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**Towards
a Circular
Regenerative
Urban Model**



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Massimo Clemente

VIBRANT PLACES: CLARIFYING THE TERMINOLOGY OF URBANISM IN THE U.S. CONTEXT*Emil Malizia***Abstract**

The preferred development outcomes of smart growth, New Urbanism, transit-oriented development, traditional neighborhood/green development, active design and walkable urbanism may be called vibrant places which are compact, connected, mixed use, walkable and transit oriented. Vibrant places can be either vibrant centers or vibrant communities depending on the predominance of work space in the former or residential neighborhoods in the latter. Together vibrant centers and communities offer an alternative regional spatial structure of transit-connected nodal development. The metro region would consist of transit-oriented vibrant centers in an approximate rank-size distribution and vibrant communities located around urban core centers and suburban town centers. This regional spatial structure would support the emerging knowledge-based economy in the U.S., reduce vehicle miles traveled, promote public health, use public infrastructure more efficiently and consume much less land.

Keywords: vibrant places, smart growth, regional development

LUOGHI PIENI DI VITALITÀ: CHIARIRE LA TERMINOLOGIA DELL'URBANISTICA NEL CONTESTO STATUNITENSE**Sommario**

I risultati principali della “crescita intelligente”, la Nuova Urbanistica, lo sviluppo incentrato sul trasporto, lo sviluppo dei quartieri tradizionali e verdi, il progetto attivo e l'urbanistica a “misura di pedone” possono essere definiti luoghi vitali, compatti, connessi, ad uso misto, percorribili a piedi ed incentrati sul trasporto. I luoghi vitali possono essere anche centri vitali o comunità vitali che dipendono rispettivamente dalla prevalenza degli spazi dedicati al lavoro e dei quartieri residenziali. Insieme, centri e comunità vitali offrono una struttura spaziale regionale alternativa di sviluppo reticolare. La regione metropolitana sarà caratterizzata da centri vitali connessi al trasporto in una distribuzione basata sulla dimensione, dalle comunità vitali localizzate intorno ai centri urbani principali ed agli agglomerati suburbani. Questa struttura spaziale regionale, negli Stati Uniti, sarà di supporto alla nuova economia della conoscenza, riducendo le distanze, promuovendo la salute pubblica, utilizzando le infrastrutture in modo più efficiente e con minore consumo di suolo.

Parole chiave: luoghi vitali, crescita intelligente, sviluppo territoriale

1. Introduction

The era of suburbanization which began after WWII in the U.S. may be coming to an end. During this time period, the lion's share of development was captured outside core urban areas. Metro regions served as the basic functional units of the economy, automobiles became the dominant mode of transportation, central cities declined, and growth continued to move outward consuming large amounts of peripheral land. The typical spatial structure of U.S. metro areas was formed by radial and circumferential interstate highways, large areas devoted to single-use residential development, and commercial development oriented to highway interchanges whether as suburban office parks, regional shopping malls, industrial zones or institutional campuses.

Although trends since the new millennium have been clouded in the U.S. by two recessions, terrorism, continuing wars, and dysfunctional state and federal governance, the economic basis for regional competitive advantage in the U.S. appears to be changing. To oversimplify, the U.S. economy of the early 20th century made things in factories located in cities. The post-WWII economy was dominated by large corporations and commercial anchors occupying facilities in suburban areas. The new U.S. economy is increasingly knowledge based and entrepreneurial, consisting of industries providing professional, information, health and business services. Research functions as the basic resource that entrepreneurs transform through innovation into new enterprises (Murphy, 2011). The city is again the "petri dish" that best cultivates both economic opportunity and economic development (Glaeser, 2011). More precisely, metro areas of different sizes and viable urban places within them are the spawning grounds for economic growth and development.

2. A short history of place making

Criticisms of the low-density, auto-oriented suburban model in the U.S. which was labeled "sprawl" development began long ago (Jackson, 1985). The *Charter for New Urbanism* was posed as an alternative way to develop, one that was much more socially beneficial, environmentally compatible and equitable (Calthorpe and Fuller, 2001). Smart growth, transit oriented development, traditional neighborhood/green development and active design promote similar ideas about development (Ewing *et al.*, 2011). Compact, mixed-use, walkable places were discussed, designed and at times developed. Compact means higher net densities. The mix of land uses brings diversity of activities. Density and diversity make walking attractive, and the walking experience engenders meaning and social attachment to place. These ideas have been applied internationally, for example, in Great Britain (Adams and Tiesdell, 2013), in China (Song and Ding, 2009; Song *et al.*, 2012) and in many other countries (see Global Urban Development network).

The growing interest in developing compact, mixed-use, walkable places has been spurred by the interaction between the evolving knowledge-based economy and demographic changes in the U.S. People in their 20s and 30s appear to prefer to live in cities rather than in suburbs. Employers and entrepreneurs who want to succeed in the knowledge economy need to attract and retain talent. Therefore, they increasingly prefer space in places where their employees can work and play and possibly, work, play, live, shop and learn. In such places, employers benefit from employees who work longer and sometimes smarter, quit less frequently, and, at times, are more innovative (Acs, 2006; EPA, 2012; Florida, 2010).

Although the principles of smart growth and New Urbanism address the region, city and neighborhood scales, most attention has been focused on neighborhoods, villages and town

centers (Bohl, 2002). To reduce auto dependence and encourage more desirable forms of regional and project-level development, Ewing and Cervero (2010) have advocated “five Ds” – density, diversity, design, destination accessibility and distance to transit. Real estate developers in the U.S. have become less interested in single-use projects and have begun to embrace projects that are mixed-use (more than one use in one building) and multi-use (different uses in close proximity) (DeLisle and Grissom, 2013).

Leinberger (2008) addresses these principles with the concept of “walkable urbanism” posed as a more viable alternative than drivable suburban. He presents five scales of region-serving walkable places: downtown, nearby urban, suburban town, suburban redevelopment and greenfield town and provides examples for 30 large U.S. metro areas (Leinberger, 2007).

Peter Calthorpe, one of the founders of New Urbanism, reemphasizes the importance of the regional scale from the economic, ecological and social capital perspectives. He approaches the region as a collection of connected neighborhoods (Calthorpe and Fuller, 2001). Leinberger (2008) provides a more useful framework by distinguishing region-serving centers from areas that are primarily residential. Although his distinction is helpful, the existence of mixed-use or multi-use in all places has generally obscured the need to define more carefully the different functions of compact, walkable transit-oriented places within the metro region.

3. Clarifying the terms

I propose the term “vibrant place” to capture the intended outcomes of compact, mixed-use walkable places. Vibrant places afford social interaction, communication, physical activity, meaning/identity, learning, chance meetings as well as rest and contemplation. Vibrant places include public parks and civic facilities and spaces as well as housing and commercial space. The specific attributes of vibrant places have been described in considerable detail (Crankshaw, 2009; EPA, 2012; Haughey, 2008; Kapp and Malizia, 2013; Paumier, 2004).

Vibrant places serve two basic functions. They are either primarily places of employment or primarily places of residence. I define “vibrant centers” as employment oriented places that also contain housing. This definition is less vague than Leinberger’s regional centers. I define “vibrant communities” as collections of residential neighborhoods that also contain employment. This definition is clearer than Calthorpe’s discussion of neighborhood aggregation in the regional context.

Most employment in vibrant centers is exporting services and goods from the region. Employment in vibrant communities is primarily providing local goods and services including public services to households. Local services are also provided to employers located in both types of places. Households living in vibrant centers often work there. Most households live in vibrant communities and need to commute to jobs in vibrant centers.

Case studies of compact vibrant places provide rich examples of walkable alternatives to sprawl development. For example, Campoli (2012) presents twelve case studies of vibrant walkable places within the following urban areas: Denver, Miami, Pasadena, Albuquerque, Toronto, Brooklyn, San Diego, Vancouver, Columbus, Ohio, Alexandria, Virginia, Portland, Oregon and Cambridge, Massachusetts.

Vibrant centers and communities can be better understood and analyzed with measurable indicators of their features. The following metrics help clarify them:

- compact/dense development: floor-area ratio, jobs per acre, households per acre;
 - mixed use/multi use: two or more uses in each building, different land uses in close proximity, public and civic spaces, portion of employees also living nearby;
 - walkable: design elements including intersection density, average block size, street pattern, safety features;
 - destinations: Walkscore and Bikescore (distances to frequently visited destinations);
 - transit-oriented: distance to public transit, quality/frequency of transit services;
 - parking: maximum amount instead of minimum amount, decks instead of surface lots.
- These metrics can be used to estimate the levels of vibrancy in different places.

4. The metro context

Once vibrant places are distinguished as either vibrant centers or vibrant communities, the conceptual challenge is to organize them in space in order to understand more fully the potential of vibrant places. A hypothetical metro spatial structure would consist of nodes of urban development, each representing a vibrant center. All vibrant centers would be connected by transit (heavy rail, light rail or bus rapid transit). Vibrant communities would be located around vibrant centers.

Depending on the population size of the metro area, we can envision one central business district, one or more urban/industrial center, and two or more town centers, each one accommodating the export sector, households and local services. The size of these vibrant centers could approximate a rank-size distribution. Primarily residential vibrant communities would contain the lion's share of metro households and the related household-serving employment. Like vibrant centers, vibrant communities could populate 3-4 density categories recognizing that households trade off space and access differently. Access-oriented households would seek core areas whereas space-oriented households would prefer suburban areas.

Well-established planning principles would come into play to shape "hypo region." With gross floor-area ratios no greater than 2.0, vibrant centers would create sufficient demand to support rail transit, either light rail or heavy rail depending on population size and the number of places. Vibrant centers and vibrant communities would be arrayed in corridors that achieve an attractive balance between jobs and households. Such development would clearly use public infrastructure very efficiently and result in places with relatively small carbon footprints. But perhaps the most impressive result is the relatively small amount of land needed to accommodate the population. The connection between greater density and more open space is logical and obvious; however, most Americans oppose denser development without recognizing that low-density development is the true enemy of open space preservation. Hypo region would convincingly demonstrate that greater density is the best way to preserve open space. For example, a U.S. metro region with 1.5 million people that had consumed over 700 square miles (over 1,800 square kilometers) of land by the year 2000 would have needed only 218 square miles (565 square kilometers) to form a region of six vibrant centers and 34 vibrant communities (Malizia and Song, 2014).

Vibrant places that serve as alternatives to low-density, decentralized development still need to accommodate automobiles. Ones owned by households in vibrant communities could be stored on individual lots. Autos owned by households living in vibrant centers would need to utilize structured parking (decks). Structured parking would also store autos required for the business and civic activities conducted in vibrant centers.

Households would use automobiles for trips between vibrant centers, from vibrant communities to vibrant centers or to travel to and from the region. Arterial roads and related infrastructure would be required but far less than with low-density suburban development. Local streets in a grid pattern would be “complete streets” that also served pedestrians, bicyclists and bus riders. About 30% of the land in vibrant places would be allocated to support local trips.

Compact nodal development connected by rapid transit would enable many workers to commute by train and walk, bike or bus from origins or to destinations. With these transportation options, auto ownership of about one per household would be adequate instead of more than two per household which is the current level in the U.S. (Malizia and Song, 2014).

Although this hypothetical metro structure is primarily designed to support higher productivity in the emerging knowledge-based economy, the collateral benefits would be legion. The most important include smaller carbon footprint/less greenhouse gas emissions, much more open and undisturbed land, greater public health benefits from more physical activity/less obesity, less new urban infrastructure, better use of existing infrastructure, higher levels of safety and security, and potentially greater creativity and social cohesion.

5. Conclusion

This article presents a clear and simple way to describe the preferred development outcomes of smart growth, New Urbanism, transit-oriented development, traditional neighborhood/green development, active design and walkable urbanism: vibrant places. It distinguishes two different types of vibrant place depending on the predominance of work space or living space: vibrant centers or vibrant communities. The metro region could consist of vibrant centers of different size: the central business district, urban/industrial centers or town centers, and vibrant communities located around the urban core centers and suburban town centers. This regional spatial structure favors non-auto transportation within and between vibrant places. Together vibrant centers and communities offer an alternative regional spatial structure of nodal development connected with rapid transit that is sustainable from the economic development, social and environmental perspectives.

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