Co-contamination as the Dark Side of Co-production: A Review of Cases and Challenges with Resulting Implications for Public Management

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Abstract: Co-production is associated with the expanding role that citizens and other private actors assume in the development and implementation of public services (Whitaker, 1980; Parks, et al., 1981). The concept of 'enhanced co-production' is a recent theoretical development that combines the existing public administration and service management approaches to address user involvement at both the strategic and operational levels (Osborne and Strokosch, 2013). While traditional public administration has focused on limitations of co-production from the aspect of service users as an 'add-on', the enhanced co-production framework enables an analysis of problems when users are increasingly involved in the service innovation stages. In addition to existing challenges such as lack of accountability, insufficient training or lax legal standards that arise from simple user participation, additional barriers due to user-led innovation include resistance from service providers to cede authority or inefficiency due to service fragmentation. Based on these theoretical assumptions, this paper uses case studies from three areas – public safety and public health in the United States, as well as public safety in South Korea – to expose and explore the "dark side" of co-production. The analyses highlight what types of barriers to co-production emerge from both sides of the spectrum, namely, co-contamination of production efforts that impact both providers and users of public services. Finally, the authors draw conclusions from the identified barriers to offer implications for public service delivery.

Keywords: Co-production, public safety, public health

1. Introduction

Governments across the globe are facing tremendous challenges and wicked problems (Fischer, 1993; Rittel and Webber, 1973). As a consequence, they have utilized alternative arrangements to increase the efficiency and effectiveness of public service delivery (Alford & O'Flynn, 2012). In many instances, governments have externalized service delivery to non-governmental organizations and individuals (Brandsen and Pestoff, 2006). This phenomenon has expanded the role of the public from the more traditional and passive customer role where individuals receive or consume governmental services, to the more active and contemporary role as citizen where one seeks to influence government actions, and as partner where one seeks to co-produce those

services (Thomas, 2012). The goal of this paper is to explore some of the challenges associated with co-production, more specifically, enhanced co-production or the co-creation of new processes and forms of public service (Osborne and Strokosch, 2013). After an overview of co-production, its emergence and evolution, and the dark side or contamination aspect of co-production, three case studies are analyzed for the purpose of exposing and exploring barriers that reveal the co-contamination aspect of co-production. This study then illuminates some implications for managers to be alert of these challenges and to adequately design and implement more effective co-production activities.

2. Theoretical Background on Co-production

2.1. Emergence of Co-production

Co-production is associated with the approach where citizens are directly involved in the production of public goods and services (Ostrom, 1996). The term production entails a wide range of different modes and stages of participation, from citizens being involved in the planning and decision-making stages of a program, to being directly located at the front lines of service delivery. The word service also denotes the type of good where co-production is generally relevant. In contrast to the production and delivery of a physical good, services involve the delivery of a set of activities that seek to change the behavior of the recipients (Whitaker, 1980). Examples include education, health care or social welfare services where the ultimate outcome is not a finished good but rather a change in behavioral attributes of recipients such as the attainment of new knowledge or skills, acquisition of healthier habits, or reduction in tendency to engage in delinquent behavior. In such instances, joint production by the delivering agent and

recipient becomes necessary because the extent to which the agent can derive the final outcome is limited due to the need for the recipient to actively engage and respond to the former's efforts in deriving the desired outcome.

There seems to be two major phases in the development of co-production within the field of public administration. The appearance of this concept can be traced to Ostrom's work during the 1970s where she and her colleagues identified several phenomena that ran counter to the traditional node of centralized public service delivery (Ostrom, 1996). In particular, Ostrom derived her analysis by observing the problems of urban governance arising from the limitations of centralized planning and service delivery. Rather than a single agency being responsible for the production and delivery of services within a jurisdiction, services were being provided by multiple organizations consisting of both public and private entities. In addition, citing the work of Lipsky (1973), she noted the significance of bureaucratic discretion that many street-level bureaucrats such as police officers and social workers displayed in their daily operations. Finally, she observed how the nature of services required the active participation of clients in affecting the final outcome of that service. Due to the relative novelty of the concept of co-production at the time, Ostrom posited herself as a radical situated between traditional public administration and purely market-based theory of development.

Soon after, other scholars also sought to elaborate a definition of and expand upon the significance of co-production. Whitaker (1980) highlights notions of citizen participation and representation to argue for changes to public service delivery. He outlines three broad ways in which citizens can affect the development and implementation of programs: citizens requesting assistance about the kinds of services they need, citizens providing assistance to effect the

workload and outcome, and citizens interacting with public agents and adjusting each other's expectations. Parks et al. (1981) incorporate economic and institutional aspects of co-production where the public is seen as consumers. In contrast to Whitaker whose focus is on political notions such as legitimacy and responsiveness, Parks et al. set forth the notion of a 'consumer producer' where co-production is a production activity that requires the joint efforts of regular producers (public agencies) and consumer producers (citizens). Throughout their piece, the authors discuss whether such a configuration is economically efficient and whether institutional arrangements allow for the feasibility of such efficiency. Brudney and England (1983) seek to provide greater clarification of the co-production concept by framing several dimensions of co-production such as the positive vs. negative or active vs. passive facets, as well as providing a typology consisting of individual, group, and collective co-production schemes. Meanwhile, Levine (1984) explores five different alternatives to the traditional mode of service delivery that can reduce fiscal burdens for governments. These include privatization, intergovernmental arrangements, enhancing operating productivity, de-professionalization of bureaucracy, and devolvement of service responsibility to the public. While co-production is one of several strategies within devolved service responsibility, Levine uses co-production to represent the dominant strategy that not only improves efficiency but also bridge the gap between government and the public to enhance citizenship.

However, these early attempts mostly consisted of defining what co-production is and advocating for its need. Just as Ostrom (1996) had used the terms "radical" and "offensive" to depict her efforts to promote co-production, the atmosphere during 1980s and beyond considered such efforts of incorporating active citizenry in the production of public services as antithetical to

established bases of both public administration and market-based theories (Bovaird and Loeffler, 2012; Evans, 1996). It is relatively recently that scholars have begun to revisit co-production in response to the limitations of private-sector management and other New Public Management initiatives that had dominated public administration during the 1990s (Bovaird, 2007; Boyle and Harris, 2009; Osborne et al., 2012; Needham, 2007; Ryan, 2012). While the underlying premise of co-production largely remains unchanged, namely that service user and citizen participation should play an active role in service planning and the delivery process, the main difference is the greater acceptance of co-production on the part of academic and practitioner circles (Bovaird and Loeffler, 2007). This seems to be part of a broader discourse within New Public Governance which is an emerging field that seeks to address the increasingly "complex, plural and fragmented nature of public policy implementation and service delivery" (Osborne, 2010: 6). In addition, the Coalition Government in the United Kingdom set forth the banner of 'Big Society', which is a political discourse that emphasizes the empowerment of communities and local government, and encourages the citizenry to play a more active role in society (Bunyan, 2012; Cabinet Office, 2010; Evans, 2011).

A key feature of recent advancements in co-production research is that scholars have sought to move beyond the exploratory and relatively unstructured context in which co-production occurs and to provide a more systematic elaboration of the co-production concept. For instance, Osborne and Strokosch (2013) provide a 3-mode typology of co-production that consists of the concepts of consumer co-production, participative co-production and enhanced co-production. The authors derived these modes from an extensive discussion of two streams of co-production literature, namely, those from the services management and the public administration

perspectives. Consumer co-production engages consumers during the operational stages of service production processes with the goal of empowering users, while participative co-production incorporates user input during the strategic planning and design stages of service production with the aim of user participation. The notion of enhanced co-production is a blend of these two perspectives that combines the strategic and operational modes of co-production. The ultimate goal of this third mode is user-led innovation. The benefit of this conceptual advancement is that while previous notions of co-production are focused on arrangements that enhance the efficacy of existing service models, enhanced co-production moves further to enable service users to "co-create new processes and forms of public service" (Osborne and Strokosch, 2013: S39).

Another major piece is by Bovaird (2007) who categorizes nine types of service delivery arrangements that are evidenced in the relationship between professionals and users in the service design and delivery processes.

Table 1. Typology of Professional-User Relationships

		Service Design		
		Professionals as sole planners	Professionals / Users as co-planners	No professional input
Service Delivery	Professionals as sole deliverers	1. Traditional professional service delivery	2. Professional service delivery, but user involvement in design	3. Professionals as sole deliverers
	Professionals / Users as co-delivers	4. User co-delivery of professionally designed services	**5. Full Co-production**	6. User delivery of services with minimal professional involvement
	Users as sole deliverers	7. User delivery of professionally designed services	8. User delivery of co-designed services	9. Self-organized community delivery

* Source: Adapted from Bovaird (2007) and Ryan (2012)

As illustrated in Table 1, there are a variety of ways in which professional and service users can interact to plan for and deliver public services. The traditional mode of professional service delivery is located at one end of the spectrum (cell 1), while self-organized community delivery in which users and communities design and deliver their own services is at the other end of the extreme (cell 9). The relationships in between cells 2 and 8 represent different types of interactions that can occur between service providers and users. As highlighted in the different types of case studies that are examined in Bovaird's study, the advantage of this framework is that it provides a more systematic way of distinguishing between various types of co-production activities and the relationships between service providers and users. What may seem like a bilateral relationship on the surface may in fact consist of multiple relationships between providers, users and other community groups. In addition, user participation is not simply a matter of citizens and stakeholders being involved in either the planning or delivery stage or both. Rather, as the case studies suggest, co-production is a highly complex strategy that involves various actors and activities and must be adaptable to different settings. Such a typology above provides a clearer standard for determining the precise roles of participants in the service delivery process.

2.2. Dark Side or "Contaminants" of Co-production

Co-production has been lauded for its positive contributions. Ostrom et al. (1978), Parks et al. (1981), Needham (2007), Bovaird and Loeffler (2012) and others have noted its potential to better comprehend, prevent, and address public problems; to engender public support; to improve publicly valued outcomes; and to increase the efficiency and effectiveness of public services. However, others have described the challenges that accompany this particular arrangement

(Williams, LePere-Schloop, Silk, and Hebdon, 2016; Evers and Ewert, 2012; Birchall and Simmons, 2004, Bovaird, 2005; Mayo and Moore, 2002), as well as the inherent conflicts that impact all group processes in general (Follett, 1918). These mixed-messages highlight the Janus-like faces of co-production: one bright and optimistic, while the other dark and more disturbing.

However, research on the dark sides of co-production is an area that has received less attention than the perceived benefits. While an analysis of individual cases might illuminate some barriers that exist in the process of co-production, the fact that few co-production arrangements can be applied across scale to public services means that most co-production activities are unique to individual settings and localities. In other words, the highly contextual nature of co-production renders it difficult to identify a common set of barriers. One study by Bovaird and Loeffler (2012) points to a rough set of factors that were derived from an analysis of the UK government's Big Society initiatives. These include funding and commissioning problems, difficulties in generating evidence of value for producers and users, the need for professional skills, risk aversion, political and professional reluctance to cede control or status, lack of authority or capacity on the part of users, lack of infrastructure or mechanisms which users can use, and lack of motivation or self-confidence on the part of users. These barriers, however, are not common to all of the initiatives but rather, some apply to only one or two while others overlap in other initiatives. At present, the limitations arising from the use of case studies render it difficult to derive a generalizable set of challenges that can arise from co-production processes.

For the purposes of our discussion, we define contamination as anything harmful or undesirable added to something, which is wholesome or unadulterated, in turn, making that service, process or product dirty, dangerous and impure. In short, contamination points to

anything that negatively impacts the enhancement of public value as a consequence of either side of the co-production equation - regular producers and/or citizen producers. Similarly, co-contamination emerges as anything that negatively impacts the enhancement of public value from both sides of the same equation. In the next section, we explore case studies from three areas – public safety and public health in the United States and an international case of public safety in South Korea – to shed light upon some of the co-contaminants or "dark sides" of co-production (Brewer and Grobosky, 2014) and to offer important implications for the management of this alternative approach to public service delivery.

3. Case studies

This section examines three case studies on co-production. Two cases are grounded in experiences in the United States (US), each covering the co-production of public safety and public health, respectively. The third is an international case from South Korea that also examines the realm of public safety. The case studies were selected on a theoretical rather than a statistical basis (Eisenhardt, 1989) in order to focus on key characteristics of co-contamination that emerge from the co-production activities. The emphasis is not necessarily on highlighting the failure of co-production, but rather to shed light upon key factors that impede effective co-production processes. The resulting analyses offer important insights into the often hidden, yet embedded aspect or feature of the dark side of co-production.

3.1. Public Safety

In the United States, there are approximately 18,000 law enforcement agencies or departments (Local Police, 2014). Of the 18,000 units, two-thirds are local law enforcement departments,

agencies and offices that have distinct but often overlapping jurisdictions, yet all are charged with serving and protecting the public from various problems. Such problems range from minor issues like traffic enforcement and noise complaints to major issues like illegal drugs and human trafficking to terrorism and cyber-crimes. In the case of these minor as well as major issues, wicked problems require the authentic public participation of "consumer producers" and "regular producers" to co-produce public safety and public order (King, Felty & Susel, 1998; Fischer, 1993; Percy, 1984; Parks et. al, 1981). Towards this desired end, emphasis has been placed on returning to one of the bedrock principles of western policing.

In 1829, Sir Robert Peel noted that the public and the police are one in their efforts to promote public safety and public order. This historic principle has been supported by the scholarship of more contemporaneous scholars who have linked co-production to the practice of local law enforcement (Ostrom et al., 1978; Whitaker, 1980; Parks et al., 1981). The manifestation of this philosophy has resulted in the practice of community-oriented policing, which represents a partnership between law enforcement and the public to co-prevent crime and disorder by co-producing public safety and public order. One very visible indication of the philosophy and practice of community policing within the United States is neighborhood watch.

Neighborhood watch, which brings together citizens with law enforcement to deter crime and disorder, is one of the oldest and often considered to be the most effective crime prevention programs in the United States. Introduced and implemented in 1972, neighborhood watch depends on a working partnership between citizens and law enforcement. Citizens are encouraged to organize themselves, be visible, and to keep a trained eye and ear on their communities. Consequently, the managing narrative for this approach to co-produce public

safety and public order is, “If you see or hear something, say something.” In theory, this approach is expected to result in keeping neighborhoods and communities safer by reducing the number of opportunities for crime to occur. Yet bringing theory into public service practice has often been problematic as the following neighborhood watch case underscores.

On the rainy evening of February 26th, 2012, at approximately 7:00pm, George Zimmerman, a white 28-year-old community volunteer with the neighborhood watch program in Sanford, Florida called 911 to report he was following a suspicious looking, black male in a hoodie who was on the premises of a gated community. At approximately the same time, Trayvon Martin, a 16-year-old African American teenager, was on his mobile phone talking with a female friend. Trayvon was walking to the home of his father’s fiancée, who lived within the gated community, after purchasing a bag of Skittles candy and a can of iced tea at a nearby convenience store. At approximately 7:25pm a shot rang out. Trayvon Martin, the unarmed teenager, was dead. He had been killed with a single shot by the neighborhood watchman, George Zimmerman.

In many respects, the co-production of public services seems to be a structural arrangement that better reflects the evolving social, cultural, economic and political contexts of postmodern society. These voluntary efforts by individuals and non-governmental entities to partner with governmental units seek to enhance both the quality and quantity of services that are provided to the public (Alford, 2002). However, the Trayvon Martin and George Zimmerman encounter highlights the challenge that accompanies bringing the theory of co-production of public safety and public order into a world of practice that utilizes citizen volunteers via neighborhood watch. The Latin phrase, “*respice, adspice, prospice*” is used as a framework to analyze the encounter. When translated into modern English, it means to reflect on the past as you examine the present

and look towards or plan for the future.

To begin the analysis requires reflecting upon the social dynamics of the American past. American history and experience both have been colored by race and reflect the tragedies and triumphs of many of its social trials and tribulations. America was, in theory, founded on the principle that all men are created equal thereby placing value on individual rights and freedoms. Yet, ironically enough, the country also began as a slave holding society. This conundrum resulted in an American dilemma (Myrdal, 1996) and a lasting, socially and politically constructed definition of “different” as being deviant.

Like the proverbial pebble being dropped in the still waters of a pond, the rippling effects of racial assumptions based on America’s historical past have radiated over time and impacts American policies and practices of today. In spite of postmodern realities which have resulted in police agencies partnering with other institutions, organizations, communities, neighborhoods or individuals in identifying, understanding, diagnosing, and addressing community problems, one significant problem remains – racial profiling. This is a form of differential treatment based on an individual’s racial or ethnic social identity. This illegitimate practice exists when the stigma or biased social cognition (Goffman, 1963) that is associated with race (and ethnicity or religion) is used by bureaucratic agents as a factor in determining access to information, employment, resources, or fair treatment. The Martin-Zimmerman encounter highlights how racial profiling seems to have escaped the bureaucratic confines typically associated with regular producers of public safety and has settled within the psyche of this particular neighborhood watchman who served as a citizen or consumer producer of public safety and public order. The genesis of this encounter may have started with the criminalization of color (Russell, 1998) but concluded with

the death of one of America's '*symbolic*' assailants – a young, black male (Skolnick, 1998).

The problems embedded within the Martin-Zimmerman case provide opportunities for the development of more thoughtful public policy and prescriptions for more impactful public management that overcome the profiling legacy of race, space and place (Meehan & Ponder, 2002). Such policies and practices could mitigate and possibly prevent the contaminates/co-contaminates that infects the co-production of public safety and public order.

3.2. Public Health

The challenges of health and the delivery of healthcare services are increasingly complex. Health status is not simply a product of biological pathways; instead, citizens' lifestyles, environments and communities shape their health (Wilkinson & Marmot, 2003). Toward that end, the public health sector emphasizes the importance of collaboration between service providers and citizens, as citizens possess critical expertise about their lives and environments that can be used to improve the delivery of public health services (Freire & Sangiorgi, 2010; Institute of Medicine, 2003; Minkler, Blackwell, Thompson, & Tamir, 2003). In community-based participatory research (CBPR), citizens are viewed as enhanced co-producers, serving in both strategic and operational roles: They share their knowledge and experience to guide the identification of key problems, the development of culturally tailored research questions, and the dissemination of results to support programs or policy changes (Green & Mercer, 2001; Minkler, Blackwell, Thompson, & Tamir, 2003). The CBPR foundational principles are: shared respect for the talent and knowledge that each partner brings; a process of co-learning, cooperation and engagement; empowerment for the affected communities to identify and build upon its strengths; and an expectation for research translation into meaningful action, services or policy (Minkler

2001; Muhammad, Wallerstein, Sussman, Avila, Belone, & Duran, 2014; Schulz, Parker, & Becker, 1998; Wallerstein & Duran, 2010). When implemented ethically and with fidelity, CBPR is an inclusive and democratic partnership between citizens and providers to address community-relevant research priorities (Flicker, Travers, Guta, McDonald, & Meagher, 2007). Its key strength is the integration of research expertise and experiential knowledge into a reinforcing partnership to improve public outcomes and experiences.

As an integrative approach, many researchers and their community partners struggle with balancing power, mutual respect and trust, ownership, and accountability and sustainability (Cargo & Mercer, 2008; Muhammad, Wallerstein, Sussman, Avila, Belone, & Duran, 2014). In many instances, CBPR is used in settings with marginalized, vulnerable or otherwise disenfranchised populations (see Cargo and Mercer, 2008 for an overview) so researchers must incorporate cultural humility, competency and safety to co-produce services (Cargo & Mercer, 2008; Israel, Eng, Schulz, & Parker, 2005; Kellog 2001; Minkler, 2004). Moreover, because researchers and citizens likely come from widely divergent backgrounds, it is necessary that each group work to understand the others' context, motivations, priorities and cultures to remove stereotypes and biases that can negatively impact the quality of the research and provision of service (Wallerstein, 1999). Strong, cooperative relationships of trust and respect are prerequisite to CBPR. Failure to translate these principles into practice can result in co-contamination, consequences to the community and weakened potential for future co-productive relationships. The following public health case examines the role of stereotypes, imbalanced power and resistance from service providers to cede authority in a CBPR framework.

The U.S. Department of Housing and Urban Development, the Boston Foundation and the

Jessie B. Cox Charitable Trust, funded the Boston Healthy Public Housing Initiative (HPHI) in March 2001 to develop a CBPR in response to intense levels of asthma prevalence in two Boston public housing developments, West Broadway and Franklin Hill. The HPHI was a collaborative partnership including, research investigators from Boston and Harvard University Schools of Public Health and Tufts University School of Medicine; city officials from the Boston Housing Authority and the Boston Public Health Commission; community leaders from the South Boston Community Health Center, and the Committee for Boston Public Housing; and citizens from the tenant task forces at the West Broadway and Franklin Hill housing developments (Brugge, Hynes, & Miranda, 2003). The goals of the multi-year project included: 1) improving the home environmental and health for pediatric asthmatics; 2) building community capacities to sustain a focus on health beyond the length of the project; and 3) impacting state and national policy related to housing design and financing for asthmatic populations (Freeman, Brugge, Bennett-Bradley, Levy, & Carrasco, 2006).

In a reflection of the experience, the researchers detailed the challenges to the CBPR, focusing on two major areas, equitable partnerships and alignment of objectives and expectations. As previously stated, an equitable and democratic process is a requisite for CBPR to co-produce enhanced results. When community citizens are approached to participate in research after it has been developed, it diminishes their potential to leverage their knowledge toward developing solutions, further weakening their perceived power. As described by a former HPHI investigator and colleague, the communities involved in the HPHI project were disenfranchised compared to the other partners, as evident by them living in public housing; their positioning had effects on their ability to establish themselves as full partners in the CBPR project (Brugge & Kole, 2003).

Further, Brugge and Kole (2003) articulate the ethical consequence of uneven power dynamics between the researchers and citizens, citing that the citizens were likely in relatively powerless positions, lacking cultural or institutional power compared to the researchers who were generally well qualified, with specialized skills and technical language.

Muhammad and colleagues (2014), researchers from the Center for Participatory Research at the University of New Mexico, one of the nation's lead CBPR facilitators posit that power and privilege conferred from researchers' affiliations with formal institutions, class, ethnicity, education, and other identities, as well as with the production of knowledge itself, has the potential to reproduce disadvantage and perpetuate inequity for the citizen participants of CBPR. The HPHI case supports this perspective. Post project interviews conducted with participants revealed that West Broadway and Franklin Hill citizens recognized the three universities as wealthy institutions with the power to manipulate the funding streams, such that the community would not have much say in the budget (Brugge & Kole, 2003). This has the potential to further disenfranchise the community citizens, further solidifying their sentiments of what can and should be done to or for them as opposed to what they can do for themselves.

Alternatively, the inequitable relationship between researchers and citizens created an adversarial environment with the citizens feeling the need to protect themselves and defend their communities, biasing the quality of the data as they were not always fully transparent and honest through the research process wanting to ensure that neither they nor their community were painted in a negative light (Brugge & Kole, 2003). The adversarial environment was in part due to the inability of researchers and citizens to overcome deeply held biases and stereotypes:

> A second challenge involves overcoming stereotypes. Academic researchers may have beliefs that community partners lack the infrastructure and capacity to be full partners in

> achieving the research aims of the project, which can immediately contribute to tensions and power differentials (in which academic researchers are uncomfortable ceding control over any aspects of the project)… Community groups may be cynical that the researchers are simply joining the collaboration to enhance their careers, gain access to subjects and data, and to write papers and retreat back to the ivory tower. These beliefs would lead to the stereotypes of academics as uncaring and lacking in any real connection to the problems of the community. In some cases, this cynicism may be justified, given previous experiences of the community with community-placed but not community-based research. (Freeman, Brugge, Bennett-Bradley, Levy, & Carrasco, 2006: 1017-1018)

Fostering a more meaningful relationship based on trust and mutual respect (Muhammad, Wallerstein, Sussman, Avila, Belone, & Duran, 2014), two-way communication, and intentional involvement of citizens in all aspects of the research from the outset were identified as solutions (Brugge & Kole, 2003; Freeman, Brugge, Bennett-Bradley, Levy, & Carrasco, 2006).

The power differential contributed to limited accountability for both groups. For example, citizens failed to keep commitments to responsibilities for the projects (Brugge & Kole, 2003) and researchers failed to adequately deliver services that were expected as an outcome by citizens (Freeman, Brugge, Bennett-Bradley, Levy, & Carrasco, 2006). In short, there was a misalignment of objectives and expectations. There was a clear tension between research mission and the delivery of service, so much that citizens lamented that the researchers failed to create tangible benefits of participation, outside of small monetary incentives to complete surveys. Further, they admonished that the project documented problems, potentially causing unintended political consequences – namely Massachusetts's politicians diminishing funds to public housing because of its onslaught of problems (Brugge & Kole, 2003). The greatest consequence of the HPHI project is that researchers failed to fully value the citizens lived experiences and expertise, in doing so, they further stigmatized a vulnerable community. Failing to adjust their stereotypes and to recognize the dominance of their power, researchers contaminated the co-productive

experience for citizens. Researchers appropriated knowledge and data for utilitarian gain, resulting in few social and health gains for the affected community. It should be noted, that the research investigators of this project published manuscripts exploring their role in contaminating efforts to improve the public health of citizens in West Broadway and Franklin Hill, providing the following cautionary advice:

> CBPR studies need to pay attention to the details of the project, since seemingly minor aspects of complex collaborations can cause intractable problems and contribute to mistrust. In any CBPR effort, time needs to be devoted to process and relationship building, long in advance of a grant deadline or project start date—the process itself may be as important as the product. Relationships that are initiated to respond to a specific grant opportunity have likely not gone through this process prior to the start of the project. While there are numerous mechanisms by which this relationship building can occur, there is no one size fits all approach that will work for the diverse set of activities that can be called CBPR. (Freeman, Brugge, Bennett-Bradley, Levy, & Carrasco, 2006: 1020)

The HPHI project is an example of the 'dark-side' of a well-intentioned effort to co-produce better public health outcomes for a vulnerable community. It represents the barriers to meaningful participation of the co-producers and the resulting contaminations: diminished trust in co-production collaborations, missed opportunities to improve the lives of communities in need of services, and a less than optimal use of philanthropic dollars. In sum, imbalanced power and unresolved stereotypes between service providers and citizens can lead to co-contamination. The service provider has the burden of working toward an equitable partnership to protect citizens from these consequences. This case exemplifies the potential consequences of contamination in the public health context, and how the future of public health depends on co-productive relationships between researchers/service providers and citizens.

3.3. Voluntary Crime Prevention Patrols in South Korea

This section examines the arguments that were for or against the passage of the Voluntary

Crime Prevention Patrol Bill raised during legislative sessions, committee meetings and public hearings to examine some of the major barriers or elements of contamination to the co-production of public safety. During the 17th (2004-2008), 18th (2008-2012) sessions and the current 19th (2012-2016) National Assembly session in South Korea, there were heated debates to enact the Voluntary Crime Prevention Patrol Bill that sought to enable a more centralized management, funding and oversight of voluntary crime prevention organizations (citizen patrols). While similar to neighborhood watch groups in the United States where citizen patrols consist of local volunteers and residents who participate in the deterrence of crime, the main difference is that in South Korea citizen patrols are somewhat more organized in the sense that these organizations receive small amounts of operational funds from local governments or police agencies (Hwang, 2011). Also, for example, under the Voluntary Crime Prevention Patrol Management and Operations Guidelines of the Kyeonggi Provincial Police Agency, they are authorized to accompany formal police organizations in crime control activities, and they may even engage in the apprehension of minor criminal offenders. In this sense, citizen patrols represent a type of enhanced co-producer where they are highly active in the coproduction of crime prevention or control in their own communities.

In response to the shifting political and social landscape, budget cuts and law enforcement manpower shortages in South Korea during the past two decades, there has been increasing attention to alternative policing strategies based on reforms such as Community-Oriented Policing, Social Control Theory and Co-production (Choi, 2001; Chung, 1994; Kim, 1997; Son, 2007). As aforementioned, citizen patrols represent a form of co-production activity where local citizens are actively involved in the delivery of public safety (Chun, 2005; Lee, 2001; Lee and

Kim, 2005; Lee and Hwang, 2009; Lee, 2012). In 2009 it was estimated that there were 3,867 citizen patrol organizations with 106,070 active members; by 2013 this figure had grown to 4,193 organizations with 104,553 active participants (Min, 2014). Also beginning in 2009 local governments across the country began instituting local ordinances to provide funds for voluntary crime prevention activities, and as of 2015 more than 90 municipalities had some form of regulation in place.[1] Table one outlines the number of citizen patrol organizations, volunteers and the amount of local government funding according to major metropolitan city or province in 2012. Table two illustrates the performance of citizen patrols in the apprehension or custody of offenders in 2012. These figures demonstrate the extent to which citizen patrols are active in the co-production of public safety.

[Table One near here]

[Table Two near here]

The emergence of modern citizen patrol groups date back to the period after the Korean War when citizen patrols were organized to supplement the shortage of formal police units in subjugating communist guerilla forces that remained in the countryside (Oh, 2000). For several decades citizen patrols continued to exist in various forms throughout different localities, and it was not until 1996 that the National Police Agency issued the Voluntary Crime Prevention Patrol Guidelines to formalize the management and operation of citizen patrols (Choi and Park, 2012). At present, each of the provincial police headquarters maintain Voluntary Crime Prevention

[1] Enhanced Local Laws and Regulations Information System (ELIS). <http://www.elis.go.kr/>

Patrol directives that contain guidelines on the organization of citizen patrols, mission and tasks, selection and dismissal, uniforms and equipment, and rewards or incentives. In addition, beginning in 2009 municipalities across the country began enacting local regulations to manage citizen patrol organizations.

In light of the expansion in size of citizen patrols and their roles in co-producing public safety, as mentioned before, scholars began advocating the need for more systematized management and oversight of citizen patrol organizations as well as more effective police-citizen partnerships. Accordingly, efforts to enact the Voluntary Crime Prevention Patrol Bill were initiated during the 17th (2004-2008) and 18th (2008-2012) National Assembly sessions. However, the Bill failed to pass in both sessions due to differences in opinion among assembly members, and opposition from citizen groups and academics as well as police organizations (Hwang, 2011). At present the Bill continues to be debated in the 19th (2012-2016) National Assembly, but some fear that the Bill may not pass through the Security and Public Administration Council (former Public Administration and Security Council) because of arguments within the National Assembly concerning the necessity of the Bill as well as divergence of opinion among assembly members, police organizations and citizen groups (Min, 2014).

Some of the main disagreements in opposition to the Bill are laid out below (Public Administration and Security Council, 2011). First, the bill has significant overlap with existing laws such as the Volunteer Activities Act or the Nonprofit and Citizen Organizations Support Act, where citizen patrols are already recognized under these statutes and are eligible for funds accordingly. Also, the Voluntary Crime Prevention Patrol directives of each provincial police headquarters or the individual local government ordinances already provide guidance concerning

the management and operation of citizen patrols. Second, formalized status and resource allocation through a national law may result in the bureaucratization of membership status, which runs counter to the central idea of voluntary participation. Third, the legalization of citizen patrols raises the issue of equity in which other volunteer organizations will pursue their own steps for legalization, again countering the notion of volunteerism.

However, arguments in support of the Bill state some of the following reasons. The first involves the high-risk nature of policing activities. Unlike other general volunteer organizations, citizen patrols are involved in crime prevention and control activities that are by nature dangerous and unpredictable (Min, 2014). While their primary role is to support the functions of formal police organizations, citizen patrols are often physically engaged in the apprehension of offenders, as observed in Table 2. As Rosenbaum (1986) commented on the negative aspects of neighborhood watch schemes in the United States, there lurks the danger that crime control activities can lead to situations in which a volunteer, offender or anyone else involved in a situation can be inflicted with serious injury or death, in turn, leading to legal or civil rights issues. Second, the sheer number of citizen patrol organizations and members within South Korea who are involved in such high-risk activities attests to the need for legislative footing that can provide more protection in terms of legal rights, physical safety and accountability. Third, local governments provide funding while police agencies are tasked with training and street-level operations with voluntary patrols. Such a dualistic structure can decrease the effectiveness of managing volunteer organizations during times of fiscal setback. Fourth, another problem with relying on local government funding is that citizen patrol groups may be used to further the political goals of local elected officials or legislatures, again another detriment to the voluntary

aspect (Hwang, 2011). Finally, the Volunteer Firefighter Corps (*Euyong Sobhangdae*) is another type of volunteer organization where citizens participate in fire prevention and suppression activities. These organizations are formally recognized through the national Fire Services Act and funded and managed accordingly, hence, the fact that they enjoy statutory basis while Volunteer Crime Prevention Patrols do not raises the issue of equity since both groups engage in the maintenance of public safety, albeit in different ways (Public Administration and Security Council, 2009).

In light of the shifting paradigm concerning the delivery of public safety, the increase in the number of citizen patrol organizations, and their active contributions to crime control, legislative attempts to push for a Volunteer Crime Prevention Control law seems logical. While the arguments that favor or oppose the Bill have their own merits, they seem to stem from a core disagreement on whether citizen patrols should be considered purely voluntary organizations or whether they are quasi-formal units that supplement police organizations. However, the high-risk nature of public safety and the fact that there are more than 4,000 organizations and 100,000 volunteers engaged in day-to-day crime prevention and control activities illustrates the potential for contamination where the lack of a national framework can cause problems for accountability for both formal police organizations and informal citizen patrols. Hence the increasingly active role of citizen patrols in coproducing public safety illustrates the need for a centralized approach that can enable more active management and oversight.

4. Discussion

The preceding cases reveal two major obstacles of trying to bring the theoretical benefits of

enhanced co-production into practice – contamination and co-contamination. In the first case, the contaminant is a community volunteer who serves as a neighborhood watchman. In his capacity as a citizen co-producer, he seems to inject racial assumptions into the public safety and public order process making it dangerous, and consequently, deadly. Instead of enhancing public value (Moore, 1995; Alford, 2002; Bovaird and Loeffler, 2012), the actions of this citizen co-producer reveal the underbelly or "dark side" of police-community co-production (Brewer and Grobosky, 2014). In the second case of the HPHI initiative in Boston, we see that inequitable power relationships between researchers and citizens acted as a contaminating factor that impacted the effectiveness of cooperative efforts between the two groups. Moreover, this attempt at a co-productive relationship further disenfranchised an already vulnerable community. On both sides of the co-productive equation, stereotypes, prejudices and biases weakened the potential for meaningful collaborations. In the final case of the voluntary crime prevention patrols in South Korea, we observe that the voluntary nature of citizen patrols coupled with the authority to engage in active crime control activities can act as a contaminant that impacts the effective co-production of public safety. Without a nationwide institutional framework for overseeing the activities of volunteers, the abundance of local citizen patrol organizations and their activities has the potential to result in problems of accountability and civil rights issues, similar to the Martin-Zimmerman encounter.

What are the public management implications from the above case studies? Contamination, either on the part of the regular producer or citizen producer, or co-contamination that emerges from both co-producers, highlights a different public management road that has been less traveled (Alford, 2008). To address the contaminating and co-contaminating opportunities and

effects that are present on the citizen producer side of the equation, organizations must unbundle their processes and services in order to ascertain where citizens can be of the most help (Bovaird and Loeffler, 2012). For example, the theoretical assumption of "perfect partners" in the co-production of crime prevention (Layne, 1989) does not reflect the reality of what occurred in Sanford, Florida. As such, a significant investment of time and resources in the recruitment, screening, selection, development, and monitoring of citizen co-producers is needed. More attention must be devoted to the practical realities that it takes to address the persistent issues, both past and present, which limit the promise of citizen co-production (Mattson, 1986).

To address the contaminating (or co-contaminating) opportunities and effects on the regular producer side of the equation, organizations must engage in self-reflexivity. They must engage in a critical review of their professional norms, organizational or institutional processes, and past and present policies and practices. Much like the premise of Clary (1985), organizations must appreciate the organization-environment interactions that impact their daily operations. The history of public organizations being sole providers continues to cast a long shadow that threatens to darken the partnering relationship of today. As previously noted, regular producers can resent and feel threatened by the emergence of user or citizen co-producers reflected by a zero sum model of co-production (Wirth, 1991; Needham, 2007). These sentiments and related others on the parts of regular producers contaminate the process thereby requiring modernizing professional norms and designing or redesigning structures, processes, and practices accordingly.

5. Conclusion

A range of co-production activities have been developed and implemented to enhance public

value, from volunteering to service monitoring (Thomas, 2012). However, our analysis of the three cases highlight the contaminating effects that have been injected into this process from the sides of regular and/or citizen producers. In particular, contamination and co-contamination have impeded the impact of co-production as a *therapeutic tool* – which builds trust and communication between partnering entities – and as a *diagnostic tool* – which reveals citizens' needs, identifies delivery problems and facilitates the effective means to negotiate and resolve these problems (Needham, 2007). Consequently, a relatively dated typology of co-production with distancing effects on the co-producers is still present – detrimental co-production (Rich, 1981) – and manifests itself in a significant way when co-production has been contaminated or co-contaminated as evidenced by the aforementioned cases.

Various scholars have noted the potential limitations of co-production (Ostrom, 1996; Needham, 2006; Needham, 2007; Bovaird, 2007 and Thomas 2012), including the apathy or passivity of the public, the blurring of the boundaries and the shifting of costs and risks to user producers. Our paper highlights contamination and co-contamination as undergirding challenges that face the management of co-production and can impact future efforts to expand the enhancement of public value. However, these challenges are paired with opportunities. Recognizing these challenges and their corresponding opportunities are paramount; equally so is recognizing the practical managerial realities and related implications that it does take "two to tango" (Osborne and Strokosch, 2013). Acknowledging the potential for contamination and co-contamination by regular and user producers is the first step in the dance to enhance co-production.

References

Alford, J. (2002). Why do public-sector clients co-produce? *Administration and Society, 34,* 3256.

Alford, J. and O'Flynn, J. (2012). *Rethinking Public Service Delivery*. New York, NY: Palgrave Macmillan.

Birchall, J. and Simmons R. (2004), *User power: The participation of users in public services*. London: National Consumer Council.

Bovaird, Tony. (2005), Public governance: Balancing stakeholder power in a network society. *International Review of Administrative Sciences, 71,* 217-228.

Bovaird, Tony. (2007). Beyond engagement and participation: User and community co-production of services. *Public Administration Review, 67*, 846-860.

Bovaird, Tony, and Loeffler, E. (2012). From engagement to co-production: the contribution of users and communities to outcomes and public value. *International society of third sector research, 23,* 1119-1138.

Boyle, D. and M. Harris. (2009). The Challenge of Co-Production: How equal partnerships between professionals and the public are crucial to improving public services. London: nef, The Lab, NESTA.

Brandsen, T., & Pestoff, V. (2006). Co-production, the third sector and the delivery of public services: An introduction. *Public Management Review*, 8(4), 493–501.

Brewer, R., & Grobosky, P. (2014). The Unraveling of Public Security in the United States: The Dark Side of Police-Community Co-production. *American Journal of Criminal Justice, 39*(1), 139-154.

Brudney, Jeffrey L. and Robert E. England. (1983). Toward a Definition of the Co-production Concept. *Public Administration Review*, 43(1): 59-65.

Brugge, D., & Kole, A. (2003). A Case Study of Community-Based Participatory Research Ethics: The Healthy Public Housing Intiative. *Science and Engineering Ethics , 9*, 485-501.

Brugge, D., Hynes, H., & Miranda, F. (2003, September 19). *Public Housing Resident's Survey Training Trainer's Manual.* Retrieved February 27, 2015, from Healhy Public Housing Intiative: http://www.hsph.harvard.edu/hphi/trainingmanual.pdf

Bunyan, Paul. (2012). Partnership, the Big Society and community organizing: between romanticizing, problematizing and politicizing community. *Community Development Journal*, 48(1): 119–133.

Cabinet Office, UK. (2010). Building the Big Society. Available at [https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/78979/building-big-society_0.pdf] Accessed February 9th, 2015.

Cargo, M., & Mercer, S. (2008). The Value and Challenges of Participatory Research: Strengthening Its Practice. *Annual Review of Public Health* , 325-350.

Choi, Eunryol and Jinhee Park. (2012). Jayool Bangbymdae Bupryul Jaejung Banghyangae Gwanhan Noneu [A Discussion on the Enactment of the Voluntary Crime Prevention Patrol Legislation]. *Hangook Cheean Haengjung Nonjib*. 8(1): 1-25.

Choi, Sunwoo. (2001). Cheean Seobeesu eu Gongdong Saengsanronjuk Jupgeun [A Co-production Approach for Policing Services]. *Hankook Gongan Haengjung Hakhwaebo,* 11:375-411.

Chun, Youngshil. (2005). *Jeeyoek Joomin eu Jayool Bangbym Hwaldong Shiltae Mit Hwalsunghwa Bangan [The Status of Community Residents' Crime Prevention Activities and Vitalization Measures]*. Seoul: Hyeongsa Jungchaek Yeon-goowon.

Chung, Yoonsu. (1994). Cheean Seobeesu Gongdong Saengsankwa Jungchaek Banghyang [Co-production of Policing Services and Policy Directions]. *Hankook Jungchaek Hakhwaebo*, 3(1): 85-106.

Clary, B. (1985). Designing urban bureaucracies for co-production. *State & Local Government* Review, 17(3), 265-272.

Evans, Peter. (1996). Government action, social capital and development: Reviewing the evidence on synergy. *World Development*, 24(6): 1119-l 132.

Evans, Kathy. (2011). 'Big Society' in the UK: A Policy Review. *Children & Society*, 25:164-171.

Evers, A. and Ewert, B. (2012). Co-production: Contested meanings and challenges for user organizations, in T. Brandsen, C. Pestoff, and B. Verschuere (eds.), *New Public Governance, the Third Sector and Co-Production*, New York: Routledge.

Fischer, F. (1993). Citizen participation and the democratization of policy expertise—from theoretical inquiry to practical cases. *Policy Sciences*, 26(3): 165-187.

Flicker, S., Travers, R., Guta, A., McDonald, S., & Meagher, A. (2007). Ethical Dilemmas in Community-Based Participatory Research: Recommendations for Institutional Review Boards. *Journal of Urban Health* , 478-493.

Follett, M. (1918). *The new state: Group organization, the solution of popular government*. New York: Longman, Green.

Freeman, E., Brugge, D., Bennett-Bradley, W. M., Levy, J., & Carrasco, E. R. (2006). Challenges of Conducting Comunity-Based Participatory Research in Boston's Neighborhoods to Reduce Disparities in Asthma. *Journal of Urban Health* , 1013-1021.

Freire, K., & Sangiorgi, D. (2010). Service Design and Healthcare Innovation: from consumption to co-production to co-creation. *Second Nordic Conference on Service Design and Service Innovation* (pp. 1-11). Linköping: ServDes.

Goffman, E. (1963). Stigma: Notes on the Management of Spoiled Identity. New York: Simon and Schuster.

Green, L., & Mercer, S. (2001). Can public health researchers and agencies reconcile the push from funding bodies and the pull from communities? . *American Jounral of Public Health , 91*, 1926-1929.

Hwang, Hyunlak. (2011). Jayool Bangbumdae Bup Jaejungeul Weehan Bupjungchaekjuk Gochal [Legal and Political Considerations for the Enactment of the Voluntary Crime Prevention Patrol Legislation]. *Hanyang Beophak*, 22(4): 435-460.

Institute of Medicine. (2003). *The Future of the Public's Health in the 21st Century.* Washington, DC: National Academies of Press.

Israel, B., Eng, E., Schulz, A., & Parker, E. (2005). *Introduction to methods in communitybased participatory research for health.*

Kellogg Foundation. (2001). *Stories of Impact: Community Health Scholars Program.* Accessed on February 28 , 2015. Available from Kellog Health Scholars : [http://www.kellogghealthscholars.org/about/ctrack_impact_scholars_book.pdf]

Kim, In. (1997). Gyeongchal eu Gongdong Saengsan eu Hyo-gwa [The Effects of Co-producing Policing Services]. *Hankook Haengjung Hakhwaebo*, 31(4): 77-94.

King, C., Felty, K. and Susel, B. (1008). The question of participation: Toward authentic public participation in public administration, *Public Administration Review*, 58(4), 317-326.

Lee, Sungshik. (2001). Jeeyeok Joomin Bangbum Soonchal Hwaldong eu Chamyeo Yo-in Mit Hwalseonghwa Banganae Gwanhan Kyeonghum Yeongu [A Conceptual Study on the Participatory Factors and Vitalization Measures for Community Residents' Voluntary Crime Prevention Activities]. *Hyeongsa Jungchaek Yeongoo*, 12(3): 111-137.

Lee, Sungjin and Euyoung Kim. (2005). Bumjwae Yebangeul Weehan Gyeongchalgwa Mingan Gyeongbee eu Sangho Hyubryeok Bangan [Police and Private Security Cooperation for Crime Prevention]. *Hankook Sports Research*, 16(2): 323-36.

Lee, Jina and Eugap Hwang. (2009). Shimindul eu JayulBangbym Hwanldong Junnyeomdoae Younghyangeul Meecheenun Yoinae Gwanhan Yeongoo [Research on the Factors that

Influence Citizens' Level of Attention on Crime Prevention Activities]. *Hankook Sahwae Yeongoo*, 12(2): 208.

Lee, Youngnam. (2012). Jayool Bangbumdae Jojik Mit Woonyoung eu Jeewon Ganghwa Bangan Yeongu [A Study on the Organization and Operational Support for Crime Prevention Patrols]. *Kyeongchal Hak Nonchong*, 7(2): 363-382.

Levine, Charles H. (1984). Citizenship and Service Delivery: The Promise of Co-production. In *The Age of Direct Citizen Participation*, by Nancy C. Roberts (ed.). (pp.78-92). ME.Sharpe: Armonk, New York. London, England.

Lipsky, Michael. (1973). Street level bureaucracy and the analysis of urban reform, in George Frederickson (Ed.), *Neighborhood Control in the 1970s*. New York: Chandler Publishing Co., 1973.

Layne, K. (1989). Perfect Partners: Co-production and crime prevention. *U.S. Department of Justice. Rockville, MD: National Institute of Justice.*

Mattson, G. (1986). The promise of citizen co-production: Some persistent issues. *Public Productivity Review*, 10(2), 51-56.

Mayo, E. and Moore, H. (2002) *Building the mutual state. Findings from the virtual think-tank.* London: Lawrence & Wishart.

Meehan, A. and M. Ponder. (2002). Race and Place: The Ecology of Racial Profiling African American Motorists. *Police Quarterly*. 19(3): 399-430.

Min, Hyung Dong. (2014). Jayeul Bhangbumdae Seolchi·Eunyongae Gwanhan Jaejung Bupryulan Bigyo Bunsuk Mit Lipbup Banghyangae Gwanhan Yeongu [Comparative Analysis on Legislative Bills and its Legislation Outlines regarding Installation and Operation of the Voluntary Crime Prevention Community]. *Hankook Kyeongchal Hakhwaebo*, 48:63-91.

Minkler, M. (2004). Ethical challenges for the "outside" researcher in community-based participatory research. *Health Education Behavior , 31*, 684-697.

Minkler, M. (2000). Using Participatory Action Research to Build Healthy Communities. *Public Health Reports: Focus on Healthy Communities , 115*, 191-197.

Minkler, M., Blackwell, A. G., Thompson, M., & Tamir, H. (2003). Community-Based Participatory Research: Implications for Public Health Funding Read More: http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.93.8.1210. *American Journal of Public Health , 93* (8), 1210-1213.

Moore, M. (1995). *Creating Public Value: Strategic Management in Government*. Cambridge, MA: Harvard University Press.

Muhammad, M., Wallerstein, N., Sussman, A. L., Avila, M., Belone, L., & Duran, B. (2014). Reflections on Researcher Identity and Power: The Impact of Positionality on Community Based Participatory Research (CBPR) Processes and Outcomes. *Critical Sociology* , 1-20.

Myrdal, G. (1996). *An American Dilemma Volume II: The Negro Problem and Modern Democracy*. New Brunswick, NJ: Transaction Publishers.

Needham, C. (2006). Co-production in public services: Opportunity of threat? ˆRenewal*, 14(2), 55-60.*

Needham, C. (2007). Realising the potential of co-production: Negotiating improvements in public services. *Social Policy & Society*, 7(2), 221-231.

Office for State, Tribal, Local and Territorial Support, CDC. (2014, May 29). *The Public Health System and the 10 Essential Public Health Services.* Retrieved February 28 , 2015, from National Public Health Performance Standards (NPHPS): http://www.cdc.gov/nphpsp/essentialservices.html

Oh, Yoonsung. (2000). Jeeyeok Joomin Chamyeo Bumjwae Yebang Hwaldongae Daehan Gochal [Community Residents' Participation in Crime Prevention Activities]. *Hankook Kyeongho Hakhwaejee*, 3(1): 175-204.

Osborne, Stephen P., ed. (2010). *The New Public Governance? Emerging perspectives on the theory and practice of public governance*. Routledge.

Osborne, Stephen P., Radnor, Zoe, and Greta Nasi. (2012). A New Theory for Public Service management? Towards a (Public) Service-Dominant Approach. *American Review of Public Administration*, 43(2): 135-158.

Osborne, Stephen P., and Strokosch, Kirsty. (2013). It takes Two to Tango? Understanding the Co-production of Public Services by Integrating the Services Management and Public Administration Perspectives. *British Journal of Management*, 24, p.31-47.

Ostrom, E., Parks, R., Whitaker, G., and Percy, S. (1978). The Public Service Production Process: A Framework for Analyzing Police Services. *Policy Studies Journal*, 7: 381-389.

Ostrom, E. (1996). Crossing the great divide: Co-production, synergy and development, *World* Development, 24(6), 1073-1087.

Parks, R., Baker, P., et al. (1981). Consumers as Co-producers of Public Services: Some Economic and institutional Considerations. *Policy Studies Journal*, 9: 1001-1011.

Percy, S. (1984). Citizen participation in the co-production of urban services. *Urban Affairs Quarterly*, 19(4), 431-446.

Pestoff, V. (2006). Citizens and co-production of welfare services. *Public Management Review, 28,* 503-509.

Public Administration and Security Council, National Assembly. (2009). Jayool Bhangbumdae Bup Jaejungeul Wihan Yeoya Hapdong Gongcheonghwa Jaryojip [Records for the Joint Public Hearing on the Voluntary Crime Prevention Law Enactment].

Public Administration and Security Council, National Assembly. (2011). Jayool Bhangbumdae Bupahn Gongchunghwae Jaryojib [Records for the Public Hearings on the Voluntary Crime Prevention Patrol Bill].

Rich, R. (1981). Interaction of voluntary and governmental sectors: Towards an understanding of co-production of municipal service. *Administration & Society*, 13: 59-76.

Rosenbaum, D. P. (1986). The problem of crime control. In D.P. Rosenbaum (Ed.), Community crime prevention: Does it work? (P.11-10). Beverly Hills: Sage Publications.

Russell, K. (1998). *The Color of Crime: Racial Hoaxes, White Fear, Black Protectionism, Police Harassment and Other Macroaggressions*. New York: New York University Press.

Ryan, Bill. (2012). Co-production: Option or Obligation? *Australian Journal of Public Administration*, 71(3): 314–324.

Schulz, B. A., Parker, E. A., & Becker, A. B. (1998). Review of Community-Based Research: Assessing Partnership Approaches to Improve Public Health. *Annual Review of Public Health , 19*, 173-202.

Skolnick, J. (1998). The Color of the Law. *The American Prospect*, 39: 90-96.

Son, Neung-su. (2007). Soonchal Jeegodae Chaejaehaeu Cheean Seobeesu Gongdong Saengsanae Gwanhan Yeongoo: Jeeyeok Kyeongchaleu InshikBoonsukeul Joongshimeuro [A Study on Co-production in Police Service of the Patrol Division System]. *Hangook Jeongchaek Gwahak Hakhwaebo*, 11(2): 79-106.

Thomas, J. C. (2012). Citizen, Customer, Partner: Engaging the public in public management. Armonk, NY: M.E. Sharpe.

Verschuere, B., Brandsen, T. & Pestoff, V. (2012). Co-production: The state of the art in research and the future agenda. *International Society of Third Sector Research, 23,* 1083-1101.

Wallerstein, N. (1999). Power between evaluator and community: research relationships within New Mexico's healthier communities. *Social Science Medicine* , 39-53.

Wallerstein, N., & Duran, B. (2010). Community-Based Participatory Research Contributions to

Intervention Research: The Intersection of Science and Practice to Improve Health Equity. *American Journal of Public Health* , S40-S46.

Wilkinson, R., & Marmot, M. (2003). *Social Determinants of Health: The Solid Facts.* Copenhagen: World Health Organization.

Whitaker, G. (1980). Co-production: Citizen Participation in Service Delivery. *Public Administration Review,* 40(3), 240-246.

Wirth, W. (1991). Responding to citizens' needs: From bureaucratic accountability to individual production in the public sector, in F. K. Kaufmann (ed.), *The Public Sector: Challenge for co-production and learning*. New York: Walter de Gruyter.

Williams, B., LePere-Schloop, M., Silk, P., and Hebdon, A. (Forthcoming in 2016). The co-production of campus safety and security: A case study at the University of Georgia. *International Review of Administrative Sciences*, 82(1).

Table 1. Number of voluntary patrol organizations, volunteers and amount of local government funds allocated according to major metropolitan city or province.

From Jan. to Sep. 2012

City or Province	Number of Organizations	Number of Volunteers	Local Government funding (in dollars)	Ratio of funds to Total
Total	3,917	100,517	12,384,518	100%
Seoul*	450	10,995	1,189,478	9.60%
Busan*	244	4,562	113,658	0.92%
Daegu*	175	4,238	41,200	0.33%
Inchon*	122	2,968	40,069	1.13%
Gwangju*	66	1,222	11,143	0.09%
Daejeon*	144	2,692	46,262	0.37%
Ulsan*	68	2,183	208,099	1.68%
Kyeonggi	518	15,819	2,764,563	22.32%
Kangwon	241	7,537	1,595,382	12.88%
Chungbuk	181	4,835	850,163	6.86%
Chungnam	392	9,396	1,337,162	10.80%
Cheonbuk	287	8,587	1,019,229	8.23%
Cheonnam	307	7,133	1,062,298	8.58%
Kyeongbuk	351	8,824	1,134,418	9.16%
Kyeongnam	347	8,785	868,348	7.01%
Jaeju	24	741	3,048	0.02%

Source: Adapted from Min (2014).
* Metropolitan city

Table 2. Performance of voluntary patrols in public safety.

From Jan. to Sep. 2012

Region	Criminal Apprehensions					Custody		Reporting of Crime
	Total	Violent	Burglary	Assault	Other	Incidents	Persons	
Total	614	0	10	147	457	7,304	9,883	5,854
Seoul*	6	0	2	0	4	175	191	196
Busan*	12	0	1	2	9	114	153	123
Daegu*	14	0	1	0	13	45	80	42
Inchon*	3	0	1	1	1	13	21	44
Gwangju*	45	0	1	24	20	51	73	46
Daejeon*	1	0	1	0	0	8	8	2
Ulsan*	1	0	0	0	1	94	115	139
Kyeonggi	324	0	1	118	205	5,500	7,147	4,106
Kangwon	2	0	0	0	2	34	54	1
Chungbuk	2	0	1	0	1	235	164	4
Chungnam	0	0	0	0	0	3	3	14
Cheonbuk	23	0	0	2	21	38	92	82
Cheonnam	1	0	0	0	1	67	128	66
Kyeongbuk	13	0	0	0	13	615	881	277
Kyeongnam	167	0	1	0	166	306	756	707
Jaeju	0	0	0	0	0	6	17	5

Source: Adapted from Min (2014).
* Metropolitan city