The UK's Provisions on Computer-Generated Works: A Solution for AI Creations?

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AI Creations

- AI systems generate outputs that appear like, and function as if they were, authorial works. Some simple examples:

- Google's translate system

- The Next Rembrandt

- Are these protected by authors' rights?
- (Note, it seems the problem does not arise with computer-generated film, phonograms, broadcasts, non-original photographs, etc: at least, no-one is discussing these cases)

Suggestions by Scholars that UK Provisions are a Useful Model

- Jani McCutcheon (2013) (considering alongside neighbouring right)
- Anne-Marie Bridy (2012, 2016) (leading to proposition that in US these could be treated as works-for-hire)
- Andres Guadamuz (2017) (strongly supportive)

CDPA, 1988 The Definition

- CDPA, s 178
- “computer-generated”, in relation to a work, means that the work is generated by computer **in circumstances such that there is no human author of the work**”

- Cf. Ireland
- “computer-generated”, in relation to a work, means that the work is generated by computer in circumstances where the author of the work is not an individual”

The Consequences

- Authorship

Section 9(3):

In the case of a literary, dramatic, musical or artistic work which is computer-generated, **the author shall be taken to be the person by whom the arrangements necessary for the creation of the work are undertaken**.

Cf. India “the person who causes the work to be created;”

- Duration
- Section 12(7):

If the work is computer-generated the above provisions do not apply and copyright expires at the end of the period of **50 years from the end of the calendar year in which the work was made**.

The Consequences: No Moral Rights

- CDPA s. 78

(1) The right conferred by section 77 (**right to be identified** as author or director) is subject to the following exceptions.

(2)The right **does not apply** in relation to the following descriptions of work—

…

(c) <u>any computer-generated work.</u>

- CDPA s.81

(1)The right conferred by section 80 (**right to object to derogatory treatment** of work) is subject to the following exceptions.

(2)The right **does not apply** to a computer program or <u>to any computer-generated work.</u>

Is the UK Provision A Useful Model for Protection of AI Generated Works?

- Not really.
- (i) Not compatible with EU Acquis (unless related rights)
- (ii) Fails to Solve Originality Problem
- (iii) Has Not Produced (Much) Clarity
- (iv) Not Necessary (Ginsburg)

(i) Not Compatible with EU *Acquis*

Two distinct (if related) questions:

- Can a computer-generated work be protected (*i.e.* original)?
- Can authorship be ascribed to a non-human person?

EU Law: Ascribing Authorship

- InfoSoc Dir, 2001/29/EC, no definition of 'authorship'.
- But in Case C-145/10, *Painer*, AG Trstenjak, [AG121]: 'only human creations are…protected.'

- Cf.
- Council Directive 91/250/EEC, 2009/24/EC, Art 2(1) (author shall be natural person which created program but allows for legislation of Member State to **designate legal person as rightholder**) (cf. Laddie et al, [36.42]
- Database Directive 96/9/EC, Art 4(1) (The author of a database shall be the natural person or group of natural persons who created the base or, where the legislation of the Member States so permits, **the legal person designated as the rightholder** by that legislation.

Subject Matter: Can Computer-Generated Works Be Original?

- 'author's own intellectual creation' standard in Council Directive 91/250/EEC, 2009/24/EC, Art 1(3); Database Directive 96/9/EC, Art 3(1)
- *Infopaq*, Case C-5/08, ECLI:EU:C:2009:465, generalised to authorial works in Information Society Directive, 2001/29/EC
- Requires:
- (i) **free and creative choices**: *Infopaq*, [45]; *BSA*, Case C-393/09, [48]-[49]; *Football Dataco*, Case C-604/10, ECLI:EU:C:2012:115, [38]
- (ii) **not following rules**: FAPL, Case C-403/08, ECLI:EU:C:2011:631, [98]; *Football Dataco*, [39]
- (iii) stamps his personal touch: *Painer*, Case C-145/10, ECLI:EU:C:2011:798, [92]; *Football Dataco*, [38]

Bently & Sherman (5th ed, forthcoming), 118

"It seems to follow that no computer-generated work can be protected by copyright in accordance with European law.

As we have noted, there is no reason why such productions could not be protected by related rights or unfair competition law. It might be said that, given the special provisions on authorship and term that are applicable to computer-generated works, this is in fact what the UK law in substance achieves. If so, the standard of 'originality' applicable is a matter for UK law alone."

(ii) Does Not Solve Originality Issue

- *Copinger*, [3-273] “It is not clear how the requirement of originality is to be applied in these circumstances, in particular the requirement that the work be the product of at least some skill and labour…. It is suggested that the relevant skill and labour is that of the person by whom the arrangements necessary for the creation of the work were undertaken..”
- *Laddie et al*, [36-44] – If the work had been created by a human author, would it have passed the originality threshold? (also McCutcheon (2013b)

(iii) Have Not Produced Beneficial Results

- Guadamuz: “The fact that s 9(3) is so clear could explain the lack of case-law dealing with this problem.”
- Even if the works were protected, the UK solution does not add much. Ramalho: “does not favour legal certainty and constitutes a reason to not extend the applicability of this legal fiction.”
- Presupposes distinction between computer-assisted and computer-generated (Denicola)
- No provision for multiple ‘authors’: Laddie et al, [36.41] (because joint authorship defined in CDPA s 10)

Interpretation: The Person Necessary

- Few cases
- Dworkin and Taylor (1989) 47: “that will normally be the operator or the person directing the operation of the machine.”
- The “person for whom it was prepared”: Bridy (2012), 27. Programmer, user of program, or programmer’s employer.

Nova Production v Mazooma Games [2006] EWHC 24 (Ch)

- Coin-operate video games based on ‘pool’
- Claimant claimed copyright in ‘frame images’ of its game Pocket Money, and that defendants' games involve a reproduction the composite frames which are displayed upon the screen (but not of any particular bitmap image files as such): [98].
- J create designed the graphics for game as bitmap files (using adobe photoshop) and wrote the software for it
- Composite frames were generated by computer program using bitmap files. The program builds up composite images by taking, for example, the bitmap image of the table and then overlaying it with images of the balls, cue and the like.

Nova Production v Mazooma Games [2006] EWHC 24 (Ch)

TABLE IN 2D PLAN VIEW
TABLE PLAYFIELD RATIO NOT STANDARD POOL 2:1

NOVA

TABLE IN 2D PLAN VIEW
TABLE PLAYFIELD RATIO NOT STANDARD POOL 2:1

MAZOOMA

Kitchin J, [105]

“In so far as each composite frame is a computer generated work then the arrangements necessary for the creation of the work were undertaken by Mr Jones because he devised the appearance of the various elements of the game and the rules and logic by which each frame is generated and he wrote the relevant computer program. In these circumstances I am satisfied that Mr Jones is the person by whom the arrangements necessary for the creation of the works were undertaken and therefore is deemed to be the author by virtue of s.9(3)”

Kitchin J at [106]

I must consider and that is the effect of player input. The appearance of any particular screen depends to some extent on the way the game is being played. For example, when the rotary knob is turned the cue rotates around the cue ball. Similarly, the power of the shot is affected by the precise moment the player chooses to press the play button. The player is not, however, an author of any of the artistic works created in the successive frame images. His input is not artistic in nature and he has contributed no skill or labour of an artistic kind. Nor has he undertaken any of the arrangements necessary for the creation of the frame images. All he has done is to play the game.

(iv) Unnecessary

- Grimmelman (2016) ‘There’s no such thing as a computer-authored work…’
- Commentaries e.g. Copinger suggest most outputs can be interpreted as ‘computer-assisted’
- No obvious justification for protecting such outputs (Ramalho, Ginsburg), though it is odd that system protects computer generated films and phonograms, but not computer-generated ‘works’
- Perhaps even missing the point: implications of AI for economics/market for human authored works.

Appendix 1 Origin

Origin

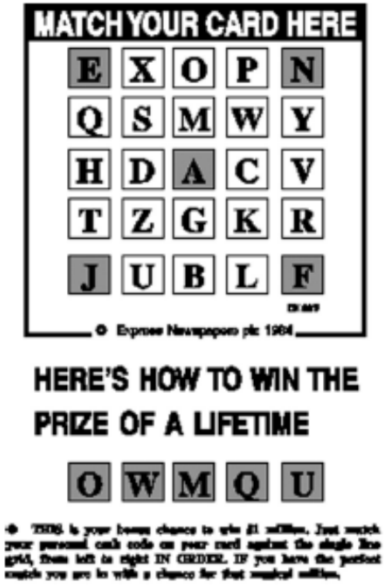
- Whitford Committee, Cmnd 6732, contemplated whether a special regime was needed
- This may seem early, but Abraham Kaminstein, US Registrar of Copyrights, identified the issue of computer authorship as early as 1966
- Treated “computer” as tool.
- “On that basis it is clear that the author of the output can be none other than the person, or persons, who devised the instructions and originated the data used to control and condition the computer to produce the particular result.”
- “we are not convinced there is a need for special treatment.”
- Similar to US National Commission on New Technological Uses of Copyright Works (CONTU) (1978), 44

White Paper, *Intellectual Property and Innovation*, Cmnd 9712 1986

- The responses to the 1981 Green Paper have shown, however, that circumstances vary so much in practice that a general solution will not be fair in all cases. It appears that no practical problems arise from the absence of specific authorship provisions in this area. The Government has therefore concluded that no specific provisions should be made to determine this question.
- 9.8 The question of authorship of works created with the aid of a computer will therefore be decided as for other categories of copyright work, ie on the basis of who, if anyone, has provided the essential skill and labour in the creation of the work. If no human skill and effort has been expended then no work warranting copyright protection has been created.

Express Newspapers v Liverpool Daily Post [1985] 1 WLR 1089

- E produced grids: identified constraints, programmed computer, ran computer to generate 750 grids
- Whitford J granted interim relief.
- "A point was taken by Mr. Jeffs … that …the result produced as a consequence of running those programmes was not a work of which it could truly be said that Mr. Ertel was the author. I reject this submission. The computer was no more than the tool by which the varying grids of five-letter sequences were produced to the instructions, via the computer programmes, of Mr. Ertel. It is as unrealistic as it would be to suggest that, if You write Your work with a pen, it is the pen which is the author of the work rather than the person who drives the pen."



Appendix 2 - Influence

Comparative Use of CGW-concept

	Definition	Authorship	Term	Moral Rights
United Kingdom	s. 178	s. 9(3)	s. 12(7)	s. 78(2), s. 81(2)
Hong Kong Copyright Ordinance	s 198	s. 11(3)	s 17(6) (50 years from making)	s 91(2)(c), 93(2)
India Copyright Act 1957	-	s 2(d)(vi)		
Ireland : Copyright and Related Rights Act 2000	s 2 (slightly different)	s 21(f)	s 30 (70 years from making available)	
New Zealand: Copyright Act 1994	s 2(1)	s 5(2)	s 22(2) (50 years from making)	s 97(2)(c) and s 100(2)(b)
South Africa: Copyright Act 1978 [added by s. 1 (d) of Act 125 of 1992.]	-	S 1(h)		

Influence over Official Reform Proposals

- WIPO, Proposal for Protection of Computer-Produced Works BCP/CE/1/2, (1991), 18
- Original ownership should vest in physical or legal entity who undertook arrangements necessary for creation of works; 50 year term; no moral rights
- Committee of Experts: premature. BCP/CE/1/3, (Nov4-8, 1991), 16-17

- Australia, CLRC, Report on Computer Software Protection (1995), 247, [13.18] (ultimately preferring neighbouring right)