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# Place Vibrancy and Its Measurement: Construct Development, Scale Development, and Relationship to Tourism

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**TTRA 2017 Extended Abstract:**  
**Place Vibrancy and Its Measurement: Construct Development, Scale Development, and  
Relationship to Tourism**

### **Introduction**

Arts and culture (AC) serve multiple roles in society. While their expression reflects aesthetics, norms, values, and customs, they have also been used instrumentally in regional and urban planning contexts to promote economic development and community development. Over the last 10 to 15 years, the process of using AC to achieve community development goals has been labelled as creative placemaking. In general, creative placemaking seeks to change the physical and social fabric of places by using AC interventions through the cooperation of various actors.

Creative placemaking programmers originally considered the broad concepts of livability and vibrancy to the goals of the programs and started work on developing indicators to measure them. However, there was a backlash about their ontology, how they could be operationalized, and whether the concepts can serve as appropriate outcomes for creative placemaking efforts. Thought leaders in the field, including the originators of the creative placemaking term, considered the concepts to be too nebulous as endpoints. The grantmakers responded to the criticisms and stopped seeking overall indicators to measure responses to creative placemaking interventions. Even so, other researchers have begun to use place vibrancy as a variable in their studies, under varying definitions.

The topic of my dissertation has arisen as a response to the initial line of inquiry about using vibrancy as a measure of creative placemaking. I propose that place vibrancy is a construct that can be measured through a psychometric scale, and that it might serve as an indicator for economic development efforts, such as tourism. To go further, a place vibrancy scale could be a potential indicator for other revitalization efforts, such as mixed-use developments and traffic mitigation.

### **Literature Review**

Significant amounts of funding from governments and foundations are currently being spent on creative placemaking. Creative placemaking has been implemented as a government-led revitalization initiative, such as for Massachusetts' Gateway Cities program (Forman & Creighton, 2012). However, its implementation has been criticized as a way to raise property values, with little regard to its effects on gentrification, displacement, and social equity (Stern & Seifert, 1998), while primarily benefitting affluent and educated white people (Chapple & Jackson, 2010; Zukin, 1982). Creative placemaking efforts have also been said to have "fuzzy" or nebulous outcomes (Nicodemus, 2013), with limited empirical research showing its effectiveness on specific outcomes (Markusen, 2014).

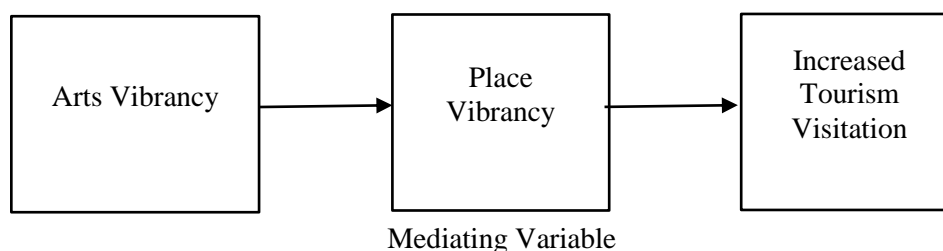
Nevertheless, there is growing evidence of a causal link between AC and economic growth (Pedroni & Sheppard, 2013). The creation of cultural districts has a positive effect on neighborhood revitalization (Grodach, 2011; Grodach, Foster, & James, 2012; Noonan, 2013; Silver & Miller, 2013; Stern & Seifert, 1998, 2007; Woronkowicz, 2015). Cultural districts are specified zones in urban or semi-urban areas that have collected a constellation of resident cultural activities that are promoted for bringing tourists and other commercial activity into an area. Neighborhoods in cultural districts that have increased participation in the arts report higher incomes (Noonan, 2013; Stern & Seifert, 1998), property values (Noonan, 2013; Stern & Seifert,

2010), and decreased poverty (Noonan, 2013; Silver & Miller, 2013; Stern & Seifert, 2010). Yet, there has been a call for more longitudinal studies to study their effects on economic regeneration (Markusen & Gadwa, 2010; Markusen, Nicodemus, & Barbour, 2013) and to disentangle the roles played by various arts and cultural activities (Woronkowitz, 2015).

The two largest creative placemaking funders in the US have attempted to build indicators to measure the effects of creative placemaking: The National Endowment of the Arts (NEA's) Our Town program developed a set of livability indicators, and ArtPlace America, a consortium of foundations, banks, and government agencies, created vibrancy indicators (Esarey, 2014). Other researchers have used the construct of vibrancy in their studies. Merlino (2014), uses an architectural approach, concluding that finer grain blocks, which are smaller and have a variety of buildings, lead to more pedestrian activity, a characteristic the author proposes is equivalent to urban vibrancy. This study supported Jane Jacobs' theory that texture and age is needed in our cities for vibrancy, but the definition for vibrancy was not grounded beyond Jacobs' theory. Other studies use variables such as the share of downtown residents who are college graduates, the crime rate, the number of cultural establishments, and the share of MSA's jobs and population growth downtown as proxies for urban vibrancy (Gross & Campbell, 2015; Holian & Kahn, 2012). Forsythe (2014) conceptualizes using new technology, such as building information modeling (BIM), geographic information systems (GIS), and global positioning systems (GPS) to track human usage, a proxy for urban vibrancy, but does not define what urban vibrancy is. Yue et al. (2016) uses the point of interest (POI) activity of cell phone usage as another proxy for vibrancy, relying on Jacobs' (1961) and Montgomery's (1998) contention that vibrancy is related to the number of people on the street. Dougal, Parsons, and Titman (2015) use fluctuations in the dominant industry of an area as an indicator for local vibrancy in their study of urban vibrancy and corporate growth. Braun and Malizia (2015) create a vibrancy index based on urban form and spatial features that was based on the built environment factors influencing travel determined by Ewing and Cervero (2010), which included compactness/density, destination accessibility, local connectivity, and mixed land use.

This dissertation proposes a new method for measuring place vibrancy: using construct development to develop a scale to measure subjective perceptions about place. Construct development is often used to measure conceptual variables by linking them with variables that are more readily operationalized. The hypothesis is that AC activity leads to the creation of an arts scene, which then leads to increased tourism visitation, and that this effect is mediated by place vibrancy (Figure 1).

**Figure 1. Theoretical framework**



## **Methodology**

To detect a relationship between the presence of the arts and economic revitalization, there needs to be a valid way to measure the degree of arts activity in a place. We use the Arts Vibrancy Index (AVI) developed by the National Center for Arts Research (NCAR) at Southern Methodist University to provide a composite score of arts providers (artists, arts orgs, etc), arts dollars (program revenue, expenses. etc.), and government support (state and federal dollars and grants).

This dissertation consists of three studies that will 1) define place vibrancy as a construct after review of a sample of planning literature, 2) the develop and validate a scale to measure that construct, and 3) test the relationship of place vibrancy to arts vibrancy and tourism visitation through a multiple regression analysis (Part 1), and a scenario-based, randomized experiment, with three scenarios representing three levels of place vibrancy serving as the treatment variable, and desire to visit a place serving as the dependent variable (Part 2).

## **Preliminary Results**

The preliminary results for the first two papers are presented here.

### Paper 1

The main themes of vibrant places derived from a sample of planning literature are activity, atmosphere, social capital, creativity, diversity, economic activity, and well-being. Past creative placemaking indicator efforts touch on most of these themes.

### Paper 2

A draft scale has been developed to measure the subjective vibrancy of a place. Items will be scored on a 5-point interval Likert scale. The subdomains include pedestrian activity, atmosphere, social capital, creativity, economic activity, presence of gathering places, built environment characteristics, and sense of well-being. There are three items per subdomain, and each sub-domain has one reverse-worded item. There is a question to test the internal validity of the scale (“Is your town vibrant?”). The scale has been pretested, and some items have been modified.

## **Conclusion and Discussion**

Grant funders have experimented with using global indicators to assess whether arts project interventions have an overall effect in revitalizing communities. At least in the case of two major grant funding programs in the US, the indicators have proven to be unsatisfactory and have been abandoned. These false starts have opened the door to basic research questions surrounding quest for developing a universal measure of a place’s vibrancy and that might indeed measure the effect of creative placemaking interventions. Other researchers have been pressing ahead with research using proxies for place vibrancy, with varying levels of theoretical grounding. For this dissertation, we offer a novel approach to measure the construct of place vibrancy through a psychometric scale, which could potentially serve as a tool for measuring other revitalization efforts beyond creative placemaking.

## **References**

Braun, L. M., & Malizia, E. (2015). Downtown vibrancy influences public health and safety outcomes in urban counties. *Journal of Transport and Health*, 2(4), 540–548.

<https://doi.org/10.1016/j.jth.2015.08.005>

- Chapple, K., & Jackson, S. (2010). Commentary: Arts, neighborhoods, and social practices: Towards an integrated epistemology of community arts. *Journal of Planning Education and Research*, 29(4), 478–490. <https://doi.org/10.1177/0739456X10363802>
- Dougal, C., Parsons, C. A., & Titman, S. (2015). Urban vibrancy and corporate growth. *Journal of Finance*, 70(1), 163–210. <https://doi.org/10.1111/jofi.12215>
- Esarey, K. (2014). *Validating livability and vibrancy: an examination of the use of indicators in creative placemaking*. Retrieved from [http://rave.ohiolink.edu/etdc/view?acc\\_num=ucin1397235448](http://rave.ohiolink.edu/etdc/view?acc_num=ucin1397235448)
- Ewing, R., & Cervero, R. (2010). Travel and the built environment. *Journal of the American Planning Association*, 76(3), 265–294. <https://doi.org/10.1080/01944361003766766>
- Forman, B., & Creighton, T. (2012). *Building vibrancy: Creative placemaking strategies for Gateway City growth and renewal*.
- Forsythe, P. J. (2014). In pursuit of value on large public projects using “spatially related value-metrics” and “virtually integrated precinct information modeling.” *Procedia - Social and Behavioral Sciences*, 119, 124–133. <https://doi.org/10.1016/j.sbspro.2014.03.016>
- Grodach, C. (2011). Art spaces in community and economic development: Connections to neighborhoods, artists, and the cultural economy. *Journal of Planning Education and Research*, 31, 74–85. <https://doi.org/10.1177/0739456X10391668>
- Grodach, C., Foster, N., & James, M. (2012). Gentrification and the artistic dividend: The role of the arts in neighborhood change, (January 2015), 1–40. <https://doi.org/10.1080/01944363.2014.928584>
- Gross, S., & Campbell, N. (2015). Central city vibrancy and new business venturing. *Journal of Entrepreneurship and Public Policy*, 4(2), 257–271. <https://doi.org/10.1108/JEPP-01-2014-0002>
- Holian, M. J., & Kahn, M. E. (2012). *The impact of center city economic and cultural vibrancy on greenhouse gas emissions from transportation*.
- Jacobs, J. (1961). *The death and life of great American cities*. New York: Vintage. <https://doi.org/10.1007/s13398-014-0173-7.2>
- Markusen, A. (2014). Creative cities: A 10-year research agenda. *Journal of Urban Affairs*, 36(S2), 567–589. <https://doi.org/10.1111/juaf.12146>
- Markusen, A., & Gadwa, A. (2010). Arts and culture in urban or regional planning: A review and research agenda. *Journal of Planning Education and Research*, 29(3), 379–391. <https://doi.org/10.1177/0739456X09354380>
- Markusen, A., Nicodemus, A. G., & Barbour, E. (2013). The arts, consumption and innovation in regional development. In *Creative Communities: Art Works in Economic Development* (pp. 36–59).
- Merlino, K. R. (2014). Urban grain and the vibrancy of older neighborhoods: metrics and measures. In *Considering research: Reflecting upon current themes in architecture Research* (pp. 477–488). Architectural Research Centers Consortium.

- Montgomery, J. (1998). Making a city: Urbanity, vitality and urban design. *Journal of Urban Design*, 3(1), 93–116. <https://doi.org/10.1080/13574809808724418>
- Nicodemus, A. G. (2013). Fuzzy vibrancy: Creative placemaking as ascendant US cultural policy. *Cultural Trends*, 22(3–4), 213–222. <https://doi.org/10.1080/09548963.2013.817653>
- Noonan, D. S. (2013). How US cultural districts reshape neighbourhoods. *Cultural Trends*, 22(3), 203–212. <https://doi.org/10.1080/09548963.2013.817652>
- Pedroni, P., & Sheppard, S. (2013). *Culture shocks and consequences: The causal link between the arts and economic growth*. Retrieved from <https://www.arts.gov/sites/default/files/Research-Art-Works-Williams1.pdf><https://www.arts.gov/sites/default/files/Research-Art-Works-Williams1.pdf>
- Silver, D., & Miller, D. (2013). Contextualizing the artistic dividend. *Journal of Urban Affairs*, 35(5), 591–606. <https://doi.org/10.1111/j.1467-9906.2012.00642.x>
- Stern, M. J., & Seifert, S. C. (1998). *Community revitalization and the arts in Philadelphia* (No. Working Paper #8).
- Stern, M. J., & Seifert, S. C. (2007). *Cultivating “natural” cultural districts*. *Creativity and Change*.
- Stern, M. J., & Seifert, S. C. (2010). Cultural clusters: The implications of cultural assets agglomeration for neighborhood revitalization. *Journal of Planning Education and Research*, 29(3), 262–279. <https://doi.org/10.1177/0739456X09358555>
- Woronkowicz, J. (2015). Art-making or place-making? The relationship between open-air performance venues and neighborhood change. *Journal of Planning Education and Research*, 36(1), 49–59. <https://doi.org/10.1177/0739456X15597759>
- Yue, Y., Zhuang, Y., Yeh, A. G. O., Xie, J.-Y., Ma, C.-L., & Li, Q.-Q. (2016). Measurements of POI-based mixed use and their relationships with neighbourhood vibrancy. *International Journal of Geographical Information Science*, 1–18. <https://doi.org/10.1080/13658816.2016.1220561>
- Zukin, S. (1982). *Loft living: culture and capital in urban change*. Rutgers University Press.