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RESEARCH ARTICLE

Design law for the technical versus affective designs

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Abstract
This paper explores the interplay between intellectual property and gender in modern design law and practice, with a focus on the New Zealand Designs Act 1953 and references to Australian, United Kingdom and European Union law. It highlights how law and practice favour technical, utilitarian design principles (that coded masculine), but neglect the dynamic, sensory and affective (embodied and emotive) aspects of designs (that coded feminine). Through its focus on the technical, design law and practice ignore the socio-legal reality that the dynamic, sensory and affective are often central to a design's success. The paper frames the foregoing in standpoint theory and affect. It challenges the focus on that which can be reduced to technical-based representation and the perception that this creates an objective master copy. The paper calls for a reassessment of what design law protects and how it protects it, to better align the system with the socio-legal realities of design creation and use.

Keywords: intellectual property; design law; gender; standpoint theory; affect

Introduction

The last decade has witnessed an exponential growth in interest in intellectual property (IP) and gender. More specifically, significant focus has been made on 'gender gaps', and we are almost in a glut of data showing gender disparities in registrable forms of IP.[1] The vast majority of this kind of quantitative focus has been on patenting. This is likely due to a mixture of factors, including that economists are interested in patents compared to other forms of IP, most jurisdictions do not have copyright registries, and trade mark registries reflect owners not creators. Rarer than quantitative studies are critical, feminist and socio-legal analyses of IP laws and their applications and how these might reflect gender and, thus, be biased.[2]

[1]See eg EPO 'Women's participation in inventive activity: evidence from EPO data' (November 2022); UKIPO 'Gender profiles in worldwide patenting: an analysis of female inventorship' (November 2019) pp 8–12; USPTO 'Progress and potential: 2020 update on US women inventor-patentees' (4 July 2020) Office of the Chief Economist, IP Data Highlights; G Lax Martinez et al 'Identifying the gender of PCT inventors' (November 2016) Economic Research Working Paper No 33; WIPO Economics and Statistics Series, 8; V Huang et al 'Patents and gender: a big data analysis of 15 years of Australian patent applications' (2022) 45(3) University of New South Wales Law Journal 914; S Corbett 'The female inventor: what price intellectual capital?' (2002) New Zealand Intellectual Property Journal 91; R Brauneis and D Oliar 'An empirical study of the race, ethnicity, gender, and age of copyright registrants' (2018) 86(1) George Washington Law Review 46; WM Schuster et al 'An empircal study of gender and race in trademark prosecution' (2021) 94 South California Law Review 1407.

[2]See eg JC Lai and K Bowrey *A Research Agenda for Intellectual Property Law and Gender* (Cheltenham: Edward Elgar, 2024); KW Swanson 'Getting a grip on the corset: gender, sexuality, and patent law' (2011) 23(1) Yale Journal of Law and Feminism 57; JC Lai *Patent Law and Women* (London: Routledge, 2022); S Yanisky-Ravid 'Eligible patent matter – gender analysis of patent

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Interestingly, an area of IP that has been almost completely ignored by both quantitative and qualitative streams of analyses is design law. This is despite the fact that it is well understood that design is gendered, because gender affects product design (whether shape, form, colour or material),[3] spaces and architecture,[4] information and communication technologies (ICT),[5] and the digital world.[6] Yet, we located only a handful of studies on how design registrations embody a gender gap,[7] and very few critical feminist or socio-legal analyses vis-à-vis design *law* and gender.[8] This paper starts to fill this lacuna, by examining how design law and practice in New Zealand (NZ) reflects gendered biases. More specifically, it examines how design law favours the technical rather than the aesthetic, despite being about 'design', and how designs are represented by abstract and static two-dimensional images, yet a core feature of successful designs is their dynamic, sensory and affective (embodied and emotive) ability. As we argue, this is gendered as the law and practice favour attributes coded masculine (the technical, abstract and authoritative) over attributes coded feminine (the aesthetic, embodied and emotive).[9]

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law: international and comparative perspectives' (2011) 19(3) American University Journal of Gender, Social Policy and the Law 851; DL Burk 'Feminism and dualism in intellectual property' (2007) 15(2) American University Journal of Gender, Social Policy and the Law 195; DL Burk 'Do patents have gender?' (2011) 19 American University Journal of Gender, Social Policy and the Law 881; DL Burk 'Copyright and feminism in digital media' (2006) 14(3) American University Journal of Gender, Social Policy and the Law 519; CJ Craig, JF Turcotte and RJ Coombe 'What is feminist about open access?: A relational approach to copyright in the academy' (2011) 1(1) Feminists@law 1; CJ Craig 'Reconstructing the author-self: some feminist lessons for copyright law' (2007) 15(2) American University Journal of Gender, Social Policy and the Law 207; CJ Craig 'Feminist aesthetics and copyright law: genius, value, and gendered visions of the creative self' (2014) 10(1) Osgoode Legal Studies Research Paper No 42; A Bartow 'Fair use and the fairer sex: gender, feminism, and copyright law' (2006) 14(3) American University Journal of Gender, Social Policy and the Law 551; BC Doagoo 'Feminist anthropology and copyright: gauging the application and limitations of oppositions models' in BC Doagoo et al (eds) *Intellectual Property for the 21st Century: Interdisciplinary Approaches* (Toronto: Irwin Law, 2014); A Kraut *Choreographing Copyright: Race, Gender, and Intellectual Property Rights in American Dance* (Oxford: Oxford University Press, 2016); KJ Greene 'Intellectual property at the intersection of race and gender: lady sings the blues' (2008) American University Journal of Gender, Social Policy and the Law 165; R Tushnet 'Symposium: my fair ladies: sex, gender, and fair use in copyright' (2007) 15(2) American University Journal of Gender, Social Policy and the Law 273; B Boateng *The Copyright Thing Doesn't Work Here: Adinkra and Kente Cloth and Intellectual Property in Ghana* (Minneapolis: University of Minnesota Press, 2011); A Bartow 'Barbie in bondage: what Orly Lobel's book "You Don't Own Me: How Mattel v. MGA Entertainment Exposed Barbie's Dark Side" tells us about the commoditization of the female body' (2019) 29 Fordham Intellectual Property, Media and Entertainment Law Journal 435; A Bartow 'The gender of trademarks and luxury branding' in H Sun et al (eds) *The Luxury Economy and Intellectual Property* (Oxford: Oxford University Press, 2015); DI Wasserman 'Trading sex, marking bodies: pornographic trademarks and the Lanham Act' (2010) 23(1) National Black Law Journal 121.

[3]See eg A Place (ed) *Feminist Designer: On the Personal and the Political in Design* (MIT Press, 2023); K Ehrnberger et al 'Visualising gender norms in design: meet the mega hurricane mixer and the drill dolphia' (2012) 6(3) International Journal of Design 85; J Wajcman *Feminism Confronts Technology* (Cambridge: Polity Press, 1995); T Lieven *Brand Gender* (Springer 2018) pp 143–176; M van Tilburg et al 'Beyond "pink it and shrink it" perceived product gender, aesthetics, and product evaluation' (2015) 32(4) Psychology & Marketing 422.

[4]See eg L Kern *Feminist City: Claiming Space in a Man-Made World* (Between the Lines, 2019).

[5]N Oudshoorn et al 'Configuring the user as everybody: gender and design cultures in information and communication technologies' (2004) 29(1) Science, Technology, & Human Values 30.

[6]R Bivens and OL Haimson 'Baking gender into social media design: how platforms shape categories for users and advertisers' (2016) 2(4) Social Media and Society 1; D Cyr and M Head 'Website design in an international context: the role of gender in masculine versus feminine oriented countries' (2013) 29(4) Computers in Human Behavior 1358.

[7]EUIPO *Women in Design* (EUIPO, 2023); J Heikkilä 'IPR gender gaps: a first look at utility model, design right and trademark filings' (2019) 118 Scienometrics 869; L Medina and I Alvarez 'Who invents what? Women's participation in patenting activity in Spain' (2022) 14(3) International Journal of Gender and Entrepreneurship 397 at 405.

[8]S Wright 'A feminist exploration of the legal protection of art' (1994) 7(1) Canadian Journal of Women and the Law 59; CE Colman 'Design and deviance: patent as symbol, rhetoric as metric Part 1' (2015) 55 Jurimetrics 419; CE Colman 'Design and deviance: patent as symbol, rhetoric as metric Part 2' (2015) 56 Jurimetrics 1. Note also I Alexander and M Handler 'Leaders and litigants: looking for women in copyright cases' in K Bowrey (ed) *Feminist Perspectives on Law, Law Schools and Law Reform: Essays in Honour of Professor Jill McKeough* (Alexandria: Federation Press, 2015) pp 137–145, who discuss copyright cases on clothing designs. See also RJ Coombe *The Cultural Life of Intellectual Property: Authorship, Appropriation, and the Law* (Durham, NC: Duke University Press, 1998), who touches upon design patents in a peripheral manner.

[9]We understand gender as social identity rather than something inherent. Thus, what is masculine or feminine is socially ascribed and context dependent.

In light of this, we ask how feminist literature regarding standpoint theory and affect can help us to think about what design law is doing and what we want it to do. We use this feminist literature because standpoint theory is defined by the embodied viewpoint (that one's specific embodiment shapes one's perception) and affect relates to the (inherently embodied) emotional and evaluative dimensions of human experiences. We contribute to the (scant) scholarship on affect and IP. Margaret Chon has examined how affect implicates narratives around IP and ultimately judicial, policy and legal decisions.[10] Estelle Derclaye has written about reorientating the goals or purposes of IP from incentive theory, utilitarianism and progress to factor-in happiness.[11] Literature that hints at the affect of the IP itself relates to trade marks, however this is about the psychology that creates consumer relationships and goodwill. For example, Barton Beebe has written about the symbolic and semiotic in trade marks,[12] and Jessica Lai and Janine Williams have examined the psychology behind trade marks and the creation of brand/consumer loyalty.[13] In addition, Lai and Williams have explored how the gendered nature of trade marks implicates consumer relationships, whether these relationships can change, and also the value of brands.[14] While there are gender issues at play, these do not specifically relate to whether the affective aspects of trade marks are protectable. That said, arguably the protection of goodwill per se and from dilution implicitly means trade mark law does protect affect.[15] Design law is different because, as examined herein, it excludes the protection of the affective in favour of the purportedly objective, and because reducing a design to the intellectual eliminates the affective.

Section 1 of this paper sets the scene by analysing NZ design law and practice to show how it shares more with patent law (for inventions) than copyright law (for artistic works and works of artistic craftsmanship), and emphasises the protection of the technical aspects of design as represented by a technical depiction of the design. Design law and practice, thereby, ignore and thus fail to protect the embodied and affective features of designs, including the dynamic, sensory, affective and relational (the relationships that designs engender). Section 2 of this paper explains that the aspects of design that can be protected are stereotypically related to industries dominated by men, and the means of depicting designs is from engineering, which men also dominate. In contrast, the embodied and the emotional is often associated with women. The law is, thus, gendered, but thinking about the law in relation to standpoint theory and affect can help to reveal the socio-legal reality of design law. The paper concludes by calling for a reassessment of what design law protects and how it does this in relation to reassessed rationales for design protection.

1. Design law in New Zealand

(a) The legislative framework

Registered designs are protected in NZ through the Designs Act 1953.[16] NZ design law mirrors earlier law from the United Kingdom (UK), where designs and designers were largely ignored by copyright until

[10]M Chon 'Emotions and intellectual property law' (2021) 54(3) Akron Law Review 529.

[11]E Derclaye 'Eudemonic intellectual property: patents and related rights as engines of happiness, peace, and sustainability' (2012) 14 Vanderbilt Journal of Entertainment and Technology Law 495; E Derclaye 'What can intellectual property law learn from happiness research?' in GB Dinwoodie *Methods and Perspectives in Intellectual Property* (Cheltenham: Edward Elgar, 2013).

[12]B Beebe 'The semiotic analysis of trademark law' (2004) 51 UCLA Law Review 621. See also RJ Coombe 'Embodied trademarks: mimesis and alterity on American commercial frontiers' (1996) 11(2) Cultural Anthropology 202, who describes how trade marks can have an 'embodied otherness' that is colonial, historical and social.

[13]JC Lai and JL Williams 'Finding your identity and partner in a trade mark? Consumption, innovation and the law' (2022) 53 International Review of Intellectual Property and Competition Law 1201.

[14]JC Lai and JL Williams 'Trade marks and gender: instrumentalising the law for gender-diverse marketing?' in Lai and Bowrey (eds), above n 2.

[15]LR Bradford 'Emotion, dilution, and the trademark consumer' (2008) 23(4) Berkeley Technology Law Journal 1227.

[16]Designs Act 1953 (NZ), s 11(1), states that the registration of the design 'shall give to the registered proprietor the copyright in the design'.

the mid-nineteenth century due to the low social status of the designer. It was concern for English designers vis-à-vis competition from French designers that led to the Ornamental Designs Act 1842 (covering the shape or patterning of articles of manufacture) and the Utility Designs Act 1843 (protecting the shape or configuration of articles with a utility).[17] Both, but especially the latter, overlapped with patent law,[18] which protects inventions – a facet of design rights that remains. These Acts were replaced by the Patents Designs, and Trade Marks Act 1883, which was more or less replicated by NZ in its Patents Designs, and Trade-Marks Act 1889 – the first NZ statute to address design rights, which was eventually replaced by the current Designs Act 1953.[19]

Rather than protecting functional characteristics (which is ostensibly the role of patents), design rights protect a design's 'shape, configuration, pattern, or ornament applied to an article by any industrial process or means, being features which in the finished article appeal to and are judged solely by the eye'.[20] Notably, the newer Australian Designs Act 2003 is similar, but with the qualification that 'design' relates to 'visual features' rather than features 'judged solely by the eye' (hereinafter 'eye judgment').[21] Visual appearance also continues to be central to assessing novelty and infringement in the UK.[22] These jurisdictions, thus, focus on the visual for registrability, which is also the sole means for determining infringement, a point we return to below. Though the NZ statute states that the features must 'appeal to … the eye (hereinafter 'eye appeal'), as with copyright's 'artistic work',[23] in practice, design law is not limited to protecting only designs of a particular quality. While artistic appeal is likely to be positive for assessments of novelty and originality, there need not be 'artistic merit'.[24] Indeed, design rights in NZ are not really about the artistic at all. As Kathy Bowrey has noted, the history of design law in England indicates design rights were meant for 'serial objects, not for the protection of art/craft'.[25]

The NZ Design Regulations 1954 specify exclusions from registration, including 'printed matter primarily of a literary or artistic character, including book jackets, calendars, certificates, coupons, *dressmaking patterns*, greetings cards, leaflets, maps, plans, postcards, stamps, trade advertisements, trade forms, and cards, transfers, and the like'.[26] These exclusions were carried over from the UK Designs Rules 1949,[27] which Hugh Laddie et al have suggested were an attempt to distinguish between artistic

[17]K Bowrey 'Art, craft, good taste and manufacturing: the development of intellectual property laws' (1997) 15(1) Law in Context 78 at 91. See also L Bently 'Visual textuality in nineteenth century intellectual property law: the Utility Designs Act 1843' (1997) 29 Intellectual Property Forum 28; DC Musker 'History of design protection in the United Kingdom' in T Aso et al (eds) *History of Design and Design Law* (Cham: Springer, 2022).

[18]Bowrey, above n 17, at 96; B Sherman and L Bently *The Making of Modern Intellectual Property Law* (Cambridge: Cambridge University Press, 1999) pp 85–94; L Bently and B Sherman, 'The rise and fall of the United Kingdom's forgotten utility model' in JL Contreras (ed) *Sub-patent Innovation Rights* (Cambridge: Cambridge University Press, 2025).

[19]The Designs Act 1953 (NZ) passed through Parliament without any debate whatsoever. See (22 October 1953) 300 NZPD 1944; (29 October 1953) 301 NZPD 2077; (18 November 1953) 301 NZPD 2293-2294; (19 November 1953) 301 NZPD 2329. On the historical overlap of design rights and functionality, see eg Musker, above n 17, pp 183–185.

[20]Designs Act 1953 (NZ), s 2.

[21]Designs Act 2003 (Cth), s 5. See K Bowrey et al *Australian Intellectual Property Law* (Oxford: Oxford University Press, 3rd edn, 2021) pp 330–331.

[22]L Bently et al *Intellectual Property Law* (Oxford: Oxford University Press, 6th edn, 2022) pp 779 and 800. On the development of the 'eye' in British law, see MD Janis, 'A closer look at the "eye" test' (2023) 13(1) IP Theory 56.

[23]The definition of 'artistic work' includes 'a graphic work, photograph, sculpture, collage, or model, *irrespective of artistic quality*': Copyright Act 1994 (NZ), s 2(1) (emphasis added). Note that 'a work of architecture, being a building or a model for a building' is not similarly qualified, suggesting (as with works of artistic craftsmanship) that their artistic quality is relevant.

[24]See eg *DA Lewis & Co Ltd v Trade Winds Furniture Ltd* (1985) 4 IPR 621, 623–624, citing *Halsbury's Laws of England* (vol 48, 4th edn) at [375]; *Mono Pumps (New Zealand) Ltd v Amalgamated Pumps Ltd* [1992] 1 NZLR 728, 741, citing *AMP Incorporated v Utilux Pty Ltd* [1972] RPC 103, 122.

[25]Bowrey, above n 17, at 100. On Australia, see also JC Lahore 'Art and function in the law of copyright and designs: the need for reappraisal' (1971–1972) Adelaide Law Review 182 at 182; J Dobinson 'A history of Australian design law' in Aso et al, above n 17. Regarding the US, see Colman 'Part 2', above n 8, at 10.

[26]Design Regulations 1954 (NZ), r 33 (emphasis added).

[27]Designs Rules 1949 (UK), r 26. The definition of design was much broader under the Patents and Designs Act 1907 (UK), s 93, as 'any design applicable to any article not being a design for a sculpture …, whether the design is applicable for the pattern,

works and designs, and to implement *Littlewoods Pools Ltd's Application* – a case that held that a design for a football coupon was not registrable because the paper merely carried the literary matter and had no separate function, so was not an article.[28] In this vein, *Russell-Clarke and Howe on Industrial Designs* explained that an article has to have a purpose beyond merely carrying the ornament, as otherwise 'the article is so subordinate to the ornament that it may be disregarded as such'.[29] The exclusions supposedly had the effect of excluding 'borderline case'.[30]

'Dressmaking patterns' are emphasised above in the legislated exclusion because it is unclear why they are either comparable to the football coupons in *Littlewood* or are borderline cases.[31] The medium of dressmaking patterns does have a separate function to merely carrying the design, as the paper is used in the clothing-making process. Accordingly, the paper does not appear to be significantly subordinate to the design such that it can be 'disregarded'.[32] Furthermore, one would think that dressmaking patterns would epitomise 'features of shape, configuration, pattern, or ornament applied to an article by any industrial process' per the definition of design.

Regarding analogous regulations (reg 11) to earlier Australian legislation,[33] which also excluded 'dressmaking patterns' from registration, Kanwal Puri stated 'reg 11 intends to take out of design registration articles which are more suited to copyright protection because they are "primarily literary or artistic in character"'.[34] However, it is difficult to understand why a dressmaking pattern is 'primarily literary or artistic in character' when it is used to make clothing, whereas a pattern on clothing (or on wallpaper, carpet or textile) is not so categorised.[35] Regarding wallpaper, *Russell-Clarke and Howe on Industrial Design* explained that these have always been registrable, 'the justification advanced being that the wallpaper, unlike the ordinary piece of paper, has a function beyond merely carrying the ornament, its purpose being to cover the walls of a room'.[36] Arguably, a dressmaking pattern is no less functional than wallpaper, as it also has a function beyond merely carrying the ornament, its purpose being to create clothing.

Potentially, undertaken by roles perceived to be feminised (clothworkers and seamstresses),[37] the application of 'dressmaking patterns' to paper was not considered to be via 'industrial processes', which is

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or for the shape or configuration, or for the ornament thereof, or for any two or more of such purposes, and by whatever means it is applicable, whether by printing, painting, embroidering, weaving, sewing, modelling, casting, embossing, engraving, staining, or any other means whatever, manual, mechanical, or chemical, separate or combined'. This was reflected in the Patents, Designs, and Trade-marks Act 1911 (NZ), s 2. The definition was narrowed in the Patents and Designs Act 1919 (UK) and Patents, Designs, and Trade-marks Act 1921 (NZ), s 2, removing references to printing, painting, embroidering, weaving, sewing, for example.

[28]H Laddie et al *The Modern Law of Copyright and Designs* (London: Butterworths, 3rd edn, 2000) at paras [43.16]–[43.21] and [43.68]–[43.70], citing *Littlewoods Pools Ltd's Application* (1949) 66 RPC 309.

[29]M Howe et al *Russell-Clarke and Howe on Industrial Designs* (London: Sweet & Maxwell, 2016) at para [3-030]. See also AD Russell-Clarke *Copyright in Industrial Designs* (London: Sweet & Maxwell, 2nd edn, 1960) pp 15–16.

[30]Howe et al, above n 29, at para [3-034].

[31]Notably, *Thornton Hall Manufacturing Ltd v Shanton Apparel Ltd (No 2)* [1989] 1 NZLR 239, at 242–244, held that dressmaking patterns, as drawings, are artistic works per copyright law. The Court stated that, even cut out, if would be a drawing and, indeed, 'a skilled designer armed with a pair of scissors would be able to draw a dress from a piece of material by cutting it out'.

[32]Note also that Laddie et al argued that *Littlewoods* was incorrect, as there are many examples where the medium for the design is subordinate to the design, but they are registrable, including designs for wallpaper: Laddie et al, above n 28, at para [43.19], citing *Wallpaper Manufacturers Ltd v Dervy Paper Staining* (1925) 42 RPC 443.

[33]Designs Regulations 1982 (Cth), reg 11(1), regulations of the Designs Act 1906 (Cth).

[34]KK Puri *Industrial Design Law in Australia and New Zealand* (Sydney: Butterworths, 1986) at para [314].

[35]See Report of the Copyright Committee 1959 (1959) Appendix to the Journals of the House of Representatives of New Zealand, vol IV, H.46, pp 113–114 at [294].

[36]Howe et al, above n 29, at para [3-032]. See also *Lamson Industries Ltd's Application* [1978] RPC 1, which held that pre-printed bands of colour on computer print-out paper was analogous to wallpaper (because the paper had a function other than supporting the design) and thus registrable. The judge noted that it was a borderline case. There are multiple borderline designs, such as printed book jackets, playing cards, boards of board games: see AI Morris and B Quest *Design: The Modern Law and Practice* (London: Butterworths, 1987) pp 21–24.

[37]Wright, above n 8, at 90–94.

undefined in the Act and Regulations.[38] Such designs were also possibly excluded because they are perceived to be non-technical and non-engineering based. Notably, the exclusion of 'printed matter' also potentially has gendered effects with respect to designs on graphical user interfaces (GUIs).[39] We return to these points below.

(b) Protecting features related to the technical

When the Ornamental Designs Act 1842 was introduced, it represented a shift in how legislation was drafted, from relating to very specific things to being more abstract.[40] According to Brad Sherman and Lionel Bently, this, compounded by issues with the patent system (such as expense and uncertainty around patentability), led to designs being filed for things considered more properly the remit of patent law. The Utility Designs Act 1843 was introduced to curb this, with the organising principle between the two Acts being beauty/utility. However, this organising principle did not delineate utility designs from patents and, together with the continuing expense and uncertainty around patentability, the overlap became between utility designs and patents.[41] Sherman and Bently note that, by the mid-nineteenth century, the overlaps were no longer seen as problematic,[42] and they continue today.

While the Designs Act 1953 specifies that designs do not protect a 'method or principle of construction' or features dictated solely by function,[43] design rights protect features closely related to the technical. This is clear from designs filed in NZ (see Table 1),[44] where the top five classes for filings from 1 January 2019 to 31 July 2024 were designs for: means of transport or hoisting (881); packaging and containers for the transport or handling of goods (762); household goods, not elsewhere specified (689); tools and hardware (603); and building units and construction elements (570). In contrast, textile piece goods was twenty-ninth with only 18 filings, articles of adornment was twenty-fourth with 67 filing, and articles of clothing and haberdashery was eleventh with 305 filings.

The close connection between design rights and technical or engineering products is also clear from cases that have reached NZ courts, which have related to patent-like subject matter:

- partitioned shot glass;[45]
- plastic crates for bread loaves;[46]
- battery display unit;[47]
- gate gudgeon;[48]
- z-post for fencing;[49]
- pump;[50]
- electronic switch panel;[51]

[38]Note, however, that in *Lacoste v Crocodile International Ptd Ltd* [2015] NZHC 2432 at [98], the Court held that the application of a trade mark to the neck of clothing was the application of a design to an article through an industrial process.

[39]Morris and Quest, above n 36, pp 21–22, suggest that the printed matter exceptions are the reason why video displays might not be registrable.

[40]Sherman and Bently, above n 18, pp 81–83.

[41]Ibid, pp 90–91.

[42]Ibid, p 93.

[43]Designs Act 1953 (NZ), s 2.

[44]This was for 8,247 filings. Many filings have more than one class and sub-class. Thus, the 8,247 filings were for 17,677 classes/sub-classes, across 1,246 different sub-classes. To make the analysis manageable and meaningful, only the first listed class was analysed.

[45]*Permanent Promotions Ptd ltd v Independent Liquor (NZ) Ltd* (HC, 10 June 2004).

[46]*Viscount Plastics Ltd v Lamnei Plastics Ltd* (HC, 13 September 2005).

[47]*Eveready NZ Ltd v Gilette NZ Ltd* (HC, 28 August 1998). The battery display unit was also patented.

[48]*Franklin Machinery Ltd v Albany Farm Centre Ltd & Others* (1991) 23 IPR 649.

[49]*Sutton v Bay Masonry Ltd* [2004] BCL 611.

[50]*Mono Pumps (New Zealand) Ltd v Amalgamated Pumps Ltd* [1992] 1 NZLR 728.

[51]*BEP Marine Ltd v Aquatech Martine Ltd & Others*, 20 December 2002, M1568/SW02, HC AUCK.

Table 1. Design applications filed in New Zealand between 1 January 2019 and 31 July 2024

Locarno Class	Locarno Class Descriptor	No. of filings
12	Means of transport or hoisting	881
9	Packaging and containers for the transport or handling of goods	762
7	Household goods, not elsewhere specified	689
8	Tools and hardware	603
25	Building units and construction elements	570
23	Fluid distribution equipment, sanitary, heating, ventilation and air-conditioning equipment, solid fuel	535
14	Recording, telecommunication or data processing equipment	514
13	Equipment for production, distribution or transformation of electricity	415
6	Furnishing	412
24	Medical and laboratory equipment	343
2	Articles of clothing and haberdashery	305
28	Pharmaceutical and cosmetic products, toilet articles and apparatus	266
15	Machines, not elsewhere specified	251
21	Games, toys, tents and sports goods	239
10	Clocks and watches and other measuring instruments, checking and signalling instruments	236
3	Travel goods, cases, parasols and personal belongings, not elsewhere specified	163
26	Lighting apparatus	139
1	Foodstuffs	114
27	Tobacco and smokers' supplies	105
32	Graphic symbols and logos, surface patterns, ornamentation, arrangement of interiors and exteriors	98
30	Articles for the care and handling of animals	79
31	Machines and appliances for preparing food or drink, not elsewhere specified	75
11	Articles of adornment	67
16	Photographic, cinematographic and optical apparatus	67
4	Brushware	63
22	Arms, pyrotechnic articles, articles for hunting, fishing and pest killing	63
29	Devices and equipment against fire hazards, for accident prevention and for rescue	61
19	Stationery and office equipment, artists' and teaching materials	55
20	Sales and advertising equipment, signs	52
5	Textile piece goods, artificial and natural sheet material	18
18	Printing and office machinery	5
17	Musical instruments	2

- laundry tub;[52]
- exercise machine;[53]
- amphibious kits (retractable legs) for small boats;[54]
- toilet;[55]
- spa pool.[56]

Only a few cases pertained to more copyright-like designs,[57] relating to:

- chair;[58]
- biscotti spoon;[59]
- water bottle;[60]
- a mark for use on clothing labels;[61]
- tags for a mechanical labelling gun for the timber industry.[62]

Notably, the final two of these cases included arguments about whether the designs were dictated solely by function, indicating they were also not purely copyright-like. Regarding the use of a mark on the neck of clothing labels, it was argued that this was dictated solely by the function of a trade mark as indicating source to consumers.[63] As to the tags for mechanical labelling, it was argued that the tag design was dictated by the needs of the labelling gun and of the industry.[64]

Nevertheless, NZ design rights are statutorily defined as copyright rather than patents (in contrast to the US).[65] However, as noted above, the history of design law shows a muddied relationship between designs and patents,[66] and the UK and NZ courts have often alluded to its in-between nature.[67] For example, regarding the novelty of chair designs, the NZ High Court in *DA Lewis & Co Ltd v Trade Winds Furniture Ltd* quoted and applied *Halsbury's Laws of England*, which stated:

> It is necessary that a design should show some new effect clearly distinguishable by the eye from what has gone before and that *the change should be such that some degree of real mental activity has been needed for its production.* … The eye is the sole judge of the existence of a difference between a design and what has gone before, but in judging the importance of that difference it would seem that

[52] *Robinhood Australia Pty Ltd & Anor v Aquatica NZ Ltd*, 25 March 2004, CIV 2004-404-00779, HC AUCK.
[53] *Brand Developers Ltd v Ezibuy Ltd* (2011) 93 IPR 143.
[54] *Sealegs International Ltd v Orion Ltd & Others* [2018] NZHC 1724.
[55] *UPL Group Ltd v Dux Engineers Ltd* [1989] 3 NZLR 135.
[56] *Watkins Manufacturing Corp v Prestige Pools Ltd* (2018) 131 IPR 353.
[57] Note that Medina and Alvarez, above n 7, at 405, found that, within design rights, what exactly women register designs for is gendered in Spain.
[58] *DA Lewis & Co Ltd v Trade Winds Furniture Ltd*, above n 24.
[59] *Creative Engineering Design Ltd v Muollo & Others*, 29 July 2004, CP 509-SD02, HC AUCK.
[60] *Waiwera Water NZ Ltd v Murray Melrose* [2019] NZHC 221.
[61] *Lacoste v Crocodile International Ptd Ltd*, above n 38. This case was more significantly about trade marks than design rights.
[62] *Handitags v Warburton*, 12 December 2001, M1586-SW01, HC AUCK.
[63] *Lacoste v Crocodile International Ptd Ltd*, above n 38, at [77]–[78].
[64] *Handitags v Warburton*, above n 62, at [8].
[65] The exact reason why the US protects designs within its patent regime rather than in connection with copyright is unclear: see T Suemune 'History of design protection in the United States of America' in Aso et al, above n 17, p 437. While design rights are patents in the US and (in New Zealand, Australia and the UK, as discussed in this paper) can be patent-like, they are also different, and thus typically excluded from patent analyses. See eg DJ Merritt 'Hypatia in the patent office: women inventors and the law, 1865–1990' (1991) 35(3) American Journal of Legal History 235 at 245, who stated, '… I excluded design patents from this study because those patents are more like copyrights or trademarks than true patents'.
[66] Bently, above n 17; Sherman and Bently, above n 18, pp 79–85.
[67] See also Colman, 'Part 1' and 'Part 2', above n 8, who outlines how judges in the US from the 1870s to the 1930s distanced themselves from the 'aesthetic' of designs (and the proection of the 'decorative arts') to conform to gender and heternormative ideals of the time. This was partly achieved through introducing invention patent standards into design patent law.

> other factors may properly be taken into account. *Although increased utility is not a necessary ingredient of a novel design, it may assist in showing that the design is really new and distinct from what has gone before*, for had such variation in fact been obvious and needed no mental activity the probability is that it would have been made before, and on account of its increased utility would have persisted.[68]

That is, as well as artistic appeal, utility (or functionality) and an indication of 'mental activity' – concepts usually associated with patents for inventions rather than copyright for artistic works – are illustrative of the novelty or originality of the design.[69]

Further comparisons with patentability were made vis-à-vis combining known integers:

> Although the requirements for a valid combination are not as strict as in the case of patents, as a general rule *there must be some artistic or other advantage from the combination* besides that possessed by the parts separately, *or at least the combination must have involved some artistic or mental effort*….
> While the court bears in mind that *the law of designs exists for the purpose of protecting innovations which do not involve such invention as is necessary for the subject matter of letters patent*, it rightly considers that there must be some check on the hampering of industries which would result if every unimportant alteration of shape or pattern could become the subject of a monopoly.[70]

Put differently, like patents, design rights are also about innovation and industry, but protect either artistic or mental advantage. This is closer to patent law's requirements of inventive step (non-obviousness) and utility[71] than copyright's requirement of originality, which requires a scintilla of 'skill, labour and judgement'.[72] While there need not be an advantage for an inventive step (which requires that the person skilled in the art (PSA), with the common general knowledge (CGK), would find the inventive concept, when compared to the prior art, non-obvious),[73] courts use an advantage as secondary evidence.[74] Similarly, an advantage is not required to show utility, however it increases the likelihood that the invention 'can provide a well-defined and particular benefit to the public' and that 'correspond[s] to a significant real-world utility', thus satisfying the requirements that the use is specific and substantial.[75] In comparison, advantage is irrelevant for assessing originality for copyright.

Analogously, in *Sutton v Bay Masonry Ltd*, the NZ High Court considered a Z-post for fencing and quoted the Australian decision *Conrol Pty Ltd v Meco McCallum Pty Ltd*, which used patent law language stating, '[t]he design may be novel notwithstanding that all of its parts are old and were *common general knowledge* at the date of registration', and '[m]ere *workshop variations* which a competent workman might be expected to achieve in the ordinary course of business does not cause a design to be new or original'.[76] The High Court also cited the High Court of England and Wales, in *Dover Ltd v Nurnberger*

[68] *DA Lewis & Co Ltd v Trade Winds Furniture Ltd*, above n 24, at 623–624, citing *Halsbury's Laws of England*, above n 24, at [375] (emphasis added).

[69] The adoption of patent law concepts into design rights (such as 'useful', 'invention' and 'non-obviousness') also occured in the US. See Suemune, above n 65, pp 438–441 and 444.

[70] *DA Lewis & Co Ltd v Trade Winds Furniture Ltd*, above n 24, at 624, citing *Halsbury's Laws of England*, above n 24, at [379] (emphasis added).

[71] Patents Act 2013 (NZ), ss 7, 10 and 14(b)(ii)–(c).

[72] Copyright Act 1994 (NZ), s 14(2); *University of London Press Ltd v University Tutorial Press Ltd* [1916] 2 Ch 601; *Henkel v Holdfast NZ Ltd* [2007] 1 NZLR 577.

[73] *Windsurfing Int'l Inc v Tabur Marine (GB) Ltd* [1985] 4 RPC 59, at 73–74.

[74] Eg *General Tire & Rubber Co v Firestone Tyre & Rubber Co Ltd* [1972] RPC 457, at 502; *Samuel Parkes & Co Ltd v Cocker Bros Ltd* (1929) 46 RPC 241, 248; *3M v Beiersdorf* (1980) 144 CLR 253, at 297–298.

[75] IPONZ, *The Patent Examination Manual*, 'Section 10: Meaning of useful', [4] and [18].

[76] *Sutton v Bay Masonry Ltd*, above n 49, at [17], citing *Conrol Pty Ltd v Meco McCallum Pty Ltd* (1996) 34 IPR 5, 17 (emphasis added).

Celluloidwaren Fabrik Gebriider Wolff, which spoke of 'intellectual activity' to originate ideas.[77] The terms 'CGK' and 'workshop variations' are used in patent law to determine whether an invention constitutes an inventive step or is obvious; as noted above, patent law's 'reasonable person', the PSA, knows the CGK, and 'workshop variations' are something the PSA could make without any inventive step.[78] Furthermore, 'intellectual activity' is something usually associated with patentable inventions rather than copyright artistic works. By employing patent law language, the courts require a certain degree of inventiveness (typically considered to be the realm of patents) to find a design to be new or original.

Overall, though legally defined as copyright, design rights are framed to be less about the 'creative arts' and are used more in the 'technical arts'.[79] As discussed below, design rights are also more akin to patents than copyright in how they are represented in practice and that they do not protect movement, context and interaction, or the affective.

(c) Excluding dynamic, sensory and affective qualities

Consistent with the law's requirement of 'eye appeal/judgment', design law generally requires static representations – images or drawings that can be clearly visually understood by courts and IP offices, and third parties.[80] These requirements were founded in the Design Registration Act 1839 (which was replaced by the 1842 and 1843 Acts noted above),[81] which created a Designs Register and the first modern (public) IP registration system.[82] Drawing 'upon the standardisation of verbal and visual formulae', the formal registration system became the source of protected designs.[83] Sherman and Bently state that 'by reducing a pattern or a design to paper, to a flattened reality, it was easier for design-related knowledge to be classified, measured and communicated'.[84] They note that the shift to focusing on how 'documents were interpreted' meant that the register became 'a stable reference point against which the identity of the intangible could be more readily ascertained'.[85]

In the same move, the control over depictions for registration limited what could be registered and the scope of protection.[86] The NZ Designs Regulations 1954 specifies requirements for design

[77] *Sutton v Bay Masonry Ltd*, above n 49, at [22], citing *Dover Ltd v Nurnberger Celluloidwaren Fabrik Gebriider Wolff* (1910) 27 RPC 498, at 503–504 (emphasis added).

[78] See eg *Windsurfing Int'l Inc v Tabur Marine (GB) Ltd*, above n 73, at 73–74; *Nicaro Holdings Ptd Ltd & Others v Martin Engineering Co & Another* (1990) 91 ALR 513.

[79] Of course, the technical can be creative and vice versa. However, we use this binary as it is reflected in modern IP law.

[80] A Tischner 'Lost in communication: a few thoughts on the object and purpose of the EU design protection' in S Frankel (ed) *The Object and Purpose of Intellectual Property* (Cheltenham: Edward Elgar, 2019).

[81] Ornamental Designs Act 1842, s 15, required that each application be 'furnished … with Two Copies, Drawings, or Prints of such Design'. The Utility Designs Act 1843, s 8, required that each application be 'furnished with Two exactly similar Drawings or Prints of such Design, with such Description in Writing as may be necessary to render the same intelligible according to the Judgment of the said Registrar'.

[82] Sherman and Bently, above n 18, pp 66–67 and 70–71.

[83] Ibid, p 72.

[84] Ibid. In 1839, the drawings for designs were not expected to be as technical as drawings for patents (p 84).

[85] Ibid, p 186.

[86] Ibid, p 188. Note the literature on the significance of technical drawings in patent law and the material effect that this, and also patent bureaucracy, can have on patentability: eg A Pottage and B Sherman *Figures of Invention: A History of Modern Patent Law* (Oxford: Oxford University Press, 2010); KW Swanson 'Making patents: patent administration, 1790–1860 symposium: the rise of intellectual property in the 18th and 19th centuries' (2020) 71(2) Case Western Reserve Law Review 777; KW Swanson 'The administration of genius: expertise and the patent bargain' (2013), available at https://scholarship.law.columbia.edu/law_culture/13. On how legal media affect what is patentable, see eg HY Kang 'Science inside law: the making of a new patent class in the international patent classification' (2012) 25(4) Science in Context 551; B Sherman 'Taxonomic property' (2008) 67(3) Cambridge Law Journal 560. See also literature on the development of the modern patent specification, which morphed with the changing philosophy behind patents from something administrative to a means of ensuring sufficient description of the invention: M Biagioli 'Patent republic: representing inventions, constructing rights and authors' (2006) 73(4) Social Research 1129; JC Lai 'The changing function of patents: a reversion to privileges?' (2017) 37(4) Legal Studies 807 at 810–814.

representations, such as clear, unambiguous images printable on A4 paper.[87] These representations are two dimensional and often engineering-like, the latter of which is a reflection of the belief that design is related to engineering, and patent attorneys who specialise in engineering are typically also practitioners of design law.[88] However, certain designs are not capable of being represented this way. For example, illustrating textile-related designs in a manner acceptable to IP offices is challenging, because of the complexity of some textile items and difficulties in illustrating flowing materials.[89]

Closely related to the difficulties in illustrating some designs, requiring static representations often fails to capture the full impact of designs that rely on dynamic, sensory or affective features. These are features that are typically only apparent when a design is *both* applied to an object (three-dimensional) *and* experienced. Regarding the dynamic, static representation neglects designs that embody fluidity and motion – qualities that have traditionally been coded feminine. If accepted design representations cannot illustrate movement, context and interaction – the embodied – design law will not protect these things. This issue has recently come to the fore with GUIs, which make the limitations of current design law more evident. When protection was first sought for GUIs, there were questions around whether a computer screen was akin to paper and the exclusion for 'printed matter' applied,[90] or whether the design on a screen was a decorative feature applied to the computer.[91] Case law suggests that there is limited ability to register digital 'icons which appear on a machine into which they are inherently built', but not 'icons, trade marks, devices or characters which appear temporarily whenever a particular computer program is loaded'.[92] Protection of the temporary and that which moves is limited.

Limitations on representations vis-à-vis movement and interaction – whether in physical designs like clothing or digital designs like GUIs – arguably undermine the law's capacity to reflect certain modern designs. Moreover, as discussed below, this gap highlights how design law and practice prioritise masculine-coded qualities like clarity and structure over feminine-coded qualities like movement and interaction. While the requirements for representations might contribute to consistency, they are constraining for designs that rely on movement, such as for watches, mechanical pencils, wheels, turbines, parts of vehicles, or convertible furniture, for example. Whether it is the flow of a dress, the precise movement of hands on a watch, or the transition of a GUI, these elements might be essential to a design's impact. However, the current law and practice in NZ, as in many jurisdictions, does not allow for such elements. While representations can show the designs in certain configurations, they cannot fully capture the aesthetics of motion.

Notably, in 2024, European Union (EU) design law was modified to address advancing digital technology and to broaden the scope of design law to cover virtual products.[93] Since 1 May 2025, 'design' includes 'lines, contours, colours, shape, texture and/or materials, of the product itself and/or of its decoration, *including the movement, transition or any other sort of animation of those features*'.[94] And '"product" means any industrial or handicraft item, other than a computer program, regardless of whether it is embodied in a physical object or materialises in a non-physical form', including graphical

[87]Designs Regulations 1954 (NZ), s 26.

[88]On the history of the visual representation of designs compared to the textual claims of patents, see Bently, above n 17.

[89]See eg K Marçal *Mother of Invention* (trans Alex Fleming, Williams Collins, 2021) pp 47–69, citing N de Monchaux *Spacesuit: Fashioning Apollo* (Cambridge, MA: MIT Press, 2011). It is also worth noting that the requirements of technical drawings can reveal class issues (which are often also gender issues), as not everyone can – or has access to the trained professionals who can – create such illustrations. Thank you to Kathy Bowrey for noting this.

[90]See eg Design Regulations 1954 (NZ), r 33. See also Laddie et al, above n 28, at paras [43.16]–[43.21] and [43.68]–[43.70], citing *Littlewoods Pools Ltd's Application* (1949) 66 RPC 309.

[91]Howe et al, above n 29, at para [3-031].

[92]*Apple Computer Inc's Design Appns* [2002] FSR 602 (RDAT) (Jacob J), 604 at [5]. Cf *KK Suwa Seikosha's Design* [1982] RPC 166 (RDAT), which allowed protection of a sound and bell symbol together with two parallel lines, on a digital watch screen, though the symbol was not always visible.

[93]Regulation 2024/2822 and Directive 2024/2823.

[94]Regulation No 6/2002, Art 3(1) (emphasis added).

works and GUIs.[95] The EU Intellectual Property Office (EUIPO) already allowed static digital designs in its Guidelines. The changes mean that animated digital designs can also be registered. However, the Guidelines state that one can use a 'sequence of snapshots' (a 'short sequence of views') to 'show a single animated design at different specific moments in time, in a clearly understandable progression',[96] and '3D computer-animated design generating motion simulation can only be considered as an additional technical means of viewing the design and does not replace conventional static views'.[97] That is, motion and animation can only be represented in the static. It remains a concern whether it is possible to represent more complicated movements/transitions that do not only relate to a single animated design, and whether such representations can capture the sensory and affective qualities of designs.

An analysis of case law reveals the confining nature of static visual representations in relation to the sensory and affective, despite the significant role they can play in the success of a design. This is exemplified by the UK Supreme Court '*Trunki*' decision, regarding colourful ride-on animal suitcases aimed at children.[98] The design rights holder lost its infringement case because comparing the 'overall impression' of the design illustrations (as exemplified in Figure 1) to the alleged infringing suitcases led to the Court holding that there was no infringement.[99] Of course, greyscale drawings could not fully capture the vibrancy of the product's colour contrasts and textures,[100] or the joy elicited from seeing and sitting on a Trunki. The temporal and interactive qualities were not captured in the registered static images, which were, thus, interpreted to exclude the design's emotional and sensory dimensions. Yet, it was highly likely those dimensions that made Trunki so distinctive and popular, and which the alleged infringer arguably copied.

The current treatment of colour in design law is perplexing.[101] It sits in contrast to copyright law, which does take colour (and brightness and vividness) into account.[102] Indeed, colour per se cannot constitute a design.[103] To illustrate, colour and printed matter were the subject matter of concern in a 1937 case regarding 'the combination of the arrangement, pattern, colouring, and shape of the calendar



Figure 1. Trunki.[104]

[95]Ibid, Art 3(2).

[96]EUIPO 'Design Guidelines' (1 May 2025), 5.3.6.

[97]Ibid, 3.4.1.

[98]*PMS International Group plc v Magmatic Ltd* [2016] UKSC 12.

[99]The *Trunki* decisions and how they interpreted the design representations has generally been critiqued. See eg Tischner, above n 80, p 170, who describes the outcome as the 'design [being] lost in communication'; D Stone, 'Trunki – how did things go so wrong?' (2016) 11(9) Journal of Intellectual Property Law & Practice 662.

[100]Visit Trunki's website to view their available suitcases: https://www.trunki.co.uk/. The Supreme Court did note the relevance of tonal contrast in the greyscale representations: *PMS International Group plc v Magmatic Ltd*, above n 98, at [51]–[54].

[101]For the history on design rights and colour see also L Edmunds and H Bentwich *The Law of Copyright in Designs* (London: Sweet & Maxwell, 1908) p 24, citing *Nevill v Bennett* (1898) 15 RPC 412; AD Russell-Clarke *Copyright and Industrial Designs* (London: Sweet & Maxwell, 1951) pp 157–158.

[102]*Bonz Group (Pty) Ltd v Cooke* [1994] 3 NZLR 216, at 226–227.

[103]*Re Calder Vale Manufacturing Co and Lappert Manufacturing Co's Designs* (1935) 52 RPC 117, at 124–125.

[104]Community Registered Design No 43427-0001.

pad as shown in the representations'.[105] It was held that there was no registrable design, as arrangement was not the proper subject matter of design rights, there was otherwise no novelty in the shape, configuration, pattern or ornament applied to any of the calendar's pages, and colour must be disregarded. Regarding the last of these, the Patents Appeal Tribunal stated that protecting colour would be impractical because either an applicant would have to file in 'all possible combinations of colours' or competitors would be able to use (even register) the design in other colours.[106] Note that, while EU and UK law define 'design' to include colour,[107] and NZ and Australian practice is that designs can include colour,[108] this does not protect colour per se. If protected, colour will only ever be one feature amongst others,[109] making it subordinate to other kinds of features.

Yet, for many designers, colour is not just an aesthetic choice but a powerful tool for communication and expression. For businesses, a product's colour can have real commercial consequences as it can be a determining factor for consumers. This is because colour can evoke strong emotional responses and contribute to the socio-cultural resonance and significance of a design.[110] For some designs, the colour(s) might be a greater part of the appeal than the shape or ornamentation. However, a system that tends to prioritise shape and structure cannot account for this socio-legal reality. Furthermore, requirements for representation to ensure uniformity and precision mean that one would have to depict a design in every colour combination that one wishes protection for, which could be burdensome for a designer that relies on colour play, as the *Trunki* case illustrates.

As alluded to above, a further sensory feature that contributes to the appeal of a design is texture.[111] For instance, soft or fluffy textures of fabric, coolness of metal, or the warmth of wood, all contribute to how a person perceives an embodied design. These tactile qualities can evoke strong emotional responses, such as comfort, luxury, or security, which can be integral to a design's impact. Yet, they are difficult to capture in two-dimensional illustrations, if they can be at all.[112] For example, the feel of a soft lambskin handbag compared to a patent leather handbag are different in real life, resulting in different emotional responses. However, in design representations, the handbags will look identical. If the texture or material can be depicted in design representations, they have to contribute to 'eye appeal' for 'eye judgement'; 'touch appeal' is irrelevant as there is no 'touch judgement'. This is also true in the UK and EU, where designs include the appearance resulting from texture or materials,[113] as it is the visual appearance (not the sensory and affective qualities) of the texture or materials from the drawings that contribute to the assessment of novelty and of infringement. Hence, textures and materials that contribute to a design's tactile and emotional experience might not be captured in the legal process, which further illustrates the challenges of protecting designs that rely on sensory and affective qualities.

The awkward juxtaposition of static representations next to embodied sensory experiences is present in the case law. Here we discuss cases involving materials where non-visual sensory qualities were

[105] *In the Matter of an Application for the Registration of a Design by Associated Colour Printers, Ltd* (*No 814,271)* [1937] 54(6) RPC 203, at 206.

[106] Ibid.

[107] EC Regulation No 6/2002, Art 3(1); Registered Designs Act 1949 (UK), s 1(2).

[108] NZ law states that colour can be used; Designs Regulations 1954 (NZ), s 26(3); Designs Act 1953, s 2(1) (NZ). The Australian statutory definition is not exhaustive; and can include colour; Designs Regulations 2004 (Cth), reg 3.01(c); Designs Act 2003 (Cth), s 5.

[109] See eg EUIPO 'Design Guidelines' (1 May 2025), 4.1.2; Bowrey et al, above n 21, p 329.

[110] See eg L-C Ou et al 'A study of colour emotion and colour preference. Part I: colour emotions for single colours' (2004) 29(3) Color Research and Application 2332; Y-J Lee and Jo Lee 'The development of an emotion model based on colour combinations' (2006) 30(2) International Journal of Consumer Studies 122; C Mohr et al 'Unifying research on colour and emotion' in LW MacDonald et al (eds) *Progress in Colour Studies* (Amsterdam: John Benjamins Publishing Co, 2018) p 209.

[111] See eg H Zuo et al 'Sensory perception of material texture in consumer products' (2016) 19(3) The Design Journal 405; X Chen et al 'Materials' tactile testing and characterisation for consumer products' affective packaging design' (2009) 30(10) Materials & Design 4299; J Sedgwick et al 'Sensual surfaces: engaging consumers through surface textures' (2003) DPPI '03: Proceedings of the 2003 International Conference on Designing Pleasurable Products and Interfaces 148.

[112] Note that the Australian Designs Act 2003, s 7(3)(a) and (b), specifically states that 'the feel of the product' and 'the materials used in the product' are not visual features of the product.

[113] The Designs Act 1949 (UK), s 1(2); EC Regulation No 6/2002, Art 3(1).

integral to the design's appeal, which two-dimensional drawings could not capture. *UPL v Dux* was an NZ High Court decision about a design for lavatory seats,[114] where the plastic material used contributed significantly to the commercial success of the design. While the plastic was an important feature of the design, the inability to fully capture these material qualities in a two-dimensional representation (see Figure 2) led to a loss of the design's affective essence when legally evaluated. This is captured by the judge's statement 'it is not always easy to compare a two-dimensional design with a three-dimensional object'.[115] This acknowledgment underscores the difficulty of translating the full sensory and emotional impact of a three-dimensional object into a static two-dimensional image. Furthermore, the judge's statement suggests that, even within a legal framework that traditionally prioritises visual logic and clarity, the embodied and affective experiences can be important in design. Ultimately, a visual comparison of the registration representation with the allegedly infringing artefact led to the court holding there was no infringement because there were visual dissimilarities,[116] though it was a stated fact that the defendant introduced its lavatory seat with 'the same items as already described in the case of [the plaintiff's] unit', which 'had an immediate effect on [the plaintiff's] sales'.[117] Arguably, like in the *Trunki*

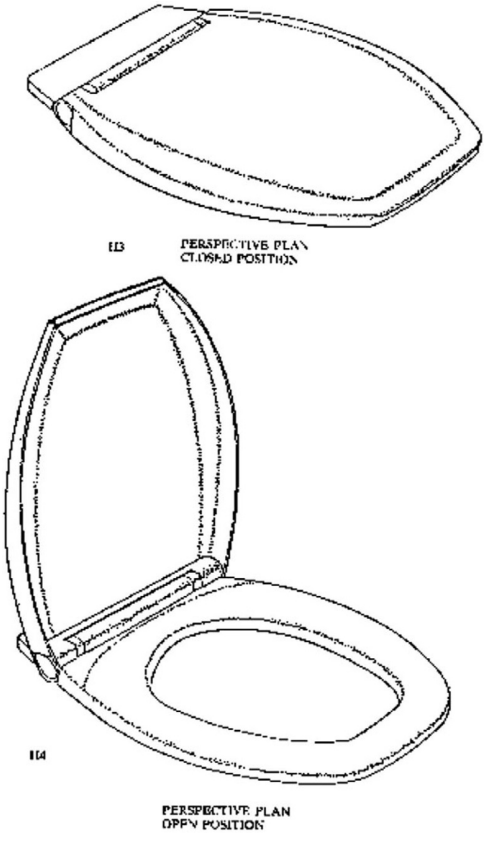


Figure 2. UPL Toilet Seat.[118]

[114] *UPL Group Ltd v Dux Engineers Ltd*, above n 55.

[115] Ibid, at 139. The Court noted that this means that courts can use embodiments of the design to make a visual comparison with the allegedly infringing artefact. However, in this particular case, the provided article was held not to be an embodiment of the design. Thus, the court compared the allegedly infringing artefact to the design representation.

[116] Ibid, at 142.

[117] Ibid, at 137.

[118] Image from ibid, at 141.

case, the alleged infringer was imitating features of the design that made it commercially successful, but the limitations of the representations limited the scope of protection.

To further illustrate how the law's focus on the visual ignores other embodied sensory experiences, we turn to *DA Lewis & Co Ltd v Trade Winds Furniture Ltd*,[119] a case about the design of the arms and legs of wooden chairs (see Figure 3 for one of the registered representations). The NZ High Court held that the registered design of the chair arms and legs was not new or original vis-à-vis the 'overall impression' of a prior design, and was invalid.[120] The court focused on visual similarities between two static representations (the registration representations and a single photograph of the prior design),[121] overlooking how these pieces of furniture might feel or interact with different environments. Yet, wooden furniture, with its natural, organic qualities, invites a sensory and affective experience beyond mere visual comparison. Variability in texture and how light interacts with the wood contribute to the furniture's emotional appeal, which might evoke comfort, nostalgia, or a connection to nature – affective qualities that are integral to the design's overall appeal. However, such features are challenging to capture in a traditional design representation and, thus, the focus on two-dimensional visual features might ignore the design's materiality and interaction with its environment.

Finally, in line with the awkward juxtaposition between static representation versus non-static reality, using natural materials in design, such as wood, presents unique challenges for design protection. Natural materials are inherently variable – no two pieces of the same kind of wood are exactly alike – and this variability contributes to the uniqueness and appeal of the design. In *DA Lewis & Co Ltd v Trade Winds Furniture Ltd*,[122] the decision that the registered design was not novel or original was based on the overall shape and configuration of the furniture, not subtleties of the material and how they affected the design. This approach might fail to account for the natural irregularities and organic qualities of wood, which are integral to the design's appeal and distinctiveness. Analogously, handmade designs often have variations difficult to capture in legal submissions. The legal system's emphasis on standardisation and visual clarity disadvantages designs that embrace natural materials with variable characteristics, which are not easily captured in static, standardised representations, *even if those characteristics are visual*. To

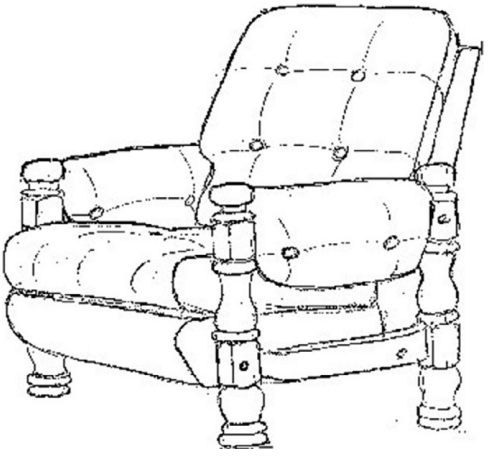


Figure 3. Lewis chair.[123]

[119] *DA Lewis & Co Ltd v Trade Winds Furniture Ltd*, above n 24.

[120] Ibid, at 625. 'Overall impression' is wording from the Designs Act 1949 (UK), s 1B(3), and Designs Act 2003 (Cth), s 16. It is not present in NZ legislation.

[121] Ibid.

[122] *DA Lewis & Co Ltd v Trade Winds Furniture Ltd*, above n 24.

[123] New Zealand Registered Design No 17094.

further illustrate this point, if DA Lewis & Co Ltd's design utilised the same natural materials but differently compared to the prior design – perhaps emphasising different aspects of the wood's texture or colour – the current legal framework might not adequately recognise these differences. This could result in natural, organic, or handmade, design elements not being fully protected, or where legal protection does not accurately reflect the design's innovative use of natural or variable materials. Note that, while Australian, UK and EU law states that design products include that which is 'hand made'[124] or 'handicraft',[125] this does not resolve issues relating to representation.

The case law analysed above highlights how the difficulty in representing dynamic, sensory and affective (embodied and emotive) qualities in legal submissions represents a significant limitation in current design law and practice. When the law focuses on clear, visual representations, this can limit the registrability and scope of protection of designs that derive value from dynamic, sensory and affective experiences. In the following section we argue for a reassessment of design law in light of this.

2. The embodied and affective

IP is ostensibly largely about the disembodied – the rational abstract thing that is applied to objects.[126] For example, the author creates the ethereal work that can be copied, a designer creates a design applied to an object, an inventor invents something that is reduced to abstraction. The creation has the air of the objective or the authoritative – it is a sculpture, model, drawing or claim reduced to an intellectual 'master' form that defines the contours of the IP. IP is not the irreducible, dependent on context, or the embodied. IP is also not the natural – if anything, it is the mastery of nature. IP cannot stem from amorphous or fluid communal creatorship, but only identifiable individuals.

Historically, the rational and the disembodied and the individual, have been coded masculine.[127] Men have agency, and with this they are constructed as masters of nature, capable of creating the objective or authoritative and culture.[128] In contrast, women have been constructed in the binary, as emotional and tied to bodily experiences and knowledge, intimately connected to nature and highly relational.[129] These binaries persist and women are still stereotyped and socialised to be more natural, emotional and communal. Consequently, the Western world tends to perceive forms of knowledge created in masculinised industries as being 'science' and 'technology',[130] and that created in feminised industries as being something else, often in the public domain.[131]

[124]Designs Act 2003 (Cth), s 6(1).

[125]Designs Act 1949 (UK), s 1(3); EC Regulation No 6/2002, Art 3(2).

[126]There are exceptions, such as *droit de suite.* See also the literature on the materiality of IP, eg K Bowrey 'Reinventing Barbie: aspirations for a feminist intellectual property' in Lai and Bowrey, above n 2, p 15; JC Lai and A Maget Dominicé *Intellectual Property and Access to Im/material Goods* (Cheltenham: Edward Elgar, 2016); B Sherman *Intangible Intangibles: Patent Law's Engagement with Dematerialised Subject Matter* (Cambridge: Cambridge University Press, 2024).

[127]IM Young 'The ideal of community and the politics of difference' (1986) 12(1) Social Theory and Practice 1; M Thornton 'Authority and corporeality: the conundrum for women in law' (1998) 6(2) Feminist Legal Studies 147 at 153; J Acker 'Hierarchies, jobs, bodies: a theory of gendered organizations' (1990 4(2) Gender and Society 139.

[128]V Plumwood *Feminism and the Mastery of Nature* (London: Routledge, 1993); E Fox Keller *Reflections on Gender and Science* (New Haven, CT: Yale University Press, 1985) pp 33–42; G Lloyd 'Reason, science and the domination of matter' in E Fox Keller and HE Longino (eds) *Feminism and Science* (Oxford: Oxford University Press, 1996); C Battersby *Gender and Genius: Towards a Feminist Aesthetics* (London: Women's Press, 1989).

[129]Young, above n 127, at 3; SB Ortner 'Is female to male as nature is to culture?' (1972) 1(2) Feminist Studies 5; Wajcman, above n 3, pp 5–6.

[130]Fox Keller, above n 128, pp 43–67 and 75–94; S Harding 'Postcolonial and feminist philosophies of science and technology: convergence and dissonances' (2009) 12(4) Postcolonial Studies 401 at 410.

[131]N Hartsock 'Rethinking modernism: minority vs majority theories' (1987) Cultural Critique 187; TL Gearhart-Serna 'Women's work, women's knowing: intellectual property and the recognition of women's traditional knowledge' (2010) 21(2) Yale Journal of Law and Feminism 372; LA Foster 'Situating feminism, patent law, and the public domain' (2011) 20 Columbia Journal of Gender & Law 262.

As argued herein, this binary is present within design law and its application, with the law favouring the masculine-coded aspects of design (the disembodied and static, relating to the technical) over the feminine-coded aspects (the embodied, relating to the dynamic, sensory and affective, including through the use of the natural).[132] Yet, much design is centred around affect – it draws embodied and emotional response, whether inherent or not, physiological or cognitive.[133] It connects to people and connects people.

In light of the gendered nature of design law and practice and how they reflect the disembodied/embodied and authoritative/affective binaries, we turn now to feminist thought regarding the body and affect and now it helps us to think about design law and what it protects and how it protects it. A strong and long line of feminists have argued that it is part of the feminist project to dismantle the belief that science and scholarship finds objective truths – what Donna Haraway has described as a 'god trick'; a view from above, free from social, political and historical contingencies.[134] Instead, they have argued that knowledge and perception are determined by one's situated and embodied viewpoint (standpoint theory), because one's situation and embodied self form the lenses through which one perceives and relays one's surroundings. This might range from the fact that one's life affects what one finds salient, to the fact that one's knowledge basis shapes what can be perceived and 'known'. For example, if one comes from a culture without integers, this has an impact on the way one thinks and perceives experiences.[135]

If we translate the foregoing into design law and practice, designs are represented the way they are because of a history of seeing certain representations – those used in science and engineering – as embodying an abstract master truth. After all, design law has largely protected technical aspects of designs in men-dominated industries, and the Western world sees knowledge from those industries (and representations of that knowledge) as 'objective'. However, those representations are the god trick. Moreover, those representations, in turn, form part of the lenses through which we consider designs and design protection. They obscure design in movement, in the fluid and, consequently, in digital things, as well as in the sensory and affective, to the point that we do not see protectable designs in such things.

But perhaps we should see protectable elements of design in the dynamic, sensory and affective. Affect theory suggests that a design's emotional impact is often tied to its ambiguity or the way it stimulates the imagination.[136] Thus, when a design is reduced to a clear, static representation, some of its affective power is inevitably lost. This is exemplified by the *Trunki* case discussed above,[137] which involved

[132]There is a significant body of feminist literature on affect and how theory about affect is arguably an offshoot of feminist scholarship on embodied and situated experiences and perspectives, which criticises the the belief that any perspective can be disembodied and objective. See eg S Ahmed *The Cultural Politics of Emotion* (Edinburgh: Edinburgh University Press, 2004); L Åhäll 'Affect as methodology: feminism and the politics of emotion' (2018) 12 Interntaional Political Sociology 36; C Pedwell and A Whitehead 'Affecting feminism: questions of feeling in feminist theory' (2012) 13(2) Feminist Theory 115; C Hemmings 'Affective solidarity: feminist reflexivity and political transformation' (2012) 13(2) Feminist Theory 147; BS Stengel 'Sex/gender and affect/emotion' (23 February 2021) *Oxford Research Encyclopedias, Education.*

[133]See eg 'Special Issue on Design & Emotion' (2009) 3(2) International Journal of Design; 'Special Issue on Design and Emotion' (2009) 20(5) Journal of Engineering Design; AG Ho and KWM Siu 'Emotion design, emotional design, emotionalize design: a review on their relationships from a new perspective' (2012) 15(1) The Design Journal 9.

[134]D Haraway 'Situated knowledges: the science question in feminism and the privilege of partial perspective' (1988) 14(3) Feminist Studies 575. See also S Harding 'Rethinking standpoint epistemology: what is "strong objectivity?"' (1992) 36(3) The Centennial Review 437; D Haraway 'Animal sociology and a natural economy of the body politic, Part II: the past is the contested zone' (1978) 4(1) Signs: Journal of Women in Culture and Society 37; and HE Longino and R Doell 'Body, bias, and behaviour: a comparative analysis of reasoning in two areas of biological science' (1983) 9(2) Signs: Journal of Women in Culture and Society 206; E Martin 'The egg and the sperm: how science has constructed a romance based on stereotypical male-female roles' (1991) 16(3) Signs: Journal of Women in Culture and Society 485.

[135]MC Frank et al 'Number as a cognitive technology: evidence from Pirahã language and cognition' (2008) 108(3) Cognition 819.

[136]JD Mayer et al 'Perceiving affective content in ambiguous visual stimuli: a component of emotional intelligence' (1990) 54(3–4) Journal of Personality Assessment 772; WS-W Tseng 'Can visual ambiguity facilitate design ideation?' (2018) 28 International Journal of Technology and Design Education 523.

[137]*MS International Group plc v Magmatic Ltd*, above n 98.

designs that were playful and imaginative – colourful ride-on suitcases designed to appeal to children. Yet, the greyscale drawings used for registration failed to capture the full imaginative appeal of the product, leading to a legal interpretation that did not fully protect the designs' emotional and sensory dimensions. The law's focus on visual and structural clarity can result in decisions that overlook a design's more intangible, affective qualities. These designs can carry significant emotional and socio-cultural value, such that we should consider the ramifications of design law and practice not protecting them because they do not fit neatly into a legal framework designed to protect industrial products.

Thus, taking affect seriously, we should acknowledge the socially constructed nature of what is protected by design law (that is, the human decisions around what to protect and how to protect it), which would open up the discourse to thinking about whether the way we represent designs could be different and it could (and whether it should) protect aspects of design that are dynamic, sensory and affective. This, in turn, begs the question of whether there is a reason why design should not protect movement, the fluid, digital things, the sensory or the affective – a question that can only be answered in relation to the rationales for design law, be they incentive based, utilitarian, or based on happiness. To illustrate, presuming that design rights do indeed serve an incentive function, what is it that we might want to incentivise? What are the economic advantages and disadvantages of design protection for movement, the fluid, digital things, the sensory or the affective? What are the affective results of design protection? And, if the scope of design right subject matter is expanded, do other aspects of design law (such as the novelty standard, exclusive rights, exceptions or protection term) need to be adjusted to ensure balance? These are all larger questions worthy of investigation. Suffice it to say that one can take neither what can be protected (and how it is protected) by design law, nor the justifications for such protection, as something inherent and free from potential gender bias.

Of course, proponents of extant design law and practice might argue that prioritising uniformity and precision in design law is necessary to maintain consistency and fairness across applications and legal disputes, and to provide the necessary balance between clarity and innovation. They might also contend that introducing more subjective elements, such as embodied sensory and emotional impact, could make legal evaluations more complex and result in unpredictable outcomes. However, while consistency is important, it should not come at the cost of failing to protect the full range of qualities that make designs meaningful and successful, unless there is a good reason for this failure. This is particularly true when one factors in the gendered nature of the current distinction between what can and cannot be protected and how this is reinforced by rules around design illustrations. Moreover, arguments to sustain the status quo in the name of 'objectivity' and consistency ignore the socio-legal reality that one is always dealing with designs in context, which becomes apparent when judges struggle to assess design registrations on paper compared to designs in the world. There has always been a subjective element to design that the technical illustrations for design registration have obfuscated. Acknowledging this, the law and its practice should be reassessed, and should possibly adapt to accurately reflect and protect the full (or at least a broader) range of creative expression.

Finally, it is worth noting that the NZ Designs Act 1953 has not been substantively amended since its enactment and this brings with it many problems, but not the problems we highlight in this paper. After all, the *Trunki* decision was from the UK Supreme Court on an EU design registration. In addition, Australian legislation is significantly newer, but design law and practice remain similar in their focus on static visual assessment and comparisons. While developments in the EU resolve some of the concerns we discuss by including movement/transition, these continue to rely on static representations. Furthermore, these EU developments have not been translated into UK law, and the NZ legislature has shown little appetite to modernise design law. That is, all the jurisdictions discussed in this paper could address the issues raised in this paper. The exact manner in which they could do so lies outside the remit of this paper. However, we tentatively propose that design law could move beyond 'eye appeal/judgment', and it could do so by taking advantage of developments in technology that allow more embodied and affective representations, including depictions that move, virtual reality and augmented reality. This remains an avenue for future research.

Conclusion

Design law, like other areas of IP law, is not prima facie gendered (though, due to the age of the legislation, the Designs Act 1953 still refers to 'he'/'him'). However, while the classes that one can get design rights in are quite broad, the case law analysed in this paper shows that design law shares more requirements with patent law for inventions than copyright for artistic works, and designs are illustrated in a static two-dimensional way that favours technical features. This favouring of the technical affects how the design system is used, as exemplified by filings and cases in NZ, and implicitly means that design law ignores the dynamic, sensory and affective. Whereas men are often stereotyped as more technically inclined, women are socially cast as more fluid, sensitive and emotional. Thus, design law is incidentally gendered. It places value in designs that can be captured in technical illustrations, thereby incentivising these. However, it does not place value in or incentivise design features relating to the dynamic, sensory and affective.

The limitations of design law and practice identified in this paper should prompt a reconsideration of the scope of traditional design law. If the law and its practice inadvertently limit the ability to fully capture the dynamic, sensory and emotional dimensions of a design, which contribute to the economic and socio-cultural value of a design, there is a need to reconsider how we approach design protection. This is particularly the case when we recognise that the challenges in protecting designs that rely on dynamic, sensory and affective qualities are deeply intertwined with gendered biases that prioritise masculine-coded qualities like functionality, clarity and structure over the feminine-coded qualities of emotional resonance, sensory experience and fluidity. Unless there are good reasons for not doing so, addressing the oversight of design law and its practice is essential to ensuring that design law more fully safeguards the aesthetic and emotional aspects of design, rather than perpetuating biases that devalue feminine-coded qualities like colour, as well as texture and emotional impact.

Thus, a broader, more inclusive legal framework would be needed to value all aspects of design. While not discussed in this paper, it is worth investigating whether such a framework would benefit other marginalised groups, such as Indigenous peoples; after all, as we note, current law and practice is not only masculine, it is also Western. The counterargument to a more inclusive framework would likely be that this would introduce subjective elements into design law, which could complicate proceedings and lead to inconsistencies. However, this view overlooks the fact that designs are never merely objective or static technical objects. Designs are always socially embedded and embodied artefacts that engage with human emotions and senses, and the law and its practice should arguably reflect this socio-legal reality.

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