

Restorative Nodes of Governance in the Anthropocene: Iran's Kashaf River¹

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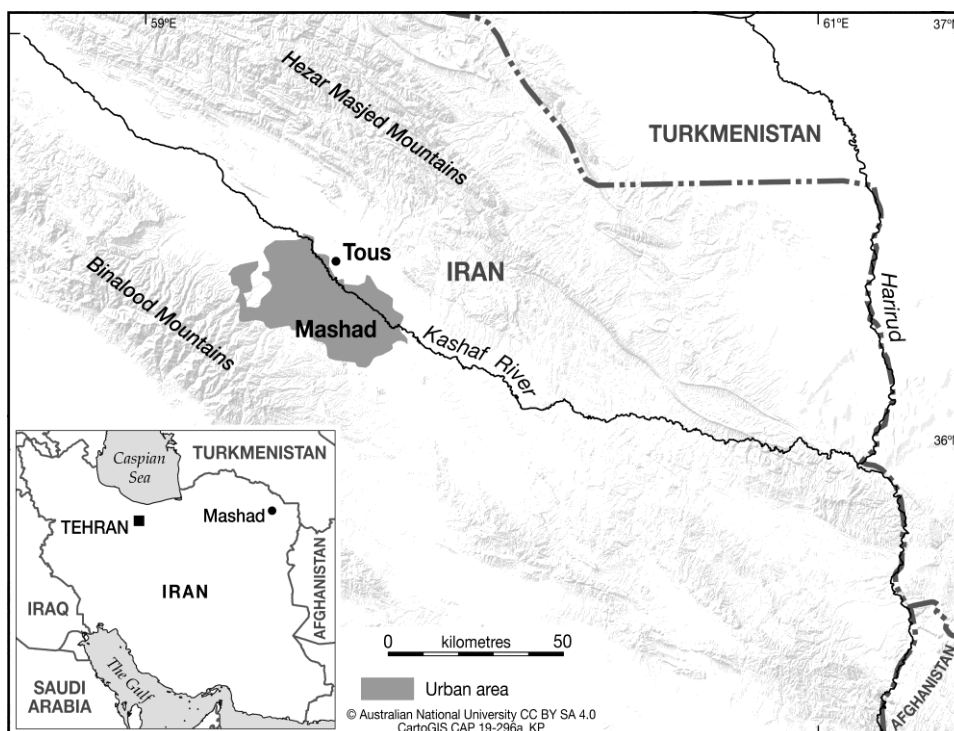
ABSTRACT

Environmental collapse along the Kashaf River in Iran is about desertification, climate change and heavy metal pollution. The river concentrates a nest of intertwined crises about urban squatters, drugs, crime, public health, marginalization, state and city planning and threats to the legitimacy and survival of the state itself. Five Clifford Shearing ideas are woven into the theoretical fabric of the article: nodal governance; regulatory culture as a storybook (rather than a rulebook); justice as a better future; and AMP – networked discovery of Awareness, Motivation and Pathways for transformation; and a green ethic of care to guide transformation. These microdynamics arise in a Kashaf River imaginary that different societies might learn from. They involve nodes of local governance organized by front-line workers who restoried intertwined problems with an ethic of care. The challenge is that restorative micro-strategies proved promising when steering powerless actors, but frayed when faced with factory owners. More aggressive strategies of policycentric governance are needed for responsive escalation to confront privilege. Yet they too may be more creatively escalated nodes of conversational regulation.

Multi-level response to a multi-level problem by multi-level governance is the topic of this paper. Ultimately, it grapples with what kinds of institutions of regulation are needed for multi-level responses to polycentric problems. It first documents a crisis of river pollution on the Kashaf River² near Mashhad, Iran and diagnoses the intersection of this with larger crises of regional water depletion and global warming. The river is drying up and suffering catastrophic heavy metal pollution (Sheikh *et al.* 2013). It proves not only an environmentally wicked problem, but socially and politically complex. The article proceeds by first narrating the unfolding layers of crisis. Then it catalogues different layers of regulatory failure across several decades. Finally some decisive moments of transformation of the regulatory storybook for the Kashaf River are considered. This transformation grows significantly from the nodal leadership of a

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² Kashafrood or Kashafrud is a river that flows from the Hezar Mountains in Razavi Khorasan Province in northeast of Iran. After passing near the cities of Radkan and Chenaran in Razavi Khorasan Province and then north and east to Mashhad, the Kashaf River joins the Harirud River at the frontier of Iran and Turkmenistan. It flows for 240 km. Mashhad is the main city on the river and Tus is another important urban centre on the river.



Map of Mashad

prosecutor's office with a new, more restorative, narrative grounded in enduring traditions of mediation in Persian society and Islam. Limits of its accomplishments are documented as well as promise. In particular, we describe how restorative approaches that appear to work in averting environmental harm by less empowered members of society can be resisted by those with more power. More optimistically, we point to how the momentum for transformation established through iterative restorative approaches can reach outwards and upwards to diverse sources of power. These can be drawn into restorative circles that may make headway against even very powerful local actors.

Data included 51 official media reports, 39 reports from underground media, dozens of Persian language publications, confidential research reports on matters like levels of pollution, and access that was given to primary source materials in government agencies. One long meeting with 20 judges and prosecutors and 38 other interviews with 51 respondents were conducted by the Iranian author with an Australian author on three Iranian fieldwork trips in 2016, 2017 and 2018. Other interviews were by the Iranian author alone after the Australians had returned home. Those interviewed included prosecutors, judges, mediators, volunteers, religious leaders, environmental NGOs, managers and inspectors of regulatory agencies and businesses and people of the Kashaf River. Part 1 describes the relationships between the layers of the crisis and levels of governance, Part 2 the layers of regulatory failure and Part 3 the multi-level governance response to these failures, Part 4 the paradoxical character of restorative justice enforcement, Part 5 a way at looking at the narrative through the Shearing insights and Part 6 the limits of these ways of seeing.

Part 1: Layers of crisis and levels of governance

This is a story of a city shifting its social ‘residuum’ (Stedman Jones 1971) - particularly the homeless, but also drug addicts, sex workers, and desperate unemployed squatters - away from the gaze of respectable citizens and pilgrims to squat near a river’s edge outside town. It is also about population and environmental pressure shifting marginal farmers who could no longer afford to buy arable land or pay for irrigation water. They too shifted to squat beside the Kashaf River and to irrigate from it or from the effluent pipes or drains of factories heading toward the river. At another level, it is a story of shifting marginal, polluting factories such as tanneries and carpet washing out of the city to a river that shifts pollution downstream. These marginal factories provided marginal employment for the marginal residuum pushed riverside. Big business then came to see advantages in locating in a vicinity with low environmental expectations (as least initially). Later an attractor for big business became state help to treat effluent after it left their plants; crisis attracted business subsidies. So this is a story of the interaction among an urban social residuum, a rural residuum, and industrial residue in one dumping ground. So many intertwined problems came to be seen by elites as posing a social stability threat even to the state itself.

It is also a story in which recurrent themes of the regulatory literature appear: the greater political appeal of risk shifting over risk management; regulatory ritualism; persistent resilience of vested interests in environmental harm; corruption; capture; a legitimization crisis; and challenges of coordinating multi-level governance to make a response work. The problem remains, the wider dimensions of crisis get frighteningly worse, yet some real progress is made in interstices of multi-level governance. Facing worsening environmental and underclass calamities, we find Mashad, Iran an unlikely locale for incipient promise toward multi-level governance innovation.

1.1 Layers of a multi-layered problem

1.1.1 Climate change

Global warming has gradually increased evaporation from parched Iran. More water evaporates to fall as rainfall into surrounding seas, or on countries that benefit from higher levels of precipitation. Climate change has meant less snow melting to feed the flow into the Kashaf River (Qanbarzadeh & Jafarpour 2004, p. 64). Less snow means reduced underground water inputs causing wells to dry up, requiring wells that were once 25 meters deep now dug 200 meters to reach the water table (Interview 041710).

1.1.2 Urban squatters

Urban planning policies in the late decades of the twentieth century effectively drove large numbers of squatters out of Iran’s second most populous city, Mashad, to the banks of the Kashaf River. The squatters were seen as a threat to urban amenity and to the lifestyle, safety and property values of middle and upper class citizens. Mashad is a tourism hub for 20 million pilgrims annually (Saghaei & Javanbakht 2013, p.79) to its immensely beautiful Holy Shrine. Elites are keen to keep the city clean and presentable for tourists. Mashad’s slums have been massive and proliferating for decades as sites of extreme inequality (Hoad 2018). An important part of the Kashaf River crisis from the 1980s then became raw sewerage and household waste from the early squatter

settlements flowing to the river (ISNA 2017). This was part of what destroyed livelihoods of those who once fished from the river. The poverty of squatters was worsened by health impacts on their children, who played in polluted, sometimes malaria-infested, ponds that were once part of the river. Some of these ponds were created by their grandparents diverting water from the river (Alizadeh *et al.* 1990, pp. 93-97).

1.1.3 Marginal farmers

Simultaneously, rural families dispossessed by drought, population pressures on arable land, and a plummeting water table headed to cities like Mashad in search of work. As squatting opportunities in the city reduced, squatting outside the city on the banks of the Kashaf River, using river water and wells to grow fruit, vegetables, wheat and livestock for the urban market became attractive for displaced farmers (Eshqi & Servati 2003, pp. 150-157).

1.1.4 Crime, drug addicts/dealers, sex workers

Urban police were attracted to reducing crime on their patch by using the planning pressure applied to urban squatters to also drive out the drug addicts and street dealers who were not integrated into organized crime groups with which the police felt they could work, and sex workers, especially those from the squatting class who plied their trade on the streets, as opposed to sex work tucked away inside more elegant premises under the wing of organized crime groups. These were the push factors; the pull factor was that for decades criminals became increasingly attracted to the Kashaf River squatter settlements because this was a large unregulated space with no police station until 2014. For example, semi-organized car theft gangs in the city bring the stolen vehicles to their bases in the riverbank areas.

We see how these different layers of the problem- the urban squatter class layer, marginalized farmers, and the criminal class - were intertwined. Marginal factories were a layer that then became intertwined with these other layers.

1.1.5 Marginal factories

Environmental regulation increased the attractions of the initially unregulated space of the Kashaf River squatter settlements for economically marginal industries that craved the kind of cheap labour that the desperately under-employed poor of the Kashaf River settlement could supply, such as carpet washing and oppressive metallurgy work like plating. Tanneries were built on the banks of the river with unpleasant, unhealthy working conditions. The tanneries used chemical inputs into the tanning process, notably chromium, that for many years ran direct to the river. More recent environmental reforms are now improving the regulation of this problem. The Iranian leather industry is huge. Few places in the world have more gifted masters of leathercraft than Iran. Environmental risk shifting to the Kashaf River is more global than simply a matter of how environmental regulation works in Iran. It is also a function of how it works across Europe where tanneries have largely disappeared. European markets rely on leather imports from places like the Kashaf River, because the costs of protecting workers and rivers from chromium and other risks make profitable EU

production difficult. It was alleged in interviews with regulators that tanneries in 'leather city' had sold water polluted with chromium to farmers.

Not all the marginal industries that moved to the Kashaf River were heavy polluters through products like leather and cement. One environmentally positive industry was low-tech recycling and reprocessing plants that recycled products like plastic in a labour-intensive way, cashing in on the large supply of cheap labour by the river. One waste separation plant has now moved inland from the river to the large, state-planned, industrial estate of Tous. It employs 1000 women separating waste. Many are former sex workers who are given a path to an alternative livelihood through this work as part of the newer, more restorative strategies for tackling the locale's intertwined crises (Interview 041707). While exiting sex workers get low-skill recycling work here, they are also helped with vocational training to transition to a 'justice as a better future' vision of local capacity-building for justice (Froestad & Shearing 2007). Traditional weaving is a popular choice for these vocational transitions. It reconnects women wrenched from their sense of identity as Muslim women by the nature of sex work to richly Persian, Turkman or Afghan craft traditions that attract sales to tourists and locals alike.

1.1.6 Big factories

Our research discovered that most of the pollution is not today caused by the above high impact small businesses, but by the larger factories that came later to the district (Interviews 081703; 091701-8). The scale of the factory problem is huge, with 230 factories, plus many smaller enterprises that make a contribution to pollution, located along a 42 kilometer stretch of the river in the vicinity of Mashad. Admittedly, most of the factories are small and marginal, but many now are large. One has 12,000 workers, the kind of factory almost impossible to find in the west today. The scale of pollution can also be large, as in one recent case where it was alleged, thanks to the undercover monitoring of environmental NGOs, that 300 to 600 tanker loads of polluted waste was dumped into the river during one night (Interview 041709). Shocking photographic evidence of this dumping from trucks was shown to us during the fieldwork.

Slightly back from the river, Tous has expanded to become the largest industrial area in the region. Cobalt, sodium, zinc and lead are among the pollutants the factories spew into the river and the underground water supply (Table). Forty different problem pollutants have been identified in the river (Table 1). Well connected factory owners have received state authorization for their polluting factories to the point where this has become the biggest part of the problem. Marginal factories owned by economically weak operators struggle to comply with environmental laws and cannot get licences to operate by the state. Even though they enjoy neither a state licence nor a social licence from a Mashad community incensed by the environmental crisis, the state is reluctant to close them for fear of rioting by their marginalized employees and fear that organized criminals might push out current owners, making the regulatory crisis even more intractable.

The scale of the factory growth across the past 30 years has expanded the population in the vicinity of the river to the point where there are now 300,000-400,000 people in a marginalized city at the margins of the metropole.

Part 2. Layers of early regulatory failure

Early responses to the regulatory crises of the Kashaf River illustrate classic pathologies repeatedly documented in the regulatory literature. These are considered in turn: heavy-handed targeting of crisis victims, risk shifting, corruption, capture, regulatory ritualism and legitimization crisis.

2.1 *Heavy-handed targeting of crisis victims*

Over time the risk shifting that created concentrations of drug dealers and semi-organized criminals outside the city created opportunity structures and breeding grounds for new kinds of crime. These eventually came to bite back at respectable Mashad society, for example through gangs that steal expensive cars. This aspect of the riverbank's nest of problems worsened as the city limits expanded out toward the squatter settlements. Also noticeable to respectable society was the fact that the beautiful Kashaf River, once attractive for boating and fishing, was now devastated.

At this point in the history, the very forces of urban planning law that had helped create the squatter settlements in 1992 again arrived on the scene to newly oppress the marginalized. Courts issued orders to move houses and farms back from the river. Police moved in to protect bulldozers executing the court orders. Squatters were bludgeoned and bulldozed from riverbank areas. Kashaf River residents and farmers were not the only poor people brutally targeted at this time. Targeted people resisted the police and tried to stay in their houses. When police shooting killed a 12 year old student from a poor family, the dispossessed rioted. They marched on 30 May, 1992 to the centre of Mashad to burn down police headquarters, the city headquarters of at least two major banks, perhaps 15 buildings in total (Interview 041709). Six people were killed (Orlando Sentinel 1992; Hashemi Rafsanjani 2016, pp. 89-113). The Iranian state fears uprisings like this might spread popular discontent with the state (Interview 041706). Mashad is one critical focus of that fear. The most recent cascade of popular protests against the regime that spread across many cities in 2017 started in Mashad (BBC 2017). The crowd in history (Rudé 1964), revolutionary sentiment on the streets, has been a major factor in recent and ancient Iranian political history, as it has always been across the Middle East from long before the time a crowd of followers marched into Jerusalem behind a new prophet on Palm Sunday. Later in the paper, we will see this fear of the crowd in history created a space for the justice system to propose a creative alternative approach to heavy-handed bulldozing of the marginalized.

This alarm of the poor was joined by great alarm from respectable Mashad society in May 2009 (Mehr News 2009) when many fell very sick, including the Iranian author of this article, from eating water melon irrigated from water polluted by the Kashaf River factory effluent. In another incident in 2009, two consumers died after eating sheep meat from the polluted farms along the Kashaf River (ISNA 2009).

2.2 *Risk shifting of illegal wells*

A theme in the regulatory literature, especially on the roots of the 2008 Global Financial Crisis, goes to dangers of moves from managing risks to risk shifting, as western banks did in the 2000s by slicing and dicing high risk loans then selling them as securities.

This was an alternative to managing the risks of their bad loans as banks had done in the past. We have seen already that the Kashaf River crisis was fundamentally about shifting risks posed by marginalized urban squatters, drug addicts, marginalized farmers and marginal industries to the river rather than managing those risks in place. In the end, risks displaced to an unregulated space created even bigger risks that threatened the earth system and the legitimacy of the state.

We have not described, however, one of the most environmentally disastrous of these risks. In the under-regulated spaces along the river, illegal wells were dug by countless poor farmers, as well as wealthy people and factories that craved water. Iran's great environmental imperative is to close illegal wells that use water wastefully, driving the water table ever deeper into widening domains of desertification. Iran's courts have seen thousands of enforcement actions to seal illegal wells. These cases are a massive part of the workload of the national courts. They had enforced the closure of 2300 illegal wells by 2015. While this seems and is a huge enforcement workload, green NGOs argue that there are 500,000 illegal wells in Iran (Interview 041708). NGOs like Water Saviour Population, Sound of Water Association, Water Lovers and Water Protectors who we interviewed want a total ban on all new wells and mass closings of existing wells to facilitate recycling of all water under public regulatory control.

The response to such court cases has been Kashaf River farmers driven to move dozens of kilometres downriver to establish new farm settlements there and dig new illegal wells. This risk shifting with wells, combined with failures to close most old wells because of enforcement swamping and corruption in the face of the sheer magnitude of the problem, means that the risk-shifting dynamic has made Iran's water crisis worse rather than better.

The Mashad reach of the Kashaf River is at the base of a large bowl, so water (and pollutants) that run into the river here quickly find their way into the underground water. At one level, there was progress when the massive newer industrial city of Tous drew factories well back from the river. At another level, Tous became a new attractor of unsightly factories that the city did not want downtown; yet it still attracted them to a site that endangered the underground water system because Tous is still close to Mashad and to the once great river, and is far from an ideal location for an industrial estate. Hence, at a structural level, the creation of Tous as an industrial city was still risk-shifting rather than optimum environmental risk management.

2.3 Corruption and capture

Ethically we are unable to cite documentary sources that prove that corruption and regulatory capture by business interests are widespread in the regulation of the multi-level problems of the Kashaf River. Those interviewed rather universally said, however, that corruption and capture were problems (see also Tasnim News Agency 2018; Freedom Messenger 2016; ISNA 2016). Respondents differed only in whether they believed corruption and capture were root causes of the crisis, or a problem sometimes in some agencies but not their own! (interviews 091701, 111702).

2.4 Regulatory ritualism

Sealing some illegal wells, and then looking the other way as farmers move downriver to dig more, is an example of regulatory ritualism and risk shifting. Ritualism means acceptance of institutionalized means for securing regulatory goals while losing all focus on achieving the goals or outcomes themselves (Merton 1968). Theoretical work on regulatory ritualism owes a debt to Michel Foucault (1977) because so many of the regulatory rituals identified in the empirical work that grounds the theory of regulatory ritualism are rituals of discipline that oppress vulnerable actors (Braithwaite *et al.* 2007). We have seen this was also initially true along the Kashaf River, as when the wells of the marginalized are sealed, by not the wells of greater concern of the well-connected.

The most common forms of ritualism along the river were modalities recurrently documented in the western regulatory literature. Front stage, politicians make robust announcements about how they will stick with the problem until it is fixed; back stage they do deals with monied interests, settling for occasional dramatic legal actions against a few less well-connected law breakers, then walking away from the problem when the media and public attention cycle moves on. Slap on the wrist monetary fines for factories has been and still is a routine form of ritualism along the Kashaf River. Years later, exactly the same kind of environmental offending by the same factory recurs, and the same kind of slap on the wrist fine is applied again without escalating until there is assurance the problem is fixed (Interview notes 041709).

2.5 Legitimation crisis

Climate change pressing down deeper upon Iran's water table will create renewed waves of sand, and waves of jeopardy, for the state. Far beyond Iran, such crises of entangled fragility create 'the potential for global-scale political upheaval' (Harrington & Shearing 2017, p. 141). For Jürgen Habermas (1975) a legitimation crisis is an identity crisis for citizens that arises when confidence in government administration collapses as a result of interacting sub-systems of the administrative apparatus failing to solve the problems for which they were designed. Resilient ritualism is one kind of administrative pathology that can foment a legitimation crisis. Merton's (1968) *Social Theory and Social Structure* laid one foundation for the Habermas conception of legitimation crisis because Merton showed the stability of states depends on citizens accepting that public administration uses legitimate means to achieve legitimated goals. For Merton, securing legitimate means but not goals can create a crisis of ritualism; securing goals without legitimate means can create a crisis of illegitimate innovation, and when social action secures neither on a wide front, Merton conceives this as 'rebellion' toward goals and means, neither of which are legitimate. Crises of confidence in the state arise, according to Habermas, because of contradictory imperatives pursued by different sub-systems, such as sub-systems for urban planning, industry planning, banking, water management, policing, and the judiciary, as discussed below for the Khasaf River example. The palpable manifestations of impending risks of legitimation crisis erupting from the riverside were the uprisings of displaced farmers burning banks and police headquarters in the metropolis and the middle class angst about the pollution and food safety dimensions of the crisis.

For Habermas, a legitimation crisis is not one that necessarily brings down a regime, but one that signals a systemically-driven state of jeopardy for the capability of the regime to deliver for citizens. The kind of incoherence among regulatory sub-systems

and loss of political will permitted by risk-shifting illusions did create a state of jeopardy for the state along the Kashaf River. At least this was true until a surprising node of governance came to the state's rescue to accomplish coherence and restore political will.

Part 3: Multi-level governance response

This section sketches the role of different levels of environmental governance: international, national, provincial, city, district and NGO governance. The international dimensions of multi-level governance of the Kashaf River have been limited because for most of the worst years of this crisis Iran has been internationally isolated. We will see later, however, that international sanctions played a paradoxical role in the genesis of the incipient restorative approach of some prosecutors to corporate crime enforcement in Iran. In addition, we attended one significant meeting of the Netherlands Ambassador and UNESCO officials with the Governor of Mashad Province and all the key Kashaf River regulators from the city, provincial and national levels of governance (meeting notes 041709). It was apparent that the Netherlands government was funding practical technical assistance in European best practices for re-using water repeatedly through purification plants and other technologies. This was to remedy the Kashaf River history of drawing water into production systems, polluting it, then sending it back into the water table through the rather direct route of effluent into the river. No transformation to the metabolism of cities, from linear degradation to circular renewal, could be more fundamental than that involved in this Netherlands water re-use assistance (World Future Council 2010). The Netherlands help was pursuant to the reconciliation of Iran with the European Union as a response to the Iran Nuclear Deal and the lifting of sanctions. Another critical reintegration of Iran relevant to ameliorating the root causes of the Kashaf River crisis was that Iran signed the 2015 Paris Climate Agreement.

Environmental NGOs had a somewhat truncated role in events described in this article because the state approves the registration of NGOs. A certain degree of circumspection, in raising allegations of regulatory corruption for example, is required to sustain registration. This means most NGO applicants do not get registration and then are shut down. Even so, environmental NGOs did play some robust and constructive roles in the multi-level governance of this crisis. It was green NGOs that took the Kashaf River crisis to the press for the first time (Interview 041709). Certain of the worst environmental abuses were exposed to the public by them. The new criminal procedure law of 2015 allowed NGOs for the first time to launch criminal actions against corporate offenders. NGOs embraced this law reform and one recent NGO criminal suit boldly alleged criminal managers in two key regulatory agencies failed to implement the law regarding industrial waste water (Khabaronline 2015; Interviews 111701-111703). Sometimes representatives of environmental NGOs are permitted to accompany state regulatory inspectors on site, though this is far from routine (Interview 041709). The most important environmental NGOs saving the river are Saviour of Waters, Environmental Lovers of Iran, Sound of Water Association, Water Lovers and Water Protectors. Animal rights organizations and women's rights groups were also players at times in pushing for the new story for the future of the Kashaf River system.

The Mayor of Mashad's office was one key coordinating node of transformed multilevel governance response. On this kind of nodal governance function in the regulation literature see Shearing (2001), Shearing and Wood (2003), Johnston and Shearing (2003), Wood and Shearing (2013) and Burris *et al.* (2005). Green Space, a semi-governmental authority associated with the Mayor's office, planted trees in a plan to re-create spectacular scenery along 70 kilometres of the riverbank. Local branches of the Environment Agency and the Water Agency also had major roles, as did urban planning and police agencies, in bringing an end to the crude policies of bulldozing the path to a non-solution. The national Ministry of Environmental Affairs, working with Banks had a key role, leveraged by political leaders, notably the Governor, to lend favourably to farmers and factories so they would be able to reinvest in moving back from the river in less disruptive ways, and invest in linkage into water treatment plants funded by the state. Industry associations also played useful roles in imploring and providing technical assistance to their Kashaf River members to come into compliance with environmental laws.

Most interestingly, and most evocatively for the theoretical frame of this article, the chief prosecutor's office of the Judicial Agency in the relevant district of Mashhad played a surprisingly catalytic role as a strategic node of multi-level governance coordination. One base for this coordination started with the fact that in Iran the Judiciary and the public prosecutor are part of the same, rather powerful, agency in the state apparatus. At national meetings, the Judicial Agency from other parts of the country have been urged to pick up the restorative lessons learned by its Mashhad counterpart.

Part 4. Paradoxes of restorative justice in corporate crime enforcement

Corporate Iran was in deep difficulty after European sanctions started to bite harder across the early years of this century. The more normally opportunistic reasons for the lure (Shover & Hochstetler 2005) of corporate crime were consequently complemented by more desperate motivations of managers to protect their workers' jobs, and their own, through diverse forms of corporate crime – fraud, corruption, cutting corners on health, safety and environmental laws – to fend off bankruptcy. When these cases came to one unusually progressive prosecutor's office in Mashhad, our multiple interviews with 20 Mediation Council mediators, prosecutors and Judges operating through that office ((051627), some businesses affected by their enforcement actions (Interview 091707), and environmental and other NGOs involved in some of their cases, revealed that the prosecutors had evolved a surprisingly restorative approach during this period of economic crisis.

Prosecutors did not wish to cause the very job losses that corporate executives often sought to avert through their crimes. They approached their cases with a posture of sympathy for executives who had been put in impossible positions after their markets or supply chains were cut by international sanctions. Prosecutors developed a process of creating a special committee for each case, comprised of the judicial deputy, the local government deputy, the Industrial section representative who is meant to be unbiased, the victim who may be represented by the prosecutor, and the criminal defendant. This group assembled to discuss the problem and identify a way forward. They solved 1000 cases like this in the past two years to end criminal conduct while avoiding shutting down factories. For example, one case we were told about involved

production of porcelain dishes. The factory had 3,500 workers and owed considerable unpaid tax. The tax department has the power to shut down a factory in such a situation even before trial and to ban the owner from leaving the country. This issue arose just before the Iranian New Year, the time that employees usually need money to go on holiday. The committee that met worked to convince the tax office that shutting the factory would not solve the problem, pointing out that workers need money as well as the tax office. The factory also contested the tax rate that it was being charged and contended it should be halved. Eventually a solution was worked out. It took some time and the factory was closed for a week, and given 18 months to pay the tax arrears. The judge said that had the penal process been followed, it could have had a range of negative impacts, including 3,500 workers losing their jobs at a difficult time. Some of these workers may have been forced into criminal activities to survive and that would have created further problems for the government the tax department serves.

Mediators from the prosecutor's office have even approached banks to help companies secure the extended loans needed to stay afloat. In one case, international sanctions had cut off raw materials to the business for a period. In other cases, mediators mobilized the judicial authority of their office to unlock administrative action by customs to release goods in order that resources would be available to compensate victims. In just this one Judicial Agency office we were told they had mediated with 270 factories with an eye to saving workers' jobs. In interviews, mediators were explicit in seeing factories producing again as a restorative outcome (interviews at 051627). The prosecutor, Mr Bakhshi Mohebi, is a PhD student in criminology at Islamic Azad University of Mashad. He encouraged a restorative approach from his Mediation Council mediators. His office advised in 2016 that his Mediation Council had mediated 600 cases in a restorative way during 2015. One corporate crime case among these involved 400 victim families. This was a major fraud. Major fraud was the largest workload of his office in terms of offence type (interviews with 20 mediators 051627). This restorative approach to corporate crime enforcement (Parker 2004) opened a door to a restorative approach to the Kashaf River environmental cases.

One bread and butter kind of Kashaf River case is a farmer digging an illegal well. This single office, not the only one in Khorasan Province, had mediated 300 water well cases! Mediators and prosecutors also frequently viewed such farmers as both offenders against environmental laws and victims when their family was hungry. This meant that the restorative doctrine of necessity in Sharia law applied. This ancient doctrine states clearly that one is permitted to steal if one is starving (Al-Hilali and Khan 2018: The Qur'an 5:3; The Qur'an 6:119.)

Mr Bakhshi Mohebi was awarded an environmental prize for his innovative restoring of the environmental enforcement strategy along the Kashaf River. His nodal leadership in energizing the networked governance of the river is illustrated by the fact that he meets weekly with the concerned NGOs of the social movement to save the river and its community (Interview 051627).

A starting point for this shift was the fact that there are certain features of Sharia law that are structurally restorative in general, but particularly in application to corporate law. One is that the desperate needs of victims of a crime should be temporally

privileged, and more privileged in emphasis, than in western law. Hence with safety, health and environmental crimes, the needs of a worker who has lost a leg or a fisher who has lost a livelihood as a result of the crime should be attended to first. A corporate criminal prosecution will not proceed until mediations and court hearings are first decided on what support and compensation will be delivered to those victims by the corporation. This victim support function of the prosecutor is so important that the Mashad prosecutor's office uses its considerable clout in the Iranian system of governance to call welfare offices, public housing offices, workers' compensation insurers, state licencing and other government offices to clear the log-jams that delay assistance to victims. Perhaps we should not view Iranian prosecutors as peculiar in giving up so much of their staff time and temporal priority to victims. Perhaps it is western prosecutors who we should view as peculiarly offender-obsessed. We say this in consideration of Johnson's (2002) research, for example, showing this is a key difference between Japanese and US prosecutors.

In addition, we interviewed three of the 30 Mediation Council volunteer victim supporters. They were all mature higher degree students at universities studying law or psychology. Not only were they unpaid; true to local greybeard and greyhair traditions of compassion, they were men and women who sometimes helped victims from their own pockets with money for travel or whatever was needed to get their case together and attend hearings. The victim supporters saw their main imperative as to just be there as a social support for their assigned victims. They were widely recognised in our interviews as playing a helpful role for the justice and dignity of the criminal process.

Up to a point, Iranian law empowers victims with a right to forgive that prosecutors cannot ignore or completely overrule, though not with all crimes. Hence, if the victims of a corporation choose to forgive its executives after receiving compensation, apology and support, this will reduce criminal sentences in proportion to that part of the sentence that is allocated to private crime against the victim. There is a quality of 'reactive fault', as Fisse (1982) puts it, in Iranian corporate law that gives large sentence discounts when firms are unusually generous and prompt in meeting the immediate needs of victims and the preventive needs of the society. However, a sentence will still be imposed in proportion to the public harm and the need for public protection from future crime by deterrence or incapacitation in the public portion of the sentence (which is separated from the private portion that relates to victim needs). Even at this second stage of the approach adopted in this Mashad prosecutor's office, more emphasis is placed on a court order that secures corporate reforms that prevent reoffending than on proportionate punishment, though the latter is important too. Our interviews in other Iranian Judicial Agency offices made it clear that a production line of punitive sentences was much more standard than the ethic of care and prevention in the approach of these Mashad prosecutorial reformers.

Sharia law valorizes restorative and responsive principles of justice in other ways in this prosecutor's office, and some others we visited in other parts of the country, though by no means in all of them. For example, while Islamic law does allow the taking of a life for a life, this infrequently happens in practice because criminal procedure lays down various paths that actively encourage victims to choose forgiveness over retribution. This is not to accept that it is good law to allow the taking of a life for a life! It is just to contend that it is a good restorative dimension of Sharia law that it allows forgiveness, care and prevention of future crime to trump retribution, and to note

that this dimension can be channeled through modern Islamic legal institutions. In Iranian law, certain principles, such as compassion, mercy, *azadi* (freedom) and forgiveness, are granted more general sway, as is the Golden Rule (Do unto others as you would have them do unto you) as a general Islamic principle. The Golden Rule can trump the specificity of Iranian contract rules, for example, in a way not dissimilar to the more recent grafting of the western legal principle of unconscionability into western contract and corporate criminal law.

In John Braithwaite's interview with a prominent Grand Ayatollah, the jurist explained that responsiveness was also a fundamental principle of Sharia law in the sense that rules must be interpreted to be responsive to the times and the people (Interview 051608). Braithwaite could have been interviewing Philip Selznick (1992) about his conception of the imperative for evolution toward responsive law (Hong & You 2018). For the Grand Ayatollah, this was about the general direction the law should head; it was not about absolutes because absolute attainment of responsiveness is impossible. The principle of *Istihsan* (Jamaludin & Buang 2013; Kayadibi 2007) means adaptation of law to the changing needs of society for justice and equity, and adaptation in the way it secures a merciful Islamic spirit in the law.

Another paradox of the politicized closure of secular courts and replacement with *shariat* (Islamic) courts after 1979 was an energizing of mediation and ancient *shora* (consultation) traditions. This was necessary when courts were closed and something was needed to replace them. Traditional mediation helped manage complaints that were beyond the capacity of a disintegrating post-revolution judiciary. The regime noticed that mediation's speedier, cheaper resolution of cases than the courts had enabled was popular, especially in rural areas where people wanted to re-connect to tribal and shari'a traditions. So this return to mediation traditions was therefore legitimating for the revolutionary legal system. At all stages of Iranian history, traditional mediation had an important role. It always fitted many of the definitional features of what is today called restorative justice. Even under the secularizing rule of the Pahlavi dynasty (1925-79), 'Justice Houses' were established throughout Iran to deal with conflicts concerning the regime's rural land reforms, but also other disputes and crimes. Early this century branches of Mediation Councils were established throughout Iran (Interviews 051622, 051621, 051627, 051623, 051616, 051619). Every province has many such branches; we were told that across the country there are 14,000 mediation councilors who have mediated 3 million cases since 2009 (ISNA 2017). None of the judges or prosecutors in Iran are women, but a notable number of mediators are women and we were able to interview four of them. They work with and within the Judicial Agency to resolve a large portion of the caseloads of courts through mediation. Restorative aspects of Islamic law, particularly forgiveness and victim empowerment, are prominent in the thinking of so many of the dozens of mediators we interviewed. In a sense, each transformation in Iranian legal history created a space for re-invigoration of Iranian restorative traditions of various kinds, but particularly neighbourhood mediation by greybeards (Interview 051615; Gholami 2006).

When countless different kinds of cases came to this chief prosecutor's office from the Kashaf River crisis – illegal wells, illegal squatting, unlicensed factories, factory and farmer pollution into the river, and more - Bakhshi Mohebi called his superior at the Judicial Agency headquarters in Tehran. Bakhshi Mohebi's pitch was that with this round of problems, why not try a more caring, restorative approach? At first his

superiors pushed back against such unconventional thinking. They said at first that his job as a prosecutor was to enforce the law to clear illegal uses away from the river. Bakhshi Mohebi persisted, arguing that the last time the full force of the law was used to bulldoze through this complex of problems in 1992, the blowback for the state was hugely politically destabilizing when the immiserated rioted. This persuaded Tehran to allow him to try restorative justice and multi-party, polycentric problem solving (Interview 041707).

From this prosecutorial node of governance, a Saviour of the Kashaf River Committee was convened to engage civil society and business. The committee embraced the five most crucial regulatory organizations: The Judicial Agency itself, The Environment Department, the Mayor's Office Green Space Agency (a coordinating node for many relevant organizations itself), the Water and Wastewater Organization, and the Agriculture Organization (Interview notes 041709). The Saviour of the Kashaf River Committee mobilized a team of some 50 key government officers 'working day and night' to find solutions to the complex of river problems.

It proceeded by establishing three co-operatives: one to deal with water needs, one to support production and one to support tree-planting. These cooperatives were designed to protect ordinary people and to give the activities a formal and legal face. The government gave them the initial investment money. They formed an NGO and selected a chair. They sent representatives into the different hamlets along the river to inform and persuade them to join the cooperative. More than 84 representatives were selected and sent to many different hamlets, and more than 88 sessions were held. Some went for as long as five hours. Momentum was generated through water night meetings, mutual dialogues, panels, circles, and even debates. Social networks and social media were used to inform people. According to one interviewee, the participants were patient yet eager to solve the problem. When people who were resisting saw that others were co-operating then their resistance fell away. After all of the sessions persuading participation, people were encouraged to put forward their demands and their representatives had meetings with representatives of the government. The first phase of response involved planting 20,000 (non-fruiting) trees, 18,000 were paid for by the government, 2000 by the cooperative. The idea was these could be harvested at a later date for their timber. The space they occupied would stop fruit and vegetables from being grown using polluted water.

Restorative justice cases were not only run with farmers and factories that produced the pollution. We learnt of one restorative justice case with the foreman of a large farm who accepted a bribe from a factory to take irrigation water tainted with pollutants. The foreman was a simple man who lacked awareness of why this was a serious crime; he experienced remorse and is now a champion for environmental citizenship along the Kashaf River. This was one of a number of restorative cases that motivated the production of a video to educate farmers about why it is so wrong to become part of the 'water mafia'.

In negotiations with farmers, they were given options rather than edicts; the farmers themselves could propose options. In Shearing's terms, the process attempted to frame a caring path to 'justice as a better future' for farmers (Froestad with Shearing 2012) as opposed to the brutally legalistic bulldozing of their future which was part of their recent past. Also in Shearing's terms, this was an AMP process that moved from

Awareness to Motivation to a Pathway to a less bleak future (Honig *et al.* 2015). Awareness was built in both Persian and Muslim ways. Many meetings occurred in the prayerful setting of the mosque with appeals from locally respected religious leaders for polluters to respond in an Islamic way to the suffering of fellow citizens who were falling sick to polluted fruit, vegetables and meat and to their obligations to the health of their own children. The good Muslim and good citizen of Iran scripts were much discussed by all sides in a kind of motivational interviewing (Rubak *et al.* 2005; Lundahl *et al.* 2010) to move from Awareness to farmers finding their own Motivation. New resources often had to be brought into the circle for farmers to be able to see a Pathway that would really be to a better future. Farmers' organizations sometimes brought social support and practical help to the circle (051627). For example, farmers were assisted to install water treatment systems. Appeals in the restorative circles to citizenship obligations also helped mobilize large numbers of local volunteers as 'Guardians of the River' to patrol the two roads running on each side of the river to watch for incidents and engage pollution control consciousness-raising conversations. This strategy grasped the World Future Council (2010, p. 12) vision of restorative cities that encourage 'all citizens take a stake in restorative development'.

At the more macro level of participatory restorative and responsive deliberation (Hong & You 2018), farmer and industry associations, individual factory managers and green NGOs had representation on the mediation process to come up with a new river management plan.

The mosque used for restorative circles is sometimes the mosque in the Judicial Agency office in Mashad city. It melds a spiritual attitude of calm and care with the aura of judicial authority. Whether local or Judicial Authority mosques, their association with ancient greybeard traditions of mediation implies a dynamic escalation quality to interated meetings that can run across many weeks. The traditional path of escalation is to bring into the meeting progressively more senior and more respected religious leaders or greybeards. While this does involve escalation to greater authority to demand action and repair of harm, it also involves escalated ability to mobilize resources for problem solving and wider circles of care. Sometimes in this traditional escalation of engagement, authority and taking the parties seriously, senior greybeards and religious leaders will engage greyhairs, highly respected women who will involve wide circles of women to contribute their perspective to the dialogue in conversation with the male decision makers in their families (Meeting with eight greybeards 051615).

Greybeards and religious leader mediators sometimes attend ritual occasions of families entangled in conflicts, such as weddings and funerals, to escalate the empathic engagement with the family by the most admired members of their community, even if a marginal farmer is a lowly member of that community. The power of such rituals of everyday life magnifies compassion. Sometimes the mediators will organize a community work party to help a farmer get some large work project done on the farm or to overcome some large setback for the farm. Greybeard traditions are not as alive in their traditional form in Mashad as they are in some provinces visited during the research such as Lorestan. Our argument here is that, in a Harrington and Shearing (2017) sense, these ancient traditions are in the background in Mashad waiting to be appropriated by contemporary innovation in an ethic of care for farmers and factories to adapt to the Anthropocene, love their fellow citizens and love their river.

None of this is to deny that many farmers, as with some factory owners, were left worse off, some a lot worse off (particularly when required to relocate). Even then, they could sometimes see that the devastation to their futures would be less than it was when the full force of the law was used to simply bulldoze those futures. How much worse or better off depended on how rich were the resources of care and support brought into the circle, particularly the funding support and the state-levered bank loans to treat waste and shift productive activity to less ecologically destructive locations. As discussed above, in many of these cases the risk-shifting path of creating the same problems by farming downstream and digging new wells there was the path to a temporarily better, yet unsustainable, future.

The level of success in persuading factories to destroy their polluting machines and practices has been lower than with persuading farmers to destroy their dangerous vegetables and rise to the challenge of the creative destruction of their farms (Interview notes 041709). Many small factories were certainly persuaded to move back from the river with relocation assistance and access to better futures of government-funded waste-water treatment by the same kinds of circles the farmers experienced for discussion in the mosque to shape up AMP. There has been a low rate of success so far in persuading factories to retool with in-plant waste treatment. There has, however, with state help, been willingness to link in to state-funded treatment plants that serve multiple factories. Many of the big factories exert formidable influence on state officials. So they continue to routinely ignore the appeals of environmental NGOs and regulators. Many continue to sell their polluted waste water illegally to farmers for irrigation. In interviews it was alleged bribes were paid to secure a blind eye to such devastating outcomes.

The Water Authority was a critical player in the reform process. It also moved from a culture of regulatory edicts to a more multi-party negotiation process. This was reported not so much as a standard new practice, but as more likely to happen when the complaint came from an environmental NGO (Interview 041709). Sometimes tripartite stakeholders – the polluter, the Water Authority and a green NGO would sit together working through the problem and a solution to restore the river. This negotiation can last three days and then reconvene again at a later date to follow up. A Water Authority senior manager we spoke with saw the Judicial Agency as a catalyst of such circles of negotiation aimed at negotiated voluntary compliance.

The Green Space organization that was established in the Mayor's Office to negotiate environmental solutions became an important contributor to regulation through social support. It became a nodal actor in a new kind of governance by contract. It negotiated the retreat of factories back from the river and hired private contractors with the machinery for this and to plant trees where factories and farms had been (Interviews 041706). Local marginal workers are hired by the contractors to do much of the new bulldozing of their own old factories and farms and to plant the trees. This was paradoxically restorative creative destruction. Some of the trees were planted for future harvesting and replanting to create new plantation livelihoods for displaced farmers. Some slightly polluted water is accepted for irrigating commercial forestry, but not farms. Of course part of the strategy of citizen engagement with an ethic of care for adaptation to the Anthropocene (Harrington & Shearing 2017) here is that replanting trees in locales once cleared of them contributes to softening earth system impacts.

Relocated factories were assisted to connect their effluent to five purification and recycling plants for water funded by the state. These plants are claimed to meet international standards by regulatory agencies though some NGOs are not sure about this. Outcomes have been positive in the fundamental sense that farmers and factories alike have been persuaded to move back from 45 kilometers of riverbank and trees are beginning to replace them.

Part 5. Summarizing the Shearing insights

Five insights from the work of Clifford Shearing pulse through this paper about micro-dynamics that might foster macro transformation of crises. Each involved collaborations with nodes of Shearing co-authors, more than a dozen, who were critical to their development. We mean no disrespect to these co-authors as we speak of the five Shearing insights. It is just that our work forges links across all five; Shearing is the only author of all five and none of his co-authors recur across the different insights that are in focus here.

5.1 Nodal governance

Nodal governance (Shearing 2001; Shearing & Wood 2003; Johnston & Shearing 2003; Wood & Shearing 2013; Burris et al. 2005) draws on Foucault's (1990, p. 93) insight that 'power comes from everywhere'. Hence, power can be drawn from across networks that are pulled together at nodes of co-ordination. Nodes are simply points where these flows of power intersect. A node is a site where knowledge, capacity and resources are mobilized to steer the flow of events (Burris et al. 2005). Nodes of governance restory mentalities (ways of thinking) about governance. The prosecutor's office in the Kashaf River case was certainly a node that scaled up governance for a polycentric problem of large scale; it 'networked networks to scale' (Hutchens 2009). It was, however, less than a 'superstructural node' in the sense of being a 'command centre of networked governance' (Burris et al. 2005). Being in the judicial, as opposed to the executive branch, of governance, it could hardly be allowed by the executive to become superstructural. Perhaps the nodes that matter most are not superstructural. Perhaps they are nodes of multidimensional problem-solving by front-line workers who 'proceed until they are apprehended'; they are not so much empowered in any top-down sense, but grab together the power that can be found everywhere (Foucault 1990). It could be a pity if nodal governance replicated the tendency of Weberian bureaucracy for managerialism by creating a new kind of 'head office' mentality. Nodes of local people who work at the frontlines of particular problems, nodes of frontline Kashaf River actors, may be the nodes that matter.

5.2 Regulatory culture as a storybook

We have already said that one of the things nodal governance can do is restory mentalities of governance. The origins of this insight are Shearing and Ericson's (1991) analysis of police culture not as a rulebook, but as a storybook. Police agencies are like universities in that they have many volumes of policies and procedures for most problems their agents confront. These are useful for guidance in difficult situations, even though police and academics rarely read them and have dim awareness of their contents as they go about their daily work. A fallacious belief is that the way to change such organizations is to change their rulebook. The Shearing and Ericson insight is that

to change organizations in important ways, you must change their storybook, the stories they tell one another in the lunchroom, in the patrol car. Mentalities are formed through this storytelling. So are imaginaries for creative and lateral ways of solving practical work problems.

5.3 Justice as a better future

Clifford Shearing and John Braithwaite had conversations about the idea of ‘justice as a better future’ at least from the time of Braithwaite’s visit to Shearing’s Zwelathemba project at the end of the 1990s. Shearing and Jan Froestad found empirically that what Zwelathemba’s South African ‘PeaceMaking Gatherings’ members wanted more than other forms of justice was justice that would ‘make for a better tomorrow’ (Froestad & Shearing 2007). This certainly concurred with what Braithwaite saw when he visited with Shearing at his South African fieldwork sites, and they agreed that this bottom-up Southern vision was an inspiring one. Jan Froestad wrote an invaluable documentation and analysis of the Zwelethemba model of forward-looking justice through peace with Shearing (Froestad with Shearing 2012; following up on Foestad & Shearing 2007).

The degree to which the Zwelethemba conception of justice should or should not be seen as having a family resemblance to restorative justice occupies the interest of many scholars, including Froestad and Shearing (2007). This is not very important to our analysis here for reasons that are important to see. The prosecutors who were key catalysts of restorying the Kashaf River intervention strategy continued overwhelmingly to be practitioners of backward-looking punitive criminal prosecution with little semblance of restorative justice. Yet when it came to the Kashaf River, the problem was so deep, its layers so complex and challenging, that they flipped to a forward-looking restorying of the kind of justice needed. And they happened to conceive this shift to some degree in restorative terms, to some degree in Islamic terms, and to some degree in traditional Iranian terms (at least implicitly). What is fundamental to our analysis, however, is the overarching theoretical idea that for *Security in the Anthropocene* (Harrington & Shearing 2017) fiddling with backward-looking justice while the planet burns is a poor choice compared to the choice made for governance toward a better future along the Kashaf River. In this circumstance, as opposed to a more mundane legal circumstance like a minor theft, ‘How do we make a better tomorrow?’ (Froestad & Shearing 2007) becomes a more inescapable question.

5.4 AMPing the Anthropocene

Under this final heading we consider first the idea of a reconfigured ethic of care for the Antropocene (the era of human domination/destruction of earth systems) that provides the overarching integration for the other four ideas. This line of thought is explicit in Harrington and Shearing (2017), but evolves from earlier work (eg Shearing et al. 2013). Then we consider the final more specific Shearing idea of transformation as requiring wide circuits of conversation across civil society and multiple levels of governance to constitute Awareness, Motivation and Pathways to transformation. For Harrington and Shearing (2017, p. 115), *Security in the Anthropocene* requires acknowledgement of ‘our careless failures to recognize our entanglements’. The green ethic of care they see as the remedy ‘emphasizes the relational practices that underpin the survival and flourishing of life’ (p. 117).

We hope to have shown that such recognition of carelessness with nature, and with marginalized people who suffer most from its degradation, and engagement with an ethic of care, was evident in the restoried restorative approach of the Mashad prosecutors and mediators and the network of care and support they mobilized. After decades of punitive responses to the marginalized, combined with captured impunity for the well-connected, this restorative and responsive transformation began to realise the Harrington and Shearing (2017, p. 111) ideal that ‘Responsibility entails an ongoing responsiveness to the entanglements of self and other’ (see also Hong & You 2018). Its remedies emphasized ‘the relational practices that underpin the survival and flourishing of life’ (Harrington & Shearing 2017, p. 117). The nodal transformation drew sustenance from ‘indigenous philosophies [of the imams, greybeards, greyhairs] that emphasize different relational ontologies and cosmologies’ (p. 116). The students working in the prosecutor’s office as volunteers who put their own money toward victim support exemplified the supplanting of punitive response with the spirit of empathy ‘to engage in gift-giving and to feel gratitude in the midst of ongoing, seemingly perpetual, social and ecological crises.’ (p. 127). Volunteers were not the only gift-giving actors involved in this multiplex problem-solving. A recent example of this approach by the same prosecutor is an initiative to deal with the problem of illegal alcohol and drug factories in a location far from the city hub. Recognising that regular patrols of the area would be too costly, after knocking down the illegal buildings, the government planted large swathes of barberries and other traditional plants used in Iranian cuisine. The intention was to both re-vegetate the area, connect city dwellers with traditional Iranian harvesting rituals and also to ensure a regular passage of passersby to disrupt any attempted re-establishment of the illegal stills and meth factories.

Indeed we see the entire Kashaf River narrative as one that “walks” with non-western scholars and thinkers [and practitioners and activists] from whom we can learn and co-produce new responses to the Anthropocene challenge’ (Harrington & Shearing 2017, p. 138). The Kashaf River prosecutors put aside the normalized prosecutor construction of reality that their job responds to illegality with proportionality of the force of a rule of law. Instead they restoried this script to seek to display an ethic of care toward marginalized people trapped in an ecological vortex by aiming for ‘justice as a better future’ (Froestad with Shearing 2012). At the same time a new way of being opened a better future for the river by reimagining a linear narrative of the metabolism of the water flows of a city’s margins with a circular narrative of rehabilitated water negotiated in conversational circles.

Honig et al. (2015) developed the AMP – Awareness, Motivation, Pathways – framework from a number of African cases of environmental threats. Their empirical insight was that it was common for interventions aimed at protecting the environment to succeed in building Awareness but to fail to improve environmental outcomes because Motivation or Pathways were not also built. Or Awareness and Motivation were both accomplished, but actors could not imagine and lay a workable Pathway to change. Awareness in Honig et al. (2015) is given a rather broad Shearingesque meaning of including altered mentalities and capacities to reframe. Motivations could be an intrinsic love of nature or extrinsic payoffs. Pathways means courses to action. Opening up opportunity structures can require resources and unlocking the skill-sets of Aware and Motivated individuals.

Part 6. Limits in regulating corporate power

Readers will have noticed that our story of transformation of the Khashaf River has been told as one of only very partial success. Yes, it is a redemptive story of genuine movement from the brutal bulldozing tactics of 1992 to more restorative revolutions. But it is also one of Awareness and Motivation of the poor that led them along better Pathways, while the rich paid bribes to take Pathways to their own interests. These Pathways continued to destroy the environment. The problem is well illustrated by interviews with people from powerful factories that revealed they had illegal large wells that were protected by bribing inspectors not to report them. At the same time we have seen that small illegal wells owned by poor farmers tend to attract enforcement action to close them. The failure has been that when reform runs up against entrenched interests (in this case of factories and politicians that protect them), networks and nodes of governance need to be intensified. One of the lead actors in the fight to save the Khashaf River recently declared:

The main thing is there is a very big mafia in almost everything including the water problem and unless we destroy that mafia we cannot do anything useful. That mafia is so powerful that if we want to understand it we have to go to the centre of it – like a bird flying in the sky cannot see what is in the sea, you have to be a fish to see there. (translation of youtube speech by Dr Popoli Yazdi of Ferdosi University: https://www.youtube.com/watch?v=xP_zueXV51E).

This corruption has two main consequences. First, it means that the biggest polluters of the river are neither held to account for their actions, nor stopped in their continuing pollution of the river. Second, it undermines the trust and relationships that has built up over time between state and citizen through iterative restorative processes. For example, some of the promises that the government made to the farmers and illegal settlers if they moved from the river have not been met due to corruption by third parties. This makes the restorative consensus fragile and subject to suspicion and resentment, as well as damaging its potential for use in further cases.

Given the extent of corruption, it would be expected that there would be a degree of disenchantment about the use of restorative justice in the context of problems with such a deeply structural character. We were astonished when one of the most active leaders in the movement argued completely the contrary. In her opinion, restorative justice was the *only* way forward given the imbalance of power involved. In supporting this position she noted that restorative justice had been really important in allowing them to get to where they are now in their understanding of the issues involved and the parties involved. She said if they had not done all that talking and relationship building and asked about everyone's needs, then they could not have found "the unseen helping hands behind the scenes." In other words, there are people within government and private organisations that are opposed to the corruption and are looking for ways to support a better approach, and they were enabled to find each other through the long restorative dialogue. In addition, if the usual penal approach had been followed, in her opinion it would not have identified the roots of the problem; there would not have been discussion about the different layers of pollution and it would just have dealt with what was apparent on the surface. Two years ago they were not aware of the deep sources of the problem; they thought it was the seasonal workers and the small scale farmers, and today they see these as just

approximately 20% of the problem, with the rest being caused by the factories and other large-scale polluters.

More strands maybe needed to reinforce those networks. As one weak reed in a network of governance after another is snapped by corporate power, more strands in the web of governance can be woven into place to strengthen the fabric. Some of those strands must be made of tougher stuff. Some corporate executives can be put in prison and their companies suffer large penalties or even be taken over by the state. Regulatory officials who take bribes must also feel pressure from criminal prosecutions. The entrenched capture and corruption we have described makes this easier said than done. However, the new Iranian criminal procedure law of 2015 that now allows NGOs to launch criminal actions against corporate offenders already shows promise as in a recent NGO criminal suit that alleged criminality against managers in regulatory agencies regarding industrial waste water enforcement. An even stronger strand to add to such networked regulation of pollution would give NGOs and whistleblowers access to a percentage of the fines imposed in such cases.

Another way to weave together stronger strands is to widen the restorative circle, reaching out not only horizontally into state departments and institutions where there are hidden allies, but also up into the international realm. Hence linkages with international NGOs and the United Nations have been made strategically in an effort to bring about some kind of accountability for the ongoing struggles to clean the Kashaf River. For instance, in December 2018 an international conference organized by a large INGO and UNESCO on ““Adaptation to Water Scarcity and Basin-connected Cities”” was held in Mashad, which continued to put the public spotlight on the state of the river and provide leverage for arguments about the importance of stopping pollution and building better water purification systems (http://www.unesco.org/new/fileadmin/MULTIMEDIA/FIELD/Tehran/images/Asian_Gwadi_idi_iran.pdf)

We have argued that a multi-level problem requires constant elaboration and development of a multi-level response that comes from many nodes of governance and from multi-level governance. While we do see in our data that fabric being repeatedly torn by corporate power, the only remedy may be to keep sewing it back together with new threads that have the strength to repair the weaker fabric that tore so easily. More horizontal restorative strands will never be enough for that purpose. Without the spectre of vertical escalation to tougher enforcement it is hard to imagine powerful factory owners who lack an environmental conscience sitting up to take notice.

Part 7. Conclusion

Lon Fuller (1964, p. 33) argued that full judicial process is only good for two types of questions: yes/no questions (‘Did she do it?’) and more/less questions (‘How much should be paid?’). Karl Polanyi (1951, pp. 174-84) distinguished these from polycentric problems that require multidimensional negotiation of interacting complexity. While the Fuller/Polanyi insight remains a rich one, we have seen it does not preclude a judicial agency becoming a node of governance for helping to solve polycentric problems with polycentric governance. It does not preclude a judicial agency from hiring mediators, recruiting victim support volunteers and networking multiple layers

of governance and civil society with a restorative and responsive strategy that is also capable of escalating up to imprisonment of powerful factory owners. Critics of our conclusion could argue that perhaps the catalytic node of governance here was not the office of Bakhshi Mohebi, but the crucial node was the Saviour of Kashaf River Committee, or even the Mayor's office. These are not unreasonable ways of seeing the history.

One reason we do not resist them is that our reflections on the narrative attract us to the hypothesis that institutional structures do not prevent new nodes of governance of multiplex problems from being energized almost anywhere in almost any circumstance of degrees of democracy in any society. This is because of Shearing and Ericson's (1991) insight that restorying a problem-solving imaginary can occur in the most implausible of locales such as the lunch rooms of local police stations where the most lowly police share stories of how they worked with others to stick with a problem and fix it. Rewriting institutional rulebooks is important intellectual work and rightly attracts much scholarly attention. Rewriting storybooks at local nodes of governance that happen to be populated by reformers with a transformative imagination attracts less attention.

Finally, it is quite plausible that decades from now the Kashaf River will be evaluated to be a site of deep desertification. Fear of that does not mean wealthy city dwellers should be content to nestle with their grandchildren in the temporary comfort of their city while failing to engage with experiments for new modalities of governance that attempt to hold back the desert from rolling over the grandchildren of the river, that attempt to keep some clean water flowing for them. Existential threats of the Anthropocene demand learning from experimentation because these threats face the puny public policy pills of the Holocene with multiple-drug resistance. Proximate human extinction is inevitable without experiments in restorying our future. It is quite plausible that accidental cascading of a nuclear weapons exchange from Pakistan or Israel (Braithwaite & D'Costa 2018) could wipe out the people of the Kashaf River long before the desert rolls over them. We must not be nihilistic about their struggle, even if it just one to make life better for a while. Polycentrism of crisis is why there is an imperative to pursue new ideas for seeding disparate new problem-solving imaginaries on many fronts at once.. The plural assemblage of thought from Clifford Shearing we have traversed is just one possible experimental bricolage for attempting to moor a stimulus for richer imaginaries for how to love nature.

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