THE IMPORTANCE OF GLOBAL NETWORKS FOR CITY BRANDING STRATEGIES BASED ON CULTURAL ASSESTS: THE BILBAO CASE.

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ABSTRACT

The Guggenheim Museum Bilbao (1997) opened around the same time as the Internet boom. The heightened use of New Media more than likely leveraged it an additional advantage in the form of more rapid information publication, attracting a large number of foreign vision. Working under the assumption that effective cultural brands can heighten place visibility and generates economic activity, we ask: (1) How effective is the Guggenheim Museum Bilbao in fuelling digital association? (2) Does the online networking density impact the city branding power? The paper introduces into the general research field of digital-network-driven place branding and the condition of effective cultural- driven city- branding management.

Keywords: Destination Branding, Online news, Cultural industries.

INTRODUCTION

Can a cultural facility become an effective branding engine? Can a cultural facility become a networking engine? Which is the influence of new media on city branding? Can a cultural facility reposition a city? Which is the impact of a cultural facility on city attractiveness?

Places increasingly perceive branding as a powerful tool that helps them to increase tourism arrivals, attract investment and film relocation, and enlarge their cultural presence (Kotler et al 1999). Place branding is on the increase, both as instrumental to foster local development and as element of wider tourism and business marketing strategies. However, destination management and strategic monitoring still face many operative hurdles to become an effective strategic instrument of local development. In line with more wide-spread product branding, one of the most difficult tasks is the measurement and monitoring of branding networks.

City- Image- makers continue to draw upon cultural policies in order to diversify economies and generate urbanity. Cultural facilities, such as art museums, housed in architecturally iconic structures can amplify cities visibility and increase the attractiveness of a place. In some cases, such as the Guggenheim Museum in Bilbao, Iconic art museum have aided in repositioning post- industrial economies.

The Guggenheim Museum Bilbao (1997) opened around the same time as the Internet boom. The heightened use of New Media more than likely leveraged it an additional advantage in the form of more rapid information publication, attracting a large number of foreign visitors. The Guggenheim Museum Bilbao became an icon because new media made it an icon. The Guggenheim Bilbao is a giant sculpture with a titanium coating, which makes it look enigmatic, different depending on the time and light of the day or night. The Guggenheim Museum is to Bilbao as the Sydney Opera house is to Sydney.

Working under the assumption that effective cultural brands can heighten place visibility and generate economic activity, we ask:

(1) How effective is the Guggenheim Museum Bilbao in connecting Bilbao with global networks?

(2) How effective are these connections with the global networks in repositioning Bilbao? Do world-class brand connections function as city branding engines?

The paper introduces into the general research field of digital-network-driven place branding and the conditions of effective brand management, with a specific review of the so-called culture-driven city branding.

PLACE BRANDING AND MANAGEMENT

Place marketing is currently seen as one of the crucial elements of place development. Within the general framework of place marketing, the branding of places, cities or countries is one crucial instrument to increase internal and external attractiveness within a framework of global competition. Many authors (e.g. Ashworth 2009, Kavaratzis and Asworth 2005, Kotler et al 1999, Kotler and Gertner 2002, Kotler 2009, Plke 2002 and 2009, Rainisto 2003) have emphasised the importance of branding as a marketing strategy applied to places, highlighting at the same time the difficulties to influence and manage effectively the process from the inside.

Although place marketing is a quite old process, during the last two decades strategic branding strategies are on the rise. This is partly due to a fiercer competition at global level, but also due to higher accessibility, increased traffic of people, goods and information and more equal localisation conditions for business. In this sense, the common targets for place marketing strategies are business visitors and tourists, residents and (qualified) employees, firms and industry investment, export markets (Kotler et al 1999).

Effective place or destination branding requires strategic and operational ability and skills. Place branding requires the generation of brand equity, including a brand identity and a brand image, awareness and the correct communication of the intended image (Rainisto, 2003).

Place branding strategies are predominantly based on one or several of the following five anchor factors (Ashworth 2009 and Plaza, Haarich and Waldron 2013):

- Personality association (Don Quijote and Castilla-LaMancha (Spain), Mozart and Salzburg, Beatles and Liverpool)
- Signature and flagship building (this includes the Opera House in Sydney and the Guggenheim Museum Bilbao, but in a wider sense, also the Egyptian Pyramids or the Pisa tower)
- Event hallmarking (sport or cultural events like the Olympic Games or the European Capital of Culture)
- Local Products and Specialties (Bordeaux and Wine, Gouda and Cheese, Parma and Ham)
- High-impact and large transport, research and knowledge infrastructure (MIT and Boston, CERN and Geneva, Trans Siberian Railway and Russia).

They are used and applied in various combinations in diverse places, trying to find the right balance between traditional value branding and modern, up-to-date branding.

Many places are associated by many people or the general public to a specific individual personality. Indirectly, mostly, the triggers of association are artists (musicians, composers, visual artists, writers), but also philosophers or natural scientists, politicians, statesman or other figures. The association of places can establish a link to historic celebrities or to contemporary individuals or groups, but even to fictive personalities (Sherlock Holmes, James Bond) or even to specific art-works (David by Michelangelo, Guernica by Picasso) or events[1] (Woodstock, Bayreuth). In this case, places can adopt fictive characteristics, melt with other images of their fictional frameworks (Harry Potter's Durham) or adopt the image of their real counterparts, like the landscape of New Zealand as Middle Earth in the "Lord of the Rings" (Plaza, Haarich and Waldron 2013). As mentioned by Ashworth (2009), or course not all associations are positive or even desired by the affected cities or regions. If there is a positive association, many local or regional authorities -- although not all -- have developed a specific place branding. This process has increased with the mushrooming of city marketing agencies and other related entities. In specific strategies, "*places associate themselves with a named individual i the hope that the necessarily unique qualities of the individual are transferred by association to the place*". (Ashworth 2009: 11).

However, there are still many places without a specific place branding strategy. In numerous cases, places are associated by the general public or by specific interest groups without a specific strategy channeling or multiplying potential positive effects on the place, like the attraction of tourism and visitors, increased exports, or the attraction of talent, skilled workers or new residents. This is probably related to the difficulties to manage, monitor and measure place branding strategies to obtain strategic knowledge. Nevertheless, even without a fully-fledged strategy, effects of cultural branding on local and regional level might be observed and measured in specific cases.

RESEARCH QUESTIONS

"The Guggenheim Museum has put Bilbao on the map." This metaphor has been applied numerous times to describe the process of physical and economic regeneration which took place in Bilbao in the 1990s and made the medium-sized city at the Spanish Atlantic, if not famous so at least popular among experts in museum management, urban renewal, and contemporary architecture. But, how exactly can the process of "putting Bilbao on the map" be described?

The aim of this paper is to verify the co-citations on the Internet using Google News for the case of Bilbao. The key questions are the following:

- How does cultural-brand distinctiveness intersect with city branding?
- Do cultural place-brands operate through international branding circuits?
- Does the networking density impact the branding power?
- How effective is the Guggenheim Museum Bilbao in fuelling digital association growth?
- How effective is the Guggenheim Museum Bilbao in connecting Bilbao with top tier (world-class) cultural assets on the Internet?
- How effective is the Guggenheim Museum Bilbao in repositioning Bilbao in the online press?

1 Here, we mean event that were not created as part of a place marketing strategy or, at least, only to a minor degree related to commercial or economic interest.

METHODOLOGY

This work presents an experiment done with the news items that Google News offers for the city of Bilbao; about the number of news items on the 'Guggenheim Museum Bilbao'. In other words, it investigates the branding of the city of Bilbao as a result of the Guggenheim Museum using data from Google News. The importance of this paper is the experiment done with Google News and the subsequent quantification of the connections of the city of Bilbao with global networks.

This paper addresses the questions by Social Network Analysis of Google News data. Google News allows users to construct keyword matrixes, which when transformed can be analyzed with Social Network Analysis programs. In order to analyse the complexity of the culture-led branding network and the relationship between its actors, the following three indicators were initially used: Degree Centrality, Betweenness Centrality and Closeness Centrality (cfr. Annex). Network graphs and network topology analysis are also employed in order to visualize the evolution of the culture-led city branding process (cfr Table 1). For this purpose, UCINET software and NETWORK WORKBENCH are made use of.

Table 1: SNA main concepts

Vertex	Node, Point, here: conceptual term as appearing in news articles and publications
Edge	Link, tie, connection, here: common event between two terms as there appear together in the same news article.
Density	Network Measure: Density is the number of lines in a simple network, expressed as a proportion of the maximum possible number of lines.
Degree Centrality	Prestige indicator: The degree of a vertex is the number of lines incident with it.
Betweenness Centrality	Control indicator: The betweenness centrality of a vertex is the proportion of all geodesics between pairs of other vertices that include this vertex.
Closeness Centrality	Brokerage indicator. The closeness centrality of a vertex is the number of other vertices divided by the sum of all distances between the vertex and all others.
Geodesic	A geodesic is the shortest path between two vertices.
Distance	The distance from vertex u to vertex v is the length of the geodesic from u to v.

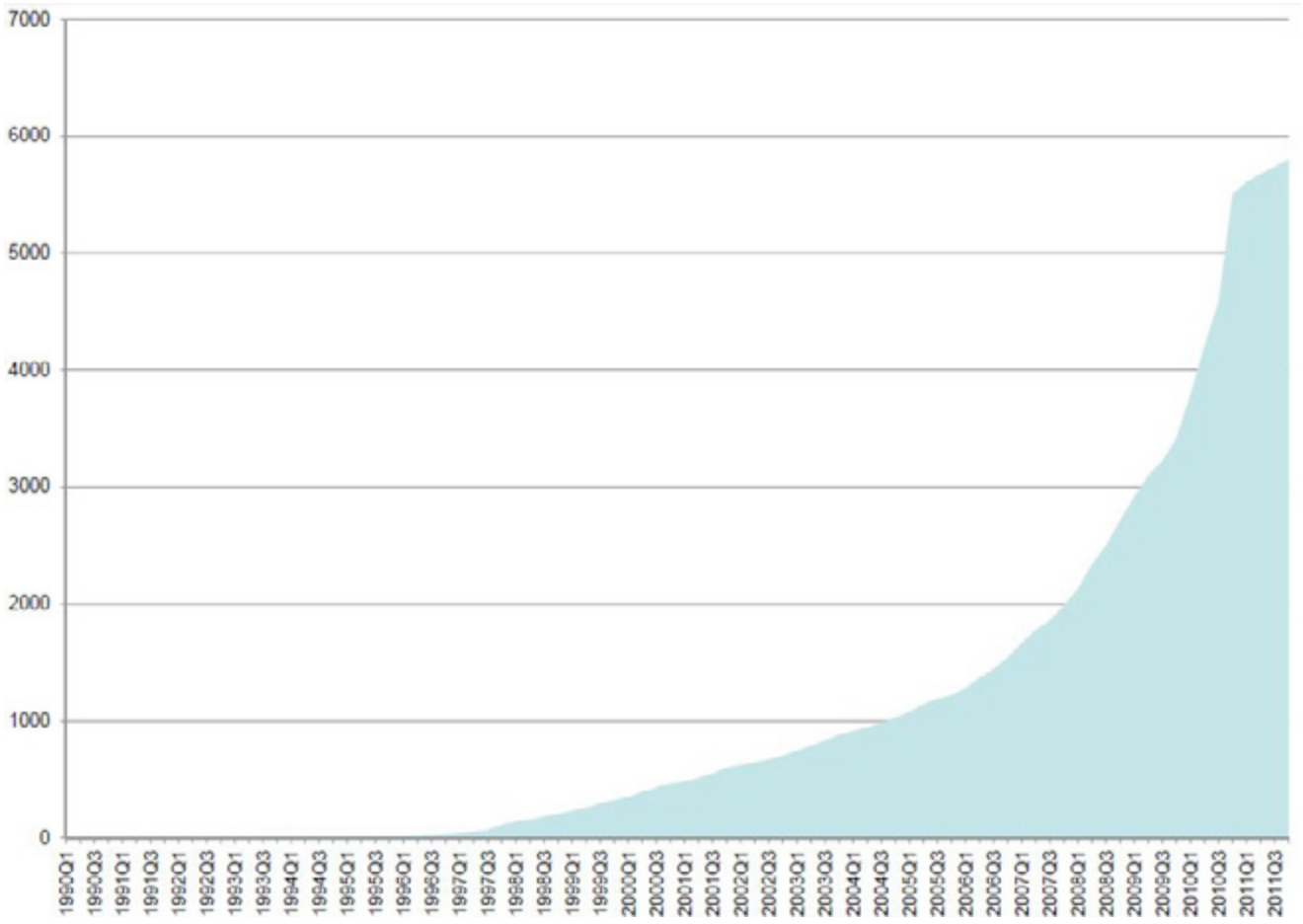
Source: de Nooy, W. et al. 2005.

The research is based on approaches and tools applied in social network analysis (Freeman 2004). THe analysis focuses on the comparison of the Bilbao network in three different time periods: 1991-1995, 1999-2004 and 2007-2011. In order to compare the networks we selected 7 brand circuits of key terms, mostly related to the Guggenheim Museum Bilbao (GMB): the Guggenheim Network Museums, GMB trustees, GMB artists, Frank Gehry's masterpieces, signature architects, high cuisine chefs, museum related to urban renewal, or franchise museums. As mentioned before, the database was created recording the number of keyword hits of each term and each co-citation of terms in Google News for the periods 1991-1995, 1999-2004 and 2007-2011. Launched in 2002, Google News is an automated news aggregator provided by Google Inc. Google News provides tailored searching. Google News Advanced Search offers users date restriction enhancement, which restricts the search to a specific date range.

ANALYSIS AND FINDINGS

At this point, it is also worth mentioning the power of specialized circuits (Sassen 2002) in building value and reducing the high risks associated with culture-led branding. As Currid and Williams (2009) point out, the need to sell to a market characterized by unpredictable demand dictates much of the media's content. Thus, the more connections an iconic museum makes to other images, the more likely the media will document it. In this way, tapping into global brand circuits oils the branch channels that drive competitive image distribution (Plaza, Haarich and Waldron 2012). THe Guggenheim Museum and Bilbao are links in many different circuits: worldwide Guggenheim Museums; worldwide Frank Gehry designs; urban planners (the Norman Foster metro and the Santiago Calatrava bridge); post-industrial cities, etc. When the media publicizes one of these topics, it is likely the GMB (and in turn, the city of Bilbao) will also be mentioned. Connections begin to build, setting off the process of image accumulation (Figure 1). Museum franchises and architecture companies form global networks and share economic and political interests (Sklair 2005). Thus, these connections form naturally.

Figure 1. News items on the Guggenheim Museum Bilbao (accumulated)



Cities and regions usually form part of networks and partnerships, on the one hand in formal relationships and mostly with other cities (as in the case of twin cities or thematic city networks), or in informal or irregular interactions through specific infrastructures, events, organizations, people who connect the city to other cities with similar interests or features.

Today, Bilbao is inserted, like other cities, in numerous international networks. However, the case of Bilbao, as a second-tier city, differs from other cities of similar features, especially since the Guggenheim Museum Bilbao entered as a new agent and acted as a broker for new connections and partnerships.

Seven networks were identified and selected for the in-depth analysis. The circuits are mostly related to the Guggenheim Museum in Bilbao through organizational, institutional and corporative connections from the GMB to other actors ("Guggenheim Museums", "GMB trustees", "GMB artists", "Frank Gehry masterpieces"). In addition, other actors related to exceptional features of Bilbao in the national and international contexts, such as "starchitects", "high cuisine chefs" or "museums related to urban renewal" or "franchise museums" were analyzed. The networks to be analyzed were selected based on previou work on the Guggenheim Museum Bilbao (Plaza 2008, 2010) and, specifically, on previous research on images, brand associations and brand circuits linked to Bilbao or the Biscay region (Plaza, Haarich and Waldron 2012, Art4Pax Foundation 2009).

The results are deployed in Figure 2.

In the first period (1991-1995), the network has a total of 354 ties and a density of 0.139, which is quite small for network standards. There are 15 nodes in the network that do not interact with any other nodes. Picasso (n48) enjoys the highest 'Degree Centrality' and one of the highest Betweenness Centrality'. Picasso (n48) has more direct links to the network and, what is more important, is the node junction to more pairs of network nodes. We pay special attention to the nodes of Guggenheim Bilbao (n1) and Bilbao (n12). These nodes are peripheral to the network in 1991-1995. On the contrary, Picasso (n48) and jazz (n51) have central positions.

In the period 1999-2003, the network has 888 ties and a density of 0.348 which is still quite small for network standards. We should keep in mind that there are still 5 nodes in the network that do not interact with any other nodes. The most important node is still Picasso (n48): Picasso is directly connected with more than 70% of the nodes and, which is more important, supplies connectivity for almost 12% of the remaining nodes.

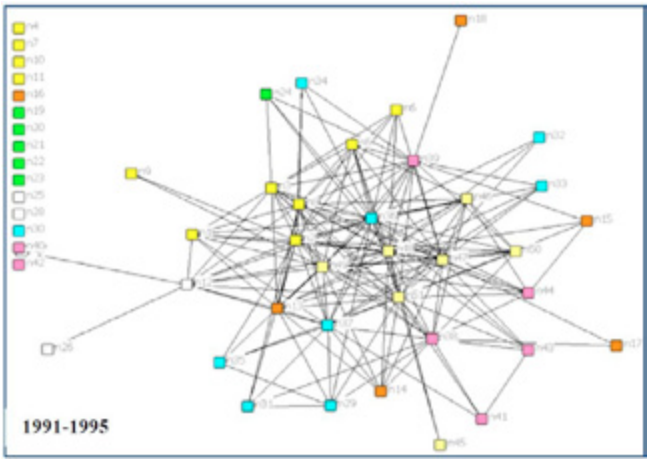
In the period 2007-2011, the network has 1,724 ties and has a density of 0.676, which is quite high. THe Guggenheim Museum Bilbao (n1) and Bilbao (n12) play an even more central role in the network as their 'betweenness centrality' has increased and they have direct linkages with all the nodes of the network. These direct ties become key for the museum's branding effectiveness.

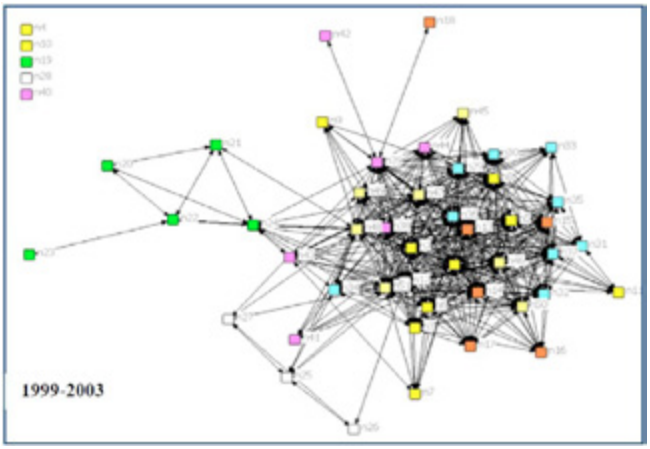
To summarize, Table 2 displays the evolution of networks across the three five-year periods. As illustrated, the network becomes denser over time, which indicates that connections and images are increasing in the media over time. Some basic network indicators are broken down for each period below.

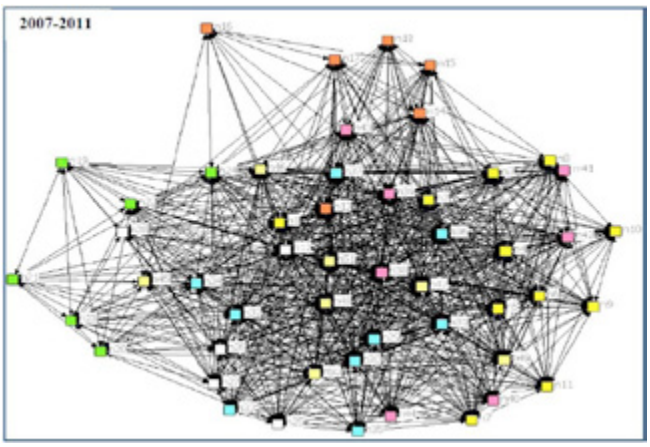
Table 2: Guggenheim Museum Bibao-driven networks: Basic indicators.

Period	No. of Ties	Density	Avg Degree
1991-1995	354	0.139	6.94
1999-2003	888	0.348	17.41
2007-2011	1,724	0.676	33.80

Figure 2. The Bilbao Network during the periods 1991-1995, 1999-2003 and 2007-2011.







Guggenheim Circuit (n1 to n11)
Bilbao (n12)
Frank Gehry Circuit (n13 to n18)
High Cuisine Circuit (n19 to n24)
Trustees Circuit (n25 to n28)
Starchitects Circuit (n29 to n37)
Iconic Art Museum Circuit (n38 to n44)
Artists Circuit (n45 to n51)

CONCLUSIONS

This paper shows that the Guggenheim Museum Bilbao has boosted the branding power of the city of Bilbao, providing favourable digital branding conditions to improve the region's competitiveness and attractiveness to attract cultural tourists.

The GMB has succeeded in connecting itself and the sphere of Bilbao to international brand-networks that also triggered connections to real personal and institutional networks. The results show considerably increased network connections and higher network density with central positions for the terms "Guggenheim Museum Bilbao" and "Bilbao" in the 2007-2011 period. In the period before (1991-1995), the Guggenheim Bilbao the network has a total of 254 ties out of 2601 possible links, and a density of 0.139, which is small for network standards (there are 15 nodes in the network that do not interact with any other nodes). In the period 2007-2011 the network has a total of 1,724 ties out of 2601 links, and a density of 0.676, which is quite high.

The Guggenheim Museum Bilbao has repositioned the city of Bilbao on the Internet, putting Bilbao on the map. Brand effectiveness depends on the significant accumulations of news items in the mass media and the insertion into international networks that make up brand circuits. Tapping into several brand circuits aids this accumulation process. Direct connectivity world-class cities (powered by a cultural facility) can fuel digital association growth. Furthermore, an iconic cultural facility in combination with New Media can alter the spatial distribution of cities on the Internet.

The networking approach to culture-led city-branding is novel, going significantly beyond the state-or-art, making substantial advances in the frontier of arts management, marketing, city planning, and Information and Communication (ICT) related statistical modelling.

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REFERENCES

Anholt, S. 2005. "Some important distinctions in place branding". Place Branding, 1(1): 116- 121.

Art4pax Foundation. 2009. La imagen de marca de Gernika en Internet. Research study for the Town Council of Gernika. November 2009.

Ashworth, G.J. 2009. "The instruments of Place Branding: How is it done?" European Spatial Research and Policy. 16(1): 9-22.

Boo S., Busser J., Baloglu S. 2009. "A model of customer-based brand equity and its aplication to multiple destinations". Tourism Management 30: 219-231.

Caldwell, N. 2000. "The Emergence of Museum Brands". International Journal of Arts Management, Vol. 2, n° 3, p. 28-34.

Colbert, F. 2003. "The Sydney Opera House: An Australian Icon". International Journal of Arts Management, Vol. 5, n° 2, 69-77.

De Nooy, W., Mrvar, A., Batagelj, V. 2005. Exploratory Social Network Analysis with Pajek Series: Structural Analysis in the Social Sciences. Cambridge University Press.

Evans, G. 2003. Hard Branding the Cultural City: From Prado to Prada. International Journal of Urban and Regional Research, 27(2): 417-440.

Freeman, L.C. 2004. The development of Social Network Analysis. A study in the Sociology of Science. Empirical Press. Vancouver, BC Canada.

Haarich S and Plaza B 2012. "Creative Bilbao: The Guggenheim Effect". Urban Planning International, 2012/3, 11-16. China: Beijing.

Hausmann, A. 2012. "The Importance of Word of Mouth for Museums: An Analytical Framework". International Journal of Arts Management, Vol. 14, n° 3, p. 32-43.

Hosany S., Ekinci Y., Uysal M. 2006. "Destination image and destination personality: An aplication of branding theories to tourism places". Journal of Business Research, 59: 638-642.

Kavaratzis, M. and Asworth, G.J. 2005 "City Branding: An Effective Assertion Of Identity or a Transitory Marketing Trick?" Tijdschrift voor Economische en Sociale Geografic, 96 (5): 506- 514.

Kotler, P., Asplund C, Rein, I. and Heider, D. 1999. Marketing Places Europe: Attracting Investments, Industries, Residents and Visitors to European Cities, Communities, Regions and Nations. Pearson Education Ltd, London.

Kotler, P., Gertner, D. 2002. "Country as brand, product, and beyond: A place marketing and brand management". Journal of Brand Management. 9(4/5): 249-261.

O'Connor N., Flanagan S. and Gilbert D. 2008. "The Integration of Film-induced Tourism and Destination Branding in Yorkshire", UK. International Journal of Tourism Research, 10: 423– 437.

Pike S. 2002. "Destination image analysis: A review of 142 papers from 1973-2000". Tourism Management 23, p. 541-549.

Pike S. 2009. "Destination brand positions of a competitive set of near-home destinations." Tourism Management 30: 857-866.

Plaza, B. 2006. "The Return on Investment of the Guggenheim Museum Bilbao". International Journal of Urban and Regional Research 30(2), p. 452–467.

Plaza, B. 2008. "On some Challenges and Conditions for the Guggenheim Museum Bilbao to be an Effective Economic Re-activator". International Journal of Urban and Regional Research 32(2), p. 506-517.

Plaza B, Tironi M and Haarich SN. 2009. "Bilbao's Art Scene and the "Guggenheim effect" revisited". European Planning Studies 17(11) p. 1713-1731.

Plaza, B. 2010. "Google Analytics Intelligence for Information Professionals". Online 34(5), p. 33-37.

Plaza, B. 2011. "Google Analytics for measuring website performance". Tourism Management 32(3), p. 477-481.

Plaza, B., Haarich, SN and Waldron, C. 2012. Branding Bilbao: Assessing the Role of an Art Museum in Creating a Valuable Place Brand. Paper presented at Association of Cultural Economics International meeting (ACEI 2012), Kyoto, Japan, June.

Plaza, B., Haarich, SN and Waldron, C (2013) Picasso's "Guernica" – The Strength of an Art Brand in Destination e-Branding. International Journal of Arts Management, 15(3). Forthcoming.

Rainisto, S. K. 2003. Success Factors of Place Marketing: A Study of Place Marketing Practices in Northern Europe and the United States, PhD thesis, Helsinki: Helsinki University of Technology, Institute of Strategy and International Business.

ANNEX: SOME NOTATION AND NETWORK METRICS

Let *N = {1, 2, … 50}* denote our set of nodes (vertexes), which represent the Guggenheim Bilbao-driven nodes who might be tied in a network of co-branding relationships with the Guggenheim Museum Bilbao in the online press. A network g is represented by a 50x50 matrix takingonvalues0or1.Theideaisthatifgij =1,theniislinkedtoj.

Degree Centrality: The degree centrality of a vertex v, for a given graph $G := (V, E)$ with $|V|$ vertices and $|E|$ edges, is defined as $C_D(v) = \deg(v)$

Betweeness Centrality: The betweeness of a vertex v in a graph $G := (V, E)$ with V vertices is computed as follows:

$$C_B(v) = \sum_{s \neq v \neq t \in V} \frac{\sigma_{st}(v)}{\sigma_{st}}$$

Closeness Centrality: The closeness of a vertex v in a graph $G := (V, E)$ with V vertices is computed as follows:

$$C_C(v) = \sum_{t \in V \setminus v} 2^{-d_G(v,t)}.$$