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DIXON v R – PROPERTY IN DIGITAL INFORMATION?

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In 2015, New Zealand's Supreme Court ruled in Dixon v R *that digital files are property for the limited purposes of a computer misuse provision – s 249(1)(a) of the Crimes Act 1961. The Court said it was distinguishing digital files from pure information, thus it was not challenging the long-standing legal position that information cannot be property. This paper analyses the Court's purposive, conceptual and factual reasoning, ultimately concluding that a distinction between digital files and information is difficult to justify. It argues that the Court's decision therefore actually erodes the traditional legal position. It concludes that Parliament, which can more fully explore policy considerations, might be better placed to determine whether digital files should be property. Potential ramifications of the Supreme Court's decision are also briefly outlined.*

Key words: property; digital files; information; Crimes Act 1961 s 249(1)(a); computer misuse

I Introduction

New Zealand's Supreme Court ruled in *Dixon v R* that digital files are not simply information, but are "property" for the purposes of s 249(1)(a) of the Crimes Act 1961.[1] In doing so the Court expressly stated that it was not reconsidering the orthodox legal position that there is no property in pure information.[2] Instead it used a purposive approach to determine Parliament's intent regarding computer misuse, and deemed digital files to be property for the limited purpose of s 249(1)(a). It supported this approach with some discussion of the factual characteristics of digital files, finding that they have a material presence. It also stated that digital files display some classic characteristics of property, being identifiable, transferable, capable of being owned, and capable of having value.[3]

This paper will firstly describe the facts of the case and the outcome in the District Court, where a jury was simply directed that digital files are property. It will then outline the reasoning of the Court of Appeal, which found that digital files are indistinguishable from information and thus incapable of being property. It will then examine the reasoning of the Supreme Court, which overturned the Court of Appeal's decision.

1 *Dixon v R* [2015] NZSC 147.
2 *Dixon v R* (SC), above n 1, at [24]; *Oxford v Moss* (1979) 68 Cr App R 183.
3 *Dixon v R* (SC), above n 1, at [25] and [38].

This paper will then explore the Supreme Court's position that digital files are sufficiently distinguishable from information to be labelled property. It will examine the Court's purposive, conceptual and factual rationales for its position and argue that, with respect, they fail to adequately distinguish digital files from recorded information. The Court's decision thus infringes on the orthodox position that there is no property in information, and does not provide an adequate basis for digital files to be property. Finally, this paper will highlight some potential ramifications of *Dixon.* It will conclude that with the distinction between digital files and information being tenuous, and the ramifications of *Dixon* being potentially widespread, it should be left to Parliament to expressly state whether or not digitally stored data should be property under the Crimes Act.

II The Facts

Jonathan Dixon was a bouncer employed by a firm providing security services for Base Ltd.[4] Base had installed CCTV at its Queenstown business, Altitude Bar.[5] During the 2011 Rugby World Cup, Base's CCTV cameras captured video footage of the England squad's vice-captain, who was married to British royalty, socialising with a woman at the bar.[6] Dixon asked Base's receptionist to compile the footage, which she did, believing Dixon needed it for legitimate purposes.[7] She saved the file on her work computer at the bar's reception area.[8] Dixon downloaded the compilation file from that computer onto his own USB stick.[9] He deleted the compilation file on the computer,[10] however Base retained the original CCTV footage at all times.[11] Dixon tried unsuccessfully to sell the compiled footage, then posted it online where it was picked up by the media.[12]

Dixon was subsequently charged with obtaining "property" under s 249(1)(a) of the Crimes Act

4 *Dixon v R* [2014] NZCA 329, [2014] 3 NZLR 504 at [4].
5 At [4].
6 At [5].
7 At [6].
8 At [6].
9 At [6].
10 *R v Dixon* DC Invercargill CRI-2011-059-1122, 17 April 2013 at [14] as cited in *Dixon v R* (CA), above n 4, at [19].
11 *Dixon v R* (CA), above n 4, at [20].
12 At [7].

1961.[13] Section 249(1) states:[14]

> 249 Accessing computer system for dishonest purpose
>
> (1) Every one is liable to imprisonment for a term not exceeding 7 years who, directly or indirectly, accesses any computer system and thereby, dishonestly or by deception, and without claim of right,–
>
> (a) obtains any property, privilege, service, pecuniary advantage, benefit, or valuable consideration; or
>
> (b) causes loss to any other person.

Property is defined in s 2(1) of the Crimes Act:[15]

> **property** includes real and personal property, and any estate or interest in any real or personal property, money, electricity, and any debt, and any thing in action, and any other right or interest[.]

In the District Court, Dixon's counsel argued that the compilation file did not fall within the definition of property in the Crimes Act, however Judge Phillips disagreed and directed the jury that the file was property.[16] Dixon was found guilty.

The Court of Appeal, however, unanimously held that the file could not be property because it was "indistinguishable in principle from pure information", the orthodox legal position being that there is no property in pure information.[17] It substituted a conviction for obtaining a benefit under s 249(1).[18]

Dixon appealed this decision to the Supreme Court, dismissing his counsel shortly before his appearance there.[19] The Supreme Court therefore did not hear oral arguments on his behalf on the issue, though it was able to see his counsel's written submissions.[20] It overturned the Court of Appeal's decision and reinstated that of the District Court, asserting that digital files are property and not information for the purposes of s 249(1)(a) of the Crimes Act.[21]

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13 At [8].
14 Crimes Act 1961, s 249(1).
15 Section 2(1).
16 *Dixon v R* (CA), above n 4, at [11]–[12].
17 *Dixon v R* (CA), above n 4, at [31].
18 At [49].
19 *Dixon v R* (SC), above n 1, at [24].
20 At [24], n 26.
21 At [72].

III The Issue

The issue for the courts was whether a digital file is property for the purposes of s 249(1)(a) of the Crimes Act.

IV The Court of Appeal's Decision

The Court of Appeal noted that s 249 was one of several sections introduced in 2003, aimed at modernising Part 10 of the Crimes Act by establishing provisions against computer misuse.[22] The Court noted that cl 19 of the Crimes Amendment Bill originally contained a different definition of property specifically for these offences:[23]

> Property includes real and personal property, and all things, animate or inanimate, in which any person has any interest or over which any person has any claim; and also includes money, things in action, and electricity.

However, upon Law and Order Select Committee recommendation that definition was abandoned, as it would result in two different definitions of property existing for different provisions in the same Act.[24] French J speaking for the Court noted that instead, Parliament amended the existing definition of property in Crimes Act.[25]

The Court relied on the long-standing common law orthodoxy that there is no property in information, even confidential information.[26] It did so because it considered that when amending the definition of property in 2003, Parliament must have been aware of the orthodox position, and would have expressly included computer data had it intended to change it.[27] French J commented that instead, "the amendment was limited. It consisted only of the addition

22 *Dixon v R* (CA), above n 4, at [14]; Crimes Act, ss 217–230; Crimes Amendment Act 2003.
23 Crimes Amendment Bill (No 6) 1999 (322-2) cl 19 as cited in *Dixon v R* (CA), above n 4, at [17].
24 *Dixon v R* (CA), above n 4, at [17].
25 *Dixon v R* (CA), above n 4, at [16] and [35].
26 See *Oxford v Moss*, above n 2; *Stewart v R* [1988] 1 SCR 963; *TS & B Retail Systems Pty Ltd v 3Fold Resources Pty Ltd* (No 3) [2007] FCA 151, 239 ALR 117; *Taxation Review Authority 25* [1997] TRNZ 129 as cited in *Dixon v R* (CA), above n 4; David Harvey "Theft of data? Judge David Harvey contemplates the decision in Dixon" [2014] NZLJ 354 at 355; Jennifer Davies *Intellectual Property Law* (4th ed, Oxford University Press, Oxford, 2012) at 96.
27 *Dixon v R* (CA), above n 4, at [35].

of money and electricity".[28] In the absence of any express statutory direction therefore, the Court reasoned that case law supported a distinction between information, which cannot be property, and the medium it is stored on, which can be property.[29] The Court conceded that a digital file has a material existence in a way that pure information does not.[30] However it ultimately decided that information stored electronically on a computer is simply a "stored sequence of bytes" that cannot be meaningfully distinguished from pure information.[31]

French J acknowledged some criticism of the orthodox position.[32] For instance, information may be very valuable.[33] However she asserted that any illogicality was outweighed by policy, because the free flow of information and speech would be impeded if information could be property.[34] She also noted that the Law Commission's May 1999 report *Computer Misuse* considered whether information should be redefined as property, and she concluded that "Parliament presumably decided not to enact such a change".[35]

French J also noted that s 230 of the Crimes Act specifically prohibits taking, copying or obtaining trade secrets.[36] She argued that if confidential information falls under the scope of property as defined in s 2, s 230 would be superfluous.[37]

Finally, the Court of Appeal considered whether treating digital files as information frustrated Parliament's purpose.[38] Since s 249 prohibits accessing a computer to obtain property, it explored what types of property Parliament might have envisaged, if not digital files.[39] The Court concluded that s 249 targets situations such as accessing a computer to use someone else's credit card without authorisation to purchase goods.[40] It found that Parliament's purpose of criminalising computer misuse would not be frustrated if Dixon was deemed to have obtained a "benefit" rather than "property" under s 249(1)(a), and amended his conviction accordingly.[41]

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28 At [35].
29 At [30] and [36].
30 At [30].
31 At [31].
32 At [33]–[34].
33 JC Smith "Theft: *Oxford v Moss*" [1979] Crim LR 119.
34 *Dixon v R* (CA), above n 4, at [33]–[34].
35 *Dixon v R* (CA), above n 4, at [35], n 20; Law Commission *Computer Misuse* (R54, 1999) at [36].
36 *Dixon v R* (CA), above n 4, at [37].
37 At [37].
38 At [38]–[39].
39 At [38]–[39].
40 At [38]–[39].
41 At [39].

The Court described the benefit Dixon gained as the opportunity to sell the footage, which, while not property, was still valuable and saleable.[42]

V The Supreme Court's Decision

The Supreme Court unanimously decided the file was property and not simply information, expressly stating that it was not reconsidering the orthodox position that information is not property.[43] The Court used three broad approaches to reach its finding. Firstly, it took a purposive approach, noting that the meaning of property varies with context, and examining the statutory scheme to determine Parliament's intent in enacting the new computer misuse provisions. Secondly, the Court used a conceptual approach, characterising property (and digital files) as capable of being owned and having value, and being identifiable and transferrable.[44] Thirdly, it undertook a factual analysis, asserting that digital files have a certain "material presence" possibly sufficient to amount to tangibility,[45] before deciding that tangibility was irrelevant under the s 2 definition of property.[46] As part of this factual analysis, the Court investigated how the issue of tangibility had been treated in the US and the UK. It was this discussion, which left the door open for digital files to be tangible property in New Zealand, that may have ramifications for the torts of conversion and trespass to goods.

A closer examination of the Court's three approaches reveals that they are, with respect, an inadequate basis for classifying digital files as property.

A The Supreme Court's Purposive Approach

The Supreme Court outlined its task as determining the meaning of "property" in s 249(1)(a) of the Crimes Act in light of the definition of property in s 2, emphasising the basic statutory interpretation principle that provisions must be construed purposively and applied to circumstances as they arise.[47] Combined with technologically neutral legislative drafting, a purposive approach is arguably the best way for courts to ensure the law keeps pace with rapidly

42 At [46].
43 *Dixon v R* (SC), above n 1, at [23]–[25].
44 At [25], [38] and [39].
45 At [39].
46 *Dixon v R* (SC), above n 1, at [50]; Crimes Act, s 2.
47 *Dixon v R* (SC), above n 1, at [33].

evolving technologies.[48] There are several problems with the Court's purposive reasoning here however.

The Supreme Court examined Parliament's purpose in amending the definition of property in s 2(1) of the Crimes Act in 2003, just as the Court of Appeal did. The Supreme Court considered the amended definition (set out above at page 4) to be:[49]

> (a) inclusive rather than exclusive;
> (b) circular, in that property is defined as including "real and personal property"; and
> (c) in wide terms. In particular, it includes tangible and intangible property.

The Supreme Court then contemplated the background to the introduction of the new computer misuse provisions. It noted that the explanatory note to the Crimes Amendment Bill focused on the idea of being deprived of property, rather than on the idea of "things capable of being stolen",[50] which had previously underpinned property offences in the Crimes Act.[51]

Arnold J speaking for the Court stated that had the very wide definition of property proposed in cl 19 of the Crimes Amendment Bill been retained, digital files would be included, being "things" in which a person may have an "interest".[52] He noted, as had the Court of Appeal, that the cl 19 definition was abandoned upon Select Committee recommendation because it would result in two different definitions of property existing in the same Act.[53] However unlike the Court of Appeal he asserted that the proposed definition in cl 19 was never intended to be narrowed down when the decision was made to simply update the s 2 definition instead.[54] Thus the Supreme Court considered that s 2 was wide enough to include digital files.

The difference in the two higher courts' approaches stems from their different views of digital files. The Court of Appeal considered that digital files are essentially information and so focused on their lack of express inclusion in s 2. The Supreme Court considered digital files to

48 Lyria Moses "Recurring Dilemmas: The Law's Race to Keep Up with Technological Change" (2007) JLTPP 240 at 279.
49 *Dixon v R* (SC), above n 1, at [11]; Crimes Act, s 2(1).
50 *Dixon v R* (SC), above n 1, at [27]; Crimes Amendment Bill (No 6) 1999 (322-2) cl 19 (explanatory note) at iv.
51 "Dixon v R – Game Over for Digital Property? I Think Not" (20 November 2015) The IT Countrey Justice <www.theitcountreyjustice.wordpress.com>
52 *Dixon v R* (SC), above n 1, at [29].
53 *Dixon v R* (SC), above n 1, at [29]; *Dixon v R* (CA), above n 4, at [17].
54 *Dixon v R* (SC), above n 1, at [29].

be distinct from pure information and so was comfortable with including them in what it described as an inclusive, wide definition of property in s 2. However, this definition may be narrower than the Supreme Court believed. Property surely cannot spring from just any right or interest, it must require a legal right or interest, yet the Court did not point to any legal rights or interests that exist in digital files apart from the very property rights it was creating. Its reasoning is thus somewhat circular.

Another problem with the Supreme Court's approach lies in its analysis of s 248, the interpretation section for the computer misuse provisions of ss 249–252. It noted that under s 248, to "access" includes to "receive data from" a computer system.[55] A computer system is defined to include any computer, part of a computer, or related "stored data".[56] Arnold J said from these definitions, there could be no doubt that Dixon accessed a computer system when he copied the compilation file from Base's computer.[57]

As some commentators have pointed out, however, holding that a digital file is property leads to a "strained construction" of s 249(1)(a), which under the Supreme Court's reasoning translates to receiving data from stored data and thereby dishonestly obtaining data which has somehow morphed into property.[58] That is, it supposes that Parliament is treating digital files as "stored data" in s 248 and as "property" in s 249. This is inconsistent, and a questionable interpretation.[59] Analysts McMeekin and French suggest that a more natural reading of s 249(1)(a) is that it prohibits accessing (receiving data from) a computer system (stored data) and thereby dishonestly obtaining property (something different from the received data).[60] This aligns with the Court of Appeal's reasoning that dishonestly obtaining property under s 249(1)(a) is aimed at situations such as where offenders access computer systems, gain credit card details, then make unauthorised

55 *Dixon v R* (SC), above n 1, at [9]; Crimes Act, s 248.
56 *Dixon v R* (SC), above n 1, at [9]; Crimes Act, s 248.
57 *Dixon v R* (SC), above n 1, at [10].
58 Suzanna McMeekin and Mike French "*Dixon v R* – What a Load of Hogwarts!" *AUTLaw* (online ed, Auckland, Autumn 2016) at 2.
59 McMeekin and French, above n 58, at 2.
60 McMeekin and French, above n 58, at 2.

purchases.[61]

Another problem arises from the Supreme Court's holding that the word "property" was included in s 249 for a wider purpose than situations such as fraudulent use of credit card details.[62] The Supreme Court reasoned that because such an act would be caught by s 240 (obtaining by deception), the new computer misuse provisions of ss 249–252 must capture something more.[63] It asserted that Parliament was contemplating stored data when introducing the new provisions, evidenced by references to "computer system", "software" and "stored data" in ss 248 and 250.[64] The Court reasoned that since "access" under s 248 includes receiving data even if that data is not permanently removed, Parliament wished to punish mere copying and did not require data deletion.[65] The Court deduced that if Parliament wanted to punish copying stored data according to the interpretation section for Part 10 (s 217) and the interpretation section for ss 249–252 (s 248), at least one of those four new provisions must prohibit copying stored data.

The Court ruled out s 252 because that section only prohibits accessing a computer system (receiving data from stored data) without authorisation.[66] This seems correct, as Dixon likely had Base's authorisation to access the computer for work but just went beyond the authorisation's scope, which Parliament explicitly allows in s 252(2).[67] However, the existence of s 252 provides a strong argument that Parliament did not wish to make people liable for copying data beyond the scope of their authorised access at all - just as s 252(2) explicitly says. This is a more natural reading of Part 10 and its legislative history than holding that a digital file, which comprises only data after all, is property. Tellingly, in *Computer Misuse* the Law Commission argued that the criminal sanction should punish employees gaining unauthorised access to information held on a computer.[68] By enacting s 252(2), Parliament

61 *Dixon v R* (CA), above n 4, at [38]–[39].
62 *Dixon v R* (SC), above n 1, at [34].
63 At [34].
64 At [35]–[36].
65 At [35].
66 At [36].
67 Crimes Act, s 252(2).
68 Law Commission *Computer Misuse*, above n 35, at [19].

has clearly pared back this suggestion, the implication being that it would over-extend the reach of the criminal law.

The Court ruled out s 250 because copying data is not modifying, damaging or interfering with it.[69] Section 250 criminalises intentionally or recklessly damaging or interfering with a computer system without authorisation. Subsection (2) specifically includes deleting any data. Unlike s 252, it is not the access that needs to be unauthorised for liability, but the act of deletion. The Supreme Court did not think merely copying data from a computer could amount to damage or interference, so quickly dispensed with this section. However, Dixon did not merely copy data, he deleted the compilation file from Base's computer.[70] Even though the raw CCTV footage remained, deleting the compilation file amounts to deleting data. In trying to include digital files as property to shore up its purposive argument, the Court overlooked a provision that would expressly cover the facts of this case. Such an interpretation moreover would not require a strained interpretation of a digital file as "property".

Section 251 involves making, selling, distributing or possessing software to commit a crime, so was irrelevant to this case. Therefore the Court selected s 249 as the best fit, and settled on an offence of obtaining property under that section as a more natural fit with what Dixon did than obtaining a benefit.[71] As noted above, it requires a strained interpretation to hold that data is property under s 249(1)(a). A more natural reading of ss 249-252 would therefore be that Parliament required something more than merely copying data from a computer to which access has been authorised, for liability to arise.

A further issue with the Supreme Court's interpretation stems from its finding that material

69 *Dixon v R* (SC), above n 1, at [36].
70 Dixon v R (CA), above n 4, at [19].
71 *Dixon v R* (SC), above n 1, at [36]–[37].

stored electronically on a computer is a "document" under s 217(c) of the Crimes Act.[72] That definition of a document includes:[73]

> (c) any disc, tape, wire, sound track, card, or other material or device in or on which information, sounds, or other data are recorded, stored (whether temporarily or permanently), or embodied so as to be capable, with or without the aid of some other equipment, of being reproduced[.]

The Supreme Court did not say what the point of holding that a digital file is a document was. Possibly it was to critique the Court of Appeal's holding that a digital "document" such as Microsoft Word creates may look analogous to a paper document to humans, but is in reality just a sequence of bytes used to present an image on a screen.[74] Although the Supreme Court's interpretation of s 217(c) was correct, this leads to a logical anomaly.

Documents have a tripartite nature, which can be illustrated by considering a paper document. Firstly, a paper document consists of physical paper and ink, which may have some intrinsic value. The physical document is obviously property, and if unlawfully taken will be considered theft under s 219 of the Crimes Act. Secondly, a document also contains a physical form of expression, such as written words or musical notation. This is closely entwined with the third element, which is the information that the notation encodes. Thus Anderson J in *R v Misic* referred to binary symbols, similarly to the English language or Morse code, as a "method of notation" of information onto a storage medium.[75] All three elements together comprise a document. Commonly however, all of a document's value to its owner lies in the information, which cannot be property under the law. Nor is copying the form of notation and the information it encodes considered to be taking property by law. If a document is copied, for example, without the original being permanently removed, this is not theft.[76]

"Document" is expressly defined in the Crimes Act to ensure that offenders who misuse documents in order to commit forgery, fraud, or theft *of something other than the document* are caught.[77] So as the Supreme Court correctly pointed out, Parliament updated s 217(c) in 2003 to ensure data stored on computers was deemed a document.[78] Parliament did so because the

72 *Dixon v R* (SC), above n 1, at [31].
73 Crimes Act, s 217(c).
74 *Dixon v R* (CA), above n 4, at [31].
75 *R v Misic* [2001] 3 NZLR 1 (CA) at [32]; *Dixon v R* (SC), above n 1, at [31].
76 *Oxford v Moss*, above n 2.
77 See Law Commission *Computer Misuse*, above n 35, at [58]–[67].
78 *Dixon v R* (SC), above n 1, at [30]–[31].

Law Commission had noted that while the previous definition included any "disc", the wide array of types of computers might lead a court to conclude that data had not located on a disc, or that data had been contained in a computer's impermanent memory, rather than in its permanent storage (the two are distinct).[79]

The logical anomaly then is that if a digital file is a document - as it must be under s 217(c) - then copying it as Dixon did should not be seen as obtaining property at all. Nothing in s 249 or the related provisions suggests that dishonestly copying a document that does not contain a trade secret is taking property. Dixon did delete the compilation file, but nothing turned on this for the Supreme Court, which seems tacit agreement with the Court of Appeal's comment that the deletion was irrelevant because Base retained the original footage.[80] As McMeekin and French note, all the value of what Dixon took lay in the recorded information, not in the file's material aspects.[81]

There may of course be copyright attached to a form of expression of information, in which case the law treats copying it as copyright infringement.[82] If the information is a trade secret it will be dealt with under s 230 of the Crimes Act, as the Court of Appeal noted, separately and distinctly[83]. Section 230 expressly refers to a trade secret as information that is secret and potentially valuable,[84] and uses the language of taking, obtaining, or copying any document, model or other depiction of a trade secret.[85] The section's wording thus actually supports the distinction between information, which cannot be property, and the medium it is stored on, which is capable of being property and therefore capable of being unlawfully taken. Similarly, if the information is a patented idea it will be protected under the Patents Act 2013. If the information is confidential, the equitable action of breach of confidence may protect it.[86]

Significantly, the Supreme Court's reasoning did not rely on the defendant obtaining any intellectual property (IP) in the file. While it is uncertain whether raw CCTV footage would meet even the low threshold of originality required in New Zealand for copyright protection,

79 Law Commission *Computer Misuse*, above n 35, at [62]–[67]; Dong Ngo "Digital storage basics part 1: Internal storage vs memory" (24 April 2014) CNET <www.cnet.com>.
80 *Dixon v R* (CA), above n 4 at [20].
81 McMeekin and French, above n 58, at 2.
82 *Laws of New Zealand* Intellectual Property: Copyright (online ed) at [1].
83 *Dixon v R* (CA), above n 4, at [37]; Crimes Act s 230.
84 Crimes Act, s 230(2).
85 Crimes Act, s 230(1).
86 *Laws of New Zealand* Tort: Breach of Confidence (online ed) at [326].

the compilation file would certainly attract copyright because that footage was purposefully selected and collated.[87] Dixon undoubtedly infringed Base's copyright in the compilation file therefore when he copied it onto his USB stick, and likely breached copyright criminally when he uploaded the file onto the internet.[88] However the Supreme Court, in confining itself to s 249(1)(a) of the Crimes Act, considered the file to be property distinctly and separately from any IP. The effect of its judgment is that if a person acts as Dixon did, but the digital file contains no IP, that person is still liable for obtaining property (namely, the file itself) under s 249(1)(a).

As already noted, the Supreme Court did not consider that it was deeming information to be property. However the above analysis shows that its purposive argument for holding that digital files are not simply information was, with respect, flawed. Arguably, digital files are merely information in recorded form.

Did Parliament therefore actually intend to encroach upon the orthodox position, and class information recorded in digital form as property for the purpose of criminalising computer misuse? McMeekin and French note that while s 2 is very broad, nothing in the computer misuse provisions or in the legislative background leading up to Part 10 suggests that Parliament intended information to come within its scope.[89] This is supported by a Law Commission report on electronic commerce released in November 1999, the same year the Commission released *Computer Misuse*.[90] The e-commerce report expressly considered whether information should be re-classed as property in civil law, and ultimately concluded that it should not.[91] One of its reasons was that, if information were to be redefined as property for the purposes of the civil law, the civil law would outstrip its criminal counterpart relating to property offences.[92] This shows that the Law Commission, having already written *Computer Misuse* that led to Parliament's enactment of Part 10, did

87 Susy Frankel "The Copyright and Privacy Nexus" (2005) 36 VUWLR 507 at 517-518.
88 Copyright Act 1994 ss 30 and 131(1)(f).
89 McMeekin and French, above n 58, at 2.
90 Law Commission *Electronic Commerce Part Two: A Basic Legal Framework* (R58, 1999); Law Commission *Computer Misuse*, above n 35.
91 Law Commission *Electronic Commerce Part Two*, above n 90, at [201] and [230].
92 Law Commission *Electronic Commerce Part Two*, above n 90, at [230].

not think information would become property for the purposes of the criminal law. Nor is there anything in Part 10 to suggest that Parliament decided otherwise.

The final problem with the Supreme Court's purposive approach lies in its discussion of the fact that in 2003 (the same year that the computer misuse provisions were brought into the Crimes Act), the definition of "goods" was amended in various consumer protection statutes to expressly include computer software "for the avoidance of doubt".[93] The Court noted that those amendments were recommended by the Commerce Committee, which considered whether software should be classified as a good or a service for the purposes of consumer protection laws, because the purchaser only receives a licence to use it.[94] The Committee decided that the interest a consumer has in software is sufficiently similar to the interest a consumer has in other types of IP, making the guarantees and remedies applicable to goods an appropriate fit.[95]

Certainly, this involves an instance of Parliament treating packages of electronic information, potentially transferred online and not via the sale of a physical storage medium, as goods, and doing so for a limited purpose. However, there is a danger in using consumer protection law provisions to connote a broader statutory context in this way. Arguably, the very fact that Parliament *expressly* included computer software in those provisions, in order to avoid doubt, supports the Court of Appeal's argument that if Parliament intended to challenge the orthodox position in the Crimes Act by including digital data in the definition of property, it would have done so expressly.

The Supreme Court's purposive approach therefore was, with respect, somewhat

93 *Dixon v R* (SC), above n 1, at [11]; Commerce Act 1986, s 2(1); Consumer Guarantees Act 1993, s 2(1); Fair Trading Act 1986, s 2(1); Sale of Goods Act 1908, s 2(1).

94 Commerce Committee *Consumer Protection (Definitions of Goods and Services) Bill 2001* (15 November 2002) at 4; *Dixon v R* (SC), above n 1, at [11].

95 Commerce Committee, above n 94, at 4; *Dixon v R* (SC), above n 1, at [11].

flawed, most notably because of its strained construction of s 249 and the logical anomaly flowing from a digital file being a document under s 217(c). The Court's approach of picking through sections to find the best fit for Dixon's actions has also been shown to be problematic. In summary, the Court's purposive approach arguably did not accurately reflect Parliament's intent.

B The Supreme Court's Conceptual Approach

The Supreme Court then considered property as a concept. It noted that Stringer J in *New Era Printers and Publishers Ltd v Commissioner of Stamp Duties* held that anything capable of being owned, sold and transferred fits both the legal and popular meanings of property.[96] The Supreme Court said Base's compilation file had value and could be sold.[97] It thus reinforced its purposive argument with a conceptual approach, contending that since digital files are capable of being owned, may have value, are identifiable and transferable, they can be property.[98] To support this, the Court stated that the Property Law Act defines property as anything capable of being owned, whether tangible or intangible.[99] This section will examine the Court's conceptual argument, and then raise a normative question.

Property rights are some of the strongest rights the law can bestow. They are enforceable against all the world, either by the rights-holder themselves under civil torts, or by the state via the criminal law.[100] In legal parlance therefore, property is often conceived of not as a thing, but as a collection of rights held in relation to that thing.[101] Clearly such rights cannot be unlimited –

96 *Dixon v R* (SC), above n 1, at [38]; *New Era Printers and Publishers Ltd v Commissioner of Stamp Duties* [1927] NZLR 438 (SC) at 444.

97 *Dixon v R* (SC), above n 1, at [39].

98 *Dixon v R* (SC), above n 1, at [25], [38] and [39].

99 *Dixon v R* (SC), above n 1, at [38]; Property Law Act 2007, s 4.

100 See FH Lawson and Bernard Rudden *The Law of Property* (3rd ed, Oxford University Press, Oxford, 2002) at 64–71; Richard Calnan *Proprietary Rights and Insolvency* (Oxford University Press, Oxford, 2010) at 44; Ben McFarlane *The Structure of Property Law* (Hart Publishing, Oxford, 2008) at 132.

101 Kevin Gray and Susan Francis Gray "The Idea of Property in Land" in Susan Bright and John Dewar (eds) *Land Law: Themes and Perspectives* (Oxford University Press, Oxford, 1998) 15 at 15; Robert Cooter and Thomas Ulen *Law & Economics* (6th ed, Pearson, Boston, 2012) at 73.

a car owner, for example, cannot run people over with impunity. Moreover, there is a closed list of rights so that each new owner need not negotiate for particular rights.[102] This is known as the *numerus clausus* principle – the law, not individuals, determines what rights are bestowed upon owners.[103] Property is thus entirely a social construct, and society is free to determine what is and is not included within its scope.

Whether property in the context of this case can really only consist of the right to own and transfer an identifiable and valuable resource, as the Supreme Court stated, firstly requires closer examination of ownership in particular, and property in general.[104]

1 Ownership and excludability

The Supreme Court left unspecified which property rights it thought comprise the ownership "bundle", such as the rights to use, alienate, or generate income from a resource. There are differing views on which rights amount to ownership. For example jurist Tony Honoré believes no single right, or "incident" of the eleven incidents of ownership he identified, is absolutely necessary for ownership as long as most are present.[105] On this view a digital file is capable of being owned, and if also capable of being identified and transferred as the Supreme Court said, may be classed as property.

Others argue however that the right to exclude others is the single indispensable element of property ownership.[106] If an owner has excludability, they have the right to choose who may and may not access their property. On this view, the Supreme Court must hold excludability within its ownership bundle.

Excludability here cannot just be the ability to physically or technologically exclude others from accessing property, it must also be enforceable by the law. The reasons are obvious – if a homeowner locks her front door, but anyone who breaks the lock and gains entry faces no legal repercussions, the homeowner cannot realistically exclude people from her house. The legal

102 Cooter and Ulen, above n 101, at 78–94.
103 Thomas W Merrill and Henry E Smith "Optimal Standardization in the Law of Property: The Numerus Clausus Principle" (2000) 110 Yale Law Journal 1 at 4.
104 *Dixon v R* (SC), above n 1, at [25] and [38].
105 Gregory S Alexander and Eduardo M Peñalver *An Introduction to Property Theory* (Cambridge University Press, Cambridge, 2012) at 4.
106 See Thomas W Merrill "Property and the Right to Exclude" (1998) 77 Neb L Rev 730; JE Penner *The Idea of Property in Law* (Oxford University Press, Oxford, 1997).

right to exclude others is the property right.

The Supreme Court neglected to mention excludability, but by classifying digital files as property for the purposes of s 249(1)(a), the Court is arguably establishing this element in the legal sense. A digital file is of course already factually excludable. People can be physically excluded from its storage medium, or technologically excluded via password protection or encryption.

The problem here is that the Court is only making a digital file excludable under the criminal law, not the civil law. This is because the civil torts may not necessarily protect intangibles, because traditionally, a property right must relate to a tangible thing.[107] The law's traditional distinction between tangibles and intangibles developed because property rights are so strong, being enforceable against all the world, and because the law attempts to categorise things in order to treat them consistently. Since a tangible object has physical boundaries, it is easy for people to know when they are interfering with it.[108] The fact that it has physical boundaries also limits the number of people who can access it.[109] The law is comfortable therefore using property rights to protect tangibles.

By contrast, intangibles might be used by a vast number of people without depleting the amount left for others, for example humming a tune does not deplete it.[110] It is also much easier for others to unknowingly interfere with owners' rights in intangible things, which lack physical boundaries.[111] Therefore, when the law does create property rights in intangibles, it needs to explore further considerations than for tangibles.[112] Thus when the law creates IP rights, it does so via acts of Parliament that recognise public policy considerations by restricting the IP's duration in time or allowing for fair use.[113] When the law considers information, it deems that the public interest outweighs the private interest and refuses to class it as property at all.

Flowing from this distinction between tangibles and intangibles, the civil torts of conversion and trespass to goods have traditionally only covered tangible property. Conversion involves

107 McFarlane, above n 100, at 133–137.
108 McFarlane, above n 100, at 136–137.
109 McFarlane, above n 100, at 136–137.
110 McFarlane, above n 100, at 136–137.
111 McFarlane, above n 100, at 136–137.
112 McFarlane, above n 100, at 137.
113 John Mummery "Property in the Information Age" in Barr (ed) *Modern Studies in Property Law vol 8* (Bloomsbury Publishing, Oxford, 2015) 3.

unlawful interference with goods possessed by another.[114] Conversion of choses in action is impossible, because by definition they are incapable of being possessed, being only enforceable through legal action.[115] Thus the only intangible that conversion historically extends to is a document of title (a debt or obligation evidenced by a document), though some US courts are now creating further exceptions.[116]

In 2007 for example, New York's highest court stated that although electronic data is intangible, it is capable of being converted.[117] The US federal Court of Appeals similarly held that an internet domain name, though intangible property, is still capable of being converted under Californian law.[118] However in the UK, the House of Lords ruled in 2007 that conversion is not available for intangibles.[119]

Trespass to goods involves a wrongful act of direct, physical interference with goods in the possession of another.[120] While physical contact is not required (for example, throwing stones near an animal may suffice), historically the tort protected only tangible property - it originally prohibited physically removing or destroying goods possessed by another.[121] Thus in considering the tort's application to computer misuse in New Zealand, the Law Commission only pondered whether damage to a computer caused by a hacker or virus could amount to trespass to goods.[122] Merely accessing a computer without authorisation was likely deemed too far removed from this tort's scope. Interestingly, the Commission did not think any harm done to a computer disc by a virus could be considered physical in nature.[123] However, some US plaintiffs have successfully used this tort against non-physical computer interference, for things such as overloading systems with spam emails or using automated web crawlers to access databases without permission.[124]

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114 Cynthia Hawes "Tortious Interference with Goods in New Zealand: The Law of Conversion, Detinue and Trespass" (PhD Dissertation, University of Canterbury, 2010).
115 Hawes "Tortious Interference with Goods in New Zealand", above n 114, at 34.
116 Susannah Lei Kan Shaw "Conversion of Intangible Property: A Modest, but Principled Extension? A Historical Perspective" (2009) 40 VUWLR 419 at 429; *Thyroff v Nationwide Mutual Insurance Co* 8 NY 3d 283 (2007); *Kremen v Cohen* 337 F 3d 1024 (9th Cir 2003).
117 *Thyroff v Nationwide Mutual Insurance Co*, above n 116.
118 *Kremen v Cohen*, above n 116.
119 *OBG Ltd v Allan* [2007] UKHL 21, [2007] 4 All ER 545.
120 Cynthia Hawes "Interference with Goods" in Stephen Todd (ed) *The Law of Torts in New Zealand* (6th ed, Brookers Ltd, Wellington, 2013) 595 at 601.
121 Hawes "Interference with Goods", above n 120, at 601–602.
122 Law Commission *Computer Misuse*, above n 35, at [147].
123 Law Commission *Computer Misuse*, above n 35, at [154].
124 Johnathan Clough "Data theft? Cybercrime and the increasing criminalisation of access to data" (2011) 22 Criminal Law Forum 145; *Compuserve Inc v Cyber Promotions Inc* 962 F Supp 1015 (SD Ohio, 1997); *Register.com Inc v Verio Inc* 126 F Supp 2d 238 (SD NY, 2000); *eBay Inc v Bidder's Edge Inc* 100 F Supp

The common law's struggle to cope with the non-physical when its torts have historically developed only around the physical is thus illustrated by the differing treatments of digital systems in other jurisdictions, as the Supreme Court noted.[125] The Court also noted that in 2014, the English Court of Appeal held that a possessory lien was not available for an electronic database, and while it ruled out the possibility that such a database was tangible property, it could not definitively state whether it was intangible property or not property at all.[126]

This means that the excludability of intangibles might not be protected by civil torts in New Zealand - yet as discussed above excludability can be seen as an essential characteristic of ownership and therefore, according to the Supreme Court, of property. In expressly limiting its classification of digital files as property to s 249(1)(a) of the Crimes Act, the Court may have effectively made them excludable under criminal, but not necessarily civil, law.[127] The Court is therefore in danger of allowing the criminal law to outstrip the civil law in this regard. It is far from clear whether New Zealand courts will follow the approach of the English courts or some of the US courts in the torts of conversion and trespass to goods as they might apply to digital files.

If excludability is not essential, or if excludability in criminal law alone is sufficient, then digital files are capable of being owned.

2 Value

Of the other characteristics of property that the Court outlined, that digital files may have economic value is undeniable. If a purchaser is willing to pay for it, for example, it has value.

3 Identifiability

The element of identifiability may not be entirely straightforward. One commentator has noted

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2d 1058 (ND Cal, 2000). But see *Intel Corp v Hamidi* 71 P 3d 296 (Cal 2003).

125 *Dixon v R* (SC), above n 1, at [40]-[50].

126 *Dixon v R* (SC), above n 1, at [49]; *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281 [2015] QB 41.

127 *Dixon v R* (SC), above n 1, at [25] and [53].

that a digital file is not stored in a single location on a computer, but is scattered randomly on its storage medium.[128] The distinction may be irrelevant however. From a functional point of view, computers can locate and assemble files when required for human use in a split second at the click of a mouse. For the purposes of the file's identifiability, it does not matter that that assembly needs to occur at all, it is enough that it is on the storage medium. A similar functional equivalence argument was upheld in *Thyroff v Nationwide Mutual Assurance Co*.[129] It is not illogical therefore for the Supreme Court to hold that digital files are identifiable.

4 Transferability

Transferability is not problematic here. Notably, the Supreme Court did not say Dixon transferred property to his USB stick, it only said he obtained property. Transferability was merely one characteristic of property that digital files had, according to the Court. Transfer of ownership can be effected in different ways, for example by physically delivering a tangible object, or by legally contracting for a sale and transferring title. A digital file arguably cannot be physically transferred at all, unless its physical storage medium is delivered. When a digital file is copied to another device, all that is actually transferred is electrical energy.[130] Thus digital products purchased and downloaded online, such as ebooks and software, are commonly not sold at all, but licensed – title is not transferred to the user.[131] However, such factual distinctions are not detrimental to the transferability of digital files because transfer of title can be effected legally if the parties agree.

5 Location

Although the Court did not mention location, some property experts, such as Arianna Pretto-Sakmann, believe only things that can be located may be property.[132] The reasons are apparent from the discussion above (at page 17) on the law's distinction between tangibles and intangibles – if something is locatable it is easy for people to know when they are interfering

128 Harvey, above n 26, at 356.

129 *Thyroff v Nationwide Mutual Insurance Co*, above n 116; *Dixon v R* (SC), above n 1, at [47]-[48].

130 Email from Peter Andreae (Associate Professor at Victoria University of Wellington School of Engineering and Computer Science) to author regarding computer data storage and transfer (21 March 2016).

131 Commerce Committee, above n 94; See "Google Play Terms of Service" (9 December 2015) Google Play <https://play.google.com>; See also "Kindle Store Terms of Use" (15 March 2016) Amazon <www.amazon.com>.

132 Arianna Pretto-Sakmann *Boundaries of Personal Property: shares and sub-shares* (Hart Publishing, Oxford, 2005) at 105.

with it, and it is easier to limit access to it. There may be issues with the locatability of digital files – for instance, a file stored by a cloud storage service is usually stored on multiple servers.[133] Similarly to identifiability however, a functional equivalence argument might be possible. As long as a file is stored on at least one device, it may not matter that it is stored on several – as long as it remains identifiable, and the owner and cloud storage service provider can exclude third parties in all of its locations. Digital files may therefore fulfil this element.

6 A normative issue

From the above discussion, the most significant conceptual problem with digital files being property is their excludability under both criminal and civil law. However, even if all conceptual obstacles are surpassed, a normative issue arises. This is whether, just because something is theoretically capable of being property, it should be treated as such. The Supreme Court justified its decision with purposive arguments. However, property is a social construct, and society dictates that not everything of value that is capable of being owned and transferred can be property. Slavery is outlawed, for obvious reasons. Body parts are not property, to prevent commercial trade springing up.[134] Nor is information property.[135] Therefore, as Mummery points out, tricky areas such as intellectual property regimes are expressly created by statutes.[136] Parliaments enacting IP laws have carefully crafted legislation in order to reward and incentivise creators while balancing the public interest in information remaining accessible.

Therefore, if the distinction between digital files and information is so tenuous, it should arguably be left to Parliament to expressly class them as property. Parliament can take time to consider all the social, political and economic ramifications flowing from a new law, and a democratically elected legislature has a mandate from society that appointed judges do not. Alternatively the judiciary could, with respect, abandon the distinction altogether and recognise that it is essentially changing the orthodox legal position on information. It should substantiate such a ruling with sound policy considerations in light of the strong public interest in keeping information freely available.

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133 Jonathan Strickland "How Cloud Storage Works" (30 April 2008) HowStuffWorks.com. <http://computer.howstuffworks.com>.

134 *Moore v Regents of the University of California* 793 P 2d 479 (Cal 1990) as cited in Jane Bawden “Body parts controversies” (2002) 4 NZLJ 2002 153;

135 *Oxford v Moss*, above n 2.

136 Mummery, above n 113.

C The Supreme Court's Factual Characterisation of Digital Files

The final issue with the Supreme Court's position, even if its purposive and conceptual arguments are accepted, is whether digital files factually have material presence.[137] The Court of Appeal conceded that digital files have some material existence in a way that information "in non-physical form" does not, but ultimately said digital files could not be meaningfully distinguished from information.[138] The Supreme Court conversely argued that such material presence supports the classification of digital files as property, and since it expressly stated that it was not encroaching on the orthodox position on information, used material presence to help distinguish digital files from information.[139] Respectfully, however, this approach is flawed.

The Supreme Court noted that digital files alter the physical state of their storage medium and take up physical space.[140] In the sense of using up capacity this statement is true, whether the files are stored magnetically on a computer's storage disc, or electronically in a memory chip, solid-state drive or USB stick. However this is also true of information recorded in other forms. Writing takes up space on a page for example. Memorising large amounts of information alters the physical state of the brain, causing its hippocampus region to enlarge.[141] The Court's consideration of capacity therefore conflates the tripartite properties of recorded information discussed earlier. What Dixon obtained, though it used up capacity on his USB stick, arguably is no different from what the student in *Oxford v Moss* famously obtained when he copied an examination paper – he obtained information in recorded form.[142]

Moreover, the Court's assertion that digital files alter the physical state of their storage does not mean that copying a digital file amounts to obtaining anything physical, even though capacity is used up. All digital storage devices, even if blank, have a "state", either of magnetic polarity of particles on a disc, or electrical on-off states of transistors in an electrical circuit.[143] The

137 *Dixon v R* (SC), above n 1, at [25], [39] and [50].
138 *Dixon v R* (CA), above n 4, at [30].
139 *Dixon v R* (SC), above n 1, at [24]–[25].
140 *Dixon v R* (SC), above n 1, at [39].
141 See Eleanor A Maguire and others "Navigation-related structural change in the hippocampi of taxi drivers" [2000] 97 PNAS 4398; Mark Brown "How Driving a Taxi Changes London Cabbies' Brains" (12 September 2011) Wired UK <www.wired.com>.
142 *Oxford v Moss*, above n 2.
143 Andrew Geddis "Dixon v R: An easy case that raises hard questions" (20 October 2015) Pundit <pundit.co.nz>; Andreae, above n 130; Jonathan Strickland "How small can CPUs get?" (15 January 2009)

magnetic particles or electrical circuit components are already present, so copying information onto them merely involves using an electric current to change and then maintain that magnetic polarity (in the case of discs) or electrical charge (in the case of transistors).[144] Copying information onto a USB stick for example, does not add anything material to the USB stick, it merely alters the stored voltages (the electrical on-off states) in the USB's circuitry. It is hard to see how this can be viewed as obtaining anything physical.

Ultimately, the Supreme Court decided that although digital files have a material presence, it was unclear whether this amounted to tangibility.[145] The Court said it did not need to determine the issue of tangibility because the definition of property under s 2 of the Crimes Act is wide enough to include intangibles.[146] However, even if that is true, the flaws in the argument that digital files have a material presence weaken the Court's distinction between digital files and information. This in turn means that deeming digital files property may encroach on the orthodox position on information – something the Court expressly said it was not doing.[147]

D Summary of the Supreme Court's Reasoning

Ultimately, the Supreme Court's holding on material presence is irrelevant to digital files' classification as property under the Crimes Act. Property is a social construct and can include anything that society wants it to. The proposition that material presence can distinguish digital files from information sufficiently to deem them property, however, is unsound. The Court's conceptual justification was also problematic, with difficulties arising from the intangibility of digital files and a normative issue arising. The Court's distinction between digital files and information therefore rests substantially on its purposive approach. This approach was also questionable, notably because of its strained construction of s 249, its sifting through provisions to find the best fit, and the fact that a digital file is a document. Its proposition that digital files are not simply information being so weakly supported, the Court is arguably encroaching on the orthodox position on information.

HowStuffWorks.com <www.computer.howstuffworks.com>; Stephen Portz "How Does a Transistor Work?" PhysLink.com <www.physlink.com>; Joel Hruska "How do SSDs work?" (26 February 2016) Extreme Tech <www.extremetech.com>.

144 Bestofmedia Team "Hard Drives 101: Magnetic Storage" (30 August 2011) Tom's Hardware <www.tomshardware.com>; Andreae, above n 130; Strickland "How small can CPUs get?", above n 143; Portz, above n 143; Hruska, above n 143.

145 *Dixon v R* (SC), above n 1, at [39]–[50].

146 *Dixon v R* (SC), above n 1, at [50].

147 *Dixon v R* (SC), above n 1, at [24].

VI The Ramifications of Dixon

The clearest consequence of the Supreme Court's decision is that individuals and businesses will have greater legal protection for their digitally stored data. There may also be ramifications for the civil torts of conversion and trespass to goods, for the criminal offence of receiving stolen property, and perhaps for further unforeseen situations. This is because even though the Court was careful to limit its decision to s 249(1)(a) of the Crimes Act, the common law system builds on previous decisions.

The most obvious ramification is that individuals acting as Dixon did will be criminally liable for unlawfully obtaining property under s 249(1)(a). An employer will now presumably be protected against unauthorised digital copying of computer files by an employee, even if the files do not attract copyright and are not confidential. This can be seen as filling a gap in the law – or it can be seen as eroding the orthodox position that there is no property in information. There may be further, less certain consequences also. For example, if person A uses their own printer, paper and ink to print out the data in person B's digital file without authorisation, is person A liable for obtaining property? Previously, this would have been seen as copying information. The legal position is now unclear.

Dixon may also affect the tort of conversion. As noted previously, conversion involves unlawful interference with goods possessed by another in a manner inconsistent with that other's possessory rights.[148] Traditionally it has been limited to tangible property, with a limited exception for documents of title.[149] After the Supreme Court's statement that digital files have a material presence, New Zealand courts may be more likely to hold that digital files are tangible and are capable of being converted. This remains uncertain until tested in a court.

Trespass to goods involves a wrongful act of direct, physical interference with goods in the possession of another, as outlined previously.[150] The law is unsettled on whether damage to the goods is required.[151] After the *Dixon* holding on digital files' material presence, the door may be open for New Zealand courts to hold that such files are goods in the possession of another.

148 Hawes "Tortious Interference with Goods in New Zealand", above n 114.
149 Shaw, above n 116, at 429.
150 Hawes "Interference with Goods", above n 120, at 601.
151 Hawes "Interference with Goods", above n 120, at 602–603.

However an issue may lie in whether mere copying amounts to direct, physical interference, even if no damage is required. Again, the law remains unclear until tested.

There may be more widespread implications if the decision in *Dixon* affects the offence of receiving stolen property under s 246 of the Crimes Act. Under s 246, a person is liable if they receive property that has been "stolen or obtained by any other imprisonable offence", as long as they know or are reckless to the fact that the property has been stolen or obtained that way.[152] Since s 249(1)(a) involves an imprisonable offence, *Dixon* makes it seem likely that a person receiving unlawfully obtained digital files would be liable. Law expert Professor Andrew Geddis points out that if this the case, if unlawfully obtained files are uploaded to the internet, everyone viewing the files (that is, downloading them to their computer's temporary memory) could be guilty of receiving stolen property.[153] He adds that online purchases of pirated movies, digitally downloaded to the purchaser's computer, could also be seen as receiving stolen property, if the purchaser had the required knowledge or recklessness.[154] It remains to be seen how the courts will address the issue of such a major potential widening of the net cast by s 246.

Another commentator wonders whether virtual "property", such as virtual real estate acquired in the game Second Life, or magical weapons acquired in the game World of Warcraft, might also attract property rights, for instance under the Property (Relationships) Act 1976.[155] Such issues are beyond the scope of this work, but they do show that there may be unintended consequences flowing from the Supreme Court's decision.

VII Conclusion

This paper has explored the Supreme Court's reasons for holding that digital files are property, not simply information, for the purposes of s 249(1)(a) of the Crimes Act. It has revealed flaws in the Court's purposive approach for doing so. It has also shown that the Court's conceptual and factual approaches are problematic, and that while these defects are not themselves conclusively detrimental since property is a social construct, they lead the decision to rest substantially on the purposive approach. This paper has argued therefore that the Supreme

152 Crimes Act, s 246(1).
153 Geddis, above n 143.
154 Geddis, above n 143.
155 "Dixon v R –Game Over for Digital Property?" above n 51.

Court's decision was, with respect, incorrect and that copying a digital file as Dixon did amounts to copying recorded information, not obtaining property.

This work has also discussed how other jurisdictions differ in their treatments of digital data under the civil torts of conversion and trespass to goods. Thus it has shown how the ramifications of *Dixon* for these torts in New Zealand remain uncertain until relevant cases appear before the courts. Similarly, it is uncertain what the effect of *Dixon* will be for the crime of receiving stolen property. The ramifications of this case for those creating hard copies without authorisation have also been shown to be unclear.

Finally, flowing from the dubious distinction between digital files and information, this paper has argued that it should be Parliament's role to expressly state whether digital files are property for the purposes of the Crimes Act. It may be that in our digital age, when data might be a company's most valuable asset, existing civil and criminal law protections such as confidentiality and copyright law are becoming inadequate. Any Parliamentary debate on the issue must be undertaken in light of the fundamental importance of information being freely available to foster human innovation, discovery and creativity. As we race along the information superhighway, the time has perhaps come for such a debate to take place.

Word Count

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