services Contribution Assessment Act* 1936-1956 s 221(1)(a).

\(^{104}\) *Victoria v Commonwealth (Second Uniform Tax Case)* (1957) 99 CLR 575, 28 (610).

\(^{105}\) Bede Harris, *Constitutional Law Guidebook* (Oxford University Press, 2009) 207.


\(^{107}\) Carling, above n 48, 167.

\(^{108}\) Ibid.

\(^{109}\) Harris, above n 105, 207.
the federal government have expanded. While the states, and now territories, have their own taxing powers (land taxes, stamp duties, payroll taxes etc. which only bring in around half of what is needed), the federal government has had its purview significantly increased with the help of the High Court and decisions such as those in the Uniform Taxation cases. A shared income tax approach has been raised on a number of occasions, as a ‘robust and reliable source of revenue’. Carling refers to the following four models that have been successful in other jurisdictions:

(a) Fully decentralised
The United States (US) and Switzerland are examples of fully decentralised models, with the US States that do have ‘income taxes, operating separate systems from the federal income tax’. In Switzerland, the federal government has the indirect taxing powers, but has left the direct taxing powers with the cantons, and is considered the most decentralised of the OECD countries.

(b) Partially decentralised
Canada is a good example of a working partially decentralised model where states piggy back their income tax on the federal income tax, which is collected at the federal level then redistributed. This has also been referred to as a coordinated base sharing model, and does have some drawbacks, such as the population size of each state differing and requiring some states to impose higher percentages of income tax than others. Note that this option would not work if there is no federal government.

(c) Income tax revenue sharing with local collections
Germany and Austria are provided as examples of sharing arrangements with local collections, however Carling sees this as a weak form of decentralisation as it lacks autonomy for the sub-central governments.

112 Koutsogeorgopoulou, above n 110, 7.
114 Carling, above n 48, 168.
115 Ibid.
117 Carling, above n 48, 169.
118 Eccelston, above n113, 442.
119 Western Australia has been used as an example here, with a ‘levy of 4.2% being required to recoup its per capita share of... aggregate income tax’. The authors suggest that the wealthier States would benefit the most from this arrangement. Ibid 443.
120 Carling, above n 48, 169.
(d) Income tax revenue sharing with national collections
The current set up in Australia is an example of revenue sharing with national collections, based on our grants system and the distribution of GST income.\(^{121}\)

2 Which model could work?
While Carling settles on a partially decentralised model,\(^{122}\) in a post-apocalyptic society, with a greatly diminished population and no federal government, the better option would be a fully decentralised model. This would allow existing and any new states\(^{123}\) to have ‘the freedom to set [their] own rates and bases with [their] own administration’.\(^{124}\) Assuming a lack of significant transport infrastructure limiting the ability to move around the country, and taxes would be collected and spent locally on rebuilding any damage that has been done.

In the current zombie free world, there are a number of advantages and disadvantages that a decentralised model would bring. Of course in a post-apocalyptic society some of these issues would be remedied simply due to the lack of federal government.

3 Advantages

(a) Decreased dependency
The level of dependency the states currently have on federal government funding is significant,\(^{125}\) with around half of their revenue coming from grants, including tied grants, and a significant proportion of that funded by GST revenue.\(^{126}\) The GST was supposed to solve or at least improve the fiscal imbalance between the states and federal government, but Carling argues that it has made things worse, as the Intergovernmental Agreement that provides the GST revenue to the states does not allow the states any real authority over the rates or base of the GST.\(^{127}\)

(b) Reduced fiscal imbalance
Seen as a source of inefficiency if is too high, Eccelston and Smith consider that some fiscal imbalance is inevitable and in fact necessary.\(^{128}\) Vertical fiscal imbalance is ‘the extent to which the states depend upon transfers from the central government to finance their own expenditure responsibilities’ and Carling suggests that Australia’s level of vertical fiscal imbalance is ‘extreme among the world’s federations’.\(^{129}\) This

\(^{121}\) Ibid.
\(^{122}\) Ibid, 170.
\(^{123}\) See Bede Harris, ‘Constitutional Implications Of A Zombie Outbreak’ (2016) 14(1) Canberra Law Review.
\(^{124}\) Carling, above n 48, 168.
\(^{125}\) Ibid, 167.
\(^{126}\) Ibid, 164.
\(^{127}\) Ibid.
\(^{128}\) Eccelston, above n113, 438.
\(^{129}\) Carling, above n 48, 162.
is evidenced by the percentage of grant money that is provided to the states to close the fiscal gap, making up around half of the revenue they need to provide services.\(^{130}\)

(c) **Increased competition**

With a reduced population and no national emergency funds, handouts\(^{131}\) or grant money on the horizon due to the lack of a federal government, states and territories would need to set competitive rates of income tax in the longer term, to keep and attract the citizens that have survived. Interestingly, Pape was a firm supporter of competition between the states as the means of best serving Australia’s federalism,\(^{132}\) and the Constitution was drafted in such a way as to leave ‘a greater body of power’ with the states to support independent operation.\(^{133}\)

4 **Disadvantages**

(a) **Increased competition**

Increased competition can also have its downsides, and there are arguments that the competition between states actually allows for tax avoidance opportunities and lowers the yield of State tax.\(^{134}\)

(b) **A lack of horizontal fiscal equality**

Currently Australia operates on a model that aims to provide each state/territory with enough funding to ensure their capacity to provide the appropriate services and infrastructure is at the same standard.\(^{135}\) The size of the population will affect the capacity of each state/territory in the amount of revenue it can raise from income tax, as obviously the more people of working age you have, the larger the tax base you can draw from.

(c) **Double taxation issues**

While this would ordinarily be a concern, without a federal government to impose tax, this would not be an issue. It may arise if and when the federal government gets itself back on track, however could still be addressed by a reduction in federal income tax by the amount of the state/territory income tax.\(^{136}\)

\(^{130}\) Commonwealth Grants Commission, above n 111.

\(^{131}\) For example, the tax bonus payments which were paid to all income earners by the Rudd Government during the global financial crisis. These payments were challenged by Bryan Pape as he believed them to be ultra vires the constitution. The High Court ruled that it was within the scope of the taxing powers for the government to make the payments. *Pape v Commissioner of Taxation* (2009) 238 CLR 1.

\(^{132}\) Williams, above n 77, 32.

\(^{133}\) Ibid.

\(^{134}\) Citing RC Mills, Smith, above n 92, 686.

\(^{135}\) Quoting from the Commonwealth Grants Commission (2013), Koutsogeorgopoulou, above n 110, 14.

\(^{136}\) Carling, above n 48, 170.
V CONCLUSION

In the author’s opinion, while not 100% guaranteed, it seems unlikely that the federal government will be wiped out by an impending threat of a zombie apocalypse, though if it does, will tax survive like the proverbial cockroach in a nuclear war? However, should the zombie apocalypse occur, regardless of what form or forms of government survive or re-emerge afterwards, tax will remain one of the most important aspects of a functioning society and there are a range of different options governments could employ that will assist society in becoming civilised once more.

Apocalypse or no apocalypse, the idea of the states and territories being able to impose their own income tax does have its merits when taking into account the arguments of increasing independence, and addressing the vertical fiscal imbalance to at least some degree. The original intention of the constitutional drafters in keeping competition between the states would be served by shifting income tax back to the states and territories. It would also allow states and territories to properly provide health, education and other essential services. While the fully decentralised model discussed as the preference in a zombie apocalypse would not be required with a federal government in place, we could look to Canada and the partially decentralised model they have implemented for further guidance.
TO WHAT EXTENT SHOULD WE EXTEND HUMAN RIGHTS TO ZOMBIES?

ERINA FLETCHER*

ABSTRACT

The concept of emancipation indicates that someone can be trapped within their own body whilst their still functions as if they were normal. Zombies have a similar concept in that they are emancipated beings that suffer at the hands of society and the government and are annihilated at first sight.

Through the use of two historical and contemporary diseases, this paper will attempt to draw a comparison of how society waited for a cure for historical and contemporary conditions and did not attempt to euthanise the patients who were suffering, despite the fact that they exhibited some of the behaviour we commonly associate with zombies. This paper will also draw parallels between the Human Rights that protect us whilst we are alive and how they should extend to a zombie when essentially, they are simply an emancipated being who is worthy of living their life to the fullest and hope should still be kept for a cure.

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I  TO WHAT EXTENT SHOULD WE EXTEND HUMAN RIGHTS TO ZOMBIES?

They would be conscious and aware - yet not fully awake; they would sit motionless and speechless all day in their chairs, totally lacking energy, impetus, initiative, motive, appetite, affect, or desire; they registered what went on about them without active attention, and with profound indifference. They neither conveyed nor felt the feeling of life; they were as insubstantial as ghosts, and as passive as zombies...

As Sickness is the greatest misery, so the greatest misery of sicknes, is solitude ... Solitude is a torment which is not threatened in hell itselfe.

A  Introduction

Societies psychological response to the zombie apocalypse has been depicted in Hollywood films from as early as the 1930’s. As an audience, we watch on as our heroes delve deep into their psyche and face some of the most fearsome creatures. Creatures that have no other ambition than to roam the land and eat anything that lives and force the remainder of society into hiding, running and overall, surviving.

However, where our heroes’ natural adrenalin response is to take whatever blunt object and destroy the brain of this flesh-eating monster, you can guarantee that the last thing that is on their minds would be whether these predatory creatures were once in fact, human beings and in fact, whether zombieism has similarities to some of the well-known illnesses that have appeared during our time.

As human beings in many of the worlds countries, we can freely go about our days without being in fear of oppression and terror from our government or higher power, however if the apocalypse were to come and the world was roaming with the walking dead, could you argue that the victims of zombieism have become emancipated within their own bodies. You could argue that human rights are extinguished when one loses control over their own mind and attempts to chew their neighbours arm off, but are they?

This paper will attempt to explore the possibility of whether a zombie is merely an emancipated human being; a victim of their own mind whilst their body is free to do as it's instinct pleases. Further, this paper will explore whether the human rights that protect living humans from any oppression and emancipation of the government, also extend to those who are effectively, no longer living.

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1 Oliver Sacks, Awakenings (Duckworth & Co 2nd ed ,1973).
2 John Donne, Devotions V Meditation.
II WHAT IS THE CONCEPT OF HUMAN LIFE?

There are several concepts of what encapsulates a ‘human life.’ It is the age-old ethical debate that still divides theorists and members of society when attempting to define what human life is and where and when it begins.

Georgio Agamben is one of the most important contemporary theorists on the theory of bare life. His contribution and theories have allowed society to revise the Foucauldian theory of biopower and therefore to rethink and re-examine the political contradictions of modernity.

Agamben’s definition of bare life is apparent in his work Homo Sacer that reworks Aristotle’s and Arendt’s distinctions between biological existence and the political life of speech and action as well as the differences between mere life and good life.

For Agamben, bare life constitutes the original but ‘concealed nucleus’ of Western biopolitics in so far as its exclusion founds the political realm. Agamben believes that bare life is already included within the political realm in the form of an exclusion and also in the form of unlimited exposure to violation. Thus the most fundamental categories of Western politics are not the social contract, friend or enemy but instead, bare life and sovereign power.

Agamben’s theory was essentially straight-forward in that there were distinguishing factors between what determines a ‘good life’ from a ‘bad life.’ His theory was similar to Karl Binding.

Karl Binding discussed the concept of life that is unworthy of being lived. Although Binding was criticised for his involvement in the Second World War and his destruction of human life, the Nazi argument was for Binding to provide ethical consideration for those he had killed in literary texts.

The Destruction of Unworthy Life argues that criminal liability may not be extended to suicide but it should be extended to the killing of third parties, however there are

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3 Homo Sacer: Sovereign Power and Bare Life (Daniel Heller-Roazen trans, Stanford University Press, 1998) [trans of Homo sacer. Il potere sovrano e la nuda vita (first published 1990)]
4 Ibid.
5 Ibid.
6 Ibid.
7 Ibid.
8 The ‘polis.’
9 Above n1.
11 Karl Binding and Alfred Hoche, Allowing the Destruction of Life Unworthy of Life: Its measure and its form (Robert Sassone trans, Sassone, 1975) [trans of Die Freigabe der Vernichtung lebensunwertes Lebens. Ihr Maß und ihre Form (first published 1920)]
12 Ibid 141.
13 Ibid.
14 Ibid.
some examples of life that arguably no longer worth living and therefore, should be disposed of and they are creating a burden on society. This burden was the arguable element that differentiates Agamben and Binding in the sense that, Binding would say someone who was suffering but are still ‘alive’ in the context that they could speak for themselves, should be disposed of because they are a burden on society. Whereas Amagaben would say that until those people stop being able to speak for themselves and live a ‘good life’ then they should not be killed.

Using both Binding and Agamben’s theory, we can deduce that the two theorists have differences between a life that is ‘worth living’ and a life that is not. So, in a medical context both Binding and Agamben would determine that someone who lacks the ability to speak or make decisions for themselves are no longer living but it is the scope of the suffering that divides the theorists. Essentially these people have become emancipated from their own bodies and are slaves to their minds or to others.

Zombies aren’t necessarily devoid of life or have a bad life, so little is known about the disease that particularly during the early phases of the apocalypse saying that that a zombie will have a life that is unworthy of living without knowing the full extent of the disease would prove to be unfair on the zombie.

III DEVOID OF HUMAN LIFE?
A STUDY OF TWO CONDITIONS.

There is historical preconception for large number of people who are affected by a disease to be dealt with ‘en masse’ but not in the sense of, should they be exhibiting strange behaviours, to kill them. 1910 saw the onset of Encephalitis Lethargica in which Oliver Sacks described the patients as resembling and having ‘zombie like behaviour.’

Locked-in syndrome also sees similar symptoms where patients are emancipated by their own minds and trapped in their bodies, sometimes with little hope of recovery.

Both examples, contemporary and historical show that societies preconception to handle mass cases of a disease is not to obliterate them as Hollywood depicts you would do a zombie, but to wait until a cure is found or the patient dies of symptoms relating to the disease.

A Encephalitis Lethargica.

14 Homo Sacer: Sovereign Power and Bare Life (Daniel Heller-Roazen trans, Stanford University Press, 1998) [trans of Homo sacer. Il potere sovrano e la nuda vita (first published 1990)]
15 Ibid.
Oliver Sacks was a British neurologist who spent most of his working life in the United States of America. His research and case studies into the human brain led him to be a bestselling author about his theories surrounding the brain and his research and opinion are still widely turned to in the 21st century.

During 1918-1928 an epidemic swept the world where patients had begun to complain of symptoms similar to that of the common cold. However, as the disease progressed unlike the common cold, patients begun exhibiting neck rigidity, double vision, delayed physical and mental response and eventually, exhibited behavioural changes, which included psychosis and psychotic episodes. This disease became known as *Encephalitis Lethargica* or ‘the sleepy sickness’.

The term *Encephalitis Lethargica* was given the name due to the presenting symptoms of tiredness, which were the result of the inflammation of the brain that inhibited the patient from waking up. Such a melancholy definition was appropriate since the most common cause of death for victims of *Encephalitis Lethargica* was that they would die of either starvation or respiratory failure. Just as quickly as the disease became known, the disease went and an outbreak has stayed dormant for the last century.

During his time working with the sufferers of the disease, Sacks deduced a number of findings about the relationship between the disease and the cognitive behaviour exhibited by the patients. Although Sacks acknowledged that every case of *Encephalitis Lethargica* varied from patient to patient, the most common symptom amongst patients was the amount of time they spent asleep or in a ‘coma like state’. Often patients would also exhibit strange or unusual symptoms and mannerisms that were outside their normal personality traits, which included random ‘fits’ and ‘flails’ of their extremities. There is even a case report of a patient of *Encephalitis Lethargica* turning and attempting to bite the nurse who was helping the patient.

Although patients seemed to make a full recovery, there were ongoing issues with later developments of Parkinsonism and other neurological or psychiatric illnesses. Often these side effects would develop years after the patients had recovered and been living normally and had no symptoms or even trace that they had had *Encephalitis Lethargica*.

17 Ibid.
18 Above n 14.
20 Ibid.
22 Thus where the name the ‘sleepy sickness’ came from. Above n 19.
During the time that Encephalitis Lethargica ran rampant throughout the world, the patients were treated exactly as anyone else suffering a debilitating illness in the sense that they were cared for by doctors and nurses who were solely devoted to helping the patients live comfortably and attempting to find a cure.

At no point during Sack’s time working with the disease and its victims were there reports of someone being humanely euthanised or killed despite their suffering. Instead the patients were kept alive in order to study the disease and the hopes that they will eventually recover which, as we know, some did. Although in Agamben’s eyes the patients weren’t living a ‘good life,’ medical professionals were willing to wait until the patients either passed away or a cure was found.

**B Locked-In Syndrome.**

Another contemporary example of zombie like behaviour is exhibited in the condition locked-in syndrome.

Locked-in syndrome, or pseudochoma, is the syndrome where a persons state of wakefulness and awareness with quadriplegia and paralysis of the lower cranial nerves, resulting in inability to show facial expression, move, speak, or communicate, except by coded eye movements. Typically it results from a pontine haemorrhage or infarct that causes quadriplegia and disrupts and damages the lower cranial nerves and the centres that control horizontal gaze.

Patients have full cognitive awareness and function with normal sleep-wake cycles, can see and hear but have the inability to move their lower face, chew, swallow, speak, breathe on their own, move their limbs or move their eyes laterally.

Each patient is essentially trapped in their own body without ways of surviving on their own without the assistance of respiratory machines and the aid of modern medicine. Although the prognosis of locked-in syndrome is relatively good, it is dependent on the type of condition that resulted in the locked-in syndrome in the first place. Supportive care and treatment to prevent pressure ulcers are used to treat patients and the rest is usually a matter of waiting until the condition of the patient improves.

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25 Ibid.
26 Above n 21.
28 Ibid.
29 Above n 21.
30 For example, certain types of cancers can be terminal and yet naturally we do not euthanise the patients no matter their suffering as the law does not extend to these ‘mercy killings’.
31 Above n 21.
Although the scientific term *pseudochoma* indicates that the patient is in a coma or coma-like state, differences have to be noted however that the two conditions are drastically different in that, some people who are in coma-like states may never recover\(^\text{32}\) whereas those with locked-in syndrome may recover.\(^\text{33}\)

### III WHAT IS EMANCIPATION IN THE CONTEXT OF THE ZOMBIE APOCALYPSE?

The dictionary\(^\text{34}\) definition of emancipation is:

\[
The \text{ fact or process of being set free from legal, social, or political restrictions; liberation.} \quad \text{35}\]

We know from case law\(^\text{36}\) and legislation\(^\text{37}\) that where someone exhibits a loss of capacity, you simply cannot make decisions without a certain type of power of attorney\(^\text{38}\) on behalf of the principal\(^\text{39}\) and although someone may be considered clinically dead, to remove their life support without that power\(^\text{40}\) could constitute murder.

However, where someone’s entire existence is solely based on the need to feed on whatever they can find, human or animal, one could argue that their life is not worth living, certainly not in the context that normal humans live their life and the threat they place on society is too deadly to the rest of the world. Essentially, they are slaves to the world and to their own minds.

The concept of someone being ‘set free’ from something denotes that particular *someone* is no longer restrained by that which oppressed him or her, whether that is social or political freedom or the rights of freedom from the suffering of their own illness.

A zombie is effectively a slave to his or her own mind. Their bodies are still functioning but their minds are forcing their bodies to do things one wouldn’t normally do.\(^\text{41}\) A zombie has no higher functioning or reasoning, they have no need

\(^\text{32}\) Ibid
\(^\text{33}\) Above n 21.
\(^\text{35}\) Ibid.
\(^\text{37}\) Such as the *Universal Declaration of Human Rights*, GA Res 217A (III), UN GAOR, 3\(^\text{rd}\) sess, 183\(^\text{rd}\) plen mtg, UN Doc S/RES A/810 (10 December 1948).
\(^\text{38}\) Such as the *Powers of Attorney Act 2006* (ACT).
\(^\text{39}\) Ibid.
\(^\text{40}\) Above n 1.
\(^\text{41}\) See for example any zombie movie where a zombie is depicted tearing something apart with their bare hands.
for material objects such as homes or furniture and they are essentially a ‘shell’ of their former selves. They do not care for their loved ones and instead see those who attempt to stop them as prey.\textsuperscript{42}

Normally with emancipation there are a series of rights that protect humans from slavery. Where someone is a slave to himself or herself however it is arguable that the government will still protect them when they are no longer humans.

In the apocalypse, the world between the Mosso phase and the Prestissimo phase has lost all functionality and one can imagine there is no government control or power helping the survivors or protecting them from the walking dead. Further, as we know from some of Hollywood’s depictions, sometimes the government turns out to be as skewed as the rest of the world and whilst a ‘safe place’ is offered, often that safe place turns out to be the most crooked of them all.\textsuperscript{43} So not only are survivors emancipated from the very rights that exist to protect them from the government, they are also emancipated from the rest of society who are trying to survive or attempting to eat one another.

So, whilst we can deduct from this argument that the survivors are emancipated from both the government and uninfected human beings, can the same be said for the zombies? It could be argued that a zombie is merely a human, who has come back to ‘life’ with the same body but a diminished mind however no rights seek to protect zombies from the government or the society who simply seek to kill them.

\section*{IV AT WHAT CONDITION ARE RIGHTS EXTINGUISHED?}

Human rights are often viewed as a means of securing emancipation from suffering, oppression and cruelty.\textsuperscript{44} Many scholars, academics, lawyers and judges alike have attempted to hone in on a single definition, or series of definitions of what encompasses ‘human rights.’

A simple Google search on ‘human rights’ brings up thousands of hits ranging from case law to theory-derived research but still as part of the human race, we are unable to define what exactly a ‘human right’ envelopes and what laws there are to protect those who have ‘lost’ their human rights.

A common consensus and reoccurring theme for those who have attempted to define, precisely what human rights encompass and that unify these scholars and academics,
is that these rights are there to protect us from an abuse of power\textsuperscript{45} and recognition of these rights will aid in curbing those who abuse that power.\textsuperscript{56}

Unfortunately, history has shown time and time again the atrocities of an abuse of power can have on a society, culture or race.\textsuperscript{47} Namely I note the ‘never again’\textsuperscript{48} argument that was promoted after World War II. Jewish men and women feared that someone would rise to replace Adolph Hitler and that the oppression would continue.

Resulting from these power abuses, there has been greater pressure internationally for abusive regimes to cease, both from non-governmental organisations and human rights institutions, to stand for change with the overarching view that human rights serve as a practical ability to reduce suffering.\textsuperscript{49}

Australia signed the \textit{Universal Declaration on Human Rights}\textsuperscript{50} on 10 December 1948\textsuperscript{51} and played a founding role as one of the eight nations that helped draft the \textit{Declaration}.\textsuperscript{52}

The \textit{Declaration}\textsuperscript{53} seeks to exist to protect the humans of the world as mentioned previously and the \textit{Declaration}\textsuperscript{54} contains 30 articles that relate to different concepts that protect society in various ways. Some of these rights protect humans from slavery,\textsuperscript{55} subjection to torture,\textsuperscript{56} discrimination due to race, gender, language or political opinion\textsuperscript{57} and the recognition of a person before the law.\textsuperscript{58}

With relation, specifically to Article 4\textsuperscript{59} the \textit{Declaration} states:

\textit{‘No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.’}\textsuperscript{60}

One could contend from Article 4\textsuperscript{61} that ‘slavery’ incorporates the unlawful confinement and forced work of someone as it implies. However, ‘slavery’ could also

\begin{itemize}
\item \textsuperscript{45} Ibid 142.
\item \textsuperscript{46} Ibid.
\item \textsuperscript{47} Above n 1.
\item \textsuperscript{48} Ibid.
\item \textsuperscript{50} \textit{Universal Declaration of Human Rights}, GA Res 217A (III), UN GAOR, 3\textsuperscript{rd} sess, 183\textsuperscript{rd} plen mtg, UN Doc S/RES A/810 (10 December 1948).
\item \textsuperscript{51} Ibid.
\item \textsuperscript{52} Above n 10.
\item \textsuperscript{53} \textit{Universal Declaration of Human Rights}, GA Res 217A (III), UN GAOR, 3\textsuperscript{rd} sess, 183\textsuperscript{rd} plen mtg, UN Doc S/RES A/810 (10 December 1948).
\item \textsuperscript{54} Ibid.
\item \textsuperscript{55} Ibid Article 4.
\item \textsuperscript{56} Ibid Article 5.
\item \textsuperscript{57} Ibid Article Article 2.
\item \textsuperscript{58} Ibid Article Article 6.
\item \textsuperscript{59} Ibid Article Article 4.
\item \textsuperscript{60} Ibid Article Article 4.
\item \textsuperscript{61} Above n 20.
\end{itemize}
encompass the suffering of someone who has been permanently derived of their liberty due to an illness or trauma and is therefore a slave of their own mind.\textsuperscript{62} Someone who has been reduced to the barest of lives and therefore is devoid of living a ‘good life.’\textsuperscript{63}

We know that zombies effectively fit this definition as they have no control of their urges and instincts specifically where their body could be argued to be working against its will. A human being is therefore sovereign over his or her own existence\textsuperscript{64} so a zombie who no longer has the sovereign power over their existence, is not considered human.

Arguably a zombie is no longer protected from government power under the \textit{Universal Declaration of Human Rights}\textsuperscript{65} because they are no longer, essentially, a human being. Although the \textit{Universal Declaration of Human Rights}\textsuperscript{66} does not explicitly define the definition of ‘human’ common sense would prevail about what encompasses the criteria of a human being. That being that a single human occupies a place on earth, lives and breathes and seeks comfort in their everyday life.

A zombie has none of these traits other than the occupation of a place on earth, they do not breathe and do not hold any ‘economic value’ to society and as mentioned their only desire is their predatory instinct. Although zombies may occupy a place on earth, they are neither living nor dead.

Agamben argues that they have ‘lost their voice’ and the right to a good life and restricted to the barest of the bare meaning that they should be ‘removed’ humanely from society. Binding would deduce the same reasoning but the fact remains that the possibility of a cure to zombieism has not been discovered and therefore, zombies are still protected by human rights.

\section{Is Zombieism Less or Equal to Death?}

Hollywood has portrayed zombies in countless different ways, from zombies whose mere existence is solely to eat and aren’t overly intelligent, to zombies that use complex problem solving skills to hunt their prey.\textsuperscript{67} The commonality between all these depictions and the disease is that it is usually transferred from a bite from an infected. In AMC’s \textit{The Walking Dead} the bite was one of the first topics that was discussed once Rick (the main character) had awoken from an induced coma.

\begin{thebibliography}{99}
\footnotesize
\item \textsuperscript{62} Above n 42.
\item \textsuperscript{63} \textit{Homo Sacer: Sovereign Power and Bare Life} (Daniel Heller-Roazen trans, Stanford University Press, 1998) [trans of \textit{Homo sacer. Il potere sovrano e la nuda vita} (first published 1990)]
\item \textsuperscript{64} Ibid 136.
\item \textsuperscript{65} Above n 48.
\item \textsuperscript{66} Ibid.
\item \textsuperscript{67} Max Brooks, \textit{World War Z: An Oral History of the Zombie War}, (Duckworth, 2006) 22.
\end{thebibliography}
Although the physical depiction of zombies may vary, the overarching theme amongst most zombie paraphernalia is that the disease arises out of a change in the brain. This was also discussed in *The Walking Dead* during the first episode where Rick encounters a zombie. 69

*Bites kill you. The fever burns you out. But then after a while... you come back...They’re dead except for something in the brain.*70

Effectively a zombie shows no sign of their prior life once they have turned. Their familiarity of people they once associated with or were related to is non-existent and their sole instinct is to survive and a survivor’s instinct is to kill them. As the brain is known to be main area that is affected (the central powerhouse of the infection site if you will) when someone is turned, usually a swift blow to the head with some form of gardening tool is the effective enough to kill them.

A zombie is essentially dead, they have no pulse or brain activity and their one predatory instinct is to hunt and kill. Often some are depicted with missing limbs or half of their face due to the (sometimes) years of roaming they have endured, whereas others only have a slight differentiation in their eyes or teeth that show they aren’t fully human. 71

The concept of ‘life devoid of value’72 is considered amongst those who are ‘incurably lost’ following disease or illness. 73 Arguably Binding says that these lives are a burden on society and financial resources and therefore should be disposed of. 74

Using Binding’s theory there is no denying that a zombie has no economically valuable place in society. Although it has been depicted in some movies75 in the initial phases of the apocalypse when society has lost control completely, they simply have no place.

Arguably a zombie is neither dead nor living. They have no cognitive function but merely a predatory drive and a desire to survive. Essentially this differentiates them

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68 *The Walking Dead* (Directed by Frank Darabont, AMC, 2010).
69 Note however, that in *The Walking Dead* the term zombie is never used. Instead, zombies are usually referred to as walkers, lamebrains, biters and creepers just to name a few.
70 Ibid.
71 See for example the early depiction of an infected human in *I am Legend*.
73 Ibid 138.
74 Above n 7.
75 See for example in *Shaun of the Dead* where once the apocalypse had finished and normalcy had begun to return, many zombies found their place in society either working in a grocery store or simply, providing company to their loved ones.
from the living so under Binding’s\textsuperscript{76} argument, zombieism is less than death and therefore, zombies should be disposed of.

VI GRANTING ZOMBIES CAPACITY.

A Power of Attorney is a legally binding document that gives a trusted person the authority to act for you and to make legally binding decisions on your behalf\textsuperscript{77} where decision-making capacity of the individual concerned has been diminished either wholly or substantially.\textsuperscript{78}

There are differences between a general power of attorney\textsuperscript{79} and an enduring power of attorney.\textsuperscript{80}

A power of attorney with general power\textsuperscript{81} can only make decisions about general matters and only while the principal has decision-making capabilities,\textsuperscript{82} they cannot make substantive or whole decisions about the principal’s wellbeing\textsuperscript{83} and the power is revoked where the principal’s decision making capabilities are diminished.\textsuperscript{84} Whereas an enduring power of attorney\textsuperscript{85} can make decisions where the principal has lost their whole or complete decision-making capabilities\textsuperscript{86} and this power is not diminished upon the principal’s condition diminishing.\textsuperscript{87}

There are also provisions for delaying activation of the power of attorney and for activation to only become active when certain requirements are met.\textsuperscript{88}

Finally, if someone does not want to provide someone with the power of attorney duty, whether that is as a general provision\textsuperscript{89} or an enduring provision,\textsuperscript{90} they can construct a living will\textsuperscript{91} which will outline the creators desires should their

\textsuperscript{76} Above n 7.
\textsuperscript{78} \textit{Powers of Attorney Act 2006 (ACT) s 8-9}.
\textsuperscript{79} Ibid s 7.
\textsuperscript{80} Ibid s 8.
\textsuperscript{81} Ibid s 8-9.
\textsuperscript{82} Ibid.
\textsuperscript{83} Ibid s 8-9.
\textsuperscript{84} Ibid.
\textsuperscript{85} Ibid s 8-9.
\textsuperscript{86} Ibid.
\textsuperscript{87} Ibid.
\textsuperscript{88} Ibid.
\textsuperscript{89} Ibid s 8-9.
\textsuperscript{90} Ibid s 8.
\textsuperscript{91} Ibid s 7.
\textsuperscript{92} Ibid s 8.
\textsuperscript{93} Ibid s 9.
capabilities to make a decision be diminished. Like the power of attorney it is a legally binding document.

A power of attorney can be made by someone either as an anticipatory step or when someone is suffering and they recognise they are unlikely to get better. The power of attorney must then be delegated to someone who, according to the Act has complete decision-making capabilities. An attorney cannot be someone who has diminished capabilities.

The rights that can be transferred according to Powers of Attorney Act under for both a general power of attorney and an enduring power of attorney include any rights relating to property, the principal’s affairs, personal care and healthcare.

A ...So In The Apocalypse?

The concept that someone can appoint a power of attorney should they be turned into a zombie isn’t overly farfetched, particularly when examining the concept of those who are declared clinically brain dead.

Drawing parallels between what we know about the treatment of the clinically brain dead such as those with encephalitis lethargica and locked in syndrome, one could argue that a zombie has the same rights as, theoretically speaking, the brain dead.

With any disease there is still hope for a cure, as a society we do not simply euthanise someone because they have an incurable cancer because there is still research and hope going towards a cure or something that can slow the progression of the disease. This forms part of the ethical debate surrounding euthanasia that society still shakes its head at.

With a condition such as locked in syndrome, parallels between the two conditions is apparent. Whilst a zombie has lost control of their mind and their body is a victim of their brains needs there is still some functioning within the brain that creates these predatory desires. Similarly, someone with locked in syndrome has no cognitive functioning in their brains and in some cases they are unlikely to ever return to

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92 Ibid s 8-9.
93 Ibid.
94 Ibid.
95 Ibid s 8-9.
96 Ibid.
97 Ibid.
98 Ibid s 7.
99 Ibid s 8-9.
100 Ibid s 9(1).
101 Ibid s 12.
102 Ibid 12(a).
104 That being to hunt and kill.
normal. This differentiates from Binding’s argument that those who do not contribute to society in any way due to illness and therefore are a burden on the hospitals system should be euthanised.

VII IS THE CONCEPT OF A ZOMBIE PUBLIC TRUSTEE REALLY THAT FARFETCHED?

The operations and functions of the Public Trustee and Guardian are established by the Public Trustee and Guardian Act 1985. The Public Trustee and Guardian is the Chief Executive Officer of that Authority.

A trustee is appointed to someone who is incapable of making a decision for themselves due to mental impairment, age or vulnerability or the person is deceased. A public trustee is usually appointed to write a living Will for someone who can impart their final decisions into a legally binding document that must be honoured upon their death.

The notion that a zombie public trustee could exist isn’t overly farfetched when examining what we know about encephalitis lethargica and locked-in syndrome. The rights of the sufferers are protected until such time exists where there is no possibility they will return to full health. As mentioned, there is still too little that is known about how zombieism works and whether there is or will be a cure to warrant simply exterminating everyone suffering the disease.

Essentially, prima facie, anyone who appoints a Will can make provision for their wellbeing once they pass away. Provisions also exist within a Will where a testator can ask to be taken off life support if there is no possibility they will recover from a coma like state or when it can be seen that there is zero brain activity. Although this order shows that if the person is ever in a coma like state, provision has been made for that person to be taken off life support and end their suffering, in a Living Will should the apocalypse come, can someone make a ‘do not obliterate’ order?

So in the apocalypse, the concept that a legally binding document exists and a provision within that documents asks that if the testators mental capability be diminished, they can remove life support it may be argued that that provision also extends to if the testator were turned into a zombie and also to a do not obliterate order.

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105 Above n 25.
106 Karl Binding and Alfred Hoche, Allowing the Destruction of Life Unworthy of Life: Its measure and its form (Robert Sassone trans, Sassone, 1975) [trans of Die Freigabe der Vernichtung lebensunwerten Lebens. Ihr Maß und ihre Form (first published 1920)]
107 Public Trustee and Guardian Act 1985 (ACT).
108 Ibid.
109 Above n 104.
A Conclusion

Human Rights remain to protect society from the oppression of the government and unlawful murder and torture whether inflicted by the government or by other members of society, however society has developed the notion that this right does not extend to zombies.

There are many differences between a zombie and a human but the rights that protect us as human beings may or may not extend to zombies, however not all rights are extinguished at a zombie state and we should recognise some of those rights.

Drawing on two conditions which exhibited similar conditions to that of a zombie in the neurological prima facie sense, whilst society remains certain that killing them was both unlawful and unethical and that a cure will eventually be found, the same argument may not be able to be extended to a zombie.

Finally, where the concept of Wills and the Public Trustee remains to exist, there should be provision for those who anticipate the zombie apocalypse to have their last wishes, should they turn, to be honoured. If someone was to lose capacity and control due to the fact they had turned into a zombie, and yet rights are extended to them, the Public Trustee could be extended to the zombies so that their final wishes are protected and society cannot take advantage of the vulnerable.
PROTECTING THE INFECTED. GOVERNMENT ACQUISITION OF PATENTS DURING THE ZOMBIE APOCALYPSE

ABSTRACT

By the Allargando stage of the zombie outbreak, a suppressant to the zombie virus has been discovered. This suppressant allows individuals who’ve been infected to halt the process of zombification. Treatment must occur regularly or else zombification will resume. The government would want to use this treatment to ensure society continues to rebuild at this critical stage and prevent the rise of more Zombies.

The question becomes how does the government react to the existence of a patent for a suppressant so crucial to the continued health and regrowth of Australian society in a way that balances both public necessity and private interest? At such a major crossroads, the Australian Government will be given the opportunity to make massive reforms in patent law and implement or repurpose legislation to deal with such a unique scenario.

This article examines Australia’s robust patenting legislation and the possibility of the return of the National Security Act to provide advice as to how the government could and should react now, to prevent creating legislation on the lurch.

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I THE ZOMBIES ARE COMING!

The zombie apocalypse would be an unprecedented emergency. A patent protected medication that cures or retards the progress of zombiefication in an affected individual would be key to ensuring Australian growth at the rebuilding stage of society. This article outlines the legal issues that come with the Federal Government or ‘Reforming Government’ seeking to use the ‘Suppressant Patent’, without the patentholder’s consent. This paper seeks to highlight the issues surrounding government procurement and problems within the Patents Act 1990 (Cth) (the ‘Patents Act’).

Section 1 will look to what the zombie apocalypse means for patents. What is the purpose of patents? Does the apocalypse impact the existence of patents? Section 2 will look to implementing patent law reform. The Federal Government has the opportunity to make fundamental reforms to the Patents Act, some of which could be implemented now to prevent the creation of legislation on the lurch. Section 3 will examine powers the government could leverage outside the Patents Act such as an adaptation of the repealed National Security Act 1939 (Cth) (The ‘NSA’).

This article seeks to provide recommendations on how the current Federal Government or a post apocalypse Reforming Government may implement new legislation and reforms, which balances both public interest and private rights now or in the future.¹

II THE WORLD IS ENDING, IS MY PATENT OKAY?

A. Historical Background of Intellectual Property

An understanding of the historical background of intellectual property provides an insight into why the government may take an interest in compulsorily acquiring the Suppressant Patent. ‘Property is the right or lawful power, which a person has to a thing’² therefore, the State grants property legal recognition and right.³

Property law gained formal recognition as a private right through the development of legal mechanisms such as titles, registers and formal contracting. This recognition implies a certain level of state power over property. While these mechanisms

¹ Acknowledgement should be made to John Gilchrist’s research on Intellectual Property matters in John S Gilchrist, ‘The Government and Copyright’ (Sydney University Press 2015).
² James Wilson, Collected Works of James Wilson, Vol 1 [2007].
³ Statute of Monopolies (1623).
predominantly favoured physical property, intellectual property saw a similar path of development though lacked many of the same legal mechanisms until much later. In examining these mechanism, we can see that while intellectual property has existed as a tool to generate market interest long before the legal mechanism we enjoy today existed. Greek city-states such as Sybaris offered one-year patents to anyone who could refine or find a new luxury. Sybaris provides a clear exame that intellectual property is a method of attracting commercial interest for and from the State.

The first instance of recognition of intellectual property in English law was seen through royalty payments during the 15th century. These royalty payments were formalised through the Statute of Monopolies (1623) establishing the statutory basis of law for patents. This cemented the idea that government has keen interest in ensuring intellectual property is regulated for the benefit of society rather than the specific proprietor. The Statute of Anne (1710) developed similar legislative tools for other forms of intellectual property giving the courts the ability to rule on intellectual property matters, the government therefore has a clear legislative control over intellectual property in common law. That control is express in both s X of the Constitution and implicit in Australia’s signature of global intellectual property rights agreements, such as the Paris Covention.

While the recognition of patents rights stems from the idea of providing incentive to business and inventors to boost markets, copyright saw a different purpose. Originally a tool to increase dissemination of information the State saw as crucial, with the advent of the printing press came a shift in attitude. Copyright saw increased government control, licences became a method of ensuring that, ‘the menace of the printing press’ did not spread any further.

Both copyright and patents have been subsequently justified as an embodiment of Lockean natural rights and as an incentive for collective flourishing through encouragement of innovation / creativity and investment.

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5 Charles Anthon, A Classical Dictionary: Containing an Account of the Principal Proper Names Mentioned in Ancient Authors, and Intended to Elucidate All the Important Points Connected with the Geography, History, Biography, Mythology, and Fine Arts of the Greek and Romans. Together with an Account of Coins, Weights, and Measures, with Tabular Values of the Same 1273 (Harper & Brothers 1841).
7 James Wilson, Collected Works of James Wilson, Vol 1 [2007].
8 Statute of Anne (1710).
It is clear to see from these examples that intellectual property is a tool of the State. Therefore, intellectual property exists only through State control and consent. It is arguable that intellectual property doesn’t exist without consent or recognition of the State, or at the very least that any intellectual property would be significantly reduced in importance without the backing of State. Such an argument will be explored in section C ‘Failed State’.

The importance in understanding that intellectual property is a state given right or tool is crucial in understanding why the state has such a keen interest in the Suppressant Patent and why we would expect a government to go to lengths to ensure its distribution occurs.

**B. Purpose of Patent Law**

Understanding the purpose behind patenting and patent law is crucial to ensuring the Federal Government and courts make informed decisions. It is not far-fetched to believe that in the course of the apocalypse many of the people who understand, or are involved, in patents will no longer be alive. A definition on the purpose of patent would prevent any misunderstanding in future rebuilding efforts.

In determining the purpose of the patents act, the Federal Court and Government would look to the Patents Act for an objects or a purpose clause. In this regard the Patents Act is silent, no objects clause exists and the explanatory memorandum provides no insight into the purpose of patents, merely stating that the previous Act was too complicated.\(^{11}\)

Objects and purposive clauses have been referred to as the modern day preamble,\(^{12}\) They seek to assist in reducing ambiguity or uncertainty in the law.\(^{13}\) Without a clear object or purpose clause the Patents Act becomes difficult to interpret. The Federal Court would have to infer the purposes behind uncertain terms and objectives in the Patent Act with no legislative assistance. Furthermore, without a purposive clause the Reforming Government would struggle in knowing the correct steps to take in instances of dispute over the Suppressant Patent or when looking to reform laws.

The lack of an of objects clause means that to define the purpose of the Patents Act, the Federal Court and government would have to look outside the Act. History, literature and other countries interpretations would all assist in the definitions of patents.

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11 Explanatory Memorandum, Patents Bill 1990 (Cth) 2, 2.
The historical origins of patents are obscure; suffice to say patents are one of the oldest intellectual property rights that exists today.\(^\text{14}\) A patent, historically, served two purposes, one, to provide incentive for innovation by giving the inventor an exclusive right to design and sell the patent.\(^\text{15}\) Patents also served the purpose of promoting investment in these inventions by giving investors an exclusive chance to recoup investment with no competition.\(^\text{16}\) Patents have been called a cornerstone in driving innovation in medical research by enabling researchers to have protection of their intellectual property and the possibility of capitalizing on their inventions.\(^\text{17}\)

Patents provide large incentive to markets and private individuals to create new technology, as the creator enjoy exclusive right to that invention for twenty, twenty five or eight years depending on the Patent.\(^\text{18}\) This incentive would be something the Reforming Government may wish to preserve.

Running counter to this idea, patents have been claimed to also serve a public purpose serving common good, as highlighted in Integra:\(^\text{19}\)

> The purpose of the patent system is not only to provide a financial incentive to create new knowledge and bring it to public benefit through new products; it also serves to add to the body of published scientific/technological knowledge.\(^\text{20}\)

There is a division of interests, an element of public benefit exists in patent law alongside a very strong private incentive. These two competing elements would need to be balanced.

Patents sit in an odd middle ground referred to as the ‘stressful if fertile union between certain contradictory principles.’\(^\text{21}\) Patents must balance the elements of private interest and the public interest. Without the addition of an object clause prior to apocolypse, a Reforming Government would have difficulty in determining what element is more important.

A government’s overriding interest in public safety and the state’s continued existence would mean if left to the Reforming Government’s interpretation the private right would be weakened possibly removed outright. An objective clause within the

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\(^\text{16}\) Ibid.

\(^\text{17}\) Children’s Cancer Institute Australia for Medical Research, Submission P13, (ALRC) 30 September 2003.


Patent Act would provide certainty and closure in ensuring the private right and the need for public purpose are clearer.

**C. Failed States.**

Historically, the Crown as a method of attracting business granted patents. A patent would only exist as an enforceable right through Crown recognition. The idea of a ‘failed state’ implies a level of societal collapse where government and therefore the Crown ceases to function. The question becomes, if failed state scenario occurred what happens to a patent with the protections afforded to patents by the Crown?

State failure brings an interesting question to the status and ownership of patents. If a patent (and current patent law) ceases to exist on state collapse, the new polity will be able to acquire the underlying IP of previously registered patents for free, while the private individual would be interested in ensuring that these patents, and their IP are protected.

What occurs to a patent in the event of failed state is not clear. Somalia, identified as failed state, serves as an example we can draw parallels from. Somalia lacks any enforceable legislative property rights due to the lack of a central court system, lack of formal contracting and widespread disregard of the state’s authority. Property rights in Somalia are asserted through non-legislative methods (choosing to enforce them through ideas such as ‘homesteading’ or clan based conflict resolution.)

Taking this if property rights are not recognised in semi functional failed states, it is doubtful that the underlying intellectual property rights within patents will formally recognised or protected during state failure. Without the security provided by patent

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24 The discussion of Failed State is an area of complexity and for the purposes of this article we will continue on the presumption that at some point during the zombie apocalypse the Australia did collapse and became a Failed State.
27 Ibid 35, Homesteading is a concept in which the individual is recognised as owning the land if they have built up and occupied the land.
28 Ibid.
registration existing alongside the protections the Federal Government would afford them, the underlying IP would become available for exploitation.

With a Reforming Government rebuilding authority and intellectual property law at the end of the apocalypse, the patent holder would be interested in reasserting their right and prevent the exploitation of the underlying IP. An argument could be mounted that patents exist as a system that recognises and protect the inalienable right the patent holder has to the underlying IP.

Inalienable rights stems from the legal theory that certain rights exist as natural rights and do not cease to exist. These inalienable rights are enshrined in human rights charters and declarations. If the underlying IP were recognised as an inalienable right, this would mean that the crown does not grant a Patent, rather, through the system of patenting recognises and formalises an already existing natural right.

If this argument were to be accepted, a patent would only be temporarily suspended at a time of state failure. With resumption of government the patent could be argued to have been refreshed. The validity of such an argument is questionable. IP is a social good that brings many benefits, and is recognised as human right. Determining if such a human right extends to the underlying IP in patents and whether that recognition extends to an inalienable right would be difficult. Does a private property right necessarily override a community need?

If a patent no longer exists and the exclusive protection for the underlying IP is extinguished a Reforming Government would be justified in exploitation of the patent. However, if the underlying IP is considered an inalienable right, the patent may refresh after State failure and the patent holder would regain their right. A definition as to the status of patents through treaties or a newly formed purpose clause would assist here greatly in determining the status of patents during the rebuilding stages.

III THE ZOMBIE APOCALYPSE: AUSTRALIA’S BEST CHANCE AT PATENT REFORM?

In the words of the philosopher Sceptum, the founder of my profession: am I going to get paid for this.
Payment as recognition for achievement, as we will see, is a core tenet of the Patent Act.\textsuperscript{33} This concept may not last through the zombie apocalypse as funds become more difficult to leverage. This section seeks to highlight this issue in our current provisions for Crown Use and Compulsory Licencing.\textsuperscript{34}

\textbf{A Compulsory Licencing.}

Compulsory licencing allows the Federal Government or individual to acquire a licence to exploit a patented right without the patent holder’s permission.\textsuperscript{35} That power that has seen limited application in the Federal Court as no compulsory licence has ever been granted in Australia\textsuperscript{36} and only one case has ever been brought to the Federal Court.\textsuperscript{37}

Reform in the compulsory licencing, rather than crown use, would allow for individuals to acquire or exploit the patent if the Federal or Reforming Government was prevented from doing so. This is particularly relevant in a scenario such as the zombie apocalypse.

1. \textit{Issues in Granting a Compulsory Licence}

A comprehensive examination of the issues associated with using tests to grant compulsory licence can be found in the Australian Law Reform Commission (The ‘ALRC’) paper, ‘\textit{Genes and Ingenuity: Gene Patenting and Human Health}’.\textsuperscript{38}

This following paragraphs will focus on the issues surrounding the requirements that must be satisfied prior to seeking compulsory licencing as stated in section 133 of the Patents Act:

\begin{quote}
A person may apply to the Federal Court, after the end of the prescribed period, for an order requiring the patentee to grant the applicant a licence to work the patented invention.\textsuperscript{39}
\end{quote}

When examined through the scope of national emergency a few issues exist. The prescribed period must have ended, the grant is only a licence, remuneration must be paid,\textsuperscript{40} and an attempt must have been made to obtain a licence from the patent holder on reasonable terms and conditions.\textsuperscript{41} These requirements create issues in the areas of

\textsuperscript{33} Patents Act 1990 (Cth) s136J, s165.
\textsuperscript{34} Ibid s163, ch12
\textsuperscript{35} Ibid s133 (1).
\textsuperscript{36} Productivity Commission 2013, \textit{Compulsory Licensing of Patents}, Inquiry Report No. 61, Canberra.
\textsuperscript{37} Fastening Supplies Pty Ltd v Olin Mathieson Chemical Corp (1969) 119 CLR 572; 44 ALJR 7.
\textsuperscript{39} Patents Act 1990 (Cth) s133.
\textsuperscript{40} Ibid s132.
\textsuperscript{41} Patents Act 1990 (Cth) s133(2)(a)(i).
timing and payment when looking to apply these provisions during a national emergency.

As the provisions stand, the Federal Government would be hamstrung during an emergency to react quickly. Through having to adhere to a prescribed period ranging from 6 to 12 months the Federal Government would face a delay in ability to acquire a patent.\(^\text{42}\) In times of emergency any undue delay could cause damage (on the basis that the Government might disregard what it regards as legal niceties that are contrary to the survival of the Executive and society).

The requirement under section 133(A)\(^\text{43}\) to attempt for reasonable period to obtain a licence from the patent holder would also cause delay. A court determination would be required to determine what a reasonable period is.\(^\text{44}\) Such a determination would be done with the Federal Court’s discretion, which the ALRC notes should have regard to the circumstances at the time.\(^\text{45}\) While likely the Federal Court would be satisfied that in the event of zombie apocalypse any delay would constitute unreasonable delay, the requirement and process still exist, which could cause delay.

These provisions limit the Federal or Reforming Government’s ability to react in emergency. An ability to react quickly and effective to acquire the patent to ensure healthcare distribution would be crucial. These timing provisions do not facilitate this need.

The second issue that may cause delay is the requirement for reasonable negotiation. This becomes an issue of both timing and payment. The Patent Act requires that reasonable payment to be given when a compulsory licence is granted\(^\text{46}\). There is no way to waive this required payment in the Patents Act.

The Federal Government would have to determine what a reasonable payment for a compulsory licence would be. According to the Patents Act the Federal Court would have to determine payment with regard to what would be ‘just and reasonable, with regard to economic value.’\(^\text{47}\)

There is no structure in the Patent Act as to what parts of the patent needs to be recognised to meet the 5(b) definition.\(^\text{48}\) In looking outside of Australia, United Kingdom case law has determined three factors that influence the price of a patent:

1. Cost of Research and Development;
2. Cost of promoting the patent; and

\(^{42}\) Patents Regulations 1991 (Cth) r 2.2(2)(a)–(b).
\(^{43}\) Patents Act 1990 (Cth) s133(2)(a)(i).
\(^{44}\) Ibid s133(2).
\(^{46}\) Patents Act 1990 (Cth) s 133(5)(b).
\(^{47}\) Ibid.
\(^{48}\) Ibid.
3. A profit or reward element.\textsuperscript{49}

The Federal Court and Government would do well to look to using these factors as a basis of determining what is ‘reasonable during and after an existential threat to the state. From the perspective of a patents right holder – who enjoys monopoly rights regarding a truly invaluable pharmaceutical – these factors would mean the price of a compulsory licenced patent would be high. The requirement for payment encompassing so many factors would be detrimental to a Reforming Government’s financial situation. The requirement a payment have regard to economic value under section 5(b),\textsuperscript{50} may not be feasible at early rebuilding stages.

In using our current provisions, we can see the Patents Act is limited. The ability of the Federal Court to incorporate certain terms into a compulsory licence may prove to be of assistance.

There are no specifics as to what terms may be included, with most discussion being that that the court may ensure there is a reversion of rights clause once the situation has calmed down.\textsuperscript{51} The legislature could extend this power to allow for detailed restricting of patent licences in money or timing.

The process of Compulsory Licencing is not timely enough. In times of emergency, the requirement for negotiation, that the patent holder enjoy a prescribed period and price determination are all areas that formally delay a government’s ability to react during emergency.


Expanding the Patents Act to allow immediate licencing of patents during ‘a national emergency or other circumstances of extreme urgency, or in cases of public non-commercial use’\textsuperscript{52} is an idea that would be consistent with art 31(b) of the TRIPS Agreement,\textsuperscript{53} answering the Federal Government’s need for legislation in times of ‘exceptions’.

A national emergency power would also allow for courts to determine price (and recognise suspension of any payment – until society has recovered), without consultation with the patent holder or remove the requirement for prior negotiation altogether. An emergency licencing provision would give the Federal Court discretion in a number of areas regarding patents depending on the extremity of the scenario would provide much needed flexibility to address issues as they arise.

\textsuperscript{50} Patents Act 1990 (Cth) s133 (5)(b).
\textsuperscript{51} Ibid s133(6)(a).
This recommendation has been criticised on a number of fronts. Removal of prior negotiation to acquiring patents has been noted as ‘draconian’ and that Compulsory Licence should remain an exception under limited circumstances. Whilst these criticisms are understandable as patents stem from a private right, such changes would put Australia in line with the Doha Declaration.

The criticisms over such reform are justly made. Such extreme provisions would lessen the attractiveness of Australian markets and depart from the fundamental principle that the patent holder enjoys an exclusive right over their patent. Such criticism does not consider that the court may revoke a compulsory licence where the circumstances that justified its grant have ceased to exist and are unlikely to reoccur.

The Legislature should look to amending the requirements for a compulsory licence now, as reform during a time of emergency may not be possible. The inclusion of emergency provisions that allow for greater discretion and ensure the Reforming or Federal Government will have the capacity to licence a cure through the Patents Act.

**B Crown Use**

Section 163 of the Patents Act states:

> Where, at any time after a patent application has been made, the invention concerned is exploited by the Commonwealth or a State (or by a person authorised in writing by the Commonwealth or a State) for the services of the Commonwealth or the State, the exploitation is not an infringement.

Crown use provisions are based on the belief that patents in matters of public interest should not prevent the Federal Government. Cosistent with the ALRC, this would be the most effective tool in dealing with National emergencies.

Crown use has been criticised in its current form as a tool “to force an unwilling licensor to the negotiating table.” The Advisory Council on Intellectual Property (“ACIP”) paper, ‘Review of Crown Use Provisions for Patents and Designs’ noted...

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54 Department of Industry Tourism and Resources, Submission P97, 19 April 2004.
57 *Patents Act 1990* (Cth) s133 (6).
59 General Steel Industries Inc. v Commissioner for Railways (NSW) (1964) 112 CLR 125, 133–134.
61 W Cornish, M Llewyn and M Adcock, *Intellectual Property Rights (IPRs) and Genetics* (2003), 74.

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submissions, which claimed that Government bodies use crown use as a threat.\(^6^3\) This idea runs counter to the belief that patents exist to protect and promote innovation.

The issue with Crown Use is the ambiguity of the provisions, clarity is needed on what it means by ‘authorised by Commonwealth and State’\(^6^4\), the Patents Act lacks a definition of ‘in service for Commonwealth or State’\(^6^5\) and finally, no explanation exists as to what is appropriate remuneration for Crown Use under s165.\(^6^6\) It would serve the Federal Government well to address these issues of ambiguity now to not be forced to rely on interpretation later.

1 **Relying on Crown Use**

The Crown Use provisions apply when the Federal Government seeks to use a patent ‘for the services of the Commonwealth or the State’\(^6^7\) without the patent holder’s permission and only if ‘if the exploitation is ‘necessary for the proper provision of those services within Australia’.\(^6^8\)

Clarity as to what exactly, ‘necessary for the proper provisions of those services within Australia’ means is ambiguous, with most interpretations quite broad. In *Stack v Brisbane City Council* (1994)\(^6^9\) the court determined, with regard to *Pfizer Corporation v Ministry of Health* [1965],\(^7^0\) that exploitation of patented drugs in a National Health Service hospitals was necessary for the provision of services within Australia as the hospital was empowered by the authority of the State\(^7^1\).

The Federal Court further stated that the powers exercised are not limited to internal activities but also benefits to the public.\(^7^2\) A State or Federal Government body may rely upon Crown Use while performing a duty or exercising a power that it was required to.\(^7^3\)

Taking this definition from *Stack*\(^7^4\) to rely on Crown Use it seems the applicant only needs to prove a connection to a government authority and that their action serves a public benefit necessary for Australia. This is a broad interpretation of the power the Reforming or Federal Government or even a related entity could justify acquisition of the suppressant patent as service for the Commonwealth and public (In this instance by distributing the cure to Australian society).

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\(^6^3\) Ibid pg 31.
\(^6^6\) Ibid s165.
\(^6^7\) *Patents Act 1990* (Cth) s 163(1).
\(^6^8\) Ibid 163 (3).
\(^6^9\) 131 ALR 333.
\(^7^0\) AC 512.
\(^7^1\) *Stack v Brisbane City Council* (1994) 131 ALR 333.
\(^7^2\) Ibid.
\(^7^3\) Ibid.
\(^7^4\) Ibid.
Crown Use provision have come under criticism by ACIP as being too broad. ACIP points to the sale of drugs being deemed a public service as an example of the power being too broad. ACIP further criticises the broad definition of Crown Use in relation to what it means to be a Commonwealth or State authority and what exactly that entails.

The current broad scope of definition to who is or isn’t a Commonwealth or State authority could mean that Crown Use could be exploited by an agency with only a tenuous connection to Commonwealth or State Authority. ACIP uses a scenario of government funded research institutes that hold a private interest acquiring rights through Crown Use for a competitive edge.

Such exploitation would promote distrust in government and lessen the attractiveness of the Australian patent system. The purpose of patents is to promote and foster innovation through reward. The ability for a government body or organisation with a tenuous connection to government authority to acquire a patent through a broad interpretation of Stack defeats that purpose. The patent holder would no longer be rewarded for his innovation as other agencies could acquire the patent for their own commercial gain and thus not truly for service to the public. The innovator is not rewarded and the attractiveness of Australian market would suffer. (In the context of the apocalypse and its immediate aftermath Australian policy makers are unlikely to give much weight to these considerations.)

2 Remuneration for Crown Use
While the Federal or State/Territory government may be able to acquire a patent through Crown Use there is still a requirement of remuneration for the patent. The Federal or Reforming Government formally would have to determine a price either jointly with the patent holder or through a Federal Court determination.

Unlike the Compulsory Licencing there is no clarity as to what would be considered reasonable remuneration if a patent is exploited through Crown Use. The Court would have to seek direction elsewhere. Our international treaties do provide some guidance in this area, definition to payment are provided in loose terms in both the

76 Ibid 21.
77 Ibid 21.
78 Ibid 21.
79 Stack v Brisbane City Council (1994) 131 ALR 333.
80 Patents Act 1990 (Cth) s165.
TRIPS Agreement,\textsuperscript{82} and the Australian-United State Free Trade Agreement.\textsuperscript{83} The Trips Agreement\textsuperscript{84} lays out a specific standard of remuneration regarding the circumstances at the time.\textsuperscript{85} The Australian-United States free trade agreement makes no reference to circumstances and simply states a requirement for ‘reasonable compensation’.\textsuperscript{86} (emphasis added).

The Federal Court would look to a payment that meets both reasonable compensation and with regard to the circumstances at the time. In such a scenario, it would be likely this would be a low amount. A better definition of payment and what would be considered appropriate remuneration in times of emergency would allow for a Reforming Government to prepare and budget better. Addition of clauses in the Patents Act regarding fair payment in acquiring a patent during times of emergency would be essential in preventing issues of ambiguity.

The lack of clarity regarding payment exposes a core issue that exists throughout this article with regards to the Patent Act: Ambiguity. With no guidance on how to structure payment, reliance on treaties would be essential to ensure meeting obligations, if in the post apocalypse international order other nations are in a position to require Australia to remunerate rights holders.

3 \textit{Recommendation: Ministerial Approval} ACIP recommends that rather than relying on the common law interpretation of Crown Use as promoted in \textit{Stack}\textsuperscript{87} the Government would be better served in requiring ministerial approval for any acquisition or licence done under Crown Use.\textsuperscript{88} This idea could be expanded by incorporating the suggestion that in the event of emergency this ministerial approval could be waived and another Minister (or delegate) could act in the Minister’s capacity.\textsuperscript{89}

The inclusion of Ministerial approval would defeat the ambiguity of the test in \textit{Stack},\textsuperscript{90} by providing an outline of the decision process that goes into implementation of Crown Use clarity and reduction of ambiguity would occur.\textsuperscript{91} In times of non-emergency this would provide an effective method of ensuring Crown Use is done correctly while preserving private rights.

\begin{thebibliography}{99}
\bibitem{83} Australia and United States, \textit{Australia–United States Free Trade Agreement}, 18 May 2004.
\bibitem{85} ibid Art 31(c)-(i) ‘adequate remuneration in the circumstances of each case, taking into account the economic value of the authorization’.
\bibitem{86} Australia and United States, \textit{Australia–United States Free Trade Agreement}, 18 May 2004.
\bibitem{87} \textit{Stack v Brisbane City Council} (1994) 131 ALR 333.
\bibitem{88} Ibid.
\bibitem{89} Ibid.
\bibitem{90} Ibid.
\end{thebibliography}
C Patent Reform Recommendation: Emergency Clauses.

Through combining the recommendations of emergency provisions for Compulsory Licencing and Crown Use, the Federal Government would be served in introducing new emergency provisions that would govern Crown Use and/or Compulsory Licencing at the time of emergency. These clauses could reduce time and expense in seeking an order for the licence to a patent.

IV WORLD WAR Z - RETURN OF THE NATIONAL SECURITY ACT?

The book of war, the one we’ve been writing since one ape slapped another, was completely useless in this situation. We had to write a new one from scratch.92

A The National Security Act.

The National Security Act 1939 (Cth)93 (The ‘NSA’) was an enactment made during World War 2 in a response to the total war scenario at the time. The NSA allowed for the Executive, through the defence head of power94, to make broad regulations to protect Australia.95 The idea of the zombie apocalypse being a total war scenario is not uncommon, so it would be no surprise to see the return of the NSA.

The NSA gave massive control to the Federal Government in aspects such as land acquisition,96 price control97 and property acquisition.98 A resurfacing of the NSA could provide the Reforming Government with the necessary powers and discretions to handle an apocalypse.

The NSA was a controversial enactment. A Reforming Government would do well in ensuring they are aware of these criticisms before implementing the NSA. The circumstances surrounding the employment of barmaids through NSA regulations in South Australia highlighted both the wide discretionary benefits that the NSA can bring along with the criticisms the power brings with it.99

The issue of barmaids surrounded a regulation under the NSA allowing women to work as barmaids to meet the lack of manpower and encourage enlistment of

93 National Security Act 1939 (Cth).
94 s 51(vi) of the Constitution as discussed in Bede Harris, ‘Constitutional Implications of the Zombie Apocalypse’, Canberra Law Review 14(1), 14.
95 National Security Act 1939 (Cth) (5).
97 Stenhouse v Coleman [1944] HCA 36; 69 CLR 457.
98 Andrews v Howell [1941] HCA 20; 65 CLR 255.
males. The key issue surround the arguments of how much a woman would be paid and whether the bar was an appropriate workplace for a woman.

The South Australian Government criticised the use of the NSA, claiming it to be a method of removing the power of the States’ power over employment through the justification of wartime and the defence head of power the legislation was based on. This criticism was not uncommon with claims that the use of defence head of power was being abused to justify regulation over areas that are not related to Defence.

Many believed that use of the defence power was not an appropriate method of justification, this was foreshadowed in Farey v Burvett [1916] with Griffith CJ stating:

The existence of war does not result in handing over to the Commonwealth general control of these matters.

Stenhouse v Coleman [1944] HCA 36 (‘Stenhouse’) expanded upon the idea with the High Court holding that any regulation passed under the NSA must be an:

An act of Statesmanship which should be related to the purpose of the constitutional power, and not to any political or other ulterior purpose.

As we can see the NSA’s power is limited. In creating a new Zombie NSA the Reforming Government would need to remember the criticisms of the original NSA. Naming something as a necessity in the zombie apocalypse would not mean regulations would be justified. A Reforming Government in theory would need to prove that use of the power will provide some effect in relation to a battle against zombies and is done so for the good of the country as a whole rather than a political measure.

As the threat to Australian society increases there was a trend in the original NSA to accept more extreme regulations created for defensive purposes. In a total zombie war scenario it could be justified that the executive may make regulations through the Zombie NSA based on an interpretation of the original NSA at its broadest in power.

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100 Ibid.
101 Ibid.
102 Ibid, 22.
103 Ibid, 21.
104 Farey V Burvett [1916] HCA 36; 21 CLR 433,442.
105 Ibid.
106 Stenhouse v Coleman [1944] HCA 36; 69 CLR 457.
107 Ibid pg 466.
It is clear to see that a Zombie NSA would have the power to help the executive address many issues that an emergency scenario such as the zombie apocalypse would bring. A ‘zombie’ NSA does not provide expansive powers at all times, regard would need to be taken to the purpose of the regulations made.

**B Torpedoes and Planes - Responses to Government Acquisition**

Patent holders tend to be apprehensive of Federal Government acquisition, even if legally justified. During the World Wars this apprehension was brought to the forefront as public and private industries partnered or were repurposed. During World War 1 industries struggled as they were:

> Based not on the new collaborative procurement paradigm but on an older one, in which the public sector bought finished goods from the private sector as ordinary commercial products.\(^{110}\)

Rather than seeing a continuation of collaboration paradigm,\(^{111}\) we may see a reversion back to procurement of finished goods. Such a move would be a more costly and demanding system for day to day Australian life, however many we may like the fiscal capacity to continue with collaboration. It seems likely that any patent holder who survived the apocalypse would be cautious of future collaborative efforts until a Reforming Government has regained complete financial capacity.

The patent holder may also find that the Federal Court loses sight of property rights at times of crisis.\(^{112}\) Losing these rights could imply a lack of patent over them\(^{113}\). If such apprehension exists the Government would do well to get the patent holder on side to prevent any issues in future.

During World War One the Wright Brothers managed to effectively delay a patent pool created by the United States Government through control of patent maintenance fees and prohibitive royalty payments,\(^ {114}\) a delay so effective military action was considered briefly to acquire the patent again.\(^ {115}\)

This highlights two issues. Firstly, patent holders are reluctant to give away patents, secondly patent holder still hold a large amount of power in our current system. A certain degree of care would be necessary to ensure the patent holder continues to help in such a time of emergency to ensure things run smoothly.

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\(^{111}\) Ibid.

\(^{112}\) Ibid 16.


\(^{115}\) Ibid.
It’s not impossible to believe that the Reforming Governments reaction will be to return to a wartime state and attempt to seize whatever it needs to get through the zombie apocalypse. Such a reaction could be damaging in the long run to the patent holder who may lose their patent and to the Reforming Government who may lose business. A worst-case scenario would be the use of the patent is effectively frozen as we see in the Wright Brothers instance.

The return of the NSA could provide some valuable discretions and flexibility but care would need to be taken in its use. The patent holder still has power, which the Reforming Government would need to make ensure is understood and approached cautiously. Furthermore, State Government and the Federal Court may take a dim view at any stripping of rights through broad regulations under a zombie NSA, if taken too far for political or unnecessary reasons.

Underlying this paper, in contrast to the dire views implicit in other contributions to the special edition of the Canberra Law review, is that institutions such as the Federal Court will continue to operate without much disruption during the course of the apocalypse and that there would be popular support for the maintenance of intellectual property rights. It is worth noting at common law there is a long history of recognising public / private use (or destruction) of property in small scale emergencies, such as house fires, floods and bushfires.

V WHERE TO NOW?

Patent Law rather artificial, highly complex and somewhat refined subject.\textsuperscript{116}

Such a quote has never been more relevant when examining patents through the lens of the zombie apocalypse. The apocalypse presents a valuable opportunity to expose our current regime to a ‘worst case’ scenario. In this instance, the Federal Government would do well to look to making new and lasting reforms to prevent legislation being created on the lurch.

Before the apocalypse begins the Federal Government should look to reforming the Patents Act. This would provide a level of certainty to a Reforming Government and guarantee that in such an emergency the Reforming Government would have the capability to address any scenario.

In the alternative after or during the apocalypse the Reforming Government may look at returning to the NSA empowering the Executive with the flexibility it requires for such a unique scenario.

\textsuperscript{116} Commissioner of Patents v The Wellcome Foundation [1983] NZLR 383 at 398, per Cooke J.
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