

Contested Energies

ERSELA KRIPA, RA, FAAR + STEPHEN MUELLER, RA, FAAR

CONTESTED TERRITORIES

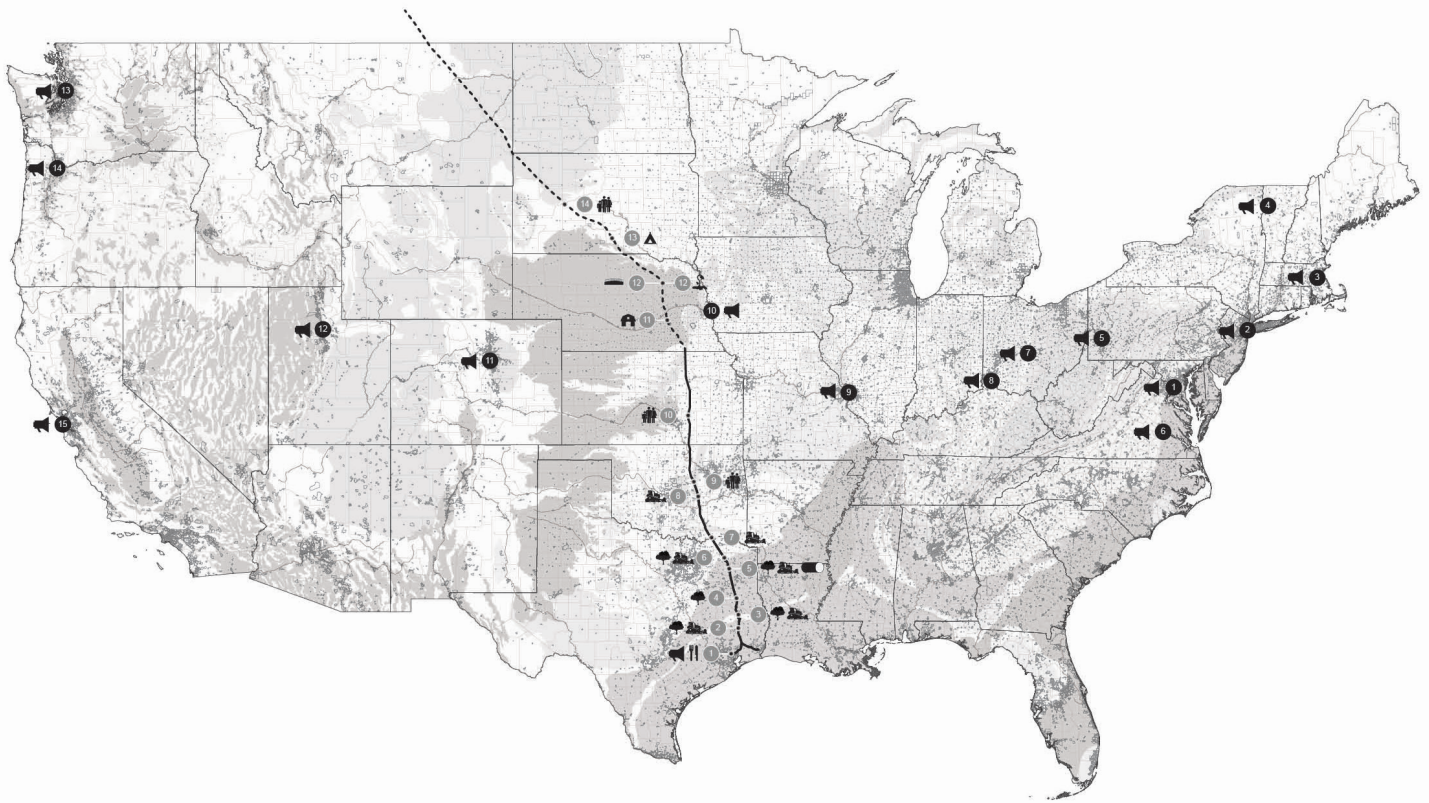
Recent transformations in domestic energy policy have instigated a new era of resource-based urbanism throughout the United States, fundamentally reshaping relationships between property, resources, and domestic space in newly contested territories. Embodied most visibly in the proliferation of hydraulic fracturing (fracking) sites across the Great Plains and western states, paradigmatic shifts in energy extraction technologies and transport logistics have conspired to inscribe volatile intersections between competing interests within newly productive domestic geographies. National policies aggressively promoting energy independence have opened new sites to energy exploration, enabling speculative investment in energy infrastructure by private companies, and a booming market for jobs in energy extraction. This has catalyzed the development of new urban forms - negotiated environments born of necessity, hardship, and speculation. Once-sleepy towns in the Great Plains have been transformed, seemingly overnight, into centers of production, transport, labor, and housing, in support of the new domestic energy economy. Private property owners in areas targeted for exploration have incrementally relinquished vast areas to both federal and private interests, ceding easements and mineral rights, in some cases through pressure from energy interests and the use of eminent domain. Split estates, kill zones, man camps, and carbon cemeteries are but a few examples of the emerging petro-industrial spatial typologies, whose very nomenclature indicates the uneasy and often conflictual methods by which these transitions occur.

Across these contested territories, the proposed Keystone XL (KXL) pipeline cuts a definitive transect, representing a newly-minted intercontinental territory, and a site of potential existential and ecological risk. KXL is a proposed and partially completed oil pipeline originating in Alberta, Canada. The line is planned and maintained by TransCanada, a major North American energy company, which manages pipelines and other energy interests across the continent. If completed, the KXL pipeline will reach 1700 miles in length, making it one of the longest oil pipelines in the world. KXL will conduct crude oil extracted from Albertan Tar Sands (and additional supply from the Bakken shale in the northern Great Plains) to advanced modern refineries in Texas capable of handling the new product. A majority of output will be exported to global markets, leaving a small

percentage for domestic consumption. The US would act largely as a bystander in this territorial transaction, its property given over as a conduit to global commerce and the flow of extraterritorial resources across its borders, in effect producing a kind of 'international easement'. Debate over the future of the line has stalled its construction, after completion of its southern leg. The northern leg requires a 'presidential permit' to cross the international border with Canada, but has been delayed pending review by the US Department of State. A forthcoming report will assess the project's contribution to the national interest, considering its potential impact on foreign policy, national security, global ecology, and the domestic economy. Along all of these vectors the project remains hotly contested.

Concerns for the project are diverse, stemming largely from uncertainty surrounding the unprecedented scale and environmental impact of resource extraction in Canada's Athabasca oil sands. The carbon and water-intensive extraction process has already transformed millions of acres of Boreal forest and wetlands in Northeastern Alberta into a seemingly alien landscape of bitumen strip mines, populated by supersized hydraulic excavators, and 400-ton 'heavy hauler' trucks standing almost 24 feet high. These highly visible transformations feed the fears and rhetoric of concerned citizens and those living in its path, who conflate the transmission of environmental devastation from the resource's origin to the physical artifact of the pipeline itself, and extrapolate possible future disaster scenarios across the pipeline territory.

Since KXL would connect the domestic interior with the wild 'otherness' of this extraction landscape, it can be read as an intrusion on the presumed sanctity of domestic territory, forging a radical continuity between landscapes of extraction and internal practices of consumption. The high visibility, and hyperbolic nature of this landscape present a radical shift in the domestic awareness of energy production, which for decades has been sourced in environments beyond the close scrutiny and daily attention of US consumers. The messy realities of energy production, once held at arm's length in the few quietly producing remaining interior oil fields, off-shore platforms in the outer continental shelf, and highly productive but highly contested fields of oil-rich nations in Latin America and the Middle



KXL Obstruction Sites | Original Research Graphic by AGENCY

East, are now brought decisively home. Opponents thus respond to the seemingly innocuous pipeline as a physical artifact of the desperation of late capitalist energy exploration, as a daily reminder of our dependence on scarce and inefficient resources, and our codependence on other nations and business conglomerates to support our carbon-intensive lifestyles.

Where the pipeline is already complete, it remains a largely invisible, yet highly volatile presence - silently, but decisively, remapping property and human relations. The chemical composition of the transmitted crude (a particular composition known as diluted bitumen, or DilBit) is a highly corrosive and viscous mixture, which demands higher operating temperatures and pressures than required for conventional oil transmission. This poses new challenges to the integrity of the pipeline, which may fail with corrosion over time, or produce highly pressured leaks contaminating large

areas above and below ground. Spectacular failures of other oil sands pipelines in the US and Canada, and documentation of poor workmanship on completed segments of KXL add to a climate of growing public skepticism for technologically risky energy endeavors since the Deepwater Horizon catastrophe in 2010, exacerbating the fear of catastrophic spills.

In a position of readiness and anticipatory response, Transcanada has created a punctuated series of hierarchical control structures across the territory, enabling pervasive spatial protocols of surveillance and maintenance. The pipeline and its associated infrastructure manage the security of both resource and property, as the transmitted crude moves from extraction site through on-ramps, tank farms, and refineries. An industry-standard deployment of pump stations at 50-mile intervals and notational 'mile markers' along the line set up a new rhythm of spatial accountability across the Jeffersonian grid, overlaying a regular system for maintenance

of predictable oil pressure throughout its length. Huge swaths of property are transformed as wide local easements for construction and later company access. This meting out of the territory also provides regular intervals for surveillance and monitoring of conditions, with robotic ‘smart pigs’ conducting sweeps between pump stations - checking for defects in pipe integrity, chemical, and electromagnetic composition which could signal tampering or systemic failure. Local wildlife and vegetation is monitored with periodic aerial photography to capture variations which could signal leakage or contamination. In the case of any leaks, larger mile-wide swaths are designated as voluntary evacuation zones, inscribing a virtual no-mans-land imbued with the portent of potential disaster. Areas with high volume input, like those near natural gas production in the Bakken Shale, and potential high volume export, like the Gulf refineries, accumulate higher orders of security and transport infrastructure.

The final path of the pipeline is a result of intense, spatial negotiation between competing and often adversarial interests. The path marks what, in the minds of its developers, advocates, and enablers is the path of least resistance, doing the least harm to those constituencies which pose a real threat of opposition. Its expedient march through depressed areas of the Great Plains has been described as a ‘map of power and poverty’, and an example of ‘environmental racism’. Targeting those properties of the poor and disenfranchised which have few resources and offer minimal resistance, it is a clear example of ‘disproportionate impact’ on those with little alternative but to agree to the construction of the line. In this way, realizing the pipeline has served to unearth the heterogeneous assembly of competing interests enmeshed in an otherwise passive territory, generating new sites for conflict and action.

MAKING AND ACTING IN THE ENERGY-INDUSTRIAL LANDSCAPE

The contemporary energy practices which have enabled the pipeline’s construction echo and reinforce longstanding preoccupations of the modern, elucidated with an astute skepticism by Hannah Arendt in *The Human Condition*. The modern’s drive for absolute efficiency and increased production, in Arendt’s terms, constitutes a making of the world – the design and execution of an explicit and controllable product or mechanism with limited or finite inputs and presumably predictable outcomes. For Arendt, making is an expedient substitution for acting, whereby an individual entity becomes uniquely empowered to control the outcomes of a situation. This, she states, inhibits the political practice of plurality, a fundamental human condition whereby individuals with independent and often conflictual expressions constitute a “space of appearance which is the public realm”.

The makers of the contemporary energy-industrial landscape argue for the exploitation of untapped resources, the expansion of domestic extractive landscapes, and the proliferation of resource infrastructure, citing quantifiable outcomes in increased production, improved energy independence, and decreased costs to the consumer. The mechanisms they propose are economic, technological,

and infrastructural, including tax credits and trade embargos, sonic cannons and seismic airguns, steam injection wells and transcontinental pipelines. They balance their argument, in Arendtian terms, both with the modern’s “early concern with tangible products and demonstrable profits” and “its later obsession with smooth functioning and sociability”.

The makers’ relationship to their opponents is largely ‘antagonistic’ – a binary politics of ‘friends and enemies’, and not an ‘agonistic’ plurality – where ‘adversaries’, or ‘friendly enemies’ might agree over principles but disagree about the means to achieve them. “Drill, Baby, Drill!” is the clarion call of the makers, rejecting the public realm’s “fiercely agonal spirit” by collapsing plurality and casting the consideration of alternative voices as an impediment to progress. When the phrase was introduced by Michael Steele at the 2008 Republican National Convention, it promoted expanding domestic energy production by opening production on previously unexplored sites. This was suggested as a part of a strategy for voters to “put [their] country first”, seemingly sacrificing individual agency for a pragmatic approach to a presumably consensual, desired outcome.

This ethos of making enabled by such rhetoric is further manifest in the construction of XL. Yet the spatial realities of making across the contested territory enable spaces for action within its blind spots. The maker’s ‘top-down’ instantiation of strategic energy-industrial spatial protocols promote a type of productive disequilibrium where the transect misaligns with existing structures and intersects adversarial population centers. The trans-political territory of the line is far-flung and overextended, leading to uncertainty, confusion, and oversight in its construction, maintenance, and in response to actions against it. As it crosses juridical and political boundaries, the pipeline constitutes a new territory of misaligned and often uncoordinated interests. A range of actors and competing interests are unearthed and subsequently drawn together, including company executives, construction crews, local law enforcement, property owners, and activists. From the acts of mapmaking, to surveying, site clearance, and the actual laying of the pipe, the ‘line’ is continuously negotiated, and constantly in flux. The proposed Nebraska segment has been redrawn multiple times in response to competing interests, largely due to concern over its transgression through the Ogallala aquifer - one of the nation’s largest supplies of drinking water - and the Nebraskan Sand Hills. Discussions with multiple property owners, including sovereign Native American tribes, have resulted in the line’s recalibration and significant rerouting. These types of adjustments are to be expected, though others were unforeseen. Construction on the line has reorganized entire small towns, some of which have been nearly emptied of residents who leave for temporary jobs in pipeline construction never to return. While the deployment of seemingly regular and innocuous infrastructures across such a large and heterogeneous territory would attempt to produce a predictable stability, it has produced instead a new public realm, and novel constituencies, coincident with the polarization and amplification of existing stakeholders.



Obstructionist Tree Village | Original Research and Graphic by AGENCY

OBSTRUCTIONIST SPATIAL PRACTICES

In its realization through conflict, the territory moves from its conception as prescriptive artifact of making to a pervasive, responsive condition of acting, enabling a range of creative spatial practices from the ‘bottom-up’. Bill McKibben, an environmentalist and staunch opponent of KXL, speaks readily about the pipeline’s ability to galvanize action from a diffuse and heterogeneous set of environmental, economic, and political actors. McKibben’s organization, 350.org, has helped to construct the pipeline territory in the public imaginary as a symbolic space of conflict. Through his work, and the work of countless others, the pipeline has been recast into a type of lightning rod for political activism of all sorts, and a cipher for a growing number of environmental and social injustices, incubating and attracting oppositional constituencies.

In this milieu, obstructionist and interventionist spatial practices abound. An anti-pipeline coalition in Nebraska builds an ‘energy barn’ in the pipeline right-of-way as a type of didactic spatial demonstration of the pipeline’s many failings. The project models an alternative use of clean energies, in the hopes of exploiting the backlash and negative publicity when the highly visible project is demolished. The Rosebud Sioux tribe builds a ‘spirit camp’ in the pipeline’s path near Ideal, South Dakota, while the Ponca tribe plants sacred corn varietals near Neligh, Nebraska, similarly problematizing

the line’s construction before it begins. These and other tactical interventions along the line successfully anticipate and exploit the violence of making the pipeline territory. The future path of the line is thus transformed into a site for opportunistic action, a field of potential where the public realm is enacted through the behaviors of autonomous individuals engaging in explicitly political practices. Alliances are forged between constituents with disparate interests across space, aligned in their opposition and their intersection with the line. Native tribes from across the plains forge new coalitions with each other, homeowners, and other actors. Activists from around the world travel to the pipeline to participate in shared action.

In 2012, a variety of resistance camps were organized and promoted by the Tar Sands Blockade (TSB), a coalition of activists who believed in “peaceful, sustained direct action” as a primary means of stopping the construction of KXL. In September 2012, founders of the organization, many of whom were veterans of the Occupy movement, established a ‘tree village’ in the piney woods of East Texas. They occupied an area the size of a city block above a planned 50-foot wide easement for over two and a half months. The camps opportunistically exploited the uncertainty in the emerging legal framework surrounding the pipeline’s construction, constructing a productive space for action within the recently redefined legal boundaries of property and ownership. If McKibben’s rhetoric had established the pipeline as a geography capable of galvanizing



national attention, the direct actions in East Texas in 2012 were an experiment of KXL's capacity to serve as a site for sustained action.

Expanding the anticipatory logics of other interventionist practices on the line, the activists in East Texas would be forced to evolve their tactics in response to changing scenarios. Preparation for the occupation began in late summer. As TransCanada secured rights for KXL easements from landowners and obtained presidential approval of the southern leg running from Cushing, Oklahoma through Texas, TSB planned its counteroffensive. Activists spoke with property owners who had second thoughts about the presence of the company on their land, and the questionable safety of petro-industrial infrastructure on their property. They found an unlikely partner in David Daniels, a property owner near Winnsboro, who contributed his land and his labor to the cause, allowing the activists access to his property and helping them build the aerial encampment.

The tree village draws on and expands technological legacies of civil disobedience and protest encampments, adapting these strategies to the particularities of the sites in East Texas and Daniels' own experience rigging high-wire circus acts. Lessons learned from experiments in tree-sitting activism, rock climbing, and more common arborist equipment and techniques enable the protesters to construct a minimal and flexible presence in the path of the proposed pipeline. The 'village' has a sophisticated level of development for such a short-lived inhabitation. Described as a "web of tree houses, structures, and pulleys", the village is a series of aerial

platforms 70 feet above the ground, including a tree house built by Daniels himself. A small outbuilding serves as headquarters, with a communal kitchen nearby capable of feeding fifty protesters. Days into the occupation, an outhouse is built by a local church. Water is carried in buckets and assorted containers. A makeshift shower is rigged for public bathing. Tree sitters are supported by a band of support staff, including on and off-site medical, legal, and media assistance. Training staff hold informational sessions for newcomers on 'prusik knots' and 'footloops' before they climb into position.

The village is defined as much by the behavior of its inhabitants as the presumed and instigated behaviors of its detractors – that is, it embodies action as a spatial, organizational device. It is critical to the campaign that a few activists are present and visible in the aerial encampment at all times, with the strategic movement of supplies and occasional substitution of exhausted occupiers orchestrating an aerial choreography of resistance. The anticipated extraction methods of law enforcement prompt the design and embellishment of the tree village. Platforms are constructed out-of-reach of easily deployed extraction equipment like the ubiquitous 'cherry picker', increasing the difficulty for law enforcement to remove the platforms and their occupants without specialized tools or specially trained operatives. As a failsafe, occupiers build devices resembling 'squirrel guards', extended metal or wooden panels below the platform of an occupied tree to prevent a would-be extractor from accessing the platform from below.



Activist Tree Village | Sky Pod (Photo by Tar Sands Blockade)

The logistical complexities of life in the trees parallel difficulties throughout the contested territory. For the organizers, their operations ‘scale up’ and connect them with a larger and underrepresented constituency, the activists’ micro-behaviors on site echoing larger regional concerns. Grace Cagle, a biologist from Fort Worth, TX and founder of TSB explains,

“...we had to haul up our own water, similarly to those who have to import water after their native sources have been contaminated by fracking and mining.”

For the protesters, the ubiquitous presence of machinery on site is a fitting microcosmic re-enactment of daily life within the contested territory. The advance of machinery toward the site portends the inevitable advance of law enforcement and the protester’s eventual extraction. It also replicates in miniature the machinations of surveillance and logistics that will be enabled by the sanctioned and prolonged presence of industry on and around private properties throughout the line. These types of inclusive interpretations of the environment, disseminated publicly and transparently via online posts, interviews, and live updates from the media team, contribute to the construction of the site as a site for action.

As the occupation wears on, activists are forced to find new means of spatial resistance to respond to changing scenarios. Along with the tree village, and its distributed occupation, parallel and more direct tactics emerge to more explicitly exploit the anticipated violence of dismantling, providing new and more visible confrontational boundaries between the protesters and law enforcement. A timber scaffold spanning the construction easement stood forty feet in the air, “a 100-foot-long wall lashed together with timber”, providing a barrier to the advancing machinery. The scaffold was occupied by a small band of sitters, sporting a banner reading ‘You Shall Not Pass’, delaying construction activities for several days. Actions of individuals were conceived and highlighted in TSB media outreach, providing a forum not only for the communal and sometimes anonymous behaviors of a masked, nameless, and camouflaged collective in the trees, but also for the explicitly attributable action of individuals.

Coincident with the growing media attention, the sites for action left

the canopy and came out into the open. The movement began to have faces and names. On October 1, Houston resident Alejandro de la Torre locked himself to an underground cement block in the path of the pipeline near temporary construction about 12 miles north of the blockade, lying on the ground for about 10 hours with his hand chained below the earth. Also in early October, 22-year old Maggie Gorry occupied a one-foot by four-foot plank atop a forty-foot pole, blocking construction for two days before her arrest. Blockaders had constructed her impromptu obstruction device under cover of darkness. Tethered to the ground with support lines in a highly visible clearing, the ‘monopod’ construction temporarily stalled the advance. Upon their arrests, accounts of Gorry’s and de la Torre’s experiences are added to the growing list of direct actions highlighted on the TSB website, a veritable catalog of spatial practices evolved from sustained action.

COUNTERMEASURES, COEVOLUTION, AND ESCALATION

The increasing sophistication of obstructionist tactics in East Texas, and the relative ease with which they could adapt to changing pressures from law enforcement, sparked a type of ‘obstructionist arms race’, transforming the pipeline territory into a laboratory of countermeasures. While the protesters took care to only engage in non-violent and non-destructive acts, their illegal occupation on newly minted company property began to wear on company representatives, who increasingly sought backup from local law enforcement to restore order to the territory and allow construction to continue. Both sides staked a claim for a right to action within the pipeline easement. Young activists, having studied political and environmental science, sociology, urban planning, and law, held training sessions for occupiers on the technical and legal aspects of disobedient spatial occupations. TransCanada, meanwhile, reportedly briefed local law enforcement on the tactics and identities of protesters, suggesting they reconsider the criminality of the use of certain protest devices, and even suggesting that the protesters’ activities be designated as terrorist acts subject to federal prosecution. As evidence of the protesters’ supposed transgressions, TransCanada presentations cited the vast geography of TSB’s social-media based financial network, which funded construction and supply of the camps through the accumulation of small donations online, and the high level of education and organizational

capabilities of the actions' leaders. The sophisticated coordination of broad-based resistance across such a vast territory had made TSB's activities inherently suspect, their actions not only criminalized but disproportionately vilified in order to enable swift and decisive countermeasures.

A heightened response by law enforcement sought to quell the increasing visibility of protestor tactics in the media, adopting an increasingly entrenched and militarized stance in the control of the site, and information surrounding the actions. From a company presentation to law enforcement, obtained through a Freedom of Information Act request, TransCanada expressed concern not only with the legality of the protester's actions, but also with the increase in 'media attention' and 'high profile' the actions had generated. Local law enforcement, encouraged by TransCanada representatives, adopted countermeasures to control the dissemination of information from the blockade. Police reportedly erected screens around sites of detainment to deter onlookers and journalists from seeing and recording their procedures, during the more exposed confrontations and arrests. Officers controlled the records and transmission of actions on the site through the confiscation of cameras and other recording devices, claiming the records were evidence in criminal investigations. A temporary and reportedly "arbitrary" media boundary was put in place by TransCanada, and moved throughout the occupation to limit access to the site and the recording of its events. Police shone floodlights on sitters at night, limiting sleep and creating an environment of ubiquitous surveillance. TransCanada later filed suit against Tar Sands Blockade and their allies, seeking damages and the forced eviction of protesters from company property and construction easements. In January 2013 the protesters agreed to TransCanada's terms, prohibiting certain actions within the pipeline easement including "chaining, shackling, binding, or attaching any person's body, or any other object, article, or mechanism...to stop, halt, or arrest" Keystone construction.

The limiting terms of the lawsuit, the state-sponsored control of information to support corporate activity, and the suggested reclassification of coordinated direct action and civil disobedience as analogous to terrorist activity, all serve as haunting precedents for future actions in contested territories of this sort. They are indicative of a general trend toward what Stephen Graham has called the 'new military urbanism', whereby security protocols developed in military settings by occupying forces abroad are brought to bear on the daily operations of the domestic homeland. The defensive posturing of our energy territory, developed in the name of domestic security, and redoubled in the face of obstructionist practices, has recast domestic constituents as extra-state actors and criminal entities. This belies the inherent vulnerability of our energy landscape, which fuels a politics of fear and a pragmatics of response. Action against our energy interests is seen as action against security, and labeled as such.

The escalation of response by the authorities in East Texas suggests a 'slippery slope', which could enable future possible over-reaches of state actors in dealing with action on and against the line. Just as

future urban forms might be harvested from embryonic territorial logistics, legal and authoritative precedents are seeded and calcified with accumulated decisions and actions in spatial practice. In today's climate of increasing scale and frequency of protests, the mutual escalation of protester and police tactics fuels the evolution of obstructionist tactics. In the 2014 Umbrella Revolution in Hong Kong, for instance, protesters and police were visibly coevolved, adapting their clothing, communications, and spatial organizational systems to each other's advances. Similarly, in emerging coevolved models of urban warfare of the IDF and Palestinian guerilla fighters, each side adopts, and then adapts, the technologies and characteristics of its adversary. The next generation of actions in newly contested territories will be equally coevolved, hardened by the experience of TSB, anticipating authoritative response.

As of this writing, the completion of KXL has been successfully stalled, due in some part to the actions in East Texas and other actions nationwide. As sites for direct action dry up, many of the organizers are moving from tactics of resistance to longer term strategic planning, including community organizing centered on environmental and climate justice. Ron Seifert, a climate activist who serves as a spokesperson for TSB suggests,

"We need to ask ourselves as organizers, 'What does escalation look like?'...Physically blockading infrastructure is a great place to start the conversation...we can still build and cultivate a culture of resistance and action, capable of escalating to the point of shutting this stuff down in the future."

Arendt describes action as both a beginning and a realization. While often warning of the unintended consequences and unpredictable outcomes actions might produce, she also details the process by which actions evolve, evoking the double-edged sword of longevity and permanence that might evolve from spontaneous, even intentionally temporary inputs. The processes Arendt describes are not the sequential optimizations of predictable outcomes that modern industry would prescribe, but rather the messy realization of accumulated actions operating within a public realm - some of which catalyze into sweeping historical and cultural transformations, others failing and fading into obscurity. We might better think of process as a chain reaction, or a chain of actions, able to be primed, evaluated, and opportunistically managed through the willful and prolonged construction of sites for action, both physically and intellectually. The first sites will be those like the easement in East Texas, recently redefined blind spots in emerging and evolving contested territories, whose ambiguity and contested nature provide a robust realm for action, debate, and design.