

Sustainability science and education in the neoliberal ecoprison

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As part of the general ‘greening’ of prisons in the last decade of neoliberalization and the formation of institutionalized programs to provide science and environmental education opportunities for the incarcerated, the Sustainability in Prisons Project (SPP), a partnership between Evergreen State College and the Washington State Department of Corrections, has become the most vibrant partnership in the US to mesh the cultures and institutions of environmental science and corrections. Drawing attention to the SPP’s anchoring mission, which is ‘to bring science and nature into prisons,’ this article looks at environmental science education in the contemporary prison in light of recent discussions of neoliberal science and ecobiopolitical theory, with the final aim of developing what amounts to a carceral political ecology of environmental education amid an ever expanding neoliberal penal State.

Keywords: environmental education; sustainability science; prisons; neoliberalism

Introduction

Think about what Michel Foucault said about gardens: ‘The garden is the smallest parcel of the world and then it is the totality of the world. The garden has been a sort of happy, universalizing heterotopia since the beginnings of antiquity’ (Foucault 1984, 47). Now think about gardens, horticulture, environmental education, and sustainability science *within* the prison environment. Think of ecocarcerality and how sustainability science and education in the prison become a site of biopower, a disciplinary technology, to use Foucault’s terminology. This is the thematic focus of what follows, an article that cracks open the emerging eco-prison, that is, the contemporary marriage of neoliberal sustainability and penalty. The emergence of penal environmental science education, it will be argued, calls for an approach attentive to contemporary critiques of the ‘penal State’ (Wacquant 2002, 2010a, 2010b, 2012a, 2012b, 2012c), as well as nuanced perspectives on neoliberal science and environmental biopolitics.

The current neoliberal situation (Harvey 2005, 2007; Giroux 2008; Graeber 2010; Chomsky 2011), a political, economic, technological, scientific, social, and ecological age illustrated best by the growing surplus of intrusive privatization, marketization, and bureaucratization schemes to order and manage central domains of life and living (e.g. work, education, health care, and habitat), is also a moment of late industrial society marked by mass imprisonment or hyperincarceration (Alexander 2010). Prisons and prison policies today are symbolic markers of

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neoliberal state transformation or ‘state crafting’ (Wacquant 2010b) and the numbers help illustrate any discussion of so-called ‘Lockdown America’ (Parenti 1999) or our ‘Prison Nation’ (Herivel and Wright 2003). According to the most recent estimates provided by the US Department of Justice’s Bureau of Prisons, there are over 2.2 million adults incarcerated in federal and state prisons in the US. With the highest incarceration rate in the world – for every 100,000 people, 743 are currently incarcerated, and the US beats the runner up Russia (with 577 inmates per 100,000) by a healthy margin. One in every 15 African–American men and one in every 36 Hispanic men are incarcerated in comparison to one in every 106 white men, and 16% of the adult prison population suffers from mental illness and 20% of inmates report sexual and other forms of abuse while in prison. Furthermore, roughly two-thirds of those released from US jails and prisons end up returning within three years, and one in three men of color can expect to go to prison in their lifetime (Alexander 2010).

This mass incarceration trend in the US and especially the jarring racial politics of our age of hyperincarceration, it has been argued, are a powerful signal of the rising penal State, of ‘punitive governance’ (Lancaster 2010) informed by neoliberal craftsmanship. As Wacquant (2012a) contends,

we cannot understand policing and prison policies in advanced societies today unless we place them in the framework of a broader *transformation of the state*, a transformation that is itself linked to a makeover of wage work and a shift in the balance of power between the classes and assorted groups struggling over its control. In this struggle, transnational corporations and the ‘modernising’ factions of the bourgeoisie and state nobility have formed an alliance under the banner of neoliberalism, gained the upper hand and launched a sweeping campaign to revamp public authority on the labour, welfare and penal fronts. Economic deregulation, the rise of precarious wage work ... and the ascent of the punitive state, go hand in hand: the ‘invisible hand’ of the precarized labour market finds its institutional counterpart in the ‘iron fist’ of a state that redeploys its forces so as to suppress or contain the *dislocations and disorders generated by the spread of social insecurity*. (Wacquant 2012, 2, emphasis in original)

Such a neoliberal prison perspective, I will argue here, matters to eco-prison or eco-penalty studies of the ‘greener’ sort, that is, studies tuning into the practices of ‘ecologizing’ ‘factions of the bourgeoisie’ and their emerging alliances with penal State nobility (e.g. state corrections personnel) and environmental scientists and educators (Ulrich and Nadkarni 2009). Bringing such critical discussions of the penal State into the ‘green prison’ movement (Judd 2008; Stohr and Wozniak 2014) – a movement also marked by a growing discourse of ‘green criminology’ (Lynch and Stretesky 2003; Beirne and South 2006, 2007; Benton 2007) addressing the criminality of environmental pollution and earthly destruction – is a wide open area of contemplation and interrogation that is, as will be discussed below, attracting environmental scientists and educators working to develop environmental or ‘sustainability’ programs in prisons.

The article will be organized as follows. First, I explore the recent work of the Sustainability in Prisons Project (SPP), a university–corrections partnership that is quickly creating the mold, the model for how to mesh sustainability science and practice with the aims of State corrections facilities. As an environmental anthropologist fascinated by this sustainability project (Little 2013), I will argue that the SPP provides a vibrant case of State–university alliance intended to fully integrate the logics of penalty and sustainability expertise in our institutional age of environmental

knowledge accumulation and neoliberal science. Next, I discuss how this move to what might be thought of in a variety of different terms, ‘ecobiopolitics’ (Olson 2010), carceral political ecology, ecocarcerality, and ecopenality, opens up new terrain for critical environmental education studies *of* and *in* prisons, as well as fertile ground for forging linkages between various fields, including the anthropology of prisons (Rhodes 2001, 2004; McCorkel 2013), environmental justice studies, political ecology, and science and technology studies. In what follows, I aim to both productively critique the greening of prisons and illustrate the constructive possibilities of sustainability science and education in prisons. While certainly a move that generates more questions than explanations, attending to both ‘critique’ and ‘possibility’ is a more genuine path toward honoring the complexities, conundrums, and deep contradictions at work in a neoliberal age of precarious synthesis between ecology and economy and, for the purposes here, between sustainability and penalty.

The sustainability in prisons project

The SPP, a partnership between Evergreen State College and the Washington State Department of Corrections (DOC), has become the most vibrant project in the country to mesh the cultures of sustainability science and corrections. The SPP’s goal is rather straightforward: ‘Our mission is to bring science and nature into prisons. We conduct ecological research and conserve biodiversity by forging collaborations with scientists, inmates, prison staff, students, and community partners. Equally important, we help reduce the environmental, economic, and human costs of prisons by inspiring and informing sustainable practices’ (LeRoy et al. 2012). Among its many accomplishments, the SPP’s projects have saved correction facilities millions of dollars by creating recycling and energy-saving programs and they have made major progress in restoring populations of an endangered species of frogs (e.g. Oregon Spotted Frogs) and rearing endangered butterflies (e.g. Taylor’s checkerspot butterflies). The SPP’s partners continue to grow, but some prominent players include the following: The Nature Conservancy, the National Science Foundation, US Department of Defense, the US Fish and Wildlife Service, and the Center for Natural Lands Management.

Established in 2005 in Washington State, the SPP has already helped to develop sustainability projects in prisons in 14 states and is quickly gaining international attention, with three countries beginning to adopt SPP’s ecological research and biodiversity conservation approach. Engaged in projects at minimum, medium, and maximum security prisons, the SPP works to forge collaborations with prison staff and inmates to carry out a variety of activities, including, but not limited, endangered species and ecological restoration, horticulture, water conservation, green purchasing and procurement, zero-waste garbage sorting and composting, as well as bicycle and wheelchair restoration. Recently, the SPP received funding from the National Institute of Corrections to develop a ‘Sustainability 101’ curriculum to be offered to Washington DOCs staff and prisoners, a curriculum aimed at addressing ‘why and how sustainability can be improved and provide specific information about how to get involved with programs at the local facility’ (LeRoy et al. 2012, 79). As this educational goal indicates, the SPP aims to provide environmental education opportunities for both prisoners and corrections staff.

The SPP is driven by meeting a diversity of interests. They adopt a multi-stakeholder commitment approach, seeking ways to make SPP programs meet the interests of offenders, the environmental education community, the science education

community, as well as officers, administrators, and the general public (SPP 2012, 37). For prisoners, according to the SPP, their programs allow for ‘increased opportunities for intellectual stimulation’ and ‘improvement in knowledge and workplace skills’ (2012, 37). For the environmental education community, these programs lead to an ‘improved understanding of the environment’ and an ‘increase in environmental stewardship’ (37). For the science education community, SPP programs help increase ‘interest and engagement in science-learning’ (ibid.). And finally, for corrections administrators, officers, and the general public, the programs lead to ‘cost-effective prison operations,’ and have the capacity to lead to a ‘reduction in behavioral infractions,’ and a ‘reduction in recidivism rates’ (ibid.).

Much of the SPP’s success, it should be added, is due to the fact that one of the cofounders is now the Director of Prisons for the Washington State DOCs, and as one SPP staff explained it to me, ‘without him on board and being an advocate for this program, it would never have gotten off the ground.’ Put another way, the very merger of the goals of sustainability science and corrections fit within what Foucault’s biopower perspective has been about all along: ‘it is precisely when these technologies [and knowledges] find a localization within specific institutions (schools, hospitals, prisons), when they “invest” these institutions, that biopower really begins its take-off’ (Dreyfus and Rabinow 1982, 185). Moreover, the SPP has made sustainability science and education ‘productive’ by its very merger with the prison system, arguably the most powerful institution since antiquity. The implementation of environmental science and education in prisons, it will be argued below, is linked to the productive and reformative logic of prisons.

Toward eco-prisons

We might find it useful to think of the SPP as a faction of sustainability practitioners engaged in synthesizing sustainability science, environmental education, and penal functionality, a move rooted in earlier prison horticulture projects (Jiler 2006). The so-called ‘green’ prison movement (Judd 2008; Stohr and Wozniak 2014) has penetrated the major institutions of corrections, namely the National Institute of Corrections (NIC) and the American Corrections Association (ACA). For example, the NIC’s recent development of a report entitled *The Greening of Corrections: Creating a Sustainable System* (NIC 2011) and holding of a national symposium on the topic in 2011 showcases the federal interest meshing sustainability and penality. The ACA is yet another institutional player in upholding the ‘sustainability’ turn in the US prison system. It has, for example, developed new accreditation standards requiring ‘facilities seeking accreditation to demonstrate that they have examined, and where appropriate and feasible, implemented strategies that promote recycling, energy and water conservation, pollution reduction and utilization of renewable energy alternatives’ (Atherton and Sheldon 2011, 3).

Washington State’s SPP hosts environmental and conservation work programs that aim to inspire positive changes in prisoner attitudes, to help reduce recidivism, to provide educational and vocational training opportunities, therapeutic benefits, and ‘opportunities to contribute’ – a DOCs term – to the ‘community’ beyond prison walls. According to a recent study (Gallagher 2013) based on a statewide survey of inmates ($n = 293$) comparing inmates with sustainability-related jobs and a control group with non-sustainability-related jobs, found that offenders whose jobs involved more education and training, or who worked with ‘living things,’ or had

‘opportunities to contribute’ to the community, tended to score higher on the New Ecological Paradigm Scale (Dunlap and Van Liere 1978; Dunlap et al. 2000; Dunlap 2008), a questionnaire that assesses environmental attitudes and is commonly used in environmental education studies. Gallagher (2013) found that these high scores indicate that these elements of inmate participation in SPP programs are associated with more pro-environmental attitudes and that because pro-environmental attitudes have been correlated with pro-social attitudes (Hines, Hungerford, and Tomera 1987; Bamberg and Möser 2007), her research suggested that SPP and the Washington State DOCs consider incorporating more of these sustainability-related jobs into other work programs.

SPP staff are fully aware of the crux of meshing ecology and corrections, of meshing environmental science and prison culture, and they are also cognizant of the brittle political–economic dimensions of their ‘sustainable practices,’ even if, as Harvey (1996) famously put it, ‘all ecological projects (and arguments),’ whether within or outside prison walls, ‘are simultaneously political–economic projects (and arguments) and vice versa’ (Harvey 1996, 182). SPP scientists and educators are sensitive to the politics of prison labor and ‘careful,’ as one SPP staff put it, ‘not to take advantage of inmates in the work we do.’ This is where the so-called political ecology of prisons gets interesting, the point at which the SPP’s mission ‘to bring science and nature to prisons’ is met with a culture of caring for inmate education and advocating for their involvement in sustainability and conservation projects, as well as in the production of environmental science and knowledge. SPP staff, in this sense, are in a continual navigation of possible exploitation, and they are careful to avoid, the best they can, any form of inmate disempowerment. ‘It can get tricky,’ as one SPP staff put it. SPP staff continually highlight the educational component of the SPP and view inmate involvement in SPP projects as ‘opportunities to contribute’ – again, a DOCs term – and not inmate exploitation. The educational focus, in this sense, counters the prison labor concern (Lafer 2003) which is ultimately an uneasiness with what has been termed ‘carceral Keynesianism’ (Parenti 1999) or how prison labor mimics ‘public-work style stimulus’ (Parenti 1999, 217). Wacquant offers a similar angle on prison labor, suggesting that it is a myth that prisons and prison labor have economic benefits:

Putting convicts to work is not a practical proposition in contemporary society, for a host of legal and economic reasons. Contrary to the claims of the critics of the so-called ‘prison-industrial complex’, incarceration is not a profitable ‘industry’ for society because its costs are astronomical (\$25,000 per inmate per year in a California state penitentiary and \$70,000 in New York county jail) and it generates no wealth. It is a gross drain on the public coffers that is profoundly irrational from a capitalistic standpoint. The private operators that benefit from the prison boom are minor players who exploit the bureaucratic rigidities of the state downstream, not strategic actors that impact penal policy upstream. (Wacquant 2012a, 5)

While Wacquant is right to point out that we are witnessing a reintroduction of ‘deskilled labor behind bars’ (Wacquant 2012b, 215; see also Harcourt 2012), I find it less convincing to say that SPP-related work is ‘deskilled’ labor. It turns out that much of SPP prison labor is skilled ‘scientific’ work. In fact, one inmate involved in one of the SPP programs went on to get a PhD in biology after his release. Sure, it is a serious minority population with access to this ‘skilled’ labor, but it is happening and therefore should figure somewhere in our fields of penal critique.

Among SPP staff I have spoken with, there is also an orbiting ethos of ‘ecohealth’ and ‘ecotherapy’ (Frumkin 2012; Hasbach 2012) that informs much of the work that SPP and their partners do, that building inmate–earth relationships has some level of healing power. For example, in one interview, I was told ‘I really feel that to have a physical connection with the planet, whether working with soil or working with frogs, it can only have a beneficial impact on your physical and mental health and wellbeing.’ The work of the SPP illustrates how spaces of incarceration are becoming simultaneously spaces of environmental science production and sustainability practice, even neoliberal institutional arrangements where environmental identities can be made possible and where environmental education is carefully used to reduce recidivism. This transformation process, which the SPP is playing a central role and which one prisoner likened to the transformation that occurs during composting, is a vibrant example of what McCorkel (2013) calls ‘habilitation,’ or a social technology intended ‘to “break down” a self that is incomplete and disordered’ (McCorkel 2013, 17). In the words of one prisoner involved in an SPP program at the Cedar Creek Correctional Facility in Washington who posted his story of ‘transformation’ on the SPP Website:

By utilizing this opportunity to participate in this program I have gained so much knowledge and wisdom in these fields. I feel as though the information I’ve accumulated from this experience is one of my most cherished possessions. And this is why: gardening is all about rebirth. You see, you plant a seed in the proper soil with the correct amount of nutrients and in the correct timing of year and up grows this beautiful plant full of life. This same concept I believe applies to my life situation. I have been reborn into a better individual. By no means am I saying that my incarceration is rebirth. More so, my positive and productive choices that I have made have been my rebirth process.

Much of this discourse on the transformative and even ‘habilitative’ effect of prisoner involvement in sustainability science and education gets at what Olson (2010) might call ‘ecobiopolitics,’ an extension of biopolitical theory which I explore further below. ‘For now at least, this prisoner’s narrative illustrates how rebirth and ‘life itself’ (Rose 2007) reflection is informed by his direct involvement in an SPP garden project.

Environmental knowledge and prison ecobiopolitics

As environmental education researchers have shown, the very institutionalization of environmental education can and often does undermine the transformative goals and logics of environmental education programs (Martin 1996; Gruenewald 2004). According to Gruenewald (2004), the issue comes largely down to the crux of education itself:

The ultimate challenge for education, environmental or otherwise, is to prepare people [and prisoners] with the skills and knowledge needed to identify and shape the quality of the world we share with others – human and nonhuman; in a multicultural and political world, this means education for cultural competence and political participation. (Gruenewald 2004, 72)

As environmental education scholars have pointed out, one of the primary struggles of informing educational programs with ecological and environmental learning opportunities and curricula is that ecological knowledge itself was often marginalized from mainstream or general education (Gruenewald 2004). Until the SPP

appeared on the corrections scene in 2004, environmental education in prisons basically did not exist, though the prison context, which the SPP has attempted to change, causes it to focus on two entangled questions: what happens when subjugated and neglected knowledge is brought into an environment of strict social subjugation and marginalization? How does environmental science education become hegemonic when deployed in spaces of human confinement and subjugation? Both questions re-anchor the discussion back to Foucault, who had much to say about ‘subjugated knowledges.’ He meant two things by this term. First, he contended, these knowledges were present in historic ‘functional and systemic ensembles’ – like the prison – but were dwarfed or excluded from exposure. Second, these knowledges were, as he puts it, ‘disqualified as nonconceptual knowledges, as insufficiently elaborated knowledges: naïve knowledges, hierarchically inferior knowledges, knowledges that are below the required level of erudition or scientificity’ (Foucault [1976] 2003, 7). In light of this perspective, the very environmental knowledge of prisoners working on SPP projects is largely ‘qualified’ by their relationship to and opportunity to work with SPP scientists. Prisoner environmental knowledges are far from ‘inferior’ when such knowledges are the outcome of SPP projects, that is, projects guided by scientific rigor.

The environmental science and education programs the SPP and its partners are engaging in are inter- and intra-institutional practices and transformations tightly wrapped up in the prison reform game that has typified the prison system for centuries. As Foucault put it,

One should recall that the movement for reforming the prisons, for controlling their functioning is not a recent phenomenon. It does not seem to have originated in a recognition of failure. Prison “reform” is virtually contemporary with the prison itself: it constitutes, as it were, its programme. (Foucault 1979, 234)

As the SPP and its partners attempt to both improve the sustainability grade of corrections facilities (e.g. reducing costs via recycling and composting) and have a positive impact on prisoners’ lives, they are engaging in a remedial practice of ‘eco’ prison reform or transformation. Again, Wacquant’s pithy angle on the neoliberal prison–state relationship is a key. As Wacquant points out, the neoliberal penal state’s attempts to ‘improve prison conditions’ are missing a heady moral storyline:

The real challenge, to be specific, is not to improve prison conditions, although that is clearly a matter of immediate urgency, but to rapidly *depopulate the prison* by engaging a proactive policy of *decarceration* based on alternative sentencing and the social treatment of urban ills. For, whereas we no longer know why we lock people up, we do know very well that passing through the prison has destructive and demoralising effects on inmates as well as on their families and associates. (Wacquant 2012, 9)

What I am calling here *carceral political ecology* opens up new terrain for work already underway at the intersection of political ecology (Robbins 2011) – an environmental social theory that, in general, draws on political economy to expose complex power dynamics of human–environment relations – and science and technology studies, an interdisciplinary field that investigates the social, political, economic, and cultural dimensions of science, scientific knowledge production, and expertise (Goldman, Nadasdy, and Turner 2011; Lave 2012a, 2012b). While political ecology and STS are linkable in the case of carceral political ecology, the emerging field of ‘carceral geography’ (Moran 2013) seems equally relevant to the discussion. A field largely seeded in earlier discussions of the ‘total institution’

(Goffman 1961) and biopower (Foucault 1979), ‘carceral geography’ (Moran 2013) ‘has tended to foreground the carceral *space*, both in terms of the individual’s movement into and out of that space and his or her experience within it, as well as the physical manifestation of the penal institution in space’ (Moran 2013, 175, emphasis in original). In many ways, the prison becomes a new *space* of institutionalized sustainability science in a neoliberal age of both hyperincarceration and rising environmental knowledge production and environmental education programs. This new institutional space is, like all institutions, ‘inhabited by a multitude of positions and voices’ (Rhodes 2004, 223), which only adds to the complexities of studying SPP-corrections relations.

It is beyond the scope of this article to fully explore the following cascade of questions, but they are ones that can help guide both carceral political ecology and prison ecobiopolitical studies: How is sustainability science becoming a node or linkage between the neoliberal penal State and the neoliberal university? How, and to what extent, are prisoners actually ‘becoming’ sustainability scientists and environmental knowledge producers? How, and to what extent, are prisons becoming a microcosm for how sustainable living and sustainable practices are done and made possible? It is also important to engage the following questions inspired by Frickel and Moore (2006, 25) to help guide future investigations of the ecobiopolitical dimensions of SPP programs and perhaps even expose the very political nature of the neoliberal eco-prison itself: How do intersecting or overlapping logics of sustainability science and prison policy shape the content and conditions of environmental knowledge production and education? What are the primary formal and informal mechanisms of institutional change invoked by prison sustainability science and education? Which ones matter most in conditioning the trajectory of environmental science research and its broader dissemination and use within the prison system and among SPP partners? What impacts do SPP–corrections partnerships have on equitable access to sustainability science and education? In other words, critical social science research grappling with the intersecting logics of sustainability and penalty, of ecobiopolitics and environmental science education, is a wide open field of interrogation.

Conclusion

This article aimed to explore and take a modest look at the practice of sustainability science and education in a spatial environment of incarceration. As stated earlier, my approach to studying the SPP is not meant to simply drag neoliberal sustainability science efforts and the ‘greening’ of the penal State through the mud to expose trenchant power relations, but instead to face the complexities, conundrums, and deep contradictions at work in attempts to pair neoliberal sustainability science and penalty itself. Bringing ‘nature’ and ‘science’ into the environment of incarceration, the active educational goal of the SPP and its partners, puts an interesting twist on the very ‘nature’ of the contemporary prison as a stark example of an ‘outlaw institution’ crafting spaces for environmental education and learning: ‘The prison is supposed to enforce the law but, by the very nature of its organisation, it operates *exlex*, in the manner of *an outlaw institution*. Promoted as a remedy for insecurity and marginality, it does little more than to concentrate and intensify them, but so long as it renders them politically *invisible*, we ask nothing more of it’ (Wacquant 2012a, 7). If nothing else, a

carceral political ecology perspective informed by ecobiopolitical theory helps make visible the political ‘nature’ of environmental science and educational goals emerging amid this contemporary outlaw institutional surge. It asks of the neoliberal eco-prison to adopt an eco-critical, eco-reflexive, and eco-justice approach that recognizes new synergies between bodies, ecologies, and emerging racial politics in our ‘Age of Colorblindness’ (Alexander 2010), an age of vibrant discourse on the ‘end’ of racial caste in America coupled with a redesigned or ‘New Jim Crow’ era reality informed by ‘our current system of mass incarceration’ (2010, 12).

The discussion of sustainability science and education unfolding in the neoliberal eco-prison brings us back to, or rightfully extends from, Foucault’s original biopolitical thinking. ‘Biopolitics,’ he writes ‘deals with the population, with the population as political problem, as a problem that is at once scientific and political, as a biological problem and as power’s problem. And I think that biopolitics emerges at this time’ (Foucault [1976] 2003, 245). If our times are marked by the emergence and growth of SPP programs in prisons, of eco-prison efforts and partnership, our times surely call for an ‘ecobiopolitical’ (Olson 2010) approach. In other words, a more laudable critique of the neoliberal eco-prison might be best served by a biopolitical theory that moves from the prison ‘population’ to the ‘environment’ itself as a ‘political problem,’ to use Foucault’s phrasing. When environmental education and sustainability science are meshed with ‘restoring’ and rehabilitating inmates, this becomes a precarious ecobiopolitical move, a dual ethos move that synthesizes caring for both the wellbeing of inmates and the ‘environment.’

As Lemke (Lemke 2011, 120) points out, ‘an analytics of biopolitics must ... take into account forms of subjectivation, that is, the manner in which subjects are brought to work on themselves, guided by scientific, medical, moral, religious, and other authorities.’ If this is the case, then ecobiopolitics takes into account forms of environmental subjectivation. Surely the ethos of sustainability is part of SPP training, even if such an environmental ethos is not the front-and-center objective of the SPP’s environmental science education programs. In my experience talking to SPP staff and partners, the conversation usually includes comments about how inmate involvement in SPP programs ‘transforms’ them or ‘makes them think differently,’ as one SPP staff put it. This real or possible cognitive shift might even be understood as a ‘science shift’ for prisoners, a subjective transformation where scientific thinking is playing a greater role.

As Lave (2012a) points out, at the forefront of current neoliberal science studies is a strong emphasis on extramural science, that is, knowledge production rooted in citizen science (both activist and volunteer forms), amateur science, crowdsourcing, commercial science, indigenous knowledge, and local knowledge. Nowhere in emerging neoliberal science studies discussions is the prison, or inmate science, mentioned. One feature of what Lave (2012a) calls ‘neoliberal science regimes’ (Lave 2010, 2012a), is ‘a new wave of appropriation of labor and knowledge. Both amateur and citizen scientists provide vast amounts of unpaid work for physical scientists’ (Lave 2012a, 28). While inmate exploitation is a vocalized concern for SPP staff, the environmental science prisoners engage in ‘unpaid’ work. One can not dodge that fact, nor should one assume SPP staff and their partners are intentionally using prisoners as labor for expanding neoliberal science regimes. All SPP staff and partners I have spoken with remind me that prisoners who get to work on SPP programs are the ‘best behaved,’ as one SPP staff put it. These are highly coveted jobs in prisons that

have SPP programs, so even though it is ‘unpaid labor’ in every definition of the term, the value placed on SPP work among prisoners, I was told, ‘speaks for itself.’

In our neoliberal age, Hursh and Henderson (2011) write, ‘education is increasingly contested, as the plutocracy promotes education as a means of producing productive, rather than critical, employees’ (Hursh and Henderson 2011, 181). Adding topics such as political ecology and ecobiopolitics to the SPP’s ‘Sustainability 101’ curriculum would likely be considered a slippery alternative sustainability education endeavor, even for SPP staff themselves who are interested in human–environment relations, the social and political dimensions of ecological restoration, and even critical pedagogy. While SPP education activities between 2011 and 2012 included numerous lectures at Washington corrections facilities, with topics ranging from fish, frogs, fires, wetland mitigation, biofuels, noxious weeds, streams, and animal track identification, environmental social science and humanities topics lacked attention. Among SPP staff I have spoken with, this is a recognized educational program gap, and an educational gap, that leads to a whirlpool of contentious environmental educational issues and questions. What effect an environmental education program in prisons emphasizing ‘critical’ environmental studies, such as political ecology or ecobiopolitics, would have, is, for now, anybody’s guess. Is an ‘eco-justice pedagogy’ (Bowers 2001) in prisons possible? Can the neoliberal eco-prison even welcome such a possibility *without* rethinking and rehabilitating the ethical and moral barometer of the penal State itself? In light of Friere’s central and enduring question, ‘How can the oppressed, as divided, unauthentic beings, participate in developing the pedagogy of their liberation?’ (Friere [1968] 2005, 48), how can the imprisoned engage in developing environmental education programs and eco-justice pedagogies for their own liberation?

Meaningfully engaging these questions calls for a radical shift or move toward SPP partnerships that dovetail with progressive programs like the Inside-Out Prison Exchange Program, a program based out of Temple University that aims to increase ‘opportunities for men and women, inside and outside of prison, to have the transformative learning experiences that emphasize collaboration and dialog, inviting participants to take leadership in addressing crime, justice, and other issues of social concern.’ Such a move would surely require a committed partnership between critical environmental educators, environmental social science and humanities scholars, corrections staff, and prisoners. An even steeper slope for both critical environmental educators and political ecologists to navigate in spaces of incarceration is how to fold in the rightful work of prison abolitionists and critical debates on the very topic of prison obsolescence (Davis 2003), a topic which, after all, might eventually become a front-and-center focus of any radical discussion of ‘new’ environmental justice (Stein 2004) dimensions of sustainability science and education efforts in prisons in our neoliberal climate.

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