Safety *research* on the move

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Question: what makes connections (often deep ones) between diverse areas, has a network of equally diverse participants and the potential to significantly impact on the life of cities and their inhabitants? Answer: the researchers who combined to produce this special issue, of course. I was privileged to see them, and others, in action at a workshop convened in Stockholm by the Editor of this special issue, and to read the papers published here. I am no specialist in transport crime, but have a broad interest in research and practice in crime prevention and particular concern with the built environment and with design in general. The Editor has already capably summarised the content of the articles in the Introduction which allows me, in what follows, to reflect on some of the many issues raised, both specific to transport, and common to the whole of crime science.

Scope

The field of transport crime and security is highly fruitful for pure and applied researchers to explore, as the articles here have confirmed. As such, it offers a distinct alternative for generating and testing theories and developing practice, to the residential settings that are

often the focus for research. It involves people in places and on the move; potentially many and diverse kinds of social interaction in varied *civil* roles (sundry officials, users, bystanders), intersecting with the *crime-related* roles of offenders, victims, crime promoters (who inadvertently or deliberately make crimes more likely/harmful) and crime preventers (whether guardians, place managers or handlers – Ekblom 2010).

The immediate situations to consider in a transport context range from the labyrinthine stations in, say, Tokyo with dozens of tunnels, entrances and exits, to simple bus stops. Yet as shown in Hart and Miethe's article, even the humble bus stop is rich in interactions with its wider environmental context of bars, ATMs and so forth. The existence of multiple stations or stops within a single system, with a fine balance of commonalities and differences, offers wide scope for both clinical and statistical comparison (Meehl 1954). This has been well-exploited here for its possibilities for correlating design features of places (articles by Uittenbogaard, and Newton, Partridge and Gill) and/or socio-demographic context (articles by Wiebe, and Yu and Smith). To complement these more analytic approaches to places we have a 'whole journey' perspective (Yu and Smith) which has elements in common with service design.

Although we have articles from transport systems in different states and countries (UK, North America, Sweden, Japan) perhaps a next step could be to deliberately make comparisons *between* them. This could both give further insight on contextual factors (by making them vary more markedly) and – by treating transport systems as individual entities

– look for higher-level emergent causes. After all, there are hundreds of such systems around the world to serve as units of analysis.

Definitional/conceptual issues

I have argued elsewhere (Ekblom 2011a,b; Ekblom and Sidebottom 2008) that the world of crime prevention suffers from unclear and overlapping terms and concepts and fragmented theory. This applies to both CPTED and mainstream situational approaches. It is therefore gratifying to see attempts in this volume to sharpen up on these important tools for thinking, action and communication. The best examples of this are Yu and Smith's attempt in their article to get to grips with 'vulnerability' of passengers and Uittenbogaard's effort, through observational procedures and definitions to characterise 'surveillance', 'visibility' and the relationship between them.

Methodological and theoretical issues

The article by Newton et al. demonstrates the unique challenges that analysis and inference face when time and place of incidents are inherently uncertain; and give encouragement that, with sufficient thought and effort, solutions (in this case, interstitial crime analysis) can be crafted which are serviceable to the point of supporting sophisticated inferential statistics and delivering useful results.

Situational crime prevention has tended to place *offenders* in the background, as a given. Studying offender locations and changes in these locations is important. This is even if – or

perhaps especially if – the research in question (in Sedelmaier's article) suggests that concerns about new transport routes opening up offenders' activity and awareness space are not always borne out. The interactions turn out to be quite complex and offender perceptions of the availability of new targets are important mediators.

More generally, such *interactions* (of the causal and statistical kind rather than social encounters) have long been a weak spot in criminology and crime prevention. In situational crime prevention for example, it is not enough to know about separate offender theories/factors, target factors or guardianship factors but how these come together in distinct patterns and interactions. Uittenbogaard's article considers surveillance, visibility and guardianship in detailed interaction.

In the built environment particularly, how to address *configurations* and *conjunctions of causes* has long been a concern of mine (Ekblom 2004, 2010) and I was delighted to see how Hart and Miethe's article on conjunctive analysis shows a promising way forward on this that is moreover statistically rigorous. Taking this even further could involve applying multiple methods to the issue (e.g. observation and ethnography at particular kinds of conjunction, and focusing offender interviews on criminal perceptions and decision making at these. There is probably conceptual and theoretical scope for bringing together the conjunctional concept with that of crime attractors and generators, which feature in many of the articles here. As part of this, a focus on the causal mechanisms underlying conjunctions which are unexpectedly high or low in crime, might bear fruit. Finally, it is worth musing whether conjunctive analysis could be applied to before-after *changes* in

places – which could include evaluation of *interventions* in the built environment and understanding of offender's adaptive countermoves.

On a practical note, *communication* of the subtleties of configurations, conjunctions and interactions operating on diverse scales and involving diverse stakeholders, to practitioners, managers and policymakers presents far more of a challenge than conveying a few straightforward, universal main effects. In ensuring that the research findings are put to good use in the real world, special effort will be needed to get the messages across. In this it is good to note the use of audience-friendly analogies such as 'bringing lambs to the slaughter and wolves to the door' (Sedelmaier). In practical guidance for managers, designers and so forth, the complexity and contingency of knowledge to be communicated and ingested suggests we should develop the use of graphics and interactive computerised guides and tutorials. An example, albeit not exclusively for transportation, is the toolkit for helping site security managers control hostile reconnaissance, designed at Huddersfield University and Central Saint Martins (Willcocks et al. 2012).

Subjective experiences and expectations of *passengers* were covered here in the article by Shibata and colleagues in Tokyo, indicating some subtle patterns with strong practical implications. There were interesting links with perceived responsibilities of different players for (in)security. Such attributions of responsibility seem important and it is not unreasonable to anticipate that they are generalisable to other situations and contexts of crime prevention – even though the details may differ in countries other than Japan. This adds an interesting dimension to what I have called *climate setting* (Ekblom 2011b) in

understanding and capturing practice knowledge of how people in the 'civil' world can be mobilised or engaged in partnership to plan, design or help implement preventive interventions.

The entanglement of perceived harm/unpleasantness of various classes of event on the one hand, and the probability of their expected occurrence on the other, as reported in the Shibata et al. article, gives cause for wondering whether there is a similar tangle in perceived risk, effort and reward on the part of *offenders*. These, of course, underlie the Rational Choice perspective and have been extensively employed as independent factors in analysing crime patterns and guiding choice of intervention methods.

By contrast, perceptions and affordances of *offenders,* while entering into the discussion and interpretation of several of the articles in this volume, have not been pursued here as the main subject of study; likewise offender scripts (Cornish 1994). We might hope to add these to the transport security repertoire, and also techniques of self-reported offending, offender interviews, and simulations. In terms of topics, it would be good to see some extension of interest to transport as target (and perhaps resource) for terrorism, as experienced (among other places) in UK, Spain, Russia and Japan.

Change is important to get to grips with – whether the changes introduced in an experimental intervention, changes used to test the predictions of theory, response to change and anticipation of change. More generally, change also sometimes literally shakes things up, giving otherwise rare opportunities to examine cause and effect. In practical

terms, it is vital to study change to contribute to the art and craft of crime impact assessment (Ekblom 2002; Monchuk and Clancey 2013) when planning transport systems, from whole new lines to minor modifications. In this respect the article by Sedelmaier provided some useful surprises in that anticipated crime impacts of a new line didn't actually happen. This suggests we should perhaps be a bit more conservative in forecasting crime risks, as the operational and financial consequences of unnecessarily addressing crime may sometimes be significant.

Extending the look ahead, transport and crime *futures* studies would be worth doing, since design of transit systems has to anticipate, or be adaptable to, crimes and criminogenic circumstances of perhaps decades into the future, as for example in the UK Foresight study of intelligent infrastructure on a 50 year horizon (BIS 2006). Everything from graffiti-repellent materials to passenger-summoned vehicles may be on the cards – how might criminals misappropriate, mistreat, misuse or misbehave with these, and what security opportunities may they present (Ekblom 2005)?

Interests and impacts

The politics and distributive justice of access to safe transport emerges as a major theme (e.g. in articles by Yu and Smith, and Loukaitou-Sideris), related to gender, age or poverty, and the key concept of being *transit captives*. Incidentally the 'captive' concept may be important in many other contexts of victimisation, fear, or even having to spend significant and not always appropriate sums on security as with small shops required to do so by insurers.

Beyond traditional studies of the incidence of crimes and the prevalence of victimisation, the wider harms of crime victimisation and the constraints on economic, social and psychological wellbeing from fear-driven avoidance of transport systems are major issues in our cities and it is good to see them addressed here. They strongly deserve continued interest in this field by researchers, their funding agencies and those policymakers, city managers and transport system managers who should be heeding the research and instructing designers appropriately. Such motivation is important to foster and maintain because both the methodological and the data-supply requirements for research in the transport safety area are highly-demanding, as the present articles have amply demonstrated.

In interviewing (women's) stakeholder interest groups with strongly-developed views Loukaitou-Sideris taps a useful seam of knowledge and experience which covers knowledge of the problem (fear *of* crime and fear *for* their children) with proposals for solutions addressing intervention, implementation and involvement issues. Importantly, she relates these to research findings rather than simply offering reportage; and as part of this shows how the interest group – women – are not a homogeneous whole to be lumped together in terms of constrained travel opportunities, experience of fear etc. – things are far more subtle. The wealth of ideas emerging from discussions with the women's interest groups, and their emergence as 'educated clients' suggest the field of transport security would be ripe for developing/ exploiting *co*-design (Thorpe and Gamman 2013). Also noteworthy is the potential benefit from community-based and people-based strategies rather than those

where technological solutions are planned and implemented purely in isolation (Ekblom 2012).

The other demographic group to receive attention in this volume (by Wiebe et al.) is young people. Refreshingly different approaches to the problem of fear of violence from a public health perspective (a problem created *by* crime *for* public health, including via sleep deprivation from circuitous commutes to avoid crime peaks) were combined with methodological innovations (and the technology of tablet computers and GIS). The resulting focus on particular places and times revealed novel and subtle insights. How far we have come from approaching fear through the standard crime survey questions of 'feeling safe going out at night' and so forth!

Concluding remarks

This brief review of the articles in this volume suggests that transport security is a field of immense practical significance, methodological challenge and theoretical and empirical interest. As the introductory article made clear, it demands integrated and cross-disciplinary theories, which go beyond criminology or crime science. We are still some distance from reaching that destination, but I believe we are clearly travelling towards it.

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