**DNA evidence** – *R. v Jones (William Francis)* [2020] EWCA Crim 1021, unreported, 3 August 2020, CA.

The appellant’s conviction for conspiracy to possess explosives for an unlawful purpose was unsafe where the only evidence on which the judge and jury could rely linking him to the conspiracy was DNA evidence on the firing pin of a grenade showing that there was DNA that was one billion times more likely than otherwise to have been the appellant’s. That DNA evidence could not, on the facts, determine whether the DNA was left directly (primary transfer) or indirectly via an intermediary (secondary transfer). That the appellant lived in the area in which the conspiracy was alleged did not assist in this respect. In a case where the DNA link itself was in question, such proximity might help, but that was not the issue here. Paradoxically, if this appellant lived further from the area of the conspiracy, the risk of innocent secondary transfer might be thought to be very much lower. There was no expert evidence that secondary transfer was improbable. The evidence here was that, as a point of general principle, direct transfer was more likely than indirect transfer, qualified by the observation that no conclusion along those lines could be reached in relation to the individual case. That it was more probable to be direct transfer than indirect was insufficient for a conviction in the absence of further evidence.

**Key cases cited**: Considered – *R. v FNC*, CLW/15/43/1, [2015] EWCA Crim 1732, [2016] 1 W.L.R. 980, CA; *R. v Tsekiri*, CLW/17/09/2, [2017] EWCA Crim 40, [2017] 1 W.L.R. 2879, CA.

COMMENT:

This is the latest in a line of cases involving the identification of a defendant from DNA on a movable object recovered from a crime scene. The judgment raises two issues of interest. First, whether DNA evidence alone can ever be sufficient to establish a case to answer. Secondly, although the decision “turns on its facts”, the court’s observations about the way in which the experts framed their conclusions are intended to provide guidance for future cases (at [41]).

*Unsupported DNA Evidence*

In *R. v Lashley* [2000] EWCA Crim 88, unreported, 8 February 2000, CA, the sole evidence against the defendant on a charge of robbery was a DNA profile obtained from a cigarette that had been left at the scene. The interpretative evidence was that the same profile would be obtained from between seven to 10 males in the UK. The Court of Appeal held that, in the absence of any other evidence, such as a connection between the defendant and the area in which the robbery took place, there was no case to answer. This approach was confirmed in *R. v Grant* [2008] EWCA Crim 1890, unreported, 18 July 2008, CA, and *R. v Ogden*, CLW/14/02/1, [2013] EWCA Crim 1294, (2013) 77 J.C.L. 462, CA.

In *R. v Bryon*, CLW/15/25/1, [2015] EWCA Crim 997, [2015] 2 Cr.App.R. 21, CA, an appeal in similar circumstances was dismissed because the defendant had a previous conviction that provided some support for the prosecution case (despite the need to ensure that bad character evidence is not used to “bolster a weak case” – see J.R. Spencer QC’s comment on the case at [2015] 7 Archbold Review 4). The appellant’s conviction for sexual assault was also upheld in *FNC*. In that case, the sole evidence of the appellant’s identity was a DNA profile obtained from semen deposited on the victim’s clothing during the commission of the offence. In relation to DNA that is found on movable items, the court in *FNC* suggested (at [30]) that “techniques of analysis of DNA have improved markedly in the past decade, certainly since the decision in *Lashley*. Thus the fact that the DNA was on an article left at the scene of the crime … may be sufficient to raise a case to answer where the match is in the order of one in a billion”.

Subsequently, William Davis J stated in *Tsekiri* (at [21]) that “there is no evidential or legal principle which prevents a case solely dependent on the presence of the defendant’s DNA profile on an article left at the scene of a crime being considered by a jury.” His Lordship had stated earlier that, where the match probability is 1:1 billion (the level at which reported match probabilities are capped in the UK), there may be a case to answer. Relevant factors would include: (a) whether there was some explanation for the presence of the defendant’s DNA other than participation in the offence; (b) whether the article was associated with the offence itself – in *Tsekiri* there was “no doubt” that the offender touched the article in question; (c) whether the article was readily moveable; (d) whether there was any geographical association between the defendant and the offence; (e) whether, in the case of a mixed profile, the defendant was the major contributor; and (f) whether it is more or less likely that the defendant’s DNA was deposited directly or indirectly (se [14]–[20]).

In *Tsekiri* itself, there was a geographical link between the appellant and the offence. In addition, the DNA was recovered from an object “used to commit the offence” (a car door handle) and the expert stated that secondary transfer was an “unlikely” explanation for its presence. The court also suggested (at [17]) that “[a] DNA profile on a small article of clothing or something such as a cigarette end at the scene of a crime might be of less probative force than (as was the case here) the same profile on a vehicle”. This decision has been criticised elsewhere, including on the grounds that cars are highly movable objects, and that there is no empirical basis for the expert’s conclusion that secondary transfer was “unlikely” (see Andrew Roberts’ comment on the case at [2017] Crim.L.R. 628). At first blush, the instant case looks similar to *Tsekiri* in several respects. The appellant’s DNA was found on an object closely connected with the commission of the offence (the hand grenade on which the conspiracy centred) and the appellant was associated with the Warrington area where the grenade was found. The key distinction is that, although the experts agreed that the direct transfer of DNA was “logically” more likely than indirect transfer, they were unable to say how much more likely it was. As they went on to explain in paragraph 13 of their joint statement (at [10]), “there is no scientific basis for assigning a weight of evidence to possible direct or indirect transfer”.

The judgment concludes by stating that, save for the court’s comments about the framing of the expert evidence (see below), it does not lay down any general principles (at [41]). It is, however, a useful reminder that source-level and activity-level propositions must not be conflated. Where secondary transfer is a viable explanation for the accepted presence of a defendant’s DNA on an object, it will not be open to a jury to infer an activity-level conclusion (i.e. whether, how and/or when the defendant came into contact with the object) solely from that source-level finding (i.e. that the DNA was the defendant’s While judges are expected to consider the list of factors set out in *Tsekiri* in determining whether there is a case to answer where the prosecution rely on DNA evidence alone,, as Roberts explains in his commentary on *Tsekiri*, these factors are problematic because they are based on questionable assumptions about what DNA evidence can validly and reliably tell us.

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*The proper scope of expert evidence*

At paragraph 12 of their joint statement (set out at [10]), the experts in the instant case opined that it was “not realistic to expect anyone to be able to account for the ways in which their DNA may have been transferred by indirect methods”. The court regarded this as “a very broadly phrased formulation”. Irwin LJ was “sceptical as to whether it was wise to reach an agreement in these terms” (at [35]), adding that the expert evidence “should have been confined to purely scientific questions” (at [38]). Of course, an expert can only testify as to matters upon which the court requires assistance (*R. v Turner* [1975] Q.B. 834, CA). In the context of the other evidence in the case (including the agreed expert evidence), the point made at paragraph 12 of the joint statement was an obvious one and not an issue upon which the jury required assistance. Nevertheless, the Court of Appeal has given experts significantly more leeway in other prominent cases. In *R. v Reed and Reed*; *R. v Garmson*, CLW/10/01/1, [2009] EWCA Crim 2698, [2010] 1 Cr.App.R. 23, CA, the prosecution expert was permitted to “stray … into the jury’s province of making common sense assessments of the plausibility of narratives” (Tony Ward, *Explaining and trusting expert evidence: What is a “sufficiently reliable scientific basis”*, (2020) 24(3) E.&P. 233, p.245). For example, she opined that knives found in the victim’s home “were foreign to the scene as the handles did not match any in [the victim’s] kitchen”. This was not a statement based on any expertise or data about the preference of individuals towards knives with identical handles and was a matter that was properly within the province of the jury (Ward, p.246).

Depending on the nature of the genetic material and the circumstances of the offence, an expert may be able to exclude the possibility that DNA was deposited indirectly. In *FNC*, for example, secondary transfer could be ruled out because the presence of semen was consistent with the victim’s account of the offence. In other cases, particularly those involving what is commonly referred to as “touch DNA” (primarily skin cells), it will be impossible to rule out secondary transfer. While there are some associations a defendant might be expected to mention as an explanation for the presence of touch DNA (e.g. “I’ve been inside that house many times”), the instant case illustrates that there will be cases in which defendants simply cannot be expected to explain how their DNA came to be present on an item. In such cases a defence advocate can make the point that it would be unrealistic for the defendant to account for the multifarious ways in which secondary transfer might have taken place, even if it is deemed to be a matter upon which the expert cannot properly comment.

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