

Right to Repair
Productivity Commission
4 National Circuit
Barton ACT 2600

28 January 2021

RE: Right to Repair

The following submission is a brief summary of observations and recommendations following a collaborative research project that we led – *Repair Design* – undertaken at UTS School of Design between 2019 and 2020. *Repair Design* opened up public discussion about product repair problems and solutions in an Australian context.

See <https://repair.design/> for more information about our project.

A report about our research project can be accessed at:

https://repairdesign224064875.files.wordpress.com/2020/07/2020-07-30_repair-design-report-web-smaller-1.pdf

The 'right to repair' was one of many issues our project engaged with. In October 2019 we organised and hosted a public event entitled 'Can we talk about a Right to Repair in Australia?' (featuring John Gertsakis, Assoc Prof Leanne Wiseman, Dr Guy Keulemans, Annette Mayne, Guido Verbist), which was later broadcast by ABC Radio National's *Big Ideas* program. You can hear an abridged version of the discussion here:

www.abc.net.au/radionational/programs/bigideas/encouraging-repair-over-waste/11924272.

The following pages contain a summary of relevant key findings and recommendations arising from our research. Our research emphasis is on the relationship between design and repair, however (as we are sure the Commission will agree), repair issues are untidily intertwined with a great number of disciplines and facets of activity, and it is not possible to draw a neat line between legal, technological, design and social issues when it comes to analysing problems repairing consumer objects and addressing e-waste management.

Please feel free to contact us for further discussion.

Sincerely,

Dr Jesse Adams Stein
Senior Lecturer &
Chancellor's Postdoctoral Research Fellow
School of Design, Faculty of Design,
Architecture & Building, UTS

Associate Professor Alexandra Crosby
Associate Head of School - Design,
Faculty of Design, Architecture & Building,
UTS

Co-Chief Investigators, *Repair Design* research project, UTS School of Design

<https://repair.design/>

The 'Right to Repair': Key Observations from the *Repair Design* research project, UTS School of Design

1. Australia could lead the way in terms of sustainable consumption and e-waste management by initiating a **regulatory presumption of repair over replacement, which would be incumbent upon Original Equipment Manufacturers (OEMs). OEMs should only replace broken products where it is unreasonable to repair them.** This principle should be the basis of all legislative or regulatory change to Australian Consumer Law and the Product Stewardship Act.
 - OEMs, however, should be compelled to share the repair burden, and not to monopolise repair.
 - OEMs should be required to act in a manner that makes repair as accessible as possible to independent repairers (and to consumers, when it is safe to do so). See # 2 below.
 - Different products have different 'reasonable' lifespans, however if an item breaks (through no fault of the consumer) after an unreasonably short period of time, OEMs should be required to attempt repair (rather than automatically opting for replacement). In other words, repair should become the norm, and replacement only as a last resort.
 - Where an OEM is undertaking a repair for an essential product (e.g. smart phone or laptop), and immediate repair is impracticable, the OEM should be required to provide a temporary replacement throughout the duration of the repair.
2. **OEMs must be required to make accessible relevant repair and/or maintenance software information to independent repairers** (and/or consumers, depending on the type of product in question). (This point has likely been made many times by others submitting to this Inquiry, so we have chosen to keep this point brief.)
3. **Consumers should never be penalised by an OEM for seeking a repair from an independent repairer.**
4. **The repair 'aftermarket' is an essential part of Australia's innovation capacity, and it needs targeted government support.** The term 'repair aftermarket' refers to businesses and individuals that specialise in repair and/or maintenance for specialised sets of products, as well as providing product parts and auxiliaries).
 - When OEMs monopolise repair, the repair aftermarket suffers. This ultimately results in higher costs for consumers, and more likelihood that consumers will turn fully repairable items over to landfill. OEM repair-monopolisation can also lead to costly delays (which can be highly problematic in agricultural, construction and industrial contexts, e.g. when a broken harvester cannot be repaired except by an authorised OEM repairer, and the harvest season is missed while waiting for a repair).
 - Targeted government support for a repair aftermarket could include (but is not limited to): tax deductibility for repair costs, subsidies to support repair-friendly initiatives, publicly-run and/or publicly supported repair centres, and regulatory

- obligations on OEMs to openly provide repair information and software access to other repairers (as noted in # 2).
- A thriving repair aftermarket reduces e-waste and generates local employment in both urban and regional areas. Repair jobs are good jobs: they assist with technical skills training, they are satisfying, and they encourage community cohesiveness.
5. **Encouraging consumers to seek out repair (rather than replacement) cannot be achieved only with ‘soft’ measures** (e.g. advocacy, voluntary community repair centres, social media encouragement). **‘Harder’ measures are necessary** (e.g. regulatory / legal / tax-based) in order to achieve significant widespread behavioural transformation.
- Consumers tend to be time poor and cost-sensitive – anything that takes a long time or costs more will result in less uptake of a repair option (over a disposal option). Encouraging repair involves addressing the accessibility and costs of repair.
 - Government could provide further support, but it is the OEMs who are profiting from poorly made objects, and therefore their responsibility for diverting technologies from e-waste is paramount. Only a regulatory solution at the point of product obsolescence can compel significant corporate change, away from the current model of short product lifespans and growing amounts of e-waste.
6. While Technological Protection Measures (TPMs) are the major hurdle for repair, **object design also matters a great deal** (particularly for small technological devices (e.g. smart phones), and small appliances (e.g. kettles, clocks, toasters, heaters).
- **No electronic device or appliance should be sold in Australia that is not able to be effectively opened for the purposes of maintenance or repair.** No batteries or electronic parts should ever be sealed inside a device, such that the object would break if someone attempted to repair it. A simple screw panel usually suffices, for most technological devices and small appliances.
 - **Durable materials matter.** Brittle plastic is one of the main causes of small appliances being discarded after a short lifespan. OEMs should be required to produce devices that can withstand reasonable durability tests, and to provide spare parts for a reasonable product lifetime (duration will vary depending on the product type).
 - **Modularity and compatibility increases product lifespans.** Standard electrical and computer ports (e.g. USB, HDMI) should be encouraged (to allow for compatibility with other objects), rather than the constant creation of new ports and points (Apple is a key offender in this respect.)
7. Particular products provide useful examples of the repair problem: **smart phones, kettles, heaters and (domestic) printers** are key examples of products that have shorter and shorter lifespans, and a deep understanding of repair problems with these products will provide a useful broader picture.
8. **‘Planned obsolescence’ is structural.** It is not simply a case that a designer and/or a company decides “Let’s make this product break in X number of years.” Planned obsolescence is part of a broader globalised economic system that demands constant product cycles, that encourages consumer expectations of constant newness, and that disengages from the waste cycle. Software updates are a key part of the planned

obsolescence problem: rendering functional hardware effectively useless with newer updates, for example. Consumers should not be penalised by an OEM for refusing to update their software to the latest version. OEMs should continue to provide technical support for older models of their products – up to 7 years old for digital electronic devices, for instance.

9. **OEMs should be held accountable for a product’s lifespan, including disposal.** If OEMs want to retain some control over licenced software for their devices, they also must have responsibility for the providing spare parts, as well as being accountable for the safe disassembly and disposal of their items into appropriate waste streams.
10. **A healthy local manufacturing sector ensures more options for repair, spare parts, and availability of repairers with relevant skills.** The problem of poor-quality breakable items (and a lack of local repair options) is directly tied to a globalised economy. Although Australia continues to import almost all of its technologies, it nevertheless retains the power to regulate those items. Requiring overseas manufacturers (that sell their goods in Australia) to adopt a repair-friendly approach ensures a renewed support for local manufacturing and widespread object repair. Furthermore, encouraging local manufacturing will have positive run-on impacts for the repair sector, both in terms of skills and the availability of locally manufactured spare parts.
11. **There is strong community support for a Repair Ratings system in Australia.** Just how such a system would work remains to be seen, but there is scope for a system that is similar to Australia’s Energy Rating System.
 - A repair ratings system should assess issues such as: software access, OEM responsiveness, product longevity and durability, materials choices, spare parts access, ease of maintenance, reasonable expectations for product lifespans, availability of appropriate repair technicians, and product simplicity (e.g. analogue v. digital / presence of a microchip / compatibility).
12. While consumer rights and intellectual property are key concepts in relation to repair ‘rights’, we are keen to encourage the Commission to remember that **repair is also an environmental issue.** The environmental consequences of over-consumption and increasing e-waste must remain core considerations in relation to any proposed regulatory change. **Extending product lifetimes can have a significant impact on reducing carbon emissions, as well as diverting and reducing toxic e-waste out of the waste stream.** (See for example this 2019 European Environmental Bureau report that calculated the significant carbon emission reductions that could be achieved by extending product lifetimes: <https://eeb.org/library/coolproducts-briefing/>). The environmental benefits of repair (over recycling and waste management) should remain key considerations in any policy change.

Further comment

In response to **Information Request 2**, we encourage the Commission to conduct further research into the diversity of products for which repair is a barrier. There are other possibilities for data sources: some local councils, for example, may collect data on products that are commonly picked up through bulky waste services or that are illegally dumped. These products vary depending on demographics and available services in different local government areas (LGAs). In order to respond with effective policy, such data needs to be linked to qualitative research on consumer practices, service design, and product design.

In response to Box 3 – Australia’s repair industry – we would also like to note that it is unlikely census data on repair businesses is entirely accurate. As well as repair being undertaken by manufacturers, as noted in the Issues Paper, repair is also undertaken by small retailers. Through our own scoping research conducted in the City of Sydney, we found many repair businesses operating as part of retail businesses. For example, a shop selling mobile phones may also offer repair services, jewellers repair watches (etc). We understand such repair practices existing in ‘business ecologies’ which also need further research and probably protection through right to repair policy.

Lastly, we note, as design educators, that any ‘right to repair’ issues need to be part of Australia’s design education. Universities should be supported to bring these issues into relevant curricula, as has been done with intellectual property law. Accordingly, we call for further government funding to be put toward academic research specifically on the issue of object repair. This could include supporting pilot studies and research linkages in collaboration with repairers and/or manufacturers.