Cleaning & Greening Companion Piece

Clio Belle Weisman

Current research suggests that blighted and vacant land, particularly in urban areas, contributes not only to negative perceptions, but to higher rates of violence and crime. It has been shown that these areas are linked to threats to residents safety, health, and quality of life. When this land is transformed, at relatively low cost, into green spaces, there is a huge benefit to those living in the neighborhood. Altering and improving blighted land and increasing neighborhood access to the green spaces supports reductions in violence, crime, and aggression.

In a recent systematic review, Bogar and Beyer (2015) note that within the research base there are two opposing theories; one suggests that residents actually fear that green spaces will increase violence and crime, as they may provide a place that will hide criminals, and criminal activities. This research also states that these perceptions lead to communities avoiding the green spaces, and perhaps result in poorer outcomes. These perceptions may in fact become a self-fulfilling prophecy of sorts, and it behooves researchers and communities alike to change the narrative around green spaces. To this end, Branas and colleagues have shown through their research that this is not the case, and access to green spaces in fact lessens incidents of violence and crime (Branas et al., 2018).

There exists an extensive theoretical base supporting community interventions such as greening, beginning with social disorganization, developed by Shaw and McKay (1942), which suggests that when a community does not share values, there is a decreased amount of social control and capital, which leads to higher rates of crime and violence. While social disorganization theory has been criticized for a number of reasons, it remains a foundational element in neighborhood and community interventions. Sociology literature continues to examine the concepts of social cohesion and social capital, both of which are integral to decreases in neighborhood crime and violence (Wen, Hawkley & Cacioppo). This continuing attempt to understand the causal mechanisms for violence and crime greatly benefits the field, in that this understanding will aid in designing and implementing appropriate and effective strategies for communities.

In an effort to reduce the incidents of violence, and specifically gun violence, Charles Branas and colleagues have conducted trials that are aimed at demonstrating the clear link between green spaces and improved health and social outcomes. In his work, Branas et al (2018) used a mixed method design in an urban environment to change urban spaces in an effort to reduce fear and violence. The place-based interventions restored vacant or blighted land and significantly reduced incidents of gun violence and other problems reported to the police. Additionally, residents supported the police data by stating they were experiencing less crime after the spaces were restored. The study found a 58% reduction in residents' fear of going outside, a 76% increase in using public spaces, and a 29% reduction in gun violence found in this trial. Branas states that this translates to 350 fewer shootings per year if the intervention were scaled up to the entire city.

While there has recently been a focus on gun violence in the United States, the majority of the discussion has focused on policy, law enforcement and legislative solutions. While it is necessary to continue to push for effective policy and reform, this is not the *only* way to approach the issue of gun violence. It must be noted that a majority of gun violence takes place in urban areas and is experienced largely by minority and lower socio-economic portions of the population. Specifically, the homicide rate for Black Americans is approximately eight times higher than Whites (CDC, 2017). Branas discusses the cyclical nature of crime and violence in cities, he calls this 'disinvestment' of cities and neighborhoods, and this leads to businesses leaving, which in turn results in an increase in drug sales – an industry that often requires the dealers to protect themselves and their business with a firearm. Dealers often leave their weapons in vacant building or abandoned vehicles.

After examining this cycle of disinvestment, crime and abandonment, Branas and colleagues saw an opportunity to interrupt the cycle through a creative approach. Rather than focus on the dealers, or weapons, or other person-based solutions, Branas determined that focusing on the abandoned property could achieve a positive outcome. His cluster randomized trial supported this hypothesis, and this innovative solution shows a great deal of promise. It is both cost effective and practical, achieving excellent outcomes on health and safety measures.

The greening of vacant land changes not just the health and safety measures, but also affects the practicalities of daily life. Branas found that residents felt better about their neighborhoods, spent more time outside, enjoyed their surroundings more and had improvements on a number of measures. In this way, the greening of spaces appears to be a community and research supported intervention that will lessen incidents of gun violence, quality of life crimes and other violence, safety and social issues.

It is vital to consider all possible solutions to a problem as systemic and pervasive as gun violence and crime; Branas and his colleagues have demonstrated through their research that greening is a viable approach, and one that could be easily scaled up to change the environment of a number of cities.

Supporting Research and References

- Bogar, S & Beyer, K. (2015). Green Space, Violence, and Crime: A Systematic Review. *Trauma, Violence & Abuse. 17.* 10.1177/1524838015576412.
- Branas, C. C., Kondo, M. C., Murphy, S. M., South, E. C., Polsky, D., & MacDonald, J. M. (2016). Urban Blight Remediation as a Cost-Beneficial Solution to Firearm Violence. *American journal of public health*, *106*, 2158–2164. doi:10.2105/AJPH.2016.303434
- Branas, C. C., South, E., Kondo, M. C., Hohl, B. C., Bourgois, P., Wiebe, D. J., & MacDonald, J. M. (2018). Citywide cluster randomized trial to restore blighted vacant land and its effects on violence, crime, and fear. *Proceedings of the National Academy of Sciences of the United States of America*, 115, 2946–2951. doi:10.1073/pnas.1718503115
- Branas C. C., Cheney R. A., MacDonald J. M., Tam V. W., Jackson T. D. (2011). Ten Have TR: A difference-in-differences analysis of health, safety, and greening vacant urban space. *American Journal of Epidemiology*, 174, 1-11.
- Culyba A. J., Jacoby S., Richmond T. S., Fein J. A., Hohl B. C., Branas C. C. (2016). Modifiable environmental features related to adolescent homicide. *JAMA Pediatrics* 170, 1-8.
- Garvin, E. C., Cannuscio, C. C., & Branas, C. C. (2013). Greening vacant lots to reduce violent crime: a randomized controlled trial. *Injury prevention: journal of the International Society for Child and Adolescent Injury Prevention*, 19(3), 198–203. doi:10.1136/injuryprev-2012-040439
- Kondo, M., Hohl, B., Han, S., & Branas, C. (2016). Effects of greening and community reuse of vacant lots on crime. *Urban studies (Edinburgh, Scotland)*, *53*, 3279–3295. doi:10.1177/0042098015608058
- Reeping PM, Cerda M, Kalesan B, Wiebe DJ, Galea S, Branas CC. State gun laws, gun ownership, and mass shootings in the United States. BMJ British Medical Journal, 364: 1542-8, 2019.
- South E. C., Hohl B. C., Kondo M. C., MacDonald J. M., Branas C. C. (2018). Effect of greening vacant land on mental health: a citywide randomized controlled trial. *JAMA Network Open, I*, 1-14.
- Wen, M., Hawkley, L. C., Cacioppo, J. T. (2006). Objective and perceived neighborhood environment individual SES and psychosocial factors, and self-rated health: An analysis of older adults in Cook County, IL. Social Science & Medicine, 63, 2575–2590.