

**PNUM
2013**

PORTUGUESE
NETWORK OF
URBAN
MORPHOLOGY

Actas do PNUM 2013

Forma Urbana nos Territórios de Influência Portuguesa

Análise, Desenho, Quantificação

Proceedings of PNUM 2013

Urban Form in Territories of Portuguese Heritage

Analysis, Design, Quantification

Editado por

Edited by

Nuno Norte Pinto and Alexandre Almeida

PNUM
2013

PORTUGUESE
NETWORK OF
URBAN
MORPHOLOGY

Copyright © 2013 by
Department of Civil Engineering of the University of Coimbra
All rights reserved.
ISBN 978-989-98435-1-6

Editors: Nuno Norte Pinto and Alexandre Almeida

The present volume contains the short papers and abstracts reviewed and presented at PNUM 2013, the 2013 Annual Conference of Portuguese Network of Urban Morphology, held in Coimbra on June 27 and 28, 2013.

This book is written in Portuguese (in both pre- and post-agreement forms) and in English.

Cite as:

In N. N. Pinto, A. Almeida (Eds), Book of Abstracts of PNUM 2013, the 2013 Annual Conference of Portuguese Network of Urban Morphology, Coimbra, June 27 and 28, 2013, Coimbra: Department of Civil Engineering of the University of Coimbra

PNUM 2013 had the institutional support of:

Com o alto patrocínio de Sua Excelência O Presidente da República
International Seminar on Urban Form
CPLP Comunidade de Países de Língua Portuguesa
UC Universidade de Coimbra
APGeo Associação Portuguesa de Geógrafos
APG Associação de Professores de Geografia
AUP Associação dos Urbanistas Portugueses
Câmara Municipal de Coimbra
CIPAL Conselho Internacional dos Arquitectos de Língua Portuguesa
Escola Superior de Gallaecia
Direcção Geral do Património Mundial

Coimbra, Portugal

Actas do PNUM 2013
Proceedings of PNUM 2013

Editado por

Edited by

Nuno Norte Pinto

Alexandre Almeida

Hybrid City Urban Genome Analysis and Governance Evaluation. Technovation in Urban Form Analysis

FERRER, Mercedes PhD¹; FARIÑA, José PhD²; REYES, Ramón MSc³; GÓMEZ, Nersa PhD⁴

¹Senior Professor and Researcher; IFAD Research Institute. Faculty of Architecture and Design. Zulia University. Maracaibo (Venezuela)

Instituto de Investigaciones (IFAD). Núcleo Técnico de LUZ. Av. Cecilio Acosta con Av. Guajira. Edif. Jesús Garrillo. Planta Alta. Maracaibo 4002, Venezuela
+ 58 414 6222510, ferrer.mercedes@gmail.com (correspondent author)

²University Professor, Department of Urbanism, Town and Country Planning Universidad Politécnica de Madrid, Escuela Técnica Superior de Arquitectura Avenida Juan Herrera 4; 28040 Madrid, España;
+ 34 913364254; jose.farina@upm.es

³Senior Professor and Researcher, Research Institute Director - IFAD Faculty of Architecture and Design; Zulia University. Maracaibo (Venezuela)
+ 58 4125143608; rareyesar@yahoo.es

⁴Senior Professor and Researcher; Research Institute, IFAD-LUZ
+ 58 414 6222510; nersag@yahoo.com

Keywords: hybrid city, governance evaluation strategy (GES+i), visible management government (VMG), territorial genetics, urban genome.

Introduction

The sustainability of the multiple forms of making the hybrid-complex city [1] urban genome by the visible management government (VMG) is evaluated, using urban governance indicators.

The paper argues that the VMG builds city to legitimate itself by performance and to strengthen local governance [2], in a context of multiple and radical mutations that tend to: dilute and centralize the local government and fractalize the hybrid city urban genome, deepening the socio-spatial and political segregation, the genetic ingovernability of the hybrid city informal typological gen and, placing the decentralized federal State, the right to the city, to the local government and the urban and multilevel governance at risk (hypothesis) [3].

Methodological Strategy [GES+i]

The innovative governance evaluation strategy (GES+i) designed to assess the relationship between the forms of making the hybrid city / urban genome (spatial variables) and governance (a-spatial variable) is transversal and multidimensional; is constructed from complexity, scenario analysis, formulation of new concepts, governance models and indicators by weaving three fields of knowledge: government, city and sustainability in four phases [3].

Phase 1, contextualizes governance in the dramatic of the twenty-first century. Phase 2, develops the theoretical and practical foundations, a network of new concepts [4] and urban approach –territorial genetics- to comprehend the complexity of the developing countries hybrid city urban genome, by weaving territorial ontogenetic [5] with the autopiethic character of the informal city gen [3]. In Phase 3, the forms of making city -typological genes and genetics codes- are characterized and governance models and indicators (UGI) are formulated to evaluate, using delphi and questionnaires, the urban genome and validate conclusions. In Phase 4, the results of the instruments applied are correlated with the VMG's urban praxis during four periods of government 1996-2010 (Figure 1).

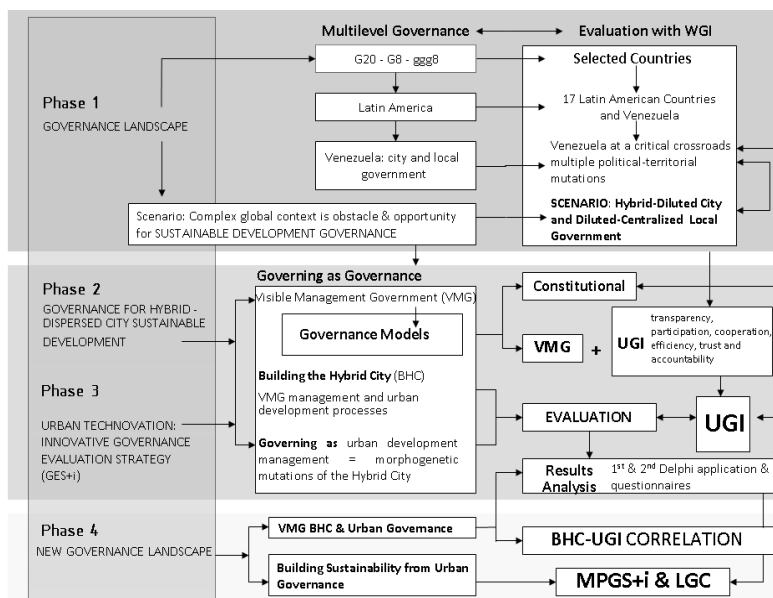


Figure 1. GES+i. Source [3]

Territorial Genetics, Hybrid City and Urban Genome

The Venezuelan and Latin American city (developing countries) is analyzed and characterized considering its genetic and cultural complexity that challenges its dual character and is conceptualized as hybrid disperse city: *“mixture of fragments with heterogeneous typological genes, formal and informal and multiple ‘in betweens’, which coexist, overlap and interweave through the public space, in a redefined space-time continuum permanently mutating and expanding”* [3].

The HYBRID CITY is a complex space-time continuum; a hybrid dispersed landscape-genome, that grows, disperses, densifies, structures, fragments and dilutes continuously, as a result of four simultaneous, interacting and sometimes conflicting processes that coexist, intersect, overlap and explain the city life cycle (CLC) in a determined space-time coordinates (Figure 2).

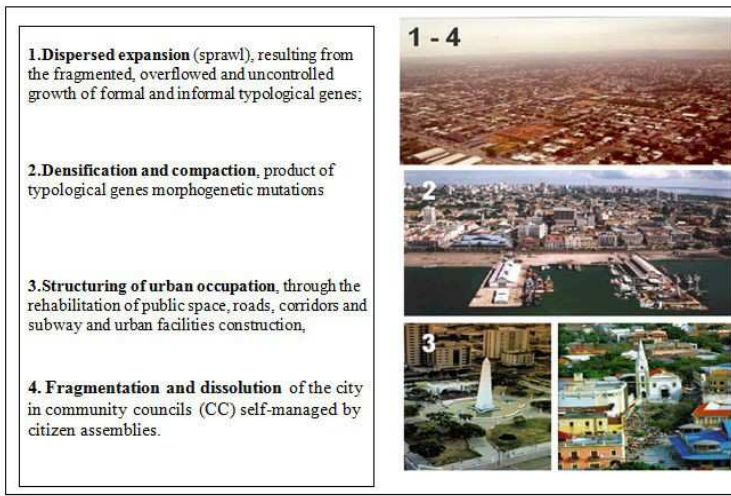


Figure 2. Building processes of the Hybrid city's urban genome. Source [3]

These forms of building the hybrid-mixed city reveals the American and Venezuelan's socio-cultural characteristics, their thinking, being, doing and living and are bearers of values, competing life projects and worlds, which are expressed in the territory and influence urban governance (territory ontogenetic). The interweaving of typological genes or, the heterogeneous forms of building, dwelling, living and thinking the city, that coexist and overlap in the hybrid-mixed city of developing countries, conforms the

city's urban genome. The urban genome synthesized in the territory the lived reality and the socio-economic, political, cultural, ethical and environmental differences that characterize the self and inhabiting/living of the Venezuelan-American and the sustainability or, unsustainability lived and expressed in space and time.

The sustainability-habitability of the urban genome relates to:

1. The hybrid-mixed characteristics of the typological genes (compact and scattered, formal and informal and multiple 'in between's',
2. The quality of the spatial and a-spatial relationships between them (socio-political governance),
3. Its structuring which creates and recreates the image and enhances the legibility of the city (Lynch 1960), provided by the quality of public spaces and
4. The degree of correlation between these dimensions: space and time intertwined of typological genes that give meaning to the being and living of citizens (life-worlds), with the spatial distribution of the quality of life and the political, institutional and the democratic governance capacity of the VMG.

Conclusions: Hybrid City Urban Genome Analysis and Governance Evaluation

The evaluation strategy proved the hypothesis and showed the transversal and multilevel correlation between, the radical mutations that contradict the constitutional governance model proposed, the governance landscape of Latin America and the Venezuela, the praxis of the hybrid regimes rich in natural resources, the perspectives of the glocal economy and expresses socio-politically the governance and rule of law and social capital-cohesion deficit and spatial-temporarily the hybrid disperse and diluted city (complex) and the diluted-centralized local government.

The confrontation of centripetal and centrifugal flows of power in the city deepens the socio-spatial and political fragmentation and deterioration of the quality of life, increasing citizens' protests and ingovernability and hindering poverty eradication and multilevel and urban governance.

The VMG urban praxis evaluation showed that the correlation between governance and the production of city formal genes by private initiative tended to be positive and, between informal genes and governance negative,

due to its autopiethic self governable character that hinders governance (Figure 3).

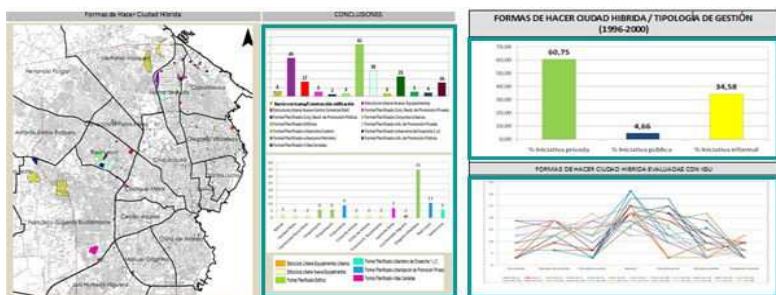


Figure 3: Urban Genome Analysis & Governance Evaluation (Delphi)

Source: [3]

The urban praxis of the VMG contradicts the formulated governance model. The centralized dissolution of the local government and hybrid city urban genome are socio-spatial and politically unsustainable. Multilevel governance tactics are proposed to recreate social cohesion and governance: a management planning innovative method (EG [PG] + i) and a local governance structure, the Local Governance Council (LGC) to orchestrate the participation of sublocal governments and spaces to build a shared and sustainable city project.

Bibliography

- [1] Ferrer y Arroyo, M.; Reyes, R.; Quintero, C.; Gómez, N. (2008). “Entre ciudad híbrida y diluida. Futuros de la ciudad venezolana”. Portafolio, Vol. 2, No 18. Revista arbitrada Facultad de Arquitectura y Diseño, Universidad del Zulia. Julio-Diciembre. Maracaibo, Venezuela. P. 190-204.
- [2] Ferrer y Arroyo, M. (2005). “GGV: Hacer ciudad, legitimidad y gobernabilidad. Hacia una praxis ética de gobernación local en Venezuela”. En, Revista Espacio Abierto Vol. 14 N° 14. Octubre-Diciembre. Maracaibo. Astro Data. Venezuela. p. 631-660.
- [3] Ferrer y Arroyo, M. (2012). *Governing the Urban Complexity from Sustainability*. Assessment of the visible management government using governance indicators (Venezuela). Doctoral Thesis, Doctorate in Environmental Science. ETSII-UPM (Madrid, Spain). xii h. 304 pp.

- [4] Ferrater Mora, J. (2001). *Diccionario de Filosofía*. Nueva edición revisada. Barcelona, Editorial Ariel. España.
- [5] Márquez - Fernández, Á. B. (2007). “Pensar la Complejidad desde la praxis cognoscente de la racionalidad intersubjetiva”. *Utopía y Praxis Latinoamericana*. Sep. 2007, Vol. 12, N° 38. p. 99 - 106.

ÍNDICE DE AUTORES

AUTHOR INDEX

ACHCAR	903	CAVACO	215
AFONSO	25, 273	CAVIC	455, 1179
AGUIAR	185	CHAVES	1035
AKAMINE	673, 937, 965	COELHO	
ALBITE	379, 387	Carlos	383
ALEIXO	651	Leonardo	891
ALMENDRA	417	COLUSSO	933
ALONSO	903	CONSTANTINOU	471
ALVES	707	CONTI	357
ANDRÉ	847	COSTA	1053
ANDRESEN	1069	CUSTÓDIO	673, 937, 965
ARAÚJO	47	DALTE	413
AZEVEDO	401	DEGREAS	569, 673, 937, 965
BANDEIRINHA	129	DELGADO	413
BAPTISTA		DIAS	
Gustavo	1045	José	139
Luana	805	ELOY	25, 273
BARROS		ENCARNAÇÃO	35
B.G.	333, 463	ESTANQUEIRO	33
Miguel	73	FARIA	
BAZOLLI	423	Ana Paula	459
BEIRÃO	485	Susana	877
BIAS	483	FARIÑA	645
BIGOTTE	111	FERNANDES	1165
BOAVIDA	205	Felippe	651
BOLONHEZI	565	Mário	467, 581
BORGES	863	FERREIRA	
BRITES	483	Bruno	743
CABRITA	785	Francisco	21
CALIX	181	Victor	455
CAMPOS		FERRER	645
Ana	673, 937, 965	FIGUEIRA	1083
Martha	863	FILHA	401
CANTANTE	57	FIORITO	485
CARDEMAN	955	FLORENTINO	225, 1095
CARIGNANI	365	FONTE	209, 1195
CARREIRAS	769	FORTUNA	107, 125
CARREIRÓ	107	FRANCISCO	417
CARVALHO		FUMEGA	325
João	89	GALENDER	673, 937, 965
Jorge	77	GARATEGUY	433
Nádia	285	GARCIA	669
CASTRO	739	GHENO	873

GÓMEZ		MARTINS	
Alejandro	1053	Carolina.....	597
Nersa.....	645	Isabel.....	411
GONÇALVES		Raquel.....	57
Andrea	437	MATOS	1087
Luciana	805	MEDEIROS	437
GRAÇA.....	111	MENDES	581, 1165
GRANCHO	605, 831	MENDIRATTA.....	191
GRANDE	149	MENDONÇA.....	979
GUERRA	411	MEYER.....	673, 937, 965
GUERREIRO		MONIZ.....	147
Maria.....	489	MONTE.....	801
Rosália	273	MONTEIRO.....	583
GUIMARÃES	1099	MONTEZUMA	1049
HEITOR	47, 297, 493, 597	MOREIRA	919
HENDGES	343	MOTTA.....	929
IMBRONITO	569	NASCIMENTO	
ISIDORO.....	349	Adriana	758
JARDIM.....	57	Filomena	455, 1179
KATAKURA.....	569	Rodrigo	235
KRAFTA.....	337, 361, 433, 697, 933	NAVEGA	379
LAMEIRA.....	999	NERBAS	813
LEITE		NETO	
Antonieta	1033	Clovis.....	1107
Henrique	817	João.....	851
Maria.....	379	Pedro.....	1099
LIMA.....	361	NOGUEIRA.....	879
LOPES		NUNES	725
Ana	57	OLIVEIRA	
João.....	489	Carla.....	995
LORENA.....	325	Cláudia	379
LOUREIRO.....	833	Flávia	781
MACEDO.....	673, 937, 965	Suzana.....	635
MACHADO	929	Vítor.....	53, 693
MAGALHÃES	221	OPPEN	591
MAIA	1073	ORSI.....	485
MALTA.....	1117	ORTEGA.....	607
MANZOLI	651, 789	PACHECO	
MARADO	821	Mafalda	297
MARAT-MENDES57, 587, 785, 1057		Pedro.....	185
MARGARIDO	135	PAIO	489
MARQUES		PAIS	77
Erika.....	739	PALMA.....	343
Teresa.....	411, 413, 467	PATRÍCIO	1091

PAULA.....	333, 463	RUIVO	417
PENNA.....	635	SÁ	
PEREIRA	583	Frederico	77
PIMENTEL	1069	Manuel	181
PINHEIRO	725	SALDANHA QUADROS.....	1129
PINTO		SALGADO.....	623
Jorge	379, 387	SALTARELLI.....	789
Nuno	89	SAMPAYO	587
Paulo	169	SANTA ROSA	483
Sandra	577	SANTANA	
PORTELA	273	Paula	1053
QUEIROGA	673, 937, 965	Trícia.....	739
QUEIROZ		SANTIAGO FARIA.....	193
Mariana.....	739	SANTOS	
Rodrigo.....	375	Analu	651, 789
RAMALHO.....	217	Lusitano	107, 125
RAMOS		Nádia.....	1099
Cátia.....	131	Sandra	107
Rui	553	Teresa.....	37
Sílvia.....	1025	Weber.....	809
RAPOSO	693	SARAIVA	1129
REBELO		SERDOURA	285, 455, 1179
Carla.....	39	SIGNOR	923
Fernando	93	SILVA	
RECHE.....	923	Andreia	1057
REGO.....	565	Caio.....	329
REIS	81, 1149	César	665
RELVÃO.....	1089	Duarte	23
RETANA.....	607	Eder.....	879
REYES	645	Flávio	387
RIBEIRO		Jonathas.....	535
Anabela.....	111	José	691
Beatriz.....	57	Luis	181
Diogo	411	Marcelo	758
Rômulo	809	Rachel	365
RITA	493	Ricardo.....	133, 1153
ROCHA.....	553	Teresa.....	389, 801
RODRIGUES		Thaís	651
Daniela.....	379	SIMONI.....	85
Flávio	379	TÂNGARI.....	1049, 1135
Paulo	847	TAVARES	309
ROMÃO.....	273	TEIXEIRA	
ROMERO.....	329	Manuel	51
ROSA	159		

Maria.....	903	Manuela	115
Rubenilson	707	TRIGUEIRO	707
TENEDÓRIO	31	URBANO	19
TERENO	583	VAZ.....	923
TERRA.....	1045	VIANA.....	43, 229, 693
TEZA.....	1045	VIEGAS	273
TOMÉ		WAMBECQ.....	505
Ana	437, 493, 597, 725	ZECHLINSKI	697

PNUM 2013

PORTUGUESE
NETWORK OF
URBAN
MORPHOLOGY

Organizado por
Organised by

PORTUGUESE
NETWORK OF
URBAN
MORPHOLOGY



FCTUC FACULDADE DE CIÊNCIAS
E TECNOLOGIA
UNIVERSIDADE DE COIMBRA
DEPARTAMENTO DE
ENGENHARIA CIVIL

Citta
FEUP FACULDADE DE ENGENHARIA
UNIVERSIDADE DO PORTO



Com o Apoio de
With the Support of

COM O ALTO PATROCÍNIO
DE SUA EXCELENCIA



O Presidente da República

ISUF
International Seminar
on Urban Form



CPLP
Comunidade dos Países
de Língua Portuguesa



CI
AL
P
CONSELHO
INTERNACIONAL
DOS
ARQUITECTOS
DE LÍNGUA
PORTUGUESA

CÂMARA
MUNICIPAL
DE
COIMBRA

Associação
Portuguesa
de Geógrafos
APG



dgpcc
CENTENÁRIO
INSTITUTO NACIONAL
DE MACHADO
DE CASTRO

ASSOCIAÇÃO
DE URBANISTAS
PORTUGUESES

escola superior gallaécia