

De-urbanizing Urban Landscapes: Proposals for Change

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INTRODUCTION

Approximately 70 cities and urban neighborhoods¹ in the United States are experiencing what has been described as under-crowding, abandonment, decay, or as my students and I have done in the research and studio work I am presenting, as “de-urbanization.” This work examines the design implications of this phenomenon in the city of St. Louis, which has lost two thirds of its population in 50 years, from a high of 850,000 in 1950, to a low of 348,000 today. We have mapped the de-urbanization resulting from the widespread abandonment of property in roughly 1/2 of the city’s urban area and we have explored design strategies that speculate about alternative, non-traditional relationships that might be established between the natural and built environment in such areas, given the large percentage of vacant land that exists.

De-urbanizing cities and neighborhoods challenge our assumptions about what constitutes an appropriate “urban landscape” and about how it can be achieved. Nearly all American cities have experienced post WWII central city loss of population and jobs to the suburbs. The causes are multiple: a re-structuring of private capital investments abetted by public infrastructural and fiscal policy facilitating the continued outward expansion of development, compounded by deep rooted racial divides and cultural preferences. In de-urbanizing cities or districts, these scenarios have played themselves out in extreme ways, unchecked by the economic and social restructuring and the foreign immigration gains that have re-populated many cities and produced a revitalized urban culture in many parts of the country.

Plans for re-development of vacant land generally propose to re-urbanize in the traditional way, by re-creating population and building densities and by re-introducing residential, retail and commercial use. However, on the scale of abandonment that one finds in a city such as St. Louis, the very idea of urban form being defined by the *built* environment, an assumption of



Fig. 1. St. Louis dis-investment.

conventional ideas of the city, must be questioned. In most cases of de-urbanization, the natural environment has become the dominant element of the landscape, and traditional “urban” uses requiring strong population densities appear unrealistic and unsustainable on any significant scale. The work that I am presenting explores instead the design implications of a central city landscape defined by the natural environment and traditionally non-urban uses such as agriculture, recreation and conservation. This work can serve to develop planning policies and urban design strategies that exploit rather than conceal the scale of dis-investment and take advantage of this land for alternative uses. It also serves to refine the conceptual model of a metropolitan “landscape mosaic” that is gaining currency as an alternative to city/suburb dichotomies. This model has been convincingly articulated by Peter Rowe and Richard T. T. Forman in their publications, from both an architectural and landscape perspective.²

PRESENTATION OF RESEARCH AND STUDIO WORK

The first step in exploring the design implications of de-urbanization has been to undertake a better description of the de-urbanizing landscape and to gain a better understanding of the dis-investment process. Metaphors of war or biological decay are commonly used to refer to such areas but these mask a lack of knowledge about the inversion of the urbanization process that is taking place and reveal an implicit ideology of growth, as well as racial and cultural prejudice. This landscape offers formal, legal and environmental resistances that must be lucidly identified in order to posit a de-densifying urbanism that challenges the usual distribution of uses in metropolitan areas as well as scenarios of continuing growth. My students and I have begun to do this by undertaking a morphological analysis of de-urbanizing St. Louis, as well as categorizing ownership in these areas in order to identify the principle actors in this process.

At this time, we have mapped vacant properties in St. Louis proper, although de-urbanization has spread to the older, inner ring suburbs in the adjacent St. Louis County as well. Some of these properties still have buildings on them; most do not. We have worked at the scale of the city and the scale of the neighborhood, creating typologies of vacancy much as one might create typologies of buildings for urbanizing conditions. We have based our work on the tools and concepts of morphological research developed by the British geographer, M. R. G. Conzen,³ in which buildings, parcel, block and street are considered the constituent elements of city form and their various configurations categorized as "urban plan units." Using GIS and imaging software, we have worked with digitized aerial photography and city data sets to create maps in which we manipulate conventional figure ground representations to reveal the "figure" of de-urbanization, as well as the particular configuration of the various types of plan units that contain vacancy.

At the scale of the city, the maps force us to acknowledge the magnitude of disinvestments, their localization and their character of disinvestments. They reveal also the inadequacy of traditional population and activity density gradients that assume intensified use at the center of metropolitan areas, with densities decreasing toward the periphery. The maps also show that while there do exist some large patches of vacant, unbuilt land, for the most part the vacancy is of the scattered, "missing teeth" variety, with empty lots and empty buildings interspersed with occupied buildings. Across the city, blocks vary in vacancy from 10% to 90%, with the greater number of blocks showing 30-60% vacancy.

At the scale of the neighborhood, the maps clearly show the distribution, configuration, character and scale of the vacancy that exists. The maps also revealed that the degree of vacancy varies from street to street, rather than block to block. In a



Fig. 2. Aerial photo of St. Louis.

gridded city such as St. Louis, the impact of disinvestments has to be measured with spatial units whose boundaries are the alleys, rather than the streets. This is in contrast to the definition of the block generally used by designers and planners, which is a geographic unit bounded by streets on all sides. This shift in the definition of the block unit and therefore the unit of measurement, aligns the spatial count of vacancy with the experience of vacant block, which is defined by the perception of vacant parcels on either side of a street.

To the formal description we have begun to add information about property ownership and occupancy, which effectively introduces the actors of dis-investment into the description. This overcomes the sense of physical determinism that often results from a purely formal analysis, and ensures the introduction of individual or group agency in the description of the de-urbanization process. We will pursue this research in such a way as to establish correlations between ownership and



Fig. 3. St. Louis-block greater than 10% vacant removed.

vacancy, a potentially useful tool to target planning policy. At this time, only the publicly held land is clearly identified to planning professionals and the greater public. The other actors who have a stake in the development of this land are generally known only by hearsay or local lore. The intent of the research is to identify them by category in order to determine what stakes these actors have in the transformation of these environments, and thus how they might be mobilized in a possible scenario of change.

The morphological research has served as the foundation for the development of architectural and urban design studio design proposals for de-urbanizing neighborhoods by identifying potential sites of intervention, or non-intervention as the case may be, and clarifying their relationship to the larger urban system. The scale, configuration, localization and ownership of vacant parcels, built or unbuilt, suggest different scales of uses and redevelopment, as well as different programs. Two



Fig. 4. St. Louis-block greater than 30% vacant removed.

strategies were explored: a radical de-densification which proposes the return of urban land to nature through its conversion to recreational, agricultural or conservation use, and a more moderate decrease in density achieved by the development of low density residential landscapes that respond to a contemporary market demand usually accommodated in new suburban communities on the periphery.

In the first strategy, we identified edge condition in the patches or corridors of vacancy that suggested new relationships between natural and built elements, with natural elements dominating. We looked at the transformation of large patches of vacancy over time, with proposals for temporary or interim uses. Students proposed the creation of new agricultural or conservation uses, or developed the organization of residential neighborhoods around recreational areas, urban forests or green house districts, rather than the usual commercial town center.

In the second strategy, we explored what form a new "residential landscape" might take within the constraints of St. Louis's 19th century gridiron. In blocks with relatively low vacancy, infill strategies achieved lower densities by expanding lot sizes or appropriating adjacent parcels. In blocks with high vacancy

rates, re-platting strategies were developed in order to change the shape and size of the parcels and therefore the relationships of buildings to streets and to each other. This made it possible to introduce contemporary notions of privacy and community, as well as accommodating car traffic and garages. When groups of blocks in proximity offered high rates of vacancy, transformations of the matrix were explored in order to change the character of the urban system by changing the alignment of streets and shapes of blocks, offering patches of naturalistic development in the midst of the traditional grid-iron. In all cases, design strategies relied on the use of natural vegetation, water, soil conditions, and topography for the full realization of these new landscapes.

CONCLUSION

The work of mapping and categorizing the distribution of vacancy in the city of St. Louis is a first step in overcoming the pessimism that is generated by what is, for many people, the daily experience of boarded or gutted buildings, vacant lots, abandoned stores, and crumbling houses, even for those living in the more intact neighborhoods. It is a first step towards naming the dis-investment that is taking place, reaching beyond metaphors of decay and war rooted in passion and fear to a more lucid appraisal of the situation. While the population continues to drop in the city at large, despite the consolidation of a few upscale neighborhoods, certain streets in areas of substantial vacancy remain largely intact architecturally and socially. Communities continue to function, despite the poverty, lack of services and drug related violence that are concentrated in de-urbanizing neighborhoods. It is not clear what can or should be done beyond the provision of adequate social services given the scale of dis-investment. The reflexive desire of the remaining neighborhood groups, of the city and of urban design professionals who have been consulted is to recreate the original morphology, and re-populate the city at all costs. This position is untenable, given the extent of vacancy and the region's slow economic growth rate, and the continued shifting of capital to the very edge of the metropolitan area, which is

experiencing exponential growth, much as all peripheries are expanding throughout the country.

The research and design work presented allows for alternative scenarios to be explored. In the process, the case of St. Louis, which appears at first exceptional and extraordinary, takes on the character of an exemplary urban condition in which the extreme manifestation of what are generalized phenomena in American cities presents the opportunity for a re-conceptualizing of the metropolitan landscape. It allows us to posit, in a heightened way, a new distribution of landscape types. The result is a scrambling of categories in which urban, suburban and exurban notions lose their geographic specificity in a reconfigured urban landscape in which natural and built elements find themselves in unlikely and novel relationships.

NOTES

- ¹ Plattus, Alan. "Undercrowding and the American City: A Position Paper and a Proposal for Action." Unpublished. 1997
- ² Dramstad, Wenche E., James D. Olson, and Richard T. T. Forman. *Landscape Ecology Principles in Landscape Architecture and Land-Use Planning*. Washington, DC: Harvard University Graduate School of Design, Island Press and the American Society of Landscape Architects, 1996
- Rowe, Peter G. "Transformation of American Metropolitan Areas and Design in a Middle Landscape." Paper presented at the 3d Cornelis van Eesteren Lecture, Delft, The Netherlands 1994.
- ³ Conzen, M. R. G. *Alnwick, Northumberland: A Study in Town Planning Analysis*. Edited by The Institute of British Geographers, *Publication No. 27*. London: George Philip and Son, Ltd., 1960.

ADDITIONAL REFERENCES

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- Vernez-Moudon, Anne, and Paul Hess. "Emerging Neighborhood Centers in Suburban Puget Sound.", 1-37: University of Washington, 1997.