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Statutory Definitions: A Problem of Logic – or Something Else?

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Introductory

In a recent article on the legal meaning of enactments¹ I promised to write further about Phil Bowles' final year LL. B. project entitled "Language, Logic and Law". This concerns the wording of the Criminal Justice Act 1988 s. 139 (prohibition of carrying knives in public places) and a decision under that section, *Harriot v Director of Public Prosecutions*². I will refer to the latter as *Harriot*.

Mr Bowles, a former police officer and IT consultant, aims first to translate the logic of s. 139 into a digital electronic circuit and then, by use of De Morgan's theorem, to reduce the complexity of the logic while maintaining its correctness. By a "reverse translation" he then hopes to produce a simplified version of s. 139 that has half the words while maintaining the same literal meaning.

I will come to the facts and law in *Harriot* shortly. First I would like to set out the views of Mr Bowles as he put them to me.

"My time in IT lasted till 1994, when I became a police officer, serving until 2002 when I became a forensic computer consultant. During my time on the beat I made many s. 139 arrests, and upon reading the facts of *Harriot*, I was very surprised, as I would also have arrested in that case, which set me thinking. My experience and 'gut' told me that most officers would have also arrested. If one accepts the premise that 'Joe Bloggs' is not the intended end-user of a statute, but that professional lawyers are, then one must surely also include police officers to a large degree: they need to know their powers to do their job! Hence IF I am right and 90-odd per cent of officers would make an arrest that the High Court now deems unlawful – then, in my view, that is a) a serious constitutional concern and b) probably rooted in the wording of the relevant statute."

I agree with that on both counts, and now turn to *Harriot*.

Law and Facts in *Harriot*

The Criminal Justice Act 1988 s. 139 makes it an offence, with certain exceptions, for a person to have with him in a public place (as defined by s. 139(7)) any article which has a blade, or is sharply pointed, other than a folding pocketknife

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¹ F A R Bennion, "Aspects of the Legal Meaning", 171 JPN (13 October 2007) p. 715, www.francisbennion.com/2007/022.htm.

² [2005] EWHC 965 (Admin).

whose cutting edge does not exceed three inches. Subsection (7) says: “In this section ‘public place’ includes any place to which at the material time the public have or are permitted access, whether on payment or otherwise”.

The defendant was convicted of this offence and the question on his appeal to the Divisional Court was whether the place where he was when arrested was a public place within the meaning of s. 139(7). It was held that it was not. The place was an area in front of a bail hostel which was set well back from the road with an extensive open area in front of it with no barrier preventing or impeding access. There were no notices or signs prohibiting or restricting access.

In *Harriot* Sedley LJ, after saying “it would not be useful or wise for this court to attempt to substitute for the statutory phrase [ie subs. (7)] some definition or exegesis of its own”³ proceeded to do exactly that. He discussed a range of cases on the meaning of “public place” without regard to the fact that they were governed by differing statutory definitions. He then said:

“ . . . [I]t seems to me that the principle which runs through all of these cases is that land may be either on the face of it public or on the face of it private land . . . ”⁴

That was not the correct test. Also incorrect was Sedley LJ’s statement that the s. 139(7) definition is “illustrative”.⁵ He said: “There was no evidence . . . that public access to [the land in question] was either invited or tolerated”⁶ which again was not the correct test. My respectful contention is that the conclusion of Sedley LJ, and also that of Mitting J who concurred, was for all these reasons erroneous. I shall now attempt to justify that, drawing on the treatment of statutory definitions in my book⁷.

Statutory definitions are included by Parliament for a purpose, and learned Judges are not entitled to disregard them as occurred here.⁸ There are six types of statutory definition: clarifying, labelling, referential, exclusionary, enlarging and comprehensive.⁹ The definition laid down by s. 139(7) is enlarging, that is it “is designed to make clear that the term includes a matter that otherwise would or might be taken as outside it”.¹⁰

I will now set out s. 139(7) in comminuted form.¹¹

- (1) In this section “public place” includes
- (2) any place to which at the material time the public have access, whether on payment or otherwise, and
- (3) any place to which at the material time the public are permitted access, whether on payment or otherwise.¹²

³ Paragraph [10].

⁴ Ibid.

⁵ Paragraph [12].

⁶ Paragraph [13].

⁷ See F A R Bennion, *Statutory Interpretation: A Code* (4th edn 2002), s. 199. This book is hereinafter referred to as “Code”.

⁸ See Code, s. 199 (at p. 480).

⁹ See Code, s. 199 (at p. 479).

¹⁰ See Code, s. 199 (at p. 489). For a detailed description of enlarging definitions see Code, s. 199 (at pp. 489-490).

¹¹ A comminuted version breaks up the text while not altering the wording. It does however repeat wording (without changing the meaning) where doing so aids understanding. It is often helpful for advocates to present a comminuted version to the court in their skeleton argument.

¹² This expanding of highly condensed statutory wording is a way of correcting *compression*, which I have described as one of the four vices of statute law. The others are *anonymity*, *distortion* and *scatter*: see “Our Legislators are CADS” 120 SJ (1976) 390, www.francisbennion.com/1976/001.htm.

Setting out the definition in this extended way, with three numbered paragraphs, clarifies (without altering) its meaning. Paragraph (3) deals with the case where the landowner has given permission for public access. By necessary implication therefore, paragraph (2) lets in the case where the public have access *without that permission*. This widens the usual meaning of “public place” by covering the case where it is physically possible for the public to gain access even though the landowner has not given permission. It covers the facts in *Harriot* and should have led to the conviction being upheld by the Divisional Court.

I return to the instances where I say above that Sedley LJ was mistaken. Clearly s. 139(7) is not as he said “illustrative”. It is not like an example; it has the substantive effect of being enlarging. He said that the principle which runs through all of these cases is that land may be either on the face of it public or on the face of it private. The land in *Harriot* may have been private on the face of it, but the enlarging effect of the definition trumped this. Sedley LJ said there was no evidence that public access to the land was either invited or tolerated. That was irrelevant, again because of the enlarging effect of the definition.

This cavalier judicial treatment of statutory definitions is not uncommon. In my book I put it down to what I call *the potency of the term defined*, saying:

“Whatever meaning may be expressly attached to a term, it is important to realise that its dictionary meaning is likely to exercise some influence over the way the definition will be understood by the court. It is impossible to cancel the ingrained emotion of a word merely by an announcement.”¹³

Ignoring the Interpretative Criteria

Another criticism of the Divisional Court in *Harriot* is that it almost entirely failed to apply the basic rule of statutory interpretation.

“The basic rule of statutory interpretation is that the legislator’s intention is taken to be that in any case of doubtful meaning the enactment shall be construed in accordance with the general guides to legislative intention laid down by law; and that where these conflict the problem shall be resolved by weighing and balancing the interpretative factors concerned.”¹⁴

I say that the court *almost* failed to apply the basic rule because it did apply just one of the numerous interpretative

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criteria, that regarding the desirability of legal certainty.¹⁵ Sedley LJ said of the argument that the forecourt in *Harriot* was a public place within the meaning of s. 139(7): “It would . . . be disruptive of legal certainty if a phrase repeatedly used by Parliament, albeit for different purposes, were given differential meanings in this way”. However this is unsound since (1) different legislative purposes may require different meanings of the term public place, and (2) as shown above, s. 139(7) expressly gives an enlarged meaning to the term.

Perhaps the most important interpretative criteria overlooked by the Divisional Court in *Harriot* were the so-called mischief rule¹⁶ and the need for purposive construction¹⁷, a concept which grew out of it. The acute social danger of knife crime was obviously the mischief Parliament had in mind in enacting s. 139. The danger is presented by a person who

¹³ Code, s. 199 (at p. 480). This statement, and the concept of the potency of the term defined, were approved by Lord Scott of Foscote in *Oxfordshire County Council v Oxford City Council and another* [2006] UKHL 25, [2006] 2 AC 674, at [82], [83].

¹⁴ Code, s. 193.

¹⁵ See Code, pp. 683-684.

¹⁶ See Code, Part XIX.

¹⁷ See Code, Part XX.

carries a knife in a place accessible to the public whether that place is strictly public or private, as s. 139(7) expressly recognised.

Sedley LJ cited in his support an earlier Court of Appeal decision on s. 139, *R v Roberts*.¹⁸ Here the court had quashed a conviction under s. 139 where the facts were similar to those in *Harriot*. Similar too are the objections that can be levelled at the decision in *Roberts*. The judge in the court below had based his finding for a conviction on the consideration that a purposive construction required this¹⁹, but the Court of Appeal were apparently unimpressed by that argument. It seems that a very curious judicial attitude has developed when it comes to the legal meaning of the term public place.

I said above that Mr Bowles aims first to translate the logic of s. 139 into a digital electronic circuit and then, by use of De Morgan's theorem, to reduce the complexity of the logic while maintaining its correctness. By a "reverse translation" he then hopes to produce a simplified version of s. 139 that has half the words while maintaining the same legal meaning. I asked Mr Bowles to supply for this article an account of just what this entails. He kindly obliged, and the next section gives this in his own words.

Mr Bowles' explanation

Looking at s. 139 from a purely logical view requires first that the major clauses and their inter-relationships are examined. All digital electronic circuits are able to be fabricated from three basic logic "building blocks" (or "gates" as they are known). These are "AND", "OR" and "NOT", which map exactly in their functions to their linguistic equivalents. An overall view of the logic of s. 139 then, has to deal with the article, the location in which the offence takes place and the statutory defences.

In digital logic, only two states exist: "TRUE" and "FALSE" and once the overall logic is analysed, it must be re-phrased into a series of TRUE/FALSE conditions which when linked, will give the literal effect of the original wording. At the highest level, an offence occurs where there is a prohibited article, a location that satisfies the "public place" test, and there is no statutory defence. One might say "offence=TRUE when article=TRUE AND location=TRUE and defence=FALSE". The next stage is to break down each major clause in detail using the same three logic gates, using more specific discriminations as inputs.

As an example, the sub-circuit representing the article will produce a TRUE output when there is a "bladed=TRUE" or "pointed=TRUE" input and a further sub-circuit dealing with "folding pocket knife" (FPK) which produces a TRUE output (i.e. it is prohibited) when FPK=TRUE but the blade is over 3 inches. It is a matter of choice whether one says "greater than 3 inches=TRUE" or "not exceeding 3 inches=FALSE". The logic designer will look to see how many components and how complex the wiring may become in each case, and chose the cheaper and/or simpler representation, knowing that the logical result is the same. Once a circuit gets beyond a handful of gates, this type of optimisation becomes immensely laborious, but is the type of task at which computers excel. Using De Morgan's theorem and some clever software, the logic designer can automatically redesign the circuit to use fewer components or shorter electrical paths while preserving the correctness of the logic. For example, De Morgan states that NOT (A OR B) is logically identical to NOT A AND NOT B.

Using these logical equivalents, simpler paths through the overall design may be discovered – it may be more efficient for the circuit to bypass the FPK test completely if the article has a 10" blade. Further optimisations can become apparent once a functional circuit is laid out graphically. In the s. 139 case the "statutory defence" circuit is on OR gate, with a series of inputs, any one of which (or all of them) produces a TRUE result, i.e. a defence is made out

¹⁸ [2003] EWCA Crim 2753, [2004] 1 WLR 181.

¹⁹ See *R v Roberts*, paragraph [4].

and the circuit prevents “offence=TRUE” from occurring. The FPK exception has functionally the same result, i.e. it cancels what would otherwise be an offence. There is a temptation then to group this sub-circuit along with the other defences, as the “back end” of the circuit already exists, and the component count is therefore reduced.

Once the re-wiring is complete, a further pass of De Morgan reduction is performed, as a change at any stage could easily result in a new combination of logic occurring which lends itself to optimisation. The steps are repeated until no further reduction occurs. The testing of the final circuit becomes simple, if tedious. Every input has two options, thus if there are 3 inputs, there are $2 \times 2 \times 2$ possible combinations; 8 inputs gives 256 combinations. These are simply tried in sequence, checking the output in each case to see that it is correct. In the s. 139 case, the output is either “offence” or “no offence”, wired as a single light which is either on or off.

Having been satisfied that all combinations produce the correct result, the final task is to translate the circuit back into English. The end result should be a shorter version of the statute which maintains the overall logical meaning of the *literal* wording of the original. The process of deriving a true legal meaning from this reduced base is not affected – the discussions that took place in *Harriot* will still occur. One of the inputs in that case, after all, is “public place” and thus whether or not to flick the switch for that input

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on the given facts of a particular case will always depend on experienced legal argument or judicial reasoning. The blinkered literal approach that the process produces is not a “magic bullet”, merely a tool to reduce the complexity of the language upon which any subsequent legal reasoning is called to operate. The IT industry has always been driven by the “less is more” approach exemplified by “Ockham’s Razor”. My process is simply an extension of that concept into the phrasing of statutory language, with the hope that legal argument could be correspondingly reduced and that decisions such as *Harriot* would therefore become less likely to occur.

I turn finally to the “public place” analysis. Applying De Morgan’s theorem to the construction “A or NOT A” is *always* “TRUE”, and thus will be optimised out of the circuit. The phrase “on payment or otherwise” fits this pattern and is removed as it contributes nothing to the logic. Thus the literal meaning that remains to be mapped to the circuit is “have” or “are permitted” access. If one uses mathematical set theory to try to isolate the essential differences and common features of the two classes of place however, it appears that “have” access can only mean those places to which physically access is possible, irrespective of permission. One solution is to have an input for each class and allow the prosecuting authorities to decide on which is most fitting to the facts, thus allowing a more purposive approach. Another is to reduce the whole clause merely to “public place” and again allow the inevitable legal discussion to take place. Either way, the eventual decision would need to be fed back into the design to ensure that the true legal meaning is accurately reflected in the circuit.

Conclusion

I will not lengthen this article by commenting in detail on Mr Bowles’ analysis, but I will mention two points on his final paragraph. He says that the phrase “on payment or otherwise” is removed “as it contributes nothing to the logic”. This raises an interesting point on the use of logic. The phrase may contribute nothing to the logic, but it does contribute something to the legal meaning. It serves a purpose for which statutory definitions are often used, namely to rule out a possible argument concerning access without payment.

The other point concerns Mr Bowles' final sentence. It seems to call for the creation of novel machinery for revising the wording of legislation after the courts have ruled on its legal meaning. This was suggested by Bentham, and has its attractions. It would however pose immense practical problems and is unlikely to be adopted by the authorities.