

Kent Academic Repository

Full text document (pdf)

Citation for published version

Miller, Vincent and Hayward, Keith (2018) 'I did my bit': Terrorism, Tarde and the Vehicle-Ramming Attack as an Imitative Event. *British Journal of Criminology*, azy017 . ISSN 0007-0955.

DOI

<https://doi.org/10.1093/bjc/azy017>

Link to record in KAR

<http://kar.kent.ac.uk/67097/>

Document Version

Author's Accepted Manuscript

Copyright & reuse

Content in the Kent Academic Repository is made available for research purposes. Unless otherwise stated all content is protected by copyright and in the absence of an open licence (eg Creative Commons), permissions for further reuse of content should be sought from the publisher, author or other copyright holder.

Versions of research

The version in the Kent Academic Repository may differ from the final published version.

Users are advised to check <http://kar.kent.ac.uk> for the status of the paper. **Users should always cite the published version of record.**

Enquiries

For any further enquiries regarding the licence status of this document, please contact:

researchsupport@kent.ac.uk

If you believe this document infringes copyright then please contact the KAR admin team with the take-down information provided at <http://kar.kent.ac.uk/contact.html>

'I did my bit': Terrorism, Tarde and the Vehicle-Ramming Attack as an Imitative Event

Vincent Miller, University of Kent
Keith Hayward, Copenhagen University

Accepted to the British Journal of Criminology, May 10, 2018

'A complex weapon makes the strong stronger, while a simple weapon – so long as there is no answer to it – gives claws to the weak'. (George Orwell, 1945)

Introduction

Shortly after midnight on June 19th 2017, Darren Osbourne, a heavy-drinking, 47-year-old resident of Pentwyn, Cardiff, deliberately swerved a rented white Luton panel van into a crowd of people outside the Finsbury Park Mosque, North London. The victims, a group of Muslim men who had just left the Mosque after attending Ramadan night-time prayers, were gathered together to assist a passer-by who had collapsed on the pavement outside. Even without this distraction, it is doubtful the mosque-goers could have avoided the attack; such was the innocuous ubiquity of Osbourne's indiscriminate but deadly weapon. Osbourne's intentions, however, were anything but innocuous.¹ After his automotive missile came to a halt against some nearby bollards, he leapt from the cab and, wild-eyed and sweating, shouted 'I'm going to kill all Muslims – I did my bit', before declaring his actions were revenge 'for London Bridge' (Pasha-Robinson 2017).²

In the days following the attack the press struggled to make sense of Osbourne's rapid descent into extremism. Certainly, his biography provided few clues as to what had motivated him to undertake the attack. We do know he was deeply affected by recent Islamic State-inspired terrorist attacks – including two involving vehicle-ramming incidents.³ But what is equally clear is that, prior to his decision to attack the mosque, Osbourne had no history of – or even interest in - violent extremism. Indeed, described variously by his sister, Nicola, as someone who was 'not interested in terrorism' or even politics in general ('He wouldn't even know who the Prime Minister is'), and by his drinking partners as 'a loveable mentalist', the picture of Osbourne that surfaced was of a 'shouty' but normal

¹ One person was killed and twenty injured in the Osbourne attack.

² On 3/6/2017 three Islamic State supporters drove a rented van into pedestrians on London Bridge. After their van was disabled, the men made their way to a nearby market and carried out a frenzied knife attack that left eight dead and 48 injured.

³ In the days leading up to the Mosque incident Osbourne had allegedly 'hurled insults at his Asian neighbour's 12-year-old son', and the night prior to the attack he was thrown out of his local pub for making threats against Muslims.

‘family man’ (Ward et al 2017) – ‘Troubled, but not a racist’ (Mortimer 2017). Even those who disliked Osbourne appeared shocked by his actions; one of his more forthcoming Pentwyn neighbours commenting ‘He’s always been a complete c***, but this is really surprising’ (ibid). Such quotes are typical of the narrative of bewilderment that quickly emerges in the wake of egregious (Western) terrorist incidents. For decades, it was standard reportorial protocol for journalists to write that serial killers were always “quiet neighbours” who “kept themselves to themselves”. In recent years, a similar cliché now commonly depicts terrorists as “non-descript”, “normal”, even “fun-loving” individuals who exhibited no prior evidence of the violence to come.

Such reportage is not, however, without foundation. One of the most robust and oft-repeated research findings within the discipline of terrorism studies is that, rather than suffering from any profound psychopathology, ‘the outstanding characteristic of terrorists is their normality’ (Crenshaw, 1981:390; Corrado, 1981; Silke, 1998). This ‘ordinariness’ finding was a necessary rejoinder to the common misconception of terrorists as “crazies” or psychopaths, but at the same time it marked the end of the search for anything as identifiable as a distinct terrorist ‘personality type’.⁴ This does not mean that terrorism scholars have failed to produce any valuable insights into terrorist behavior. On the contrary, there exists a veritable mass of excellent (post facto) psycho-sociological scholarship on the terrorist actor (see e.g. Horgan, 2005; Post, 2007; McCauley and Moskalenko, 2011; Gill, 2016). Instead, it is simply to point out that it remains difficult to extrapolate out from the individual, psycho-biographical level to make wider points that can be used to improve security and enhance detection. This problem is especially apparent with vehicle ramming, a phenomenon marked by a surprising diversity of perpetrators (in terms of their ideologies, biographies, and geographical locations). It is largely for this reason that, in the analysis of the vehicle ramming attack (VRA) that follows, we have chosen to focus not on the perpetrator per se, but on a very different, and much-neglected, aspect of terrorism: the terrorist act itself. In this case, the specific phenomenon of purposely driving a vehicle into groups of civilians or police/military personnel.

In criminology, of course, there is nothing new about training attention exclusively on the criminal act. In fact, since the 1980s, situational crime preventionists have done precisely that; downplaying any interest in offender motivation and stressing instead the importance of the criminal event itself and the situational factors that influence its commission (e.g. Cornish and Clarke 1986). The explicit goal of this ‘administrative criminology’, then and now, remains beguilingly straightforward: to

⁴ This tendency to focus not on the ‘why question’ but on the ‘how question’ is now very marked within terrorism studies. In particular, the issue of *process* (as opposed to a specific personality trait or biographical ‘turning point’) is seen as especially important when it comes to ‘radicalization’ and ‘de-radicalization’; discourses that, as Sedgwick (2010), has pointed out, emerged as a sort of ‘holy grail of national security research’ in the aftermath of the July 7/7 London bombings.

implement practical, cost-effective crime control measures that will bring about a quantifiable reduction in the overall rate of specific crimes. Nothing wrong with this of course, but our rationale for focusing attention on the criminal/terrorist event does not stem from a situational perspective – although obviously we hope the theoretical analysis of VRAs presented here will help preventionists better combat the phenomenon in the future. Instead, our interest in vehicle ramming is due to its growing appeal as a simplistic but potent means of doing terrorism – of performing an act of violence against civilians for political or symbolic purposes. Vehicle ramming is a cheap but extremely effective way of inducing fear, promoting an ideological message, or just simply wreaking destruction for any number of personal reasons, suicide included. It is perhaps for this reason that ramming attacks are now being conducted by such a wide array of perpetrators. Yet the fact that VRAs are easy to carry out and impossible to predict does not explain why they have become so prevalent over the last year or so. It is this particular aspect of the vehicle-ramming event that interests us. Why, given the mass availability of automobiles for many decades around the world, have these motorised crimes suddenly been adopted by everyone from committed Islamic State-affiliated Jihadists, to ‘lone-wolf’ Palestinians and other Muslims with no previous links to organised terrorist groups, to anti-Muslim extremists, to American right-wing Christians, to unbalanced members of the public at large?

In a bid to answer this question, the paper will proceed in three parts. Part one provides some historical and geographical context in the form of a short genealogy of VRAs that traces (and statistically documents) two recent steep rises in ramming incidents; a first pulse that took place in Jerusalem and the West Bank between 2015-2016; and a second ongoing ‘wave of vehicular terror’ that started in 2016 and is currently affecting Europe and North America. In part two we address the most common extant explanations for the rise of global ramming attacks. For example, we consider the publication of a series of articles in Al Qaeda and Islamic State online propaganda magazines that discuss and actively encourage VRAs in the name of Jihad. However, as our analysis will show, while relevant to the situation, the idea that these two publications can somehow account for the recent spike in VRAs (as is often suggested in the media) is too reductive. If, as we suggest, standard rationalisations for VRAs are problematic, what other factors might have contributed to the rapid increase in what was once an extremely rare form of violence? We set ourselves this task in the final part of the article.

Inspired by the social theory of Gabriel Tarde (2012/1895, 1903, 2010/1888), part three introduces the concepts of ‘contagion’, ‘imitation’, and the ‘mimetic’, and assesses their value in terms of understanding the current spate of VRAs. More specifically, we assert that, as a result of the intensely connected and networked nature of contemporary society, at least some of the explanatory focus should now be trained on the terrorist act itself as something with a seductive appeal and force all of its own; as something that travels through our contemporary ‘mediascape’, to be internalised and

imitated by a varied array of subjects who in turn are animated by a diverse set of motivations, psychologies and ideologies. After a general consideration of Tarde's imitation-based approach to the social world, the final part divides into three brief subsections that each illustrate how his thinking can be used to understand some of the prominent features associated with the VRA: i) the sudden, wave-like growth and diffusion of the act of vehicle ramming; ii) its enactment by a diverse set of (predominantly) 'lone-actor' terrorists; and iii) the influence of contemporary mediascapes in the sudden lurch towards political violence that is a common feature of vehicle rammers. In conclusion, we assert that Tarde's work is likely to be of considerable use when it comes to analysing subsequent trend-like pulses in terrorist *modus operandi*.

A brief history of the vehicle ramming attack

In his typically engaging book *Buda's Wagon: A Brief History of the Car Bomb*, Mike Davis documents what he describes as 'the irreversible globalization of car-bombing'. Likening the 'steep, almost exponential' rise of vehicle-born bombing in the final third of the twentieth century to 'an implacable virus' that inserted itself into a 'host society', Davis claims that 'the most dramatic impact of the car bomb has been precisely its enfranchisement of marginal actors in modern history' (2007:11). While the bloody violence and territorial reach associated with the car bomb far exceeds that of the VRA, it is difficult not to also note some striking similarities. To start with, like its more explosive counterpart, VRAs also seem to have something of a virus-like quality. For example, in the last four years, the VRA has transitioned from being a relatively rare occurrence, to become, by 2016, the most lethal form of terror attack in Western countries, claiming just over half of all terrorism-related deaths in the West that year.⁵ (Importantly, these figures do not include the growing number of ramming incidents in North America and Europe that have been classified as 'non-terrorist' in origin). The two terror tactics are also similar in that, by transforming a bland, everyday object into a lethal, semi-strategic weapon, they empower marginal actors by providing them with the means to strike at the heart of urban centres and sow fear in the wider society. Finally, although both techniques are frequently employed by well-organised terrorist groups, neither method is exclusive to terrorism (nor as we have seen above, to Islamist terrorism). Instead, both acts have a history of being adopted, adapted and transformed by groups and perpetrators coming from a variety of religious and non-religious backgrounds and ethnicities - including so-called 'lone-wolf' actors, as exemplified by the Osbourne case above.⁶ Given such similarities, it would seem instructive to follow Davis's lead and undertake a brief history of the VRA.

⁵ Terrorist casualties in Western countries in 2016: vehicular: 99 killed, 502 injured; bombing: 32 killed, 330 injured; shooting: 51 killed, 61 injured; stabbing: 7 killed, 27 injured (Lazo 2017).

⁶ The term 'lone wolf' is a subject of debate (Schuurman et al, 2018). However, we adopt the position of Hamm and Spaaj (2017:14) who define lone wolf terrorism as 'terrorist actions carried out by lone individuals, as

To understand more about the nature of VRAs we created a database of 119 such attacks from 1999 to the present. The primary source for this database was the National Consortium for the Study of Terrorism and Responses to Terrorism Global Terrorism Database (<https://www.start.umd.edu/gtd/>). However, due to certain limitations,⁷ we supplemented the sample with information drawn from the RAND Database of Worldwide Terrorism Incidents (<https://www.rand.org/nsrd/projects/terrorism-incidents.html>), as well as further examples from our own media searches. Inclusion in the database required the following criteria to be met:

1. A vehicle had to be used as a weapon on pedestrians or populated vehicles.
2. The vehicle had to be the primary weapon. Any other weapons used (knives, firearms) could only be used when the vehicle was disabled and not part of an ‘armed assault’ or ‘car bomb’.
3. The incident was not part of a kidnapping attempt.
4. Pedestrian casualties were intended, and not part of a chase, evasion or accident.
5. The vehicle was not used primarily for demolition.

This yielded a database of 125 attacks from 1/1/1999-31/12/ 2017, and a pattern demonstrated in Figures 1 and 2 below:

[INSERT Figure 1 here]

Here is the distribution separated for location of either Western Europe/North America, Middle East/North Africa, Rest of the world:

[INSERT Figure 2 here]

The Figures demonstrate a sporadic history of VRAs in different parts of the world up until 2014. At that point, a rise in ramming incidents occurs, beginning with a wave of attacks in the Middle East (almost exclusively in Israel and the West Bank, see Figure 2), which, by the end of 2015, becomes quite dramatic. This is followed by a second spike starting in 2015 across North America and Western Europe (Figure 2). Let us look at each in turn.

‘The intifada of the individuals’

opposed to those carried out on the part of terrorist organizations or state bodies’. Accordingly, ‘The lone wolf is solitary by nature... although his or her radicalization to action may be spurred by violent images, incendiary books, manifestos, and fatwas’ (ibid:5).

⁷ Detailed records of incidents are not provided before 1999, and the database does not include 2017. In addition, the database only includes incidents that have been judged to be ‘terrorism’. For our purposes, we needed to also include VRAs involving other motivations, such as mental illness etc.

When examined more closely, the 2015 spike in ramming attacks in Israel and the West Bank can be seen as part of a larger wave of violence known as ‘The wave of terror’ (Ostrovsky 2015), or ‘The intifada of the individuals’ (Nashashibi 2015; David 2016; Pfeffer 2016; Ackerman 2015). In Israel, military officials now use both appellations to describe a spontaneous escalation in unsophisticated, ‘lone-wolf’ DIY attacks by Palestinians on Israelis that involved knives and other sharp-edged instruments (cleavers, screwdrivers etc.), but also – more unusually - vehicular ramming. Indeed, during this time, ramming itself went from a rare occurrence to the second most common form of attack in Israel and the West Bank (Eglash et al 2016).

Commentary on both sides of the conflict attributed this unforeseen ‘wave’ of terror to a well-established list of causes: poor economic conditions among Palestinian youth, lack of progress in the peace negotiations, and conflicts over Israeli access to the Temple Mount. But while initially there was an all-too-familiar feel to both the attacks and the explanatory commentary, it quickly emerged that certain aspects of this latest pulse of attacks marked it out as different from previous intifadas. To start with, many of the attacks during this period were carried out by so-called ‘lone-wolf’ assailants; individuals with no previous history of violent political behaviour and no established association with existing terrorist organisations. In the words of Sharif Nashashibi (2015), such is the level of the Palestinians’ exasperation, ‘they are rising up as individuals rather than as a collective mass (out of necessity, not choice), without the relative safety of numbers and the backing of their leaders’.

Second, it appeared that the attackers’ motivation for violence was also more varied and personal than in other periods of the conflict. In other words, as Pfeffer makes clear in the following quotation, while all expressed frustration with the plight of Palestine, the triggering factor was often as much personal as it was political or ideological:

The attackers have a social media presence, usually on Facebook but also on Twitter and Instagram. Analysis of their behaviour online has yielded profiles of potential attackers and, in many cases, also the additional motivations for a suicide attack. Often these are personal and non-ideological reasons such as debt or forced marriage. In many cases, Israeli security services believe the real motivation behind attacks was the desire for "suicide by IDF", attaining the status of martyrdom and sparing family embarrassment. (Pfeffer 2016)

These two points are empirically substantiated in a recent study by Perry, Hasisi and Perry (2017). Drawing on a database supplied by the Israeli Security Agency, Perry and his colleagues examined 62 VRAs perpetrated by ‘lone terrorists’ in Israel and the West Bank between January 2000 and March 2016. They point out that none of the 62 acts were committed by a terrorist organisation, and that only 14.5% of the sample had previously engaged in terrorist activity. They also stressed that, while over half of the perpetrators declared a nationalistic or religious motivation for their attack (suggesting they

were affected by the political situation around them), in many cases political events shrouded or were used to justify other unrelated personal grievances.⁸

Finally, as Ackerman makes clear, many of the attacks associated with ‘the intifada of the individuals’ were unsophisticated, unpredictable and, interestingly, very hastily planned, using simple ‘DIY’ weapons (typically knives and vehicles).

These types of terrorist attacks cannot be detected ahead of time, as there is no planning or strategy behind them. As a result, the security forces have no way of preventing them. In these cases, intelligence gathering does not give us an advantage... When lone-wolf attacks succeed, other individuals think to themselves, “Hey, I can do that too.” (Ackerman 2015)

Importantly, it is not simply that more successful Israeli security measures have created a situation where only knives and cars are available (as is sometimes claimed, see below). Instead, it is symptomatic of the style of the attack, one lacking in organisation and planning (Beaumont 2015). A style that is perhaps inspiring simply because it is so easy to repeat.

Ripple Effect: Beyond the West Bank and into the West

While VRAs and other related forms of violence associated with the intifada of the individuals peaked in 2015 (and actually started to decline in Israel and the West Bank by the end of 2016), we can clearly see from Figure 2 that, by late 2016, ramming incidents had started to spread to other regions – most notably Europe and North America. For example, by the end of 2017 (a year not currently covered by the Global Terrorism Database), there had already been many more VRAs in Western cities (32) than in the West Bank and Jerusalem (10). In large part this increase in Western attacks can be attributed to a spate of spectacular and deadly terrorist actions by Islamic State-inspired supporters. Consider, for example, the following high profile VRAs undertaken by jihadists in the last 12 months of the sample:

- 19 December 2016: failed asylum seeker, Anis Amri steers a hijacked HGV into a Christmas market in Breitscheidplatz, Berlin, killing 12, injuring 56.
- 22 March 2017: British Muslim Khalid Masood drives his car into pedestrians on Westminster Bridge, London, killing five, injuring fifty.
- 7 April 7 2017: Uzbek asylum-seeker Rakhmat Akilov attacks a pedestrianised shopping street in Stockholm, Sweden, killing five, injuring fifty.
- 3 June 2017: three Muslim men drive a van into pedestrians on London Bridge before assaulting passers-by in a nearby market with knives, killing eight, injuring forty-eight.
- 8 August 8 2017: Hamou Benlatreche plows his car into a military patrol in Levallois-Perret, Paris, injuring six soldiers.

⁸ Aside from the fact that most of the attackers were under 25 years of age, Perry et al (2017) concluded that, because of the diversity of the sample, a profile of lone-actor terrorists in Jerusalem/the West Bank was not possible. For example, only 28.5% had prior criminal convictions, and only 12.9% were said to be suffering from psychological or mental health issues.

- 17 August 2017: a jihadist cell undertakes twin VRAs in Barcelona and Cambrils, Spain. Fifteen people were killed and over 130 were injured.
- 6 November 2017: Sayfullo Saipov drove a 'Home Depot' truck onto bike paths in Manhattan, deliberately targeting bicyclists and pedestrians, before finally driving into a school bus. Eight people were killed, eleven injured.

However, it should not be forgotten that alongside these horrendous attacks a growing number of 'non-terrorist' ramming events also took place in Western cities in 2017 – a great many of which, just like in Palestine and Israel, were either spontaneous, chaotically planned, or undertaken by people with no previous affiliation with terrorist networks. Once again, when listed, these events make for chilling reading:

- 20 January 2017: Dimitrios Garagasoulas, a 26-year-old Australian, stabbed his brother (allegedly for being gay), then went on a driving rampage across Melbourne, killing 6 people, wounding 30.
- 25 February: a German man armed with a knife drove a rented car into a square in Heidelberg, killing one, injuring two.
- 18 May: a US military veteran drove his car into pedestrians in Times Square, New York City in an apparent 'suicide by cop' attempt, killing one, injuring twenty.
- 29 July: one person was killed and four injured when a drunk man deliberately careered into a group of pedestrians in Helsinki, Finland.
- 14 August: Eric Patterson crashed his car into a pizzeria terrace in a small shopping area, killing one and injuring thirteen.
- 21 August: a man with a history of petty crime deliberately rammed pedestrians waiting at two separate bus stops in Marseilles, France with a stolen white van, killing one, injuring one.
- 10 November: a man deliberately drove his car into a group of Chinese students in Blagnac, France, injuring three.
- 2 December: five people were injured in south-west London after a rental car rammed pedestrians after an altercation between occupants of the vehicle and the pedestrians.

Such incidents illustrate that, not only has vehicle ramming spread beyond the Israeli-Palestinian conflict and into Western cities, but that it is now a favoured practice of Jihadists, anti-Islamists, right-wing Christians, and unbalanced members of the public at large. As Youself Munayyer, Executive Director for the US Campaign for Palestinian Rights, suggested in an interview:

The tools that people use to carry out attacks don't have a religion, trucks don't have an ideology. They just require somebody to drive them... This is a question of utility and opportunity and tactics more than it is about ideologies. Israeli settlers have used their cars to run over Palestinian civilians in the West Bank. It's a tactic that can be used by lots of different people. (Munayyer, Cited in Moore 2017)

This is certainly true, but it does not account for why VRAs have emerged as such a popular option at this particular moment in history. To understand this development we must look elsewhere.

From nothing to something? Extant explanations

In the face of the spate of VRAs that have occurred in Western cities since 2015, three online articles have frequently been held up in the press as both the inspiration behind and the catalyst for this new terrorist modus operandi. In the Fall 2010 edition of Inspire, the official magazine of Al Qaeda in the

Arabian Peninsula, a feature article appeared entitled ‘The ultimate mowing machine’. The title page depicted a Ford F-Series ‘Super Duty’ pickup truck. However, in the Inspire article the original Ford slogan - ‘The ultimate towing machine’ – had been changed in a bid to encourage the ‘mowing down’ of the enemies of Allah.⁹ ‘The ultimate mowing machine’ was followed in 2016 and 2017 by two similar articles in Rumiya, an online magazine used by the Islamic State for propaganda and recruitment purposes (‘Just terror tactics’, Issue 3, November 2016; and ‘Just terror tactics: truck attacks’ Issue 9, May 2017). All three articles encouraged vehicle ramming as an action in which lone-actor Jihadists could easily and without suspicion obtain (preferably large) vehicles and then target festivals, crowded city centres and other ‘pedestrian only’ areas for maximum destructive effect.

[INSERT Figure3 here]

This seemingly straightforward explanation is problematic for a number of reasons. To start with, when one examines the publication dates of these articles more closely, their release bears little significance to the actual pattern of attacks. For example, if ‘The ultimate mowing machine’ was so influential, why did it take more than four years for the first high-profile VRAs to occur in Western cities? Indeed, further analysis reveals that the original Inspire article may have itself been inspired by a March, 2006 incident in which a man, wanting to ‘avenge the deaths of Muslims around the world’, drove a rented Jeep Cherokee SUV into a crowd of people in a busy pedestrian area at the University of North Carolina, Chapel Hill, injuring nine. Interestingly, this attack was followed just a few weeks later by another SUV ramming incident, this time of pedestrians in San Francisco, California, by a schizophrenic Afghani immigrant.¹⁰ Furthermore, although there was a discernible pulse of VRAs following the publication of the ‘Just terror attacks’ article in Rumiya in November 2016,¹¹ this article actually appeared after both the wave of ramming incidents in Israel and the West Bank, and, importantly, Europe’s most deadly and most publicised VRA – the July 2016 Bastille Day attack in Nice, France, which killed 87 and injured 433.¹² Likewise, the May 2017 article was published after

⁹ The author also suggested welding steel blades to the front of a pickup truck to cause further damage to pedestrians on the streets of Western cities, adding later: ‘This is one of many ways to implement this idea. You may modify it and add or subtract it accordingly to what is suitable to your particular conditions... Tell the world why you did it...’ (Ibrahim 2010:54).

¹⁰ Our sample reveals a sporadic history of ramming attacks dating back to 1999 (the last year of reliable records from the GTD), which includes VRAs by both Palestinians and Israeli Settlers as early as 2001.

¹¹ For example, on 28th November 2016, Abdul Razak Ali Artan rammed his vehicle into a group of students and then stabbed bystanders on the Ohio State University campus in Columbus, Ohio. At least 11 people were injured before Artan was shot and killed by a nearby police officer. ISIL subsequently claimed responsibility for the incident.

¹² The driver of the white 19-tonne Renault Midlum truck used in Nice was Mohamed Lahouaiej-Bouhlel, a 31-year-old man of Tunisian origin. Once again, the Islamic State would claim responsibility.

highly mediated attacks in Berlin, Stockholm and London.¹³ None of this is to suggest that these three now infamous articles have not played an important part in promoting the concept of the VRA, only that they should not be seen as causal. If the ‘The ultimate mowing machine’ and the two subsequent Rumiya articles were merely an articulation of an ongoing VRA wave rather than, as some have suggested, actually precipitating or causing it, how else might we account for the current popularity of this mode of attack?

A second extant explanation relates to situational developments associated with the so-called ‘security hypothesis’ (Farrell et al 2011). In relation to the VRA, the argument would go as follows: because situational crime preventionists have successfully ‘reduced the rewards of terrorism’ by physically target-hardening structures and situations that traditionally have been the focus of terrorist attacks (the most obvious example here being the implementation of airport scanning equipment to combat terrorist “skyjackings”), contemporary terrorists have shifted their attention to ‘softer targets’ (e.g. unprotected pedestrians) and more mundane methods (e.g. vehicle ramming). No doubt this argument has merit. Certainly proponents of the situational approach argue that the shift away from complex, so-called ‘expeditionary terrorism’ (Kilcullen 2009:32) (such as the 1993 and 2001 World Trade Centre attacks) towards more ‘parochial, devolved, amateurish, ugly, and uncinematic’ forms of terrorism (Cottee, 2017) is evidence of the effectiveness of Crime Prevention through Environmental Design (CPTED) and related preventative concepts such as Newman and Clarke’s (2008) ‘EVIL DONE’ vulnerability index (Freilich and Newman 2009).¹⁴ Yet on closer inspection there is a problem. If targeted preventative measures against terrorism have been in position for decades (starting with the aforementioned control and regulation of airports in the 1970s, continuing with urban counter-terrorist measures such as those deployed against the Irish Republican Army in Northern Ireland and London in the 1980s and 1990s, and culminating in the type of technically-sophisticated target-hardening that has come to define the post-9/11 era cityscape), why is it only in the last two years that VRAs have become commonplace?

If the two most prevalent explanations for the rise of the VRA are unsatisfactory, how else might we account for this burgeoning phenomenon? Interestingly, there does exist one final, albeit almost

¹³ It is estimated that less than 1,000 British-registered IP addresses downloaded ‘The ultimate mowing machine’ article (Fisher, 2012), compared with 54,723 UK downloads of *Inspire* between 14/10/2014-12/1/2015. This is important because these later editions contained absolutely no information on VRAs. Instead, the practical advice for the would-be terrorist in subsequent *Inspire* magazines focused on how to make car bombs using nails and gas.

¹⁴ Such claims must be tempered by the Achilles heel of CPTED: displacement; a point born out in a recent commentary on VRAs by terrorist scholar Brian Jenkins (2017). After outlining ‘Ten potential mitigation measures’ to combat motorized assaults he concludes: ‘it is not clear that any of the suggested potential security measures would prevent a determined terrorist behind the wheel from driving a bit further to get roughly the same results’.

entirely ignored, explanation - not of VRAs per se, but of previous modes of terrorism that also appeared to follow a wave/trend-like pattern. Consider, for example, the skyjacking epidemic of the late-1960s and early-1970s, a phenomenon that, as Brendan Koerner suggests, has striking similarities with today's ramming situation.

The perpetrators of these crimes often said they were acting to support one of the era's fashionable political causes – the Black Power movement, for example, or the crusade to end the Vietnam War. But if you scratched beneath the surface, you often found people in desperate straits – people like Roger Holder, a PTSD-afflicted Vietnam vet who ostensibly hijacked a Western Airlines jet to Algeria as part of a convoluted plot to win the freedom of American political activist Angela Davis but was also keen to avoid a looming court date for fraud. Or Paul Joseph Sini, an alcoholic loner who claimed to be an affiliate of the Irish Republican Army but who really hijacked Air Canada Flight 812 and demanded a \$1.5 million ransom because he was sick of feeling worthless... When interviewed in prison, many hijackers confessed that they'd become intrigued after viewing news footage of stolen planes; when they committed their own crimes, they were often mindful of the fact that their exploits would be aired to millions. (Koerner, 2016)

The contagion-like nature of skyjacking and other similarly “fashionable” terrorist practices have not passed without comment. Holden stressed this very theme in his 1986 article on the subject, while Jenkins (1981) demonstrated similar effects with regard to embassy takeovers in the 1970s. More generally, Midlarsky, Crenshaw and Yoshida (1980) found a contagion pattern in the spread of ‘terrorism’ itself, as well as with specific terrorist actions, from national movements in the developing world to radical groups in Western Europe. However, in terms of the argument we will develop in the remainder of the article, perhaps the most important paper on ‘the contagion effect’ is not on trends in terrorist practice per se, but on the (‘copycat’) relationship between heavy media coverage of high-profile killings and subsequent clusters of violent crimes. Writing in 1971, Berkowitz and Macauley established a relationship between several of the more notorious crimes of 1960s America, including the JFK assassination, the Richard Speck killing of eight nurses in Chicago in 1966, and the mass shooting at the University of Texas in the same year. All these studies, to a greater or lesser degree, evoke something that we feel might help explain the current spate of VRAs. This work, for shorthand purposes can be incorporated under the umbrella term ‘contagion theory’, an unsung field of study which posits that, much like biological contagion, if one person is exposed to a phenomenon (either in person or through the media), this can serve as the stimulus for the imitative social actions of another, thereby explaining the subsequent (sudden) spatial or temporal clustering of certain social phenomena. It is to this body of work that we now turn.

Gabriel Tarde, contagion theory, and the vehicle-ramming attack as a mimetic phenomenon

What is notable, theoretically speaking, about ‘exposure’ or ‘contagion’ as a causal phenomenon is that it shifts the analysis and explanation of behaviour away from ‘subjects’ in themselves to emphasise instead the relational aspects of interaction, exposure and the flow of behaviours between

persons. As Marsden (2005) notes, this shift in emphasis away from an autonomous individual subject is one reason mainstream social science has never really taken contagion theory seriously, as any approach that seeks to explain adult behavioural patterns via ‘social replication’ undermines the traditional, Western, Cartesian understanding of the human subject as an agent defined solely by individual intentionality/evaluation. ‘Social contagion’ is thus incompatible with the idea of the self-contained, rational calculating actor. Such criticism has also been voiced within terrorism studies specifically, with the likes of Picard (1986) dismissing the concept of social contagion as a ‘dangerous idea backed by dubious science’. Yet might it be time for terrorist researchers and criminologists to do what other branches of the social sciences are now doing, and reconsider contagion-like arguments in light of the Internet age?¹⁵ Certainly, if we consider the speed, intensity, and scope of the wave-like spread of VRAs over the last two years, it would seem that, of the currently available explanations, the ‘contagion approach’, centred as it is on networked technologies and imitative processes associated with ‘the viral’, has much to offer. Indeed, in recent years, the imitative and mimetic processes associated with contagion have been reconsidered by ‘digital culture’ scholars interested in how information is exchanged and disseminated through the networked technologies of the Internet. Most obviously, this body of work has extended the biological metaphor via the use of the terms ‘viral’ and ‘meme’ (e.g. Sampson 2012; Shifman 2014; Guadagno et al 2013).¹⁶

Work on ‘contagion’ has its roots in turn-of-the-century ‘crowd’ theorists such as Gabriel Tarde and Gustav le Bon. Tarde (1903, 2010/1888, 2012/1895) in particular is noteworthy here, as his work proved to be extremely influential in the early development of sociology, psychology and (lest we forget) criminology (Bierne, 1993), both in Europe and North America (Leys, 1993; Kinnunen, 1996). More recently, Tarde’s work has found favour not just with scholars examining the viral or mimetic nature(s) of the Internet (Sampson 2012; Burgess et al 2017), but also with sociologists of ‘affect’ (Blackman 2007), Actor-Network Theorists involved in innovation, diffusion, and science and technology studies (Latour 2002), and researchers interested in the spread of new social and political movements (Marrero-Guillamón 2013).

For Tarde (1903), imitation is a (perhaps the) basic process of the social world. According to his thesis, imitation occurs as the by-product of human co-existence, and is a construct he used to develop a view of society and social actors that privileges neither individual ‘psychology’ nor deterministic

¹⁵ Recent years have seen a significant revival of interest in contagion theory. See e.g. Gould et al (2003) and Marsden (1998) on suicide; Christakis and Fowler (2007) on obesity; Patten and Arboleda-Florez (2004) on violent group behaviour; Howard and Gengler (2001) on the ‘emotional contagions’ of mood and aggression.

¹⁶ ‘Memes’ are the socio-cultural equivalent of the biological/evolutionary concept of the gene (Dawkins 1976). The term is used to describe cultural messages which, through the creative and participatory nature of Web 2.0, proliferate across social media, while continually being adapted, parodied and reworked (Shifman 2014; Wiggins and Bowers 2015).

social structures as the primary initiates of social action. Later work on ‘mimesis’ by Walter Benjamin also resonated with Tarde, with the German philosopher noting: ‘There is perhaps not a single one of his [sic] higher functions in which his [sic] mimetic faculty does not play a decisive role’ (Benjamin 1999/1933: 720).

Importantly, imitation here does not refer to a process of simple observation and mimicry, but to the general openness of human subjectivity to the influence of the surrounding social world – i.e. the ability to affect and be affected, consciously and unconsciously, by others (Blackman 2007,2012). Accordingly, Tarde’s ‘inter-psychological’ model of subjectivity concentrated on how subjects internalise, almost in the manner of hypnotic ‘suggestion’, the ideas, desires, beliefs, emotions, and thus behaviours, of others, and then either reject, replicate, or adapt (innovate) them to suit their own individual circumstances.

By emphasizing imitation and interaction, Tarde focused attention on the contingent and fluid nature of the social as a continual process. At the same time, in place of the concept of ‘individual’, Tarde proposed a social ontology of the self as a kind of ‘socialized monad’ (Candea 2016:12); a subject that is a reflection (or microcosm) of the social whole and thus inherently open to change through the influence of external factors (Schmidt 2004). So, while ‘individual’ preferences, cognitions and decisions exist because of varying biographies of exposure, all of these important elements of the decision-making process (and subsequent behavior) are internalized from others as part of the process of social interaction and imitation. Thus, social beings are ‘social’ because they internalize the external. In Tarde’s own words, social actors deeply influence - or, more accurately, ‘mutually possess’ - one another through diverse interactive and imitative processes (Sampson 2012).¹⁷

Thus, a society or culture can be seen as being made up of a ‘career of imitations’ that has been created through a constant set of individual interactions over time (Marsden 2000). Tarde’s concept of imitative innovation helped him explain both the idea (and the origins) of social similarity, and (at the same time) the sometimes rapid spread of new ideas, practices, beliefs, tactics and affects through populations. In this sense, his work should be seen as an attempt to explain both social stability and social change without relying on static/binary notions of the ‘individual’ vs ‘the social’, agency vs structure, or subject vs object.

Tarde’s ideas provide an important theoretical contextualisation to research which emphasises the role of ‘exposure’, ‘contagion’ or ‘mimesis’ in the spread of social phenomena. More specifically in terms

¹⁷ Such thinking chimes with recent Deleuzian-inspired work on affect/emotion in sociology and the humanities (Massumi 1995; Blackman 2007; Blackmore 2000).

of our overall hypothesis, we argue that Tarde's theory of imitation can help us better explain VRAs, not only as 'expressions' of either structural/ideological or psychological factors, but as social actions that have an energy and force all of their own. In the following three short subsections, we suggest that Tarde's thinking can provide a useful starting point for thinking about certain peculiar aspects of VRAs: i.e. their 'wave-like' pattern of temporal clustering (which inevitably makes us question why these attacks suddenly became so popular despite the ready availability of cars and trucks around the world for decades), the diversity of perpetrators involved in the attacks, and the often spontaneous nature of the incidents.

i. Vehicle ramming as an imitative wave

Although clearly very different social phenomena, VRAs and online events such as viral media campaigns, memes, and different forms of online activism/awareness-raising may not be as different as one might think. Both exhibit the same wave-like distribution or temporal clustering - a pattern of inactivity, a rapid increase in take-up, interest or diffusion (usually on a profoundly international scale), and finally a longer, but still rapid, drop-off in participation. For example, this typical pattern of wave-like temporal clustering was demonstrated when seventeen million people participated in the 'Ice bucket challenge', an imitative meme which captured global attention and participation for a brief period in 2014.

Such patterned spontaneity would doubtless have fascinated Tarde. In his day, he was struck by how quickly innovations, ideas, fashions, technologies, and crimes could be diffused throughout a population or a crowd. Moreover, he realised the importance of the new communication technologies of his time - newspapers, railways, the telegraph etc. - in promoting the increasingly rapid transmission of ideas across dispersed populations (Barry and Thrift 2007). It was these technologies, especially the media, that turned localised 'crowds' into dispersed 'publics', subsequently transforming an imitative process that was once spatially clustered, into a 'contagion without contact' (Tarde 1901:11, cited in Gibbs 2008) in which the suggestibility of publics was demonstrated by temporal clustering of social phenomena.

This process of diffusion, exposure, connection and influence became the contemporary social fact for Tarde, and these 'pulses' or 'waves' of innovation, change or action are what he sought to explain in his work.

Social things, which maintain and perpetuate themselves by the individual consciousness's through which they evolve, are like an ocean wave, which crosses innumerable molecules and seems to animate them even while living from their force (Tarde 2010/1888:120).

Tarde wasn't interested in the 'subject' so much as with the interactive processes that (he felt) modified individuals, and thus created similarities among them. He was therefore not focused on 'individual' persons per se, nor with societal structures, but with the force of micro-actions (be it ideas, fashions, behaviours, communications, emotions) which, he claimed, move through social life not unlike the flow of an ocean wave (Sampson 2012). While waves have their origins in individual events, they also gain their own momentum and force, a force which can be dissipated or amplified, and can even merge with other waves. Tarde saw the events of social life as analogous: having their origins in the creativity of specific individual actions, but also gaining their own momentum - what he called an 'imitative radiation' that created 'lines of force which traverse the individual person' (Barry 2006:54). This suggests a view of social phenomena themselves as vitalistic forces which emerge through relationality and encounter.

Such an 'imitative radiation' is apparent, for example, in Towers et al (2015) recent study of mass killings and school shootings in the US. Applying a 'contagion model' to recent datasets of firearm incidents that left 4 or more people killed, Towers et al concluded that there is 'significant evidence' that these incidents 'are incited by similar events in the immediate past' - with the 'temporary increase in probability' lasting 13 days. This 'contagion effect', they argue, is due in large part to intense cycles of media coverage of these shootings that prolong and diffuse the event among dispersed populations. It is a sentiment echoed in recent commentary on VRAs:

The fact that this has been broadcast, the attacks in Nice and Berlin have been shown so many times in the international media, simply had the effect of drawing the attention of people that this is an effective instrument... People copy, people imitate, you see it coming and going... (Uzi Arad, Israel's National Security Council, quoted in Moore 2017)

These waves of imitative radiation are evident both internationally (where global ramming incidents have gone from insignificance to over forty per year within two years) and at a more localized, micro-level. For example, on the 21st December 2014, 11 civilians were injured in Dijon, France, when a mentally unstable "40-year-old man of Arab origin" used a Transit-style van as a weapon in five parts of the city in the space of thirty minutes. Within 24 hours, a Frenchman, with a history of petty crime, alcoholism, and mental health issues drove his van into shoppers at a Christmas market in Nantes, injuring 10. He then stabbed himself 13 times in the chest with a knife. Authorities believe he had no political or religious motive, but was directly inspired by the Dijon incident the previous evening (Lichfield 2014). Likewise, the inspiration for Osbourne's June 2017 attack on the Finsbury Mosque can be traced (in large part) to his desire for revenge for the London Bridge attack sixteen days before. Interestingly, the Osbourne attack was then itself copied just four days later by Marek Zakarocki, a Polish immigrant to the UK and 'Britain First' supporter, who allegedly shouted 'I am going to kill a Muslim. I'm doing it for Britain', before twice driving his white van at the owner of a London curry

house. Six days later, a Frenchman, also wanting to avenge recent Islamic-State attacks in Paris, was arrested after driving his car into a crowd in front of a mosque in a Paris suburb.

At the most basic explanatory level, then, Tarde's ideas provide an interesting, tentative framework for thinking about the rapid rise and spread of VRAs from an exceedingly rare practice just three years ago, to something now occurring with alarming frequency in countries across the globe. However, these examples not only highlight the wave-like clustering of VRAs, but also the diversity of the perpetrators involved in terms of their motives, ideologies and individual circumstances. In the next section, we demonstrate how such diversity can also be explained using Tardian theory.

ii. Imitation, anti-structure, and the diversity of VRA perpetrators

According to Tarde (1903), it is the imitation process, rather than social structures, that provides the basis for both the socialisation and the actions of individuals. Hence, the social is not a fixed entity, but is continually (re)made through transmissions/processes, and the resultant actions of imitation, opposition, and adaptation (Burgess et al 2017). This 'anti-structural' and 'anti-individual' approach to the origins of human behaviour is useful when we consider the diverse motivations of vehicle rammers.

Previously, we observed how VRAs spread (in short order) from the Palestinian conflict to Jihadist attacks in Western cities, ultimately encompassing a diverse array of attackers with a variety of motives. We similarly noted that even within the narrower confines of the 'Intifada of Individuals', it was clear from commentary on both sides that the Palestinian perpetrators had little in common in terms of their motivation (David 2016; Pfeffer 2016). Figure 4 illustrates this spread of perpetrators over time from an almost exclusively Palestinian practice, to Jihadists in Western cities, to people from a variety of backgrounds and motives.

[INSERT Figure 4 here]

Many, but not all, VRA perpetrators were inspired by some sense of injustice towards either Palestinians or Muslims. Others were not Muslims at all but instead wanted to avenge jihadist attacks. Some, but not all, suffered from a history of mental health problems. Some had histories of petty violence, some did not. Others merely wanted to kill themselves. Focusing more closely on 2017 sharply illustrates this diversity. Of the 42 VRAs we catalogued in that year, ten were perpetrated by Palestinians in Israel and the West Bank, and another ten were attributed to Jihadists. Four incidents were related to the ramming of (left-wing) protestors; four attributed to 'revenge' against Muslims; five appeared to be spontaneous responses to previous altercations or disputes; and nine committed by

those with either no clear motivation, mental health issues, or aspirations of suicide. This is notable because when we conceptualize a ‘wave’ of ramming attacks, the tendency is to gloss over the act itself and to look instead at its ‘cause’, either in terms of individual psychology or the social structures and ideologies that surround the individual. Too often in the analysis of terrorism, the act itself is rarely considered relevant, apart from being a means either to demonstrate an ideological goal, or to express the will of an individual, sane or otherwise. This in turn leads one to see ‘cause’ in a shared ideology, or a common individual alienation or mental illness. Of course, these are relevant, but why not also consider the material act itself?

Given the eclecticism of vehicle rammers in terms of personal/ideological motivation, it seems reasonable to pay attention to the one thing that unites their actions – the attack mode: the ‘style’, the instruments (cars, trucks, knives) involved, and the exposure to similar actions conducted by others through mass media and the Internet. To see the attack exclusively as an expression of individual psychology, or larger ideological/structural ‘social facts’, is to potentially miss out on the power of the act itself to inspire and to be worth imitating, either meticulously or more spontaneously.

iii. Vehicle ramming and emotional contagion: mimesis and the contemporary mediascape

As discussed above, in terms of their biographies, relationships to organised terrorist groups, and lack of planning, a considerable number of contemporary vehicle rammers contradict the established blueprint of the ideologically committed, well-organised terrorist actor. These observations resonate with the findings of the Israeli National Institute for Security Studies which suggested that the perpetrators of the ‘Intifada of Individuals’ were not typical of previous ‘intifadas’ in that they were largely ‘lone wolf’ assailants, often with no previous history of political violence and no established links with existing terrorist organisations. Instead, they were diverse individuals driven by different personal circumstances who were ‘inspired by the media (the internet, television, and the press), which provided them with illustrations of the injustice that Israel commits against the Palestinians and sparked them to take action’ (David 2016).

This is particularly prescient to a contemporary digital media culture in which the notion of ‘exposure’ to the acts of others has become extremely complicated. While contagion research in the 1970s demonstrated how the proliferation of broadcast media brought with it a new age of copy-cat crimes and terrorist inspiration, the move to a decentralised, networked, interactive mediascape has created an even more complicated, uncontrollable and immersive media experience. Such environments provide almost continual, instantaneous exposure to the acts and experiences of others around the world. Castells (1996) famously referred to this technologically-enabled, networked existence of continual connection beyond one’s own physical locality as ‘the space of flows’, and it is

reasonable to suggest that processes like ‘contagion’ become markedly more significant in a space of flows that allows for so many vectors of ‘exposure’, so many acts to imitate, and so many emotions with which to resonate and rationalize one’s action. Not without relevance here is recent work that examines so-called ‘emotional contagion’ (Neumann and Strack 2000; Howard and Gengler 2001), which demonstrates how exposure to the emotional states of others, affect one’s own emotional mood or position. The most notorious illustration of this was the Facebook ‘emotional contagion’ experiment of 2012 (Kramer et al 2014), which found that people’s moods closely mirrored the moods of others around them, even in non-proximal, online environments. Indeed, Gibbs (2008) sees social media in particular, with its technological capacities for connection and social influence as ‘the locus par excellence of imitation which imagines itself to be original’ (ibid: 138) and in that sense contributes to the production of an affective ‘mimetic field’, which again, can be demonstrated in the intensive, wave-like nature of much online social phenomena.

Such a ‘mimetic field’ for car-based violence has also been articulated in the US through several popular memes in recent years. ‘Run them over’ was a saying which spread through comments sections on YouTube videos, blogposts, and news stories depicting confrontations between frustrated drivers and ‘Black lives matter’ protestors on the streets of American cities. In February 2017, the ‘All lives splatter’ meme (Figure 5) emerged out of the ‘Take America back’ Facebook page and was widely disseminated through right-wing websites (Grabar 2017). Similar sentiments and incidents¹⁸ were replicated in a cluster of YouTube videos all encouraging or celebrating the ramming of left-wing protestors in both the run-up to and the aftermath of the Charlottesville VRA in August 2017.¹⁹ In total, we found six incidents of vehicle ramming involving the targeting of protestors in 2016 and 2017.

[INSERT Figure 5 here]

The haphazard, lone-operator nature of VRAs, and the often sudden lurch towards violence, both highlight the contingent nature of attacker’s identities and the usefulness of Tarde’s more fluid notion of the individual as monad - something always in formation as it internalises the external world. Such thinking inevitably differentiates Tarde’s ‘imitative’ approach from rational choice or media ‘effects’ conceptions that rely on a self-enclosed, ‘Cartesian’ notion of the subject. More problematically in

¹⁸ The Charlottesville ramming was preceded by at least three ramming incidents targeting BLM protestors: January 6, 2015, in South Minneapolis, MN; July 8, 2016 outside the Ferguson police station, St Louis, MO; July 11, 2016 in Carbondale, IL. In this last incident, the driver stopped in front of the protestors, emerged from his vehicle and shouted ‘All lives matter, not blacks, all lives’, before returning to his vehicle, and driving into the protestors (KFVS 2016).

¹⁹ Some examples include: FirearmsresQ (2017); Randy (2017); Gekrons (2017).

terms of prevention and risk-assessment, this view of the late modern terrorist as an unbounded subject continually open to internalising and emulating external influences and acts, does much to undermine the static notions of ‘identity’ behind the psychologically-constructed ‘personality types’ popular with twentieth-century terrorism researchers.

For some, this detour into digital culture studies and contagion theory will seem unnecessary. However, to adopt such a position would be to ignore the fact that the entire history of twentieth-century terrorism has itself been the subject of a wave-like metaphor. Here we refer to Rapoport’s (2004) much-cited categorisation of four historical waves of modern terrorism.²⁰ According to Rapoport, each ‘wave’ had a distinct ‘energy’ which influenced the formation of new groups under particular ideologies. Indeed, if we consider J.D Simon’s (2011) recent augmentation of the Rapoport framework, his emerging ‘fifth wave’ of terrorism draws even more parallels. Most obviously, Simon asserts that the next wave of terror will be undertaken not by highly coordinated terrorist groups with clearly demarcated political or religious objectives, but by ‘lone-operator’ terrorists. Moreover, these actors will plan their acts and distribute their message via digital technologies; hence Simon’s description of this new era as a ‘technological’ wave whose ‘energy’ will come from its ability to spread information, tactics, awareness, radical ideas, and perhaps even emotional contagion through the diverse vectors of the Internet. This being the case, it would seem that many of the sociological theories currently being used to understand memes, virals, and other digital phenomena are likely to become increasingly relevant to any analysis of new trends and patterns in late modern terrorism.

Conclusion

The same night Osbourne committed his attack outside the Finsbury Park Mosque, Djaziri Adam Lotfi, an IS supporter on a French terrorist watch list, ploughed his car into Gendarmerie on the Champs Elysees. A few days later, in an attack that closely mirrors the Osbourne incident, a disgruntled Frenchman was arrested while attempting to drive his car into a crowd near a Mosque in suburban Paris. Like Osbourne, he too was seeking to avenge recent Islamic-State attacks. Such incidents illustrate the appeal of vehicle ramming as a means of symbolic violence; a form of attack as likely to be employed by an Islamic State supporter as by an organisationally unaffiliated, disgruntled loner. In short, just as car bombing brought about the ‘enfranchisement of marginal actors in history’ (Davis, 2007:11), vehicle ramming has further democratised terrorism to the point where, as Cottee (2017) suggests, it now ‘just requires a willingness to kill and die. Indeed, just about any village idiot

²⁰ The anarchist wave (late nineteenth and early twentieth century); the anti-colonialist wave (1920s-1960s); the new-left wave (1960s-1980); and the religious wave (1979-present).

can aspire to become a martyr to a cause that politically makes no real sense and that they barely understand’.

But even though VRAs have transformed the Western terrorist act into something more akin to a misdirected ‘crime of passion’ than an act of ‘expeditionary terrorism’, it is likely that the current spate of VRAs will eventually subside just as other wave or trend-like terrorist phenomena have done in the past. This is not to suggest that the latest ‘fifth’ wave of terrorism is petering out. On the contrary. Our point is that, even if we do see a marked decline in vehicle ramming (as was the case with ‘the intifada of individuals’), another equally tawdry and devolved form of violence will quickly emerge to take its place. Indeed, our media-saturated, networked society makes such waves not just likely, but inevitable. Not only will the next democratised terrorist methodology be widely available to view and download on an array of digital formats, but more worryingly, online ‘filter bubbles’ and other forms of personalised digital isolation will continue to intensify the ongoing conflation of personal and political grievances that is the product of online hate speech and weaponised identity politics. In previous decades, terrorists required both a viable (successful) tactical exemplar and a warrant from a credible/worthy organisation before embarking on an action. Today, the former is only a meme away, and the latter no longer needed. Such a situation demands that criminologists and terrorism scholars play closer attention to developing terrorist trends. But documenting the frequency and diffusion patterns of whatever practice follows in the wake of vehicle ramming will not be enough. We must also take a page from Tarde’s book and acknowledge that certain high-profile acts have a relational energy and imitative force all of their own. Only then, when we have given the mimetic power of terrorism its due causal weight, will we be truly capable of combating it.

References

- ACKERMAN, L. (2015), ‘Has a third Intifada begun?’, *The Jerusalem Post*, 15/10/2015.
- BARRY, A. (2005), ‘Pharmaceutical matters: the invention of informed materials’, *Theory, Culture and Society*, 22(1):51-69.
- BARRY, A. and THRIFT, N. (2007), ‘Gabriel Tarde: imitation, invention and economy’, *Economy and Society*, 36(4):509-525,
- BEAUMONT, P. (2015), ‘What’s driving the young lone wolves who are stalking the streets of Israel?’, *The Guardian*, 18/10/2015. <https://www.theguardian.com/world/2015/oct/18/knife-intifada-palestinian-israel-west-bank>
- BIERNE, P. (1993) *Inventing Criminology*, Albany: SUNY Press.
- BENJAMIN, W. (1999), “On the Mimetic Faculty,” in *Selected Writings, 1926-1934*, (eds) M.Jennings, H.Eiland, and G.Smith, Cambridge, MA: Belknap Press.
- BERKOWITZ, L. and MACAULAY, J. (1971), ‘The contagion of criminal violence’, *Sociometry*, 238-260.
- BLACKMAN, L. (2007), ‘Reinventing psychological matters: the importance of the suggestive realm of Tarde’s ontology’, *Economy and Society*, 36(4):574-596.
- BLACKMORE, S. (2000), *The Meme Machine*. Oxford: Oxford University Press.
- BURGESS, A. MILLER, V. and MOORE, S. (2017), ‘Prestige, performance and social pressure in viral challenge memes’, *Sociology*, 0038038516680312.

- CANDEA, M. (2010), *The Social After Gabriel Tarde*. London: Routledge.
- CASTELLS, M. (1996), *The Information Age*,. Volume I. Oxford: Blackwell.
- CHRISTAKIS, N. and FOWLER, J. (2007), 'The spread of obesity in a large social network over 32 years', *New England Journal of Medicine*, 357:370-379.
- CORRADO, R. (1981), 'A critique of the mental disorder perspective of political violence', *International Journal of Law and Psychiatry*, 4:1-47.
- COTTEE, S. (2017), 'The Islamic State's shock-and-bore terrorism', *Foreign Policy*, 27th July.
- CRENSHAW, M. (1981), 'The Causes of Terrorism', *Comparative Politics* 13(4):379-399.
- DAVID, A.B. (2016), 'Six months of terrorist attacks by lone individuals: to be continued', *Israeli Institute for National Security Studies*, Insight No. 806. 20/03/2016.
<http://www.inss.org.il/publication/six-months-of-terrorist-attacks-by-lone-individuals-to-be-continued/> [Accessed: 06/12/2017].
- DAVIS, M. (2007), *Buda's Wagon*. London: Verso.
- DAWKINS, R. (1976), *The Selfish Gene*. Oxford: Oxford University Press.
- EGLASH, R. BOOTH, W. and CAMERON, D. (2016), "'A new kind of terrorism" in Israel', *The Washington Post*, 20/09/2016. <https://www.washingtonpost.com/graphics/world/israel-palestine-deaths/> [Accessed: 08/09/2017].
- FARRALL, G. TSELONI, A. MAILLEY, J. and TILLEY, N. (2011), 'The crime drop and the security hypothesis', *Journal of Research in Crime and Delinquency*, 48(2):147-175.
- FirearmsresQ (2017), 'Trump protester gets hit by car 6 times. Darwin awards. Run over bill', <https://www.youtube.com/watch?v=fkvHP6nKlCU>, Posted 05/02/2017.
- FISHER, M. (2012), 'It's not just newspapers: circulation tanks at Al-Qaeda's magazine 'Inspire'', *The Atlantic*, June 12th.
- 'GEKRON'S' (2017), 'Protesters getting hit by cars', located at:
<https://www.youtube.com/watch?v=ivUkN6cofK0> Posted: May 13, 2017.
- GIBBS, A. (2008), 'Panic! affect contagion, mimesis and suggestion in the social field', *Cultural Studies Review*, 14(2):130.
- GILL, P (2016), *Lone-Actor Terrorists*. London: Routledge.
- GOULD, M. JAMIESON, P. and ROMER, D. (2003), 'Media contagion and suicide among the young', *American Behavioral Scientist*, 46(9):1269-1284.
- GRABAR, H. (2017), "'Run them down': driving into crowds of protesters was a right wing fantasy long before the violence in Charlottesville", *Slate*, 14/08/2017.
http://www.slate.com/articles/business/metropolis/2017/08/driving_into_crowds_of_protesters_wa_s_a_right_wing_fantasy_long_before_charlottesville.html [Accessed: 01/12/2017]
- GUADAGNO, R.E. REMPALA, D.M. MURPHY, S. and OKDIE, B.M. (2013), 'What makes a video go viral? An analysis of emotional contagion and Internet memes', *Computers in Human Behavior*, 29(6):2312-2319.
- HAMM, M. and SPAAJ, R. (2017), *The Age of Lone Wolf Terrorism*. New York: Columbia University Press.
- HOLDEN, R. (1986), 'The contagiousness of aircraft hijacking', *American Journal of Sociology*, 91:4:874-904.
- HORGAN, J. (2005), *The Psychology of Terrorism*. London: Routledge.
- HOWARD, D.J., and GENGLER, C. (2001), 'Emotional contagion effects on product attitudes', *Journal of Consumer Research*, 28(2):189-201.
- IBRAHIM, Y. (2010), 'The ultimate mowing machine' *Inspire*, Autumn 2010:54-55.
<https://azelin.files.wordpress.com/2010/10/inspire-magazine-2.pdf> [Accessed: 12/06/2017]
- JENKINS, B. (2017), 'Vehicular terrorism: weighing the benefits, and worth, of prevention', *The RAND Blog*, www.RAND.org
- JENKINS, B. (1981), *Embassies under siege: a review of 48 embassy takeovers, 1971-1980*. No. RAND/R-2651-RC. RAND CORP SANTA MONICA CA.
- KFVS (2016) 'Driver plows through 'Black Lives matter' protesters in southern IL. KFVS television 11/06/2016. <http://www.kfvs12.com/story/32413138/driver-plows-through-black-lives-matter-protesters-in-southern-il> [Accessed 05/12/2017]
- KINNUNEN, J. (1996), 'Gabriel Tarde as a founding father of innovation diffusion research'. *Acta Sociologica*, 39(4): 431-442.

- KOERNER, B. (2016), 'Why is ISIS winning the social media war?', April, Wired.com.
- KRAMER, A.D. GUILLORY, J.E. and HANCOCK, J.T. (2014), 'Experimental evidence of massive-scale emotional contagion through social networks', *Proceedings of the National Academy of Sciences*, 111(24):8788-8790.
- LATOURET, B. (2002), 'Gabriel Tarde and the End of the Social', in P. Joyce (ed). *The Social in Question*. London: Routledge.
- LAZO, L. (2017), 'Vehicles as weapons of terror: US cities on alert as attacks hit the West', *Stars and Stripes*, 09/07/2017. <https://www.stripes.com/news/us/vehicles-as-weapons-of-terror-us-cities-on-alert-as-attacks-hit-the-west-1.477364> [Accessed: 08/08/2017]
- LEYS, R. (1993), Mead's voices: imitation as foundation, or, the struggle against mimesis. *Critical Inquiry*, 19(2), 277-307.
- LICHFIELD, J. (2014), 'France gripped by fear at Christmas after third street attack in three days', *The Independent*, 23/12/2014. <http://www.independent.co.uk/news/world/europe/france-gripped-by-fear-at-christmas-after-third-street-attack-in-three-days-9943109.html> [Accessed: 12/10/2017]
- McCAULEY, C. and MOSKALENKO, S. (2011), *Friction: How Radicalization Happens to Them and Us*. Oxford: Oxford University Press.
- MARSDEN, P. (1998), 'Memetics and social contagion: two sides of the same coin', *Journal of Memetics-Evolutionary Models of Information Transmission*, 2(2):171-185.
- MASSUMI, B. (1995) 'The autonomy of affect', *Cultural Critique*, (31):83-109.
- MIDLARSKY, M.I. CRENSHAW, M. and YOSHIDA, F. (1980), 'Why violence spreads: the contagion of international terrorism', *International Studies Quarterly*, 24(2):262-298.
- MILLER, V. (2017), 'Phatic culture and the status quo: reconsidering the purpose of social media activism', *Convergence*, 23(3):251-269.
- MOORE, J. (2017), 'After London, Nice and Berlin vehicle attacks, what can cities do to prevent more?' *Newsweek*, 23/3/2017. <http://www.newsweek.com/after-london-nice-and-berlin-what-can-cities-do-prevent-car-ramming-attacks-572692> [Accessed: 12/08/2017]
- NASHASHIBI, S. (2015), 'Israel's cruelty has unleashed an intifada of individuals', *The National* (UAE Edition), 31/10/2015. <https://www.thenational.ae/opinion/israel-s-cruelty-has-unleashed-an-intifada-of-individuals-1.67173> [Accessed: 07/08/2017]
- OSTROVSKY, A. (2015), 'Why is the world ignoring a wave of terror in Israel?', *The Telegraph*, 09/10/2015. <http://www.telegraph.co.uk/news/worldnews/middleeast/israel/11921994/Why-is-the-world-ignoring-a-wave-of-terror-in-Israel.html> [Accessed: 09/09/2017]
- PATTEN, S.B. and ARBOLEDA-FLOREZ, J. (2004), 'Epidemic theory and group violence', *Social Psychiatry and Psychiatric Epidemiology*, 39(11):853-856.
- PERRY, S. HASISI, B. and PERRY, G. (2017), 'Who is the Lone Terrorist? A Study of Vehicle-Borne Attackers in Israel and the West Bank', *Studies in Conflict and Terrorism*, DOI: 10.1080/1057610X.2017.1348101
- PFEFFER, A. (2016), 'This is the age of the individual's intifada', *The Jewish Chronicle*, June 16th.
- PICARD, R. G. (1986), 'News coverage as the contagion of terrorism: dangerous charges backed by dubious science', *Media Coverage of Terrorism*. Newbury Park: Sage.
- POST, J.M. (2007), *The Mind of the Terrorist*. Palgrave-Macmillan.
- 'RANDY' (2017), 'Anti-Trump protesters hit by cars compilation NEW CLIPS', <https://www.youtube.com/watch?v=idjGM6l9wEA> Posted: August 9, 2017.
- RAPOPORT, D.C. (2001), 'The fourth wave: September 11 in the history of terrorism', *Current History*, 100 (650):419.
- SAMPSON, T.D. (2012), *Virality*. University of Minnesota Press.
- SCHUURMAN, B. LINDEKILDE, L. MALTHANER, S. O'CONNOR, F. GILL, P and BOUHANA, N. (2018), 'End of the lone wolf: the typology that should not have been', *Studies in Conflict & Terrorism*, DOI: 10.1080/1057610X.2017.1419554
- SEDGWICK, M. (2010), 'The concept of radicalization as a source of confusion', *Terrorism and Political Violence*, 22(4):479-494.
- SHIFMAN, L. (2014), *Memes in Digital Culture*. Cambridge, MA: MIT.
- SILKE, A. (1998), 'Cheshire-cat logic: the recurring theme of terrorist abnormality in psychological research', *Psychology, Crime, and Law*, 4(1):51-69.

- SIMON J.D. (2011), 'Technology and Lone Operator Terrorism: Prospects for a fifth wave of global terrorism', In: Rosenfeld, J. (ed.) *Terrorism, Identity and Legacy*. New York: Routledge.
- TARDE, G. (2012/1895), *Monadology and Sociology*. Melbourne, Australia: Re Press.
- TARDE, G. (1903), *The Laws of Imitation*. New York: Henry, Holt and Co.
- TARDE, G. (2010/1888), *Gabriel Tarde on Communication and Social Influence*. Chicago: University of Chicago Press.
- TOWERS, S. GOMEZ-LIEVANO, A. KHAN, M. MUBAYI, A. and CASTILLO-CHAVEZ, C. (2015), 'Contagion in mass killings and school shootings', *PLoS one*, 10(7), e0117259.
- WIGGINS, B.E. and BOWERS, G.B. (2015), 'Memes as genre: a structural analysis of the memescape', *New Media and Society*, 17(11):1886-1906.
- WILKINSON, M. (2015), 'Bomb guide read 4,000 times in the UK—and that is just in one week', *The Sun*, 18/01/2015. <https://www.thesun.co.uk/archives/news/13230/bomb-guide-read-4000-times-in-uk/> [Accessed: 15/07/2017].

Figures

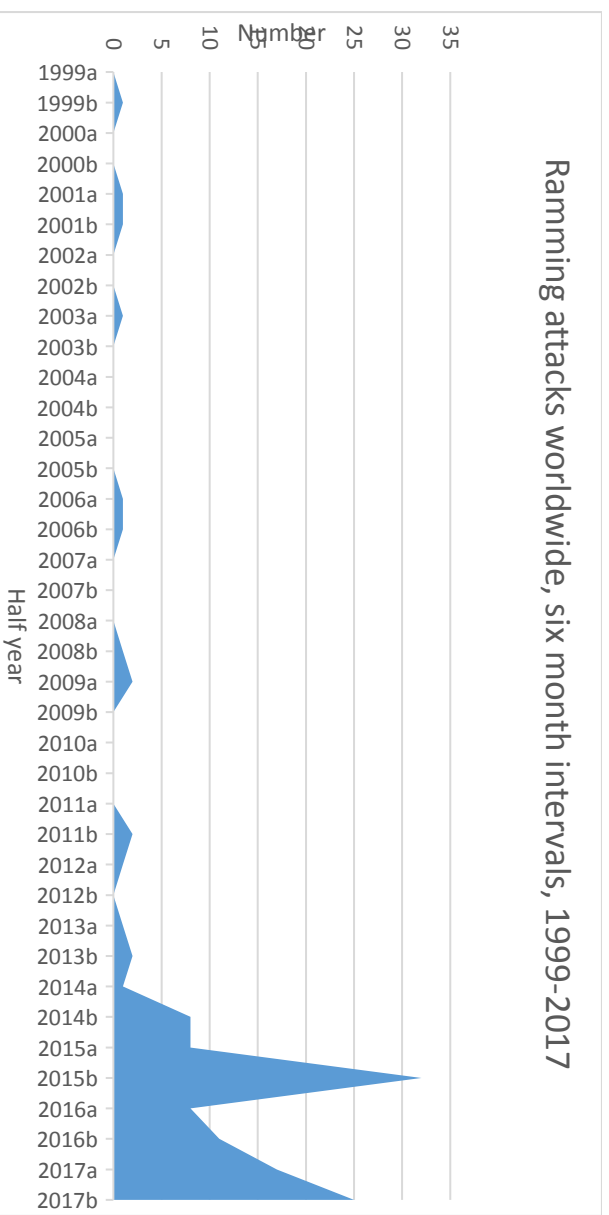


Figure 1: Total vehicle ramming attacks worldwide, six month intervals 1999-2017

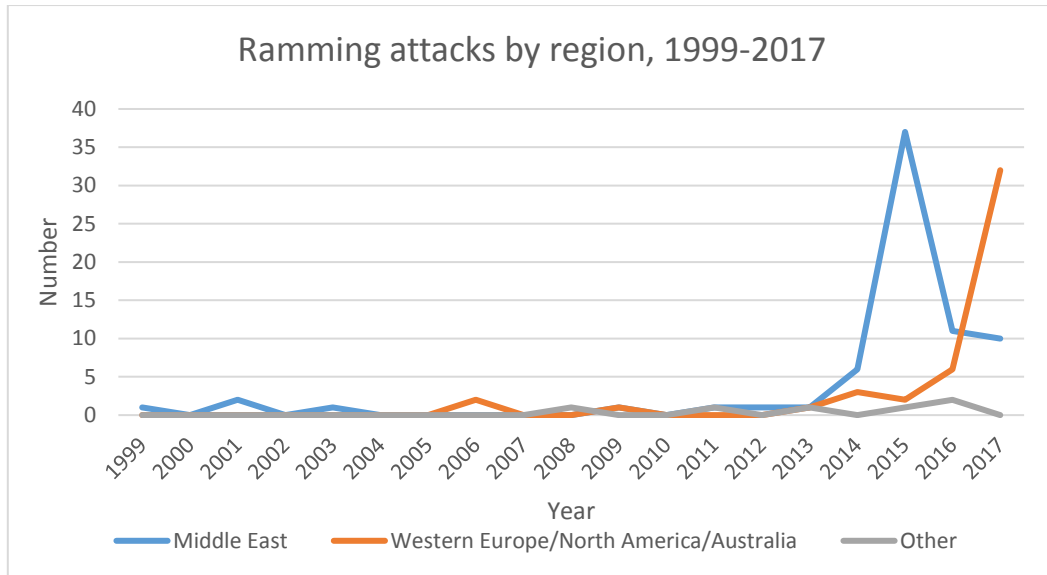


Figure 2: Vehicle Ramming attacks by Region 1999-2017 (to December 03)

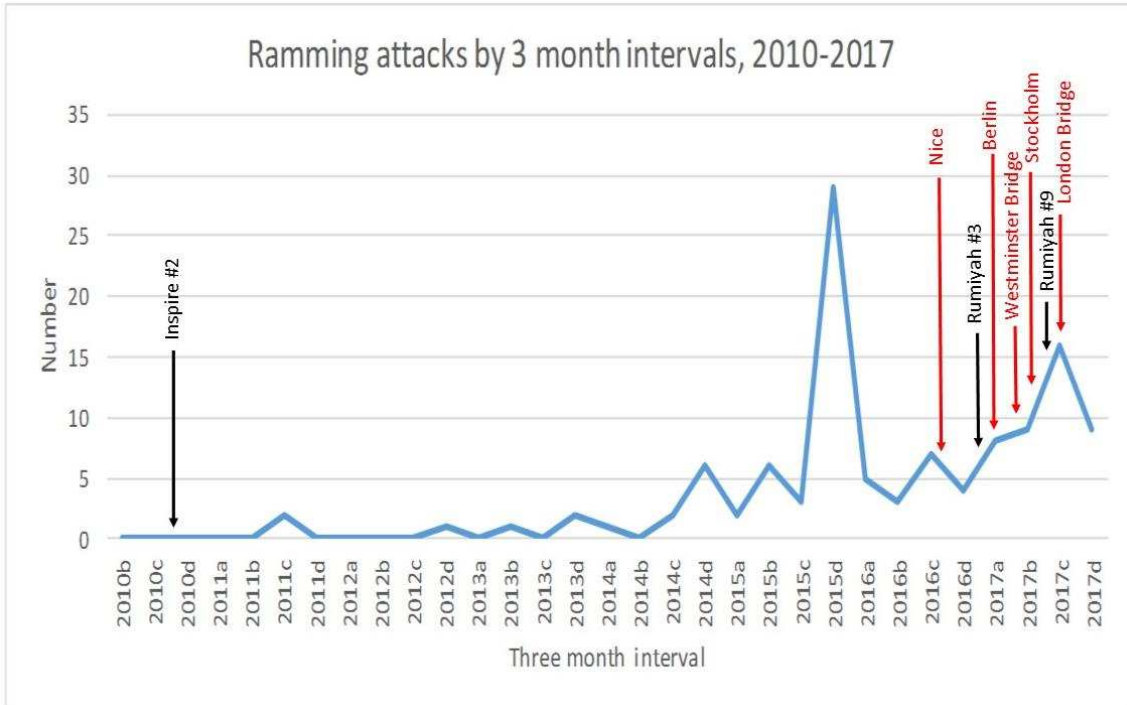


Figure 3: Ramming attacks by three month intervals, 2010-2017

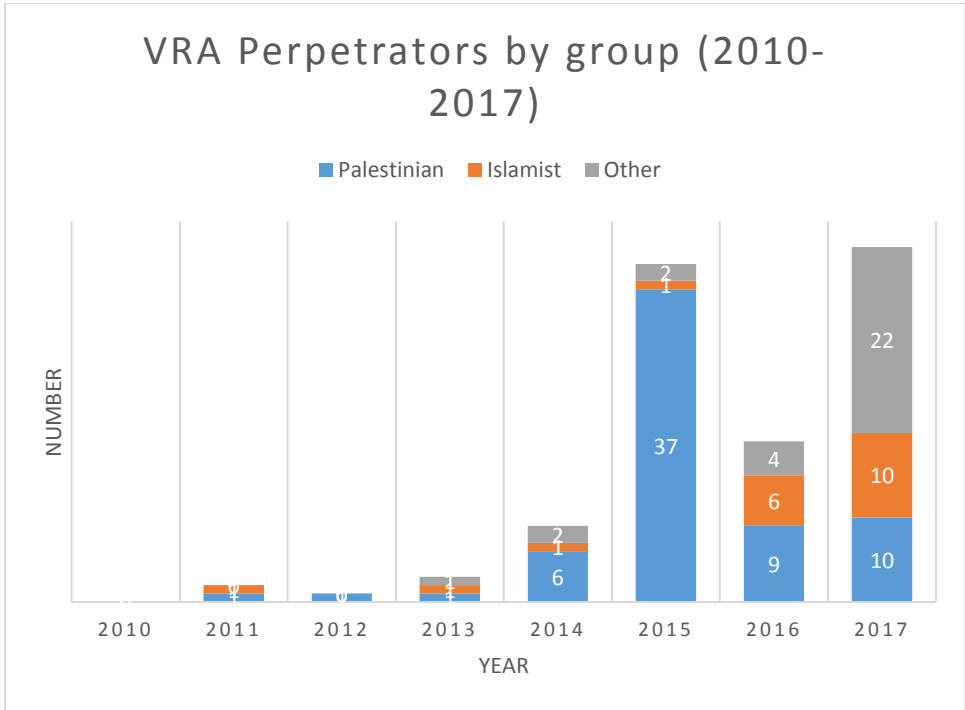


Figure 4: VRA perpetrators by group (2010-2017)



Figure 5: "All lives splatter" internet meme.