

## **Q&A – Prof Robert Agnew – 10 February 2022**

A great set of questions. I'm afraid that I can't do justice to them all, many require rather long responses and are outside my area of expertise. I have attached a copy of my 2012 Theoretical Criminology article, which addresses certain of the questions, and I will at least attempt to outline answers to other of the questions. Also, I suspect that many in the audience for my talk can provide better answers to certain of the questions and I can.

**1. Concerning changed temperature and crime, are other possible contributing factors to crime controlled?**

It varies by study, but an effort is often made to control for other variables that might influence the temperature-crime relationship, such as whether schools are closed and holidays occur during the temperature spikes.

**2. Professor Agnew, do you see how different types/stages of climate change/disasters contribute to different crime types? How to measure such difference?**

My work is at a rather general level, although I do devote some attention to property versus violent crime, individual-level crime, corporate crime, state crime, and harmful acts not legally defined as crimes. When all aspects of climate change are considered together, I think CC will result in increases in all types of crime. But at a more particular level of analysis, it may well be the case that some aspects of climate change are more likely to result in some types of crime than others. I can think of a few examples, although don't have anything close to a systematic theory here. To give one example, habitat change (e.g., desertification) may have an especially large effect on illegal migration or violence between farmers and herders.

**3. Thank you for this presentation on climate change and crime. Very important and timely thought provoking indeed. What is your message to criminologists to move forward with expanding, integrating and developing new theories, research and policies in reducing the impact of crimes. Any specific pointers!**

Please see my Theoretical Criminology paper, which addresses these issues in the concluding section.

**4. If climate change has an active or passive effect on crime (rates), how might that change the role of police? Will this impact our demands on the police from responding fast to crimes or patrolling large beats to use their resources more efficiently, also in terms of saving fuel and lower congestion?**

I think CC will certainly impact on policing. I know that the military is devoting much attention to the impact of CC on its operations, including how to reduce it's carbon footprint, whether to relocate or better protect bases, the types of conflict that might result from CC (and where, when, etc.) and how to respond to them, etc. A recent newspaper article described some efforts here.

<https://www.washingtonpost.com/climate-solutions/2022/02/10/army-military-green-climate-strategy/> These efforts might serve as a model for the police.

And some attention is now being devoted to the implications of CC for policing. The selection below is from a report in the area:

## New Report Outlines Impact of Climate Change on Law Enforcement

January 30, 2008 By [Sonia Schmanski](#)

“The risks of climate change demand a rethink of approaches to security,” writes Chris Abbott in *An Uncertain Future: Law Enforcement, National Security and Climate Change*, a report released recently by Oxford Research Group. Climate change’s impact on security concerns has recently moved to the forefront of global dialogue, a development Abbott links to three trends: widespread acceptance of scientific evidence that climate change is real; increased attention to energy security; and growing awareness of nontraditional threats around the world.

Abbott claims that three likely socio-economic impacts of climate change—damaged infrastructure, resource scarcity, and mass displacement of people—could easily lead to civil strife, intercommunal violence, and international instability. For instance, he warns that major problems should be expected where small, affluent populations live next to large, poor ones—a contention U.S. and Mexican leaders, among others, should take note of.

Law enforcement and police should prepare for four key climate-related developments, says Abbott:

- Demands for greater border security;
- Changes in rates and types of crimes, due to large-scale migration;
- The need to enforce newly enacted climate-related laws; and
- The need to respond to increasingly frequent natural disasters.

In addition, he argues, military planners will need to study four crucial operational and strategic issues:

- Difficulties maintaining the soundness of equipment and weaponry and the health of military personnel in a changed climate;
- Loss of defense assets (for instance, military bases on low-lying islands or coasts that will need to be relocated);
- More frequent peacetime deployments, particularly for disaster relief; and
- Instability in strategically important regions, such as the Horn of Africa or the Persian Gulf.

Although Abbott's report does not add new information to the existing body of research on climate change and security, it does helpfully summarize several developments that leaders in government, law enforcement, and the military will need to study and prepare for. In addition, Abbott should be commended for repeatedly eschewing alarmist responses to climate change's security challenges and instead urging a pragmatic and humane approach. *Rachel Weisshaar contributed to this report.*

**5. I saw you referred to the SDG's at the beginning. Do you think those goals are ambitious enough?**

I think we certainly need to be doing much more than is now the case, as I mentioned we are now on a trajectory for a 3 degree C increase in average temperature by the end of the century – but most climate scientists believe we need to limit the increase to 1.5 (we're already at 1.1 C) to avert the worst consequences of climate change. There are many excellent discussions of what we should do to keep the increase at 1.5, but the problem of course is getting governments and other groups to make the necessary changes.

**6. Thank you very much for the lecture. I am curious how this can be brought in practice? To whom and how, so the needed actions could be made.**

That's the key question – what can be done to better address climate change. We know what we need to do, but how to get politicians and others to act is another matter. There is a lot of discussion and some research here. The point I'm trying to make is we all needed to get involved in various ways, and – as criminologists/researchers – we should think about how we might bring our research to bear on this issue and -- just as importantly – how we might share our research with broader audiences (beyond a small group of criminologists who read professional journals). There is some discussion here, such as the work on translational criminology.

**7. To what extent can we discuss Covid-19 pandemic in light of Green Criminology, and to what extent strains enforced by the pandemic context influenced changes in crime (although crime dropped in general, some forms increased (cybercrime, domestic abuse, violence)). Thank you!**

There's good reason to believe that climate change will increase the frequency and severity of pandemics (e.g., the negative health effects of climate change may make individuals more vulnerable to severe illness). And, of course, pandemics such as the one we're now experiencing are incredibly disruptive, contributing to strains of various types and also affecting other causes of crime. Beyond readings news reports, I have closely followed the impact of Covid-19 on crime, but I know that good research is emerging here.

**8. Excellent presentation Bob! Have you thought about the effects of crime in hindering attempts to mitigate CC - eg fraud in carbon-capping, theft of renewable infrastructure etc?**

Thanks and great point. Many of the crimes stimulated by CC and the efforts to address CC may well contribute to further climate change. Some of these crimes will involve the violation of regulations/practices designed to reduce CC. Some will involve efforts to cope with CC, such as the illegal harvest and burning of

trees. Some will involve group conflict that hinders efforts to develop state responses to climate change, etc. An important paper can be written here.

9. **I work for POLIS, a network of European local and regional authorities that plan, run and manage public transport services infrastructure. Protecting them from crime, especially at the scale of what we should expect, is a major challenge. Any words of advice?**

Public transportation certainly has a major role to play in the response to climate change, although CC will pose infrastructure challenges in the transportation sector. In terms of security, I know there has been some research on the relationship between public transportation and crime, as well as reducing crime in public transportation – although I'm afraid this is somewhat outside my area. But I suspect there is some information out there on how to plan and maintain public transportation in ways that minimize crime. A key issue, however, is how CC will impact crime and public transportation. Beyond a few obvious observations (e.g., CC will substantially increase the use of public transport), I'm afraid I don't have much to offer at this point – but I'm sure those with more expertise can offer some guidance.

10. **Are these CC issues best dealt with at a federal or provincial level or can a municipality having an effect if no one else around them does?** Ideally, all levels should be involved. Municipalities certainly have a key role to play, and certain cities in the US have been at the forefront of efforts to address climate change – including conducting studies on how CC will affect various aspects on municipal life, planning responses that involve both efforts to mitigate and adapt to climate change, and working toward the implementation of these responses. Many of these efforts have not considered the increased crime that may result from CC, but municipalities are well suited to examine and plan responses here.

11. **Dear Professor, I understand that climate change as mediator or moderator variable. In the Real world, to test the mediation or moderation effect of cc, what kind of data should be used? The data must be at country level. Because it is difficult measure micro level climate change and crime change.**

I focused on the manner in which those variables associated with crime theories, such as strain and low social control, may mediate the effect of those factors associated with climate change (e.g., higher temperatures, sea level rise) on crime. But the factors associated with climate change may also moderate the effect of other variables on crime (certain strains are more likely to result in crime when the effects of climate change are more severe). And some studies on the effects of CC on crime can be conducted with city, individual-level, etc data. Many of the temperature studies, for example, use city-level data and in some cases individual-level (experimental studies that examine whether individuals behave in a more aggressive manner when exposed to uncomfortable hot temperatures). It does depend, however, on the aspect of CC that is being examined,

12. **You spoke mainly about climate change and future crime. However, can you assess the current extent and shape of the current link between these two phenomena and whether there are any mitigating measures?** There is a growing body of research on factors related to CC and current/past crime; most notably the research on temperature and crime, but some research looks at other aspects of CC – such as habitat change associated with CC and migration

associated with CC. The research sometimes takes the form of case studies, but the evidence of the effects of CC on current and past crime is growing.

**13. If there are limited studies in this area - how do we future proof police practices & get decision makers to take cc into account as a serious consideration on policing when there isn't evidence on how the effects of cc will impact on policing?**

I think there is enough evidence to justify planning and preparation for a response, and as noted above some military and police organizations have already started work here. But criminologists and others can certainly do much more, both in terms of research and making such research known to broader audiences, than is now the case. It is a challenge, however, to convince certain organizations to plan for threats in the future, particularly if current resources are scarce. But I think pervasive arguments can be made here.