The Sustainable University: Repair as Maintenance and Transformation

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Introduction: A Sustainable Fitness Center

In 2011, Colgate University, the college where I work, opened a new fitness center, with much publicity and celebration. For those working in higher education in the U.S., campus fitness centers have acquired a kind of symbolic significance in recent years, as universities increasingly compete to attract more and better applicants, even while facing criticism over the growth in tuition costs as they add these lavish amenities. In addition to its gleaming newness, the fitness center also had one additional feature to tout: it was our first campus building certified through the U.S. Green Building Council’s LEED system of sustainable building practices. LEED certification is an international standard that grades new or renovated buildings according to several metrics, including energy and water efficiency, incorporation of green building materials, and sustainable landscaping around the building. LEED sums these metrics and awards a Certified, Silver, Gold, or Platinum rating to projects that gain enough points; our new fitness center achieved the Gold designation. In fact, Colgate has now pledged that all campus building projects will meet the LEED Silver standard or better. In this sustainability effort, Colgate joins a long list of other colleges and universities that have made similar commitments in the past decade; a whole tangle of consortiums, each with their own punchy acronyms, are now in place to help institutions of higher education make commitments to reducing carbon emissions, incorporating local and sustainable food, and other key dimensions of campus sustainability.

Figure 1: This illustration, included in a 2011 article for Colgate’s alumni magazine, Scene, emphasizes the sustainable features of the fitness center, including elements that helped gain LEED certification for the building. Credit: Katherine Laube, Colgate University.
I begin with this story not to critique or commend my particular university but to provide just one example of a wider set of trends and tensions between the concurrent growth and sustainability of institutions. Imperatives for growth and for sustainability are each forward-looking, though, in its most ideal form, sustainability is meant to reorient and rebalance our current practices to “[meet] the needs of the present without compromising the ability of future generations to meet their own needs,” as in the Bruntland Commission’s widely-cited definition. This ideal posits an imagined future, and the practice of sustainability requires some kind of pathway from here to there. But what choices should be made to facilitate this road to a more sustainable future; what are the steps that would lead to a green fix for those future generations? Questions about how to define and achieve these goals are grounded (often literally) in practices that can be broadly conceptualized as repair.

**Sustainability as Repair**

What does it mean to think about sustainability as a kind of repair, a set of practices and structures meant to engage with and address the balance between what we do now and where we might want to be in the future? Conceptually, repair helps focus our attention on the social and material structures that literally undergird our everyday lives; repair practices and institutions are a fundamental component of social order, due to their role in continually maintaining these infrastructures. Following work in ethnomethodology and conversation analysis, I understand repair as something that is happening all the time, sometimes in a spectacularly obvious way (as when a breakdown draws our attention explicitly to the need for repair) but often also behind the scenes. At the same time, questions about repair can lead to disagreements and reveal disparate interests about the direction or even necessity of repair.

In prior work I have found it useful to draw on two conceptual modes of repair that define a continuum between relative order and change. “Repair as maintenance” is a more conservative approach to repair that prioritizes existing structures and interests, attempting to preserve and restore them to a relatively stable condition. “Repair as transformation” is a more radical strategy that emphasizes broader social and material change, imagining new arrangements of infrastructures and institutions. Tensions between maintenance and transformation are often inherent in situations where competing visions of repair call for either sustaining the form of existing solutions or a more comprehensive reinvention of them. Once the material and social elements of infrastructures are established, change can and does occur, but repair as maintenance often supports the status quo and those who may gain from it. For example, the flood control infrastructure of New Orleans is largely built around levees, barriers that jacket the city’s waterways and are meant to prevent flood waters from spilling over and into the city. The levees have the advantage of preserving more land for human development, especially when compared with flood control methods that more closely mimic the characteristics of rivers and wetlands, which are more land extensive. Land owners and developers therefore prefer the levee system, as it more fully maximizes the potential for profitable uses of developed space. Despite the limitations of a levee-centered system, which are well known and were clearly revealed in the aftermath of Hurricane Katrina, it is a challenge to reorient the system in a more transformative way.

This tension between existing orders and contested futures describes the challenge inherent in sustainability. Because sustainability as a practice and an emerging social movement aims to reorient large-scale infrastructures related to energy, food, transportation, and others, these same tensions between maintenance and transformation are typically found in proposals for sustainable change. As in the case of Colgate described above, colleges and universities have become increasingly important sites for the development and implementation of sustainability-related initiatives over the past two decades. While often depicted as slow and stodgy in adapting to new ideas and trends, universities can also be at times especially flexible institutions given their relatively diffuse administrative structure and the influence of new ideas and movements developed through the creation of knowledge and the continual generational turnover of students. While universities have to balance revenues and expenses, the profit motive is less dominant than...
for corporations, especially public corporations which must answer to investors on a quarterly basis. In this way, universities are a useful place to study the influence of sustainability and especially to consider the potential tensions between repair as maintenance and repair as transformation.

The University as Growth Machine: Repair as Maintenance

At the same time, contemporary universities are subject to trends that may work in counter to the relative openness and experimentation described just above: there is a competitive pressure among institutions of a similar size and student and donor “market,” with incentives to improve their relative position and attract improved human capital in the form of students, staff, faculty, and alumni as well as economic capital such as tuition, grants, (monetized) intellectual property, and endowment resources. In this way, universities tend to expand. While the number of students served might not change, the footprint of the physical campus, the number of employees, and amenities provided may all increase, requiring additional investment and growth. Ross terms universities a form of “urban growth machine” for this reason, citing the case of New York University as a prominent institutional real estate owner and developer in Manhattans. Colgate’s new fitness center is one small example of this growth: though the overall number of students at the university did not increase, the physical footprint of the campus expanded by 15,000 square feet, with a commensurate expansion in energy use and other impacts on the sustainability profile of the institution.

How can universities be both key centers of economic growth and adopt increasingly ambitious plans for sustainability? A cynical view would frame sustainability planning as a form of greenwashing, an instrumental kind of repair as maintenance that fully accommodates existing growth pressures and covers them over with a patina of sustainability. My own experience with university-based sustainability initiatives suggests a more complex set of issues and tensions. Sustainability efforts are often geared toward maintenance, and attempt to rework existing infrastructures and policies to limit but not eliminate impacts. At the level of practice, modest changes to operations may occur, but the essential things that a university does, and the broader political economy of higher education, largely have not changed. This orientation toward maintenance is illustrated and supported by the range of sustainability standards described above. AASHE’s STARS, for example, provides a comprehensive set of sustainability standards for colleges and universities, with indicators for nearly every aspect of campus operations, including carbon emissions, waste, social sustainability, and other categories. These standards now essentially define what it means for a campus to be sustainable, and, in the process, they may support and legitimate a more delimited scope of repair.

As an example, consider how AASHE’s STARS metrics are used for benchmarking and ranking institutions on the basis of their sustainability efforts. In 2015, Colgate was ranked the 39th “coolest school” by the Sierra Club, which uses the STARS numbers publicly reported by participating schools to construct their annual list. Colgate’s score in this ranking, 688.42, aggregates points gained through a wide range of campus operations, including new or existing buildings certified through systems such as LEED. In this way, the standards have become interdependent and mutually reinforcing, creating a path toward a particular version of sustainability, a version reflected through the accumulation of points. No doubt each institution takes its own approach in implementing the STAR and LEED standards, but the very existence of green building standards presumes that new buildings will be constructed. Thus this definition of sustainability provides not only specific criteria for how to achieve green goals, but also a kind of cap on sustainability itself, illustrated perhaps most clearly in this statement from the Sierra Club’s description of their Cool Schools methodology:

...while many universities are making admirable progress, no school has yet attained complete sustainability. In 2015, the top-rated university scored 859.75 out of a possible 1,000 points, indicating much work completed but also room for improvement.

If sustainability is an imagined future where resources are continually conserved to maintain a steady state of development, then this vision
provides a very specific benchmark for the conclusion of repair: 1000 points. This precise accounting standard is very much in line with a repair as maintenance approach to sustainability; in fact, sustainability efforts of this kind may be described as a form of “standardized repair,” laying out means and ends for institutions to follow along a standardized path toward a sustainable future. Bowker and Star note that standards are increasingly built into the design and structure of our material environments, and so perhaps the standardization of repair, including sustainability planning, should not be surprising. But the sheer scope of challenges from climate change and other global impacts of human institutions raise questions about the ultimate impact of repair as maintenance and whether a standardized approach to institutional repair is an appropriate model for sustainable change.

Figure 2: The Sierra Club’s annual “Cool Schools” ranking illustrates the instrumental approach to sustainability as a form of repair, with a straightforward summation of factors such as energy use, food and dining, investments, and other criteria that can score points toward an institution’s total. Placement within the ranking, as well as movement from year to year, can also serve as a useful marketing tool for colleges and universities.

The Resilient University: Moving toward Transformative Repair

A repair as maintenance approach to sustainability can be effective, especially in the short term and when directed toward the lower fruit of institutional change. Rather than viewing incremental change as a kind of cop out, perhaps it makes more sense to describe the adoption of sustainability standards and public commitments as a partial and predictable response, given the many other pressures facing contemporary higher education. These standards provide a playbook for institutions to follow through a complex set of practices and decisions; they also likely result in net economic and environmental savings when energy use, water consumption, and waste are reduced.

However, we are approaching a reckoning, not only due to the increasingly obvious impacts of climate change and other shifts in the global system of political ecology, but also in the more local efforts that institutions and communities are making in response to calls for change. For example, in 2009, when my university made a commitment to achieve carbon neutrality by 2019, a 10 year period of work seemed daunting yet aggressively do-able. Now that we are in 2017, 2019 looms more starkly, and questions about effective and attainable next steps hang over the climate commitment process.

Increasingly, institutions of all kinds, including colleges and universities face a test in their commitment to commitments, especially as the lowest fruit of sustainability work becomes increasingly scarce. A more transformative approach will be required to effect the next set of changes, and those steps may lead away from national or global standards and toward more local solutions that take advantage of regional opportunities to make colleges and universities sustainable in tandem with the communities that co-exist with them. Groups such as Second Nature and AASHE are developing a new focus on resiliency in the face of evidence that climate change is now, to some degree, irreversible. Second Nature now offers colleges and university the opportunity to sign on for a commitment to carbon reduction, climate resiliency and adaptation, or both. But transformative change defies standardization, calling instead for more context-dependent means and a more open-ended set of goals.

This shift toward localism, resiliency, and adaptation to forces such as climate change may not seem an especially transformative form of repair; in fact, it could be read as waving the white flag, giving up on a more fully comprehensive set of changes to the structure and business model of universities. However, the key to understanding
repair, as I have described the distinction between maintenance and transformation here, lies in the extent of changes to existing structures, hierarchies, and practices. Colgate is planning to reach its commitment to carbon neutrality in part via the purchase of “carbon offsets,” including an investment in reforestation in Patagonia, Chile.[12] In this way, and like many other institutions with similar plans and commitments, Colgate will achieve carbon neutrality, but this investment might preclude other steps built around more transformative institutional change. And investments in carbon offsets are simply not available to institutions with fewer resources.

A more realistic, but also murkier and less easily prescribed path suggests that colleges and universities radically reorient their relationships with local communities to develop partnerships around sustainability and resiliency planning. In this model of sustainability, the university as growth machine becomes harder to justify, especially as the key question shifts away from, “is the fitness center LEED certified?” toward, “how does the new fitness center increase the sustainability and resiliency of our broader community?” Partnering with their neighbors and regional communities may allow universities to have a broader impact than if focusing more narrowly on the boundaries of their own campuses. For example, by investing in a local reforestation effort, a campus like Colgate could mitigate its carbon footprint and, at the same time, provide an amenity to support a range of community needs, including ecosystem restoration, protection from flooding and erosion, and the potential to develop new jobs and recreational opportunities. Working cooperatively with other local institutions may also allow colleges and universities with fewer resources to share the costs of this work. Finally, and perhaps most importantly, as Russo and Pattison note, transformative change that emphasizes community resilience may more proactively protect those marginalized populations that, due to historic patterns of inequality and environmental injustice, are most vulnerable to ecological shocks.[13] Although this transformative approach to sustainability may seem messy, in a world of truly transformative ecological change, this mode of repair may ultimately be the key model for a sustainable university.

REFERENCES

[1] Colgate University, “Colgate University Green Building Standards” (Colgate University, 2014).


