



UNIVERSITAT POLITÈCNICA  
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CPSV  
CENTRE  
DE POLÍTICA DE SÒL  
I VALORACIONS

# XIII CTV

Congreso Internacional  
Ciudad y Territorio Virtual  
*International Conference  
Virtual City and Territory*

BAR  
CEL  
ONA  
2019

RETOS Y PARADIGMAS DE LA CIUDAD CONTEMPORÁNEA

2, 3 y 4 de octubre de 2019  
Barcelona, España

## Proceedings



Colaboran:



Ajuntament de  
Barcelona



Generalitat  
de Catalunya



## Actas CTV 2019

# XII Congreso Internacional Ciudad y Territorio Virtual Retos y paradigmas de la ciudad contemporánea

*Proceedings CTV 2019*

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Challenges and paradigms of the contemporary city*

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**Universidad Politécnica de Cataluña, UPC**

*Technical University of Catalonia, UPC*

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## Antecedentes

### El Centro de Política de Suelo y Valoraciones (CPSV)

El Centro de Política del Suelo y Valoraciones, CPSV de la Universidad Politécnica de Cataluña (UPC) es una unidad científico técnica de investigación creada en 1986, que en 1997 adquirió la condición de centro específico de investigación de la UPC y que integra un colectivo pluridisciplinar de investigadores, que desarrollan investigación y docencia en los campos de la actuación territorial, ambiental, la gestión y administración del urbanismo, la valoración urbana e inmobiliaria, los usos del suelo y herramientas de gestión ambiental, la dirección del planeamiento territorial y urbano, el medio ambiente y la calidad de vida urbana sostenible, etc.

En los últimos años ha trabajado en la aplicación de nuevas sensibilidades como la ecología urbana y la gestión ambiental y en la integración de las Tecnologías de la Información y de la Comunicación (TIC), los sistemas de información geográfica (SIG) en el análisis territorial, la modelización virtual de la arquitectura y la ciudad en 3D y la teledetección (*Remote Sensing*).

Su objetivo es dinamizar el conocimiento, la innovación y la investigación universitaria, desarrollando metodologías, aplicaciones tecnológicas, optimización de instrumentos urbanos y territoriales, así como la formación de profesionales en sus principales líneas de investigación:

- Planificación urbana y territorial.
- Gestión urbanística.
- Valoración urbana e inmobiliaria.
- Análisis urbano y territorial con el concurso de las nuevas tecnologías de la información y las comunicaciones (GIS, teledetección y R.V.).
- Ecología Urbana, Gestión y evaluación ambiental de la Ciudad y el Territorio.

### El Laboratorio de Modelización Virtual de la Ciudad (LMVC)

El Laboratorio de Modelización Virtual de la Ciudad (LMVC), es una iniciativa del CPSV con el respaldo de la Escuela Técnica Superior de Arquitectura de Barcelona (ETSAB) y en cuya creación participaron conjuntamente, los en aquel entonces; Departamento de Expresión Gráfica Arquitectónica I (EGAI) y Departamento de Construcciones Arquitectónicas I (CAI).

Su objetivo principal es el de trabajar las nuevas tecnologías dirigidas al análisis espacial, la gestión del territorio y la representación del urbanismo y la arquitectura, trabajando en dos líneas de investigación prioritarias; el modelado virtual 3D del territorio, el urbanismo, la arquitectura y la arqueología y el análisis urbano y territorial utilizando los sistemas de información geográfica, SIG.

En el campo de la representación virtual, el Laboratorio, ha contado con la colaboración del Centro de Realidad Virtual (CRV) de la Universidad Politécnica de Cataluña (UPC). Esto ha permitido la inserción de modelos 3D de distintos entornos urbanos de la ciudad de Barcelona en sistemas de inmersión virtual como la CAVE (Computer Animated Virtual Environment) o su proyección estereoscópica en sistemas como las mesas tipo workbench. Asimismo, en los últimos años ha trabajado con técnicas de levantamiento con escáner láser, para la obtención de nubes de puntos que



permiten elaborar modelos 3D de alta resolución, tanto de entornos urbanos y edificios existentes, como de reconstrucción virtual del patrimonio.

Durante la existencia del Laboratorio se han logrado importantes avances en el campo de la representación virtual y se han elaborado modelos virtuales de diversas ciudades, en un esfuerzo por optimizar las metodologías, sobre todo en lo referido al postproceso de las nubes de puntos, para la obtención de los modelos.

Así en el contexto del LMVC surgió, el año 2004, la idea de realizar el 1er Congreso Internacional de Ciudad y Territorio Virtual (CTV), cuyo responsable fue el Dr. Arquitecto. Josep Roca Cladera, director del CPSV, quien se ha mantenido como presidente del Comité Científico del mismo hasta la actualidad.

## El Congreso Internacional de Ciudad y Territorio Virtual (CTV)

El 1er Congreso internacional de Ciudad y Territorio Virtual (CTV) (<https://revistes.upc.edu/index.php/CTV/issue/view/784>) realizado en Barcelona en 2004, fue planteado como un lugar de encuentro para presentar algunos desarrollos de modelos virtuales y herramientas de representación del entorno construido, en el marco de las actividades en torno al *Forum de la Culturas - Barcelona 2004*. En éste se consiguió reunir un grupo de aproximadamente 100 investigadores, que durante tres días discutieron acerca de proyectos y avances en las tres áreas temáticas que se definieron:

- *Ciudades Virtuales en el Mundo*
- *Territorio Virtual y Cartografía 3D*
- *Representación Virtual del Patrimonio*

Al finalizar esta reunión, se decidió continuar con este espacio de encuentro anual y la creación de la *Red Arquitectura, Ciudad y Medioambiente / Architecture, City and Environment Network*, como plataforma del Congreso. Así después de este 1er congreso, se realizó en el año 2005, la segunda edición en Concepción (Chile), en el campus de la Universidad del Bío-Bío. Posteriormente en 2006, en Bilbao, la Fundación Labein - Tecnalia, organizó la tercera edición y la cuarta fue en octubre de 2007 en Guadalajara y Puerto Vallarta (México), organizada por la Universidad de Guadalajara, bajo el reclamo de "re-pensar la ciudad" y las problemáticas que en ella coexisten.

Durante estos cuatro primeros congresos se presentaron un importante número de trabajos por parte de investigadores, estudiantes, profesionales, empresas especializadas, administraciones locales e instituciones de prestigio, que tienen incidencia en las actuaciones urbano-territoriales y que incorporaron índices cualitativos para plantear soluciones efectivas a problemas reales, haciendo uso e incorporando las tecnologías y recursos informáticos con los que hoy se cuenta, en la realización de estudios, proyectos y en la búsqueda de propuestas de futuro.

En esta última línea de cuestionamientos, se regresó al origen territorial, Barcelona, donde se realizó la quinta edición en 2009. Sin embargo, se había avanzado en conocimiento y en interacción, desarrollando vínculos de trabajo y colaboración y sobretodo se había aprendido. Por ello se planteó un nuevo punto de encuentro en la búsqueda de soluciones al problema del desarrollo territorial-urbano, considerando la valoración social, la conservación del entorno y del patrimonio, la participación ciudadana y la posibilidad de elaborar propuestas cualitativas para nuestras ciudades y sus habitantes, de cara a las transformaciones que se avecinan en este Siglo XXI. En este contexto la



convocatoria se realizó en base al tema de *"Estrategias de transformación y gestión de la ciudad; perspectivas y nuevas tecnologías"*. En cualquier caso, sin olvidar el interés en el uso de las TIC, como herramientas de análisis y representación de la ciudad, se persiguió descubrir sus potencialidades, como orientadoras en la elaboración de propuestas efectivas en el campo del crecimiento urbano, de la sostenibilidad territorial y del conocimiento y modelado de los nuevos paradigmas de crecimiento y planificación urbana, así como de gestión y economías de las ciudades.

En esta quinta edición se propuso un nuevo espacio de encuentro para la búsqueda de soluciones al problema del desarrollo territorial-urbano, considerando la valoración social, la conservación del entorno y del patrimonio, la participación ciudadana y la posibilidad de elaborar propuestas cualitativas para nuestras ciudades y sus habitantes, de cara a las transformaciones que previstas para este siglo XXI. Además, se consolidó su internacionalización con la participación de más de 200 personas de más de 10 países, tanto de América como de Europa, afianzando su lógica de alternancia de sus entre ambos continentes.

En la misma línea, la sexta edición tuvo lugar en octubre de 2010 en la Universidad de Baja California en Mexicali (México) y las dos ediciones siguientes se organizaron en países de lengua portuguesa; la séptima edición fue coorganizada por la Universidad de Coimbra y la Universidad Nueva de Lisboa (Portugal) en Lisboa en octubre de 2011 y la octava edición fue en septiembre de 2012 en Río de Janeiro (Brasil), organizada por la Universidad federal de Río de Janeiro. La novena edición tuvo lugar en septiembre 2013, en Roma (Italia) organizada por el Departamento de Arquitectura de la Universidad Roma Tre, en base a los conceptos de *"Ciudad · Memoria · Gente"* y la décima edición fue, en septiembre de 2014 en Monterrey (México) en la Facultad de Arquitectura de la Universidad Autónoma de Nuevo León bajo el tema *"dispersión / concentración de los territorios urbanos, a la luz de las tecnologías del siglo XXI."*

La undécima edición fue en Cracovia (Polonia) organizada por el Institute of Urban Design de la Faculty of Architecture de la Cracow University of Technology, con el Centro de Política de Suelo y Valoraciones (CPSV), de la Escuela Técnica Superior de Arquitectura de Barcelona (ETSAB), de la Universidad Politécnica de Cataluña y la Polish Academy of Sciences, KUiA. A esta edición asistieron más de 150 participantes de Europa y de América latina.

La duodécima edición, "Ciudades y territorios inteligentes", se realizó entre el 5 y el 7 de septiembre de 2018 (<http://www.uncuyo.edu.ar/congresoctv2018/>) en Mendoza (Argentina) organizada por la Universidad Nacional de Cuyo y su eje central del congreso será la "sostenibilidad ambiental, social y económica" de los territorios y de los sistemas urbanos de escala metropolitana. La decimotercera edición de 2019, "Retos y paradigmas de la ciudad contemporánea" fue, nuevamente, en Barcelona y en ella se presentaron 149 trabajos y participaron más de 200 personas. Además, a partir de ésta se activó la nueva plataforma de gestión del congreso, <https://revistes.upc.edu/index.php/CTV/index>

La próxima edición programada del congreso será en 2020 en Bogotá y Cartagena de Indias (Colombia), organizado por la Facultad de Artes y Diseño de la Universidad Jorge Tadeo Lozano.



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## **Conferencias Magistrales**

### **Barcelona, hacia qué modelo**

**Ton Salvador**

Director de Modelo Urbano del Ayuntamiento de Barcelona. Arquitecto por la Escuela Técnica Superior de Arquitectura de Barcelona (ETSAB) de la Universidad Politécnica de Cataluña (UPC). Profesor en la ETSAB y en la Escuela Técnica Superior de Arquitectura de Reus (EAR).

### **Historical City Centres as Expressions of Nation-Building Discourses in the Middle East**

**Michael F. Davie**

Doctor en Geografía física por el Centro de Geografía Aplicada de la Universidad Louis Pasteur de Estrasburgo. Fue miembro del Centro de Estudios e Investigación sobre Urbanización en el Mundo Árabe. "Urbama". Posteriormente trabajó en el UMR CNRS 8185 "Espacios, naturaleza y cultura", de la Universidad París IV Sorbona.

### **Definición de los edificios de consumo de energía casi cero (nZEB) y recomendaciones en proyectos de rehabilitación**

**Lluís Morer i Forns**

Jefe del Programa de Eficiencia Energética del Instituto Catalán de Energía (ICAEN). Miembro del Comité del Esquema de Expertos en Auditorías Energéticas de PRO.

### **Ciudad Moderna: explosión-implosión de un sistema urbano**

**Daniel González Romero**

Doctor en Arquitectura y Urbanística por la Universidad de Valladolid y la Universidad de Las Palmas de Gran Canaria. Profesor Investigador Titular del Centro Universitario de Arte, Arquitectura y Diseño de la Universidad de Guadalajara, México. Director del Centro de Investigaciones del Medio Ambiente y Ordenación Territorial CIMA.



## Urbanismo, Gobernanza y Sustentabilidad

Héctor Gaete Feres

Arquitecto y Magíster en Urbanismo. Doctor en Gestión y Valoración Urbana (UPC). Miembro del cuerpo académico de la Facultad de Arquitectura, Construcción y Diseño de la Universidad del Bío-Bío, Chile. Ex Rector y ex Director de Planificación y Estudios de la misma institución.

## Dificultades para garantizar el derecho a la vivienda

Carme Trilla Bellart

Doctora en economía. Ha desarrollado su labor en materia de vivienda, tanto desde el sector público, como mediante consultoría privada. Ex Directora General de Vivienda y también Secretaria de Vivienda del Departamento de Medio Ambiente y Vivienda de la Generalitat de Cataluña.

## Mercados y favelas, la nueva informalidad urbana en América Latina: la precarización del precario

Pedro Abramo

Doctor, economista. Profesor e investigador en el Instituto de Investigación y Planificación Urbana y Regional (IPPUR) de la Universidad Federal de Río de Janeiro. Miembro del personal editorial de Cuadernos, publicación de investigación urbana y regional del IPPUR. Forma parte del equipo docente de Lincoln Institute of Land Policy.

## XIII CTV, Retos y paradigmas de la ciudad contemporánea

### Sesiones temáticas

#### Cambio Climático, planeamiento y urbanismo

Coordinadora: Blanca Arellano Ramos, UPC (Barcelona, España)

El calentamiento global es un hecho inequívoco, afectando de forma creciente los ecosistemas de todo el planeta, con el consiguiente incremento de los eventos singulares (olas de calor, inundaciones torrenciales, sequías, vendavales, ...). El Cambio Climático (CC), además, se ve reforzado en las ciudades por la presencia de fenómenos como la Isla de Calor Urbana, la contaminación atmosférica, la impermeabilización del suelo o el bajo albedo.

En este sentido es fundamental repensar de forma radical el modelo de desarrollo urbano heredado históricamente, promoviendo la reducción de la emisión de gases efecto invernadero. Asimismo, es necesario conocer los efectos del CC sobre la población y desarrollar metodologías conducentes a mejorar las condiciones ambientales mediante la adaptación de las ciudades al Cambio Climático y la reducción de sus efectos sobre la población, tanto desde la Planificación territorial, como desde el diseño urbano.

Esta sesión se realiza en el marco del proyecto **Urban-CLIMPLAN, La isla de calor urbana: efectos en el cambio climático y modelado para estrategias de planeamiento territorial y urbano. Aplicación a la región metropolitana de Barcelona**. Ministerio de Economía y Competitividad y el Fondo Europeo de Desarrollo Regional (FEDER). Programa Estatal de Investigación, Desarrollo e Innovación Orientada a los Retos de la Sociedad, Convocatoria 2015, Modalidad 1 «Proyectos de I+D+I» | Ref: BIA2015-68623-R (MINECO/FEDER) | Plazo de ejecución: 2016-2019 | responsable: Dr. Josep Roca Cladera.





## Eficiencia energética en el medio edificado

Coordinador: **Carlos Marmolejo Duarte**, UPC (Barcelona, España)

Han pasado más de veinte años desde la aparición de las etiquetas verdes en los edificios en el mundo y más de 10 desde que la UE (mediante la EPBD) estableció la obligación de certificar la eficiencia energética de las viviendas. Sin embargo, en muchos países no se han implementado sistemas de certificación y las personas desconocen sus implicaciones. Por ello es importante conocer casos de éxito en rehabilitación energética urbana y edilicia, así como sus resultados.

Esta sesión se realiza en el marco del proyecto **EnerValor ¿Cuánto nos importa la calificación energética? Un análisis del nivel de comprensión de los EPC, confianza percibida e impacto sobre las preferencias y valores residenciales**. Ministerio de Economía y Competitividad y el Fondo Europeo de Desarrollo Regional (FEDER). Programa Estatal de Investigación, Desarrollo e Innovación Orientada a los Retos de la Sociedad, Convocatoria 2015, Modalidad 1 «Proyectos de I+D+I» | Ref: BIA2015-68623-R (MINECO/FEDER) | Plazo de ejecución: 2016-2020 | responsable: Dr. Josep Roca Cladera.



## Gentrificación, Turismo y Vivienda

Coordinadores: **Javier Burón Cuadrado y Eduardo González de Molina**, Ayuntamiento de Barcelona (España)

Actualmente la problemática de acceso a la vivienda, con fenómenos como la competencia entre el turismo y los residentes, no solo afecta a las clases sociales más desfavorecidas, sino también a importantes segmentos de las clases medias. En este contexto es necesario conocer y desarrollar estrategias innovadoras que faciliten a la ciudadanía el acceso a la vivienda (en propiedad o alquiler) que satisfagan sus necesidades y posibiliten su adecuado desarrollo.

En este sentido el turismo, no solo genera beneficios económicos. Su masificación también provoca tensiones sobre las actividades que tradicionalmente han conformado nuestras ciudades, y muy especialmente sobre la vivienda permanente. El aumento del precio de la vivienda (con la creciente pérdida de accesibilidad económica) y el cambio radical en el modelo de comercio tradicional, son alguno de sus efectos más dañinos.

Por ello son necesarias estrategias de regulación de la gentrificación, que ayuden a evitar el desplazamiento de las actividades y los habitantes tradicionales de los centros urbanos.

## Frentes marítimos portuarios-urbanos

Coordinador: **Julián Galindo González**, DUOT-UPC (Barcelona, España)

Las transformaciones de los frentes marítimos, como respuesta a las nuevas formas de organización de los territorios portuarios y su relación con las ciudades y las infraestructuras de transporte de bienes es un fenómeno que cada vez requiere más atención. La interacción de los espacios portuarios y urbanos, así como sus sistemas de gestión, son de gran interés para generar nuevas interfaces territoriales de relación entre la ciudadanía y las actividades portuarias.



## Ciudades inteligentes y modelos virtuales

Coordinador: **Eduardo Chica Mejía**, Universidad de Bogotá Jorge Tadeo Lozano (Colombia)

Las TIC han dejado de ser una novedad en el mundo actual y, cada vez más, inciden en los modelos de desarrollo urbano. Por ello es importante determinar en qué medida éstas pueden contribuir al desarrollo de ciudades inteligentes, sostenibles, eficientes económicamente y socialmente integradoras.

Asimismo, conocer experiencias de modelos virtuales (mediante RV, RA, etc.) utilizados en el desarrollo de aplicaciones web de información y servicios urbanos, que faciliten la interacción de los ciudadanos con su entorno.

## Centros históricos y retos futuros

Coordinador: **Mario Cerasoli**, Universidad Roma Tre (Italia)

El estudio específico de los centros históricos, de sus procesos de restauración y conservación comenzó en la década de los 60, pero en los últimos años, las nuevas dinámicas territoriales, las tecnologías y las comunicaciones han modificado las maneras de enfrentarse a su estudio y a la búsqueda de soluciones a su despoblamiento y abandono tradicionales. Por ello es interesante conocer los diferentes aportes en esta materia y los nuevos retos a los que se enfrentan.

## Derecho a la Ciudad, Empoderamiento y Género

Coordinadoras: **María Teresa Pérez Bourzac**, CUAAD-UdG (Guadalajara, México) y **Blanca Valdivia Gutiérrez**, CPSV-UPC (Barcelona)

Más allá de los derechos individuales, surgen los derechos colectivos, como el Derecho a la Ciudad, el derecho de todos los colectivos sociales a disfrutar de una plena ciudadanía. El empoderamiento de los grupos desfavorecidos ocupa un lugar preeminente en los retos urbanos. La Ciudad debe ser integradora, equitativa y diseñada y gestionada para toda la población.

En este sentido ocupa un papel relevante la perspectiva de género. Aunque existen abundantes directivas internacionales y estatales que sostienen la necesidad de incorporar la igualdad de género en el disfrute de la ciudad, no se ha avanzado lo suficiente en este camino. Por ello es relevante conocer la incidencia real de las regulaciones de Igualdad en las nuevas agendas urbana y las consideraciones del impacto de género en el urbanismo y en los modelos de ciudad.

## Movilidad, infraestructuras y territorio sostenible

Coordinadores: **Andreu Ulied Seguí**, Mcrit S.L. (Barcelona, España) y **Carlos Aguirre Núñez**, UDLA (Santiago, Chile)

Las presiones ambientales y los efectos económicos y sociales del transporte y la movilidad territorial tienen gran importancia en el desarrollo sostenible, sobre todo por las necesidades cada vez mayores de transportes de mercancías, servicios y personas. Por ello el desafío de desarrollar infraestructuras y medios de transporte sostenibles a escala territorial y urbana debe ser una prioridad estratégica a escala local, nacional, regional y mundial.



## XIII CTV, Challenges and paradigms of the contemporary city Thematic Sessions

### Climate Change, regional and urban planning

Global warming is an unequivocal fact, increasingly affecting the ecosystems of the entire planet, with the consequent increase in singular events (heat waves, torrential floods, droughts, storms, ...). Climate Change (CC), in addition, is reinforced in cities by the presence of different phenomena such as the Urban Heat Island, air pollution, soil waterproofing or low albedo.

In this context, it is essential to radically rethink the historically inherited urban development model, promoting the reduction of greenhouse gas emissions. It is also necessary to know the effects of CC on the population and develop methodologies conducive to improving environmental conditions by adapting cities to climate change and reducing their effects on the population, both from territorial planning and urban design.

### Energy efficiency in the built environment

More than twenty years have passed since the appearance of green labels on buildings in the world and more than 10 years since the EU (through the EPBD) established the obligation to certify the energy efficiency of homes. However, in many countries certification systems have not been implemented and people are unaware of their implications. For this reason, it is important to know success cases in urban and building energy rehabilitation, as well as their results.

### Gentrification, Tourism and Housing

Currently the problem of access to housing, with phenomena such as competition between tourism and residents, affects not only the most disadvantaged social classes, but also important segments of the middle classes. In this context, it is necessary to know and develop innovative strategies that facilitate citizens access to housing (owned or rented) that meets their needs and enables their proper development.

In this sense, tourism does not only generate economic benefits. Its overcrowding also generates tensions on the activities that have traditionally shaped our cities, and especially on permanent housing. The increase in the price of housing (with the growing loss of economic accessibility) and the radical change in the traditional trade model are some of its most damaging effects. For this reason, gentrification regulation strategies are needed to help avoid the displacement of activities and the traditional inhabitants of urban centres.

### Port-urban waterfronts

The transformations of the maritime fronts, as a response to the new forms of organization of the port territories and their relation with the cities and the infrastructures for the transport of goods, is a phenomenon that increasingly requires more attention. The interaction of port and urban spaces, as well as their management systems, are of great interest to generate new territorial interfaces of relationship between citizens and port activities.



## Smart cities and virtual models

ICTs have ceased to be a novelty in today's world and, increasingly, have an impact on urban development models. Therefore, it is important to determine to what extent these can contribute to the development of Smart Cities, sustainable, economically efficient and socially inclusive.

Likewise, to know experiences of virtual models (through RV, RA, etc.) used in the development of web applications of information and urban services, which facilitate the interaction of citizens with their environment.

## Historical centres and future challenges

The specific study of historical centres, their restoration and conservation processes began in the 1960s, but in recent years, new territorial dynamics, technologies and communications have modified the ways of confronting their study and development. search for solutions to their traditional depopulation and abandonment. Therefore, it is interesting to know the different contributions in this matter and the new challenges they face.

## Right to the City, Empowerment and Gender

Beyond individual rights, collective rights arise, such as the Right to the City, the right of all social groups to enjoy full citizenship. The empowerment of disadvantaged groups occupies a prominent place in urban challenges. The City must be inclusive, equitable and designed and managed for all the people.

In this sense, the gender perspective plays a relevant role. Although there are many international and state directives that support the need to incorporate gender equality in the enjoyment of the city, not enough has been advanced in this way. For this reason, it is relevant to know the real incidence of the Equality regulations in the new urban agendas and the considerations of the impact of gender in urbanism and in the city models.

## Mobility, infrastructure and sustainable territory

Environmental pressures and the economic and social effects of transport and territorial mobility are of great importance in sustainable development, above all because of the growing needs for the transport of goods, services and people. Therefore, the challenge of developing sustainable transport infrastructure and means at a territorial and urban level must be a strategic priority at the local, national, regional and global levels.

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## XIII CTV, Reptes i paradigmes de la ciutat contemporània Sessions temàtiques

### Canvi Climàtic, planejament i urbanisme

L'escalfament global és un fet inequívoc, afectant de forma creixent els ecosistemes de tot el planeta, amb el consegüent increment dels esdeveniments singulars (onades de calor, inundacions torrecials, sequeres, ventades, ...). El Canvi Climàtic (CC), a més, es veu reforçat a les ciutats per la presència de fenòmens com l'Illa de Calor Urbana, la contaminació atmosfèrica, la impermeabilització del sòl o el baix albedo.



En aquest context és fonamental repensar de forma radical el model de desenvolupament urbà heretat històricament, promovent la reducció de l'emissió de gasos efecte hivernacle. Així mateix, cal conèixer els efectes del CC sobre la població i desenvolupar metodologies conduents a millorar les condicions ambientals mitjançant l'adaptació de les ciutats al canvi climàtic i la reducció dels seus efectes sobre la població, tant des de la Planificació territorial, com des del disseny urbà.

## Eficiència energètica en el medi edificat

Han passat més de vint anys des de l'aparició de les etiquetes verdes en els edificis en el món i més de 10 des que la UE (mitjançant la EPBD) va establir l'obligació de certificar l'eficiència energètica dels habitatges. No obstant això, en molts països no s'han implementat sistemes de certificació i les persones desconeixen les seves implicacions. Per això és important conèixer casos d'èxit en rehabilitació energètica urbana i edilícia, així com els seus resultats.

## Gentrificació, Turisme i Habitatge

Actualment la problemàtica d'accés a l'habitatge, amb fenòmens com la competència entre el turisme i els residents, no només afecta les classes socials més desfavorides, sinó també a importants segments de les classes mitjanes. En aquest context és necessari conèixer i desenvolupar estratègies innovadores que facilitin a la ciutadania l'accés a habitatges (en propietat o lloguer) que satisfacin les seves necessitats i facin possible el seu adequat desenvolupament.

En aquest sentit, el turisme, no només genera beneficis econòmics. La seva massificació també provoca tensions sobre les activitats que tradicionalment han conformat les nostres ciutats, i molt especialment sobre l'habitacle permanent. L'augment del preu de l'habitacle (amb la creixent pèrdua d'accessibilitat econòmica) i el canvi radical en el model de comerç tradicional, són alguns dels seus efectes més nocius. Per això són necessàries estratègies de regulació de la gentrificació, que ajudin a evitar el desplaçament de les activitats i els habitants tradicionals dels centres urbans.

## Fronts marítims portuaris-urbans

Les transformacions dels fronts marítims, com a resposta a les noves formes d'organització dels territoris portuaris i la seva relació amb les ciutats i les infraestructures de transport de béns és un fenomen que cada vegada requereix més atenció. La interacció dels espais portuaris i urbans, així com els seus sistemes de gestió, són de gran interès per a generar noves interfícies territorials de relació entre la ciutadania i les activitats portuàries.

## Ciutats intel·ligents i models virtuals

Les TIC han deixat de ser una novetat en el món actual i, cada vegada més, incideixen en els models de desenvolupament urbà. Per això és important determinar en quina mesura aquestes poden contribuir al desenvolupament de ciutats intel·ligents, sostenibles, eficients econòmicament i socialment integradores.

Així mateix, conèixer experiències de models virtuals (mitjançant RV, RA, etc.) utilitzats en el desenvolupament d'applicacions web d'informació i serveis urbans, que facilitin la interacció dels ciutadans amb el seu entorn.



## Centres històrics i reptes futurs

L'estudi específic dels centres històrics, dels seus processos de restauració i conservació començar en la dècada dels 60, però en els últims anys, les noves dinàmiques territorials, les tecnologies i les comunicacions han modificat les maneres d'enfrontar-se al seu estudi ia la recerca de solucions al seu despoblament i abandonament tradicionals. Per això és interessant conèixer les diferents aportacions en aquesta matèria i els nous reptes als quals s'enfronten.

## Dret a la Ciutat, Apoderament i Gènere

Més enllà dels drets individuals, sorgeixen els drets col·lectius, com el Dret a la Ciutat, el dret de tots els col·lectius socials a gaudir d'una plena ciutadania. L'apoderament dels grups desfavorits ocupa un lloc preeminent en els reptes urbans. La Ciutat ha de ser integradora, equitativa i dissenyada i gestionada per a tota la població.

En aquest sentit ocupa un paper rellevant la perspectiva de gènere. Encara que hi ha abundants directives internacionals i estatals que sostenen la necessitat d'iniciar la igualtat de gènere en el gaudiment de la ciutat, no s'ha avançat prou en aquest camí. Per això és rellevant conèixer la incidència real de les regulacions d'Igualtat a les noves agendes urbana i les consideracions de l'impacte de gènere en l'urbanisme i en els models de ciutat.

## Mobilitat, infraestructures i territori sostenible

Les pressions ambientals i els efectes econòmics i socials del transport i la mobilitat territorial tenen gran importància en el desenvolupament sostenible, sobretot per les necessitats cada vegada més grans de transports de mercaderies, serveis i persones. Per això el desafiament de desenvolupar infraestructures i mitjans de transport sostenibles a escala territorial i urbana ha de ser una prioritat estratègica a escala local, nacional, regional i mundial.



## ITALIAN HISTORIC CENTERS AND MARGINALITY. FOR A REGENERATION STRATEGY OF THE CONTEMPORARY HISTORIC TERRITORY

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### Abstract

The study developed by Ancsa\* and Cresme\*\* shows the current state of the Italian historic centers from the economic and demographic point of view, which is the starting point of the paper in reflecting on the Italian urban policies for the enhancement and preservation of the contemporary historic territory. Moreover, the paper aims to deeper investigate the phenomenon of marginality as arising from the application of the concept of "periphery" to historic centers.

Starting from the analytical-interpretative methodology used in the Ancsa-Cresme 2017 report, our study follows an inductive method based on demographic, social and economic survey trends in the provincial capital cities. Although in a quantitative way, this approach reflects the trend Italian cities are going through, and is useful to outline the common characteristics of the marginality phenomenon of some historic centers. This general investigation represents the reference framework for the in-depth and comparative analysis of the case studies useful to understand the specific phenomena that are characterizing historic centers, as well as of the policies, strategies and planning outcomes for their regeneration. Due to their structure and morphology, historic centers are living and unique organisms, and it is thus difficult to plan a predefined and standardized urban policy framework. That is why, starting from a general framework, we deepen some case studies to outline the policies suitable for similar urban contexts.

The paper proposes a comparative analysis between two Italian case studies that are characterized by phenomena of degradation or by hiking tourism, ageing and declining population (especially young people and families) as well as the loss of neighbourhood business activities. At the same time, the paper considers historic centers as nodes of the historic territory network identified through an enhancement approach of the historic and cultural heritage more in line with the shape and needs of the contemporary city. These two conditions demonstrate that historic centers should become crucial for the new urban policies agenda.

The data used are taken from the census surveys of the National Institute of Statistics and/or available from local databases, as well as data taken from the urban planning tools in force.

The results show the urban policies that it would be useful to support in order to promote a regeneration of the contemporary city. These policies must be aware of both the problems that afflict the traditional historic components (the marginality of historic centers) and the new challenges deriving from socio-economic and environmental changes, which considerably extend the inhabitants' memories and urban planning competencies beyond the perimeter of the historic centers.

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**Key words:** historical territory; contemporary city; urban regeneration; urban policy

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## 1. Introduction

The paper considers historic centers as nodes of the historic territory network identified through an enhancement approach of the historic and cultural heritage in line with the shape and needs of the contemporary city. Following this, we propose a comparative analysis among the historic centers of Italian provincial capitals characterized by different phenomena, such as degradation, hiking tourism, ageing and declining population as well as the loss of neighbourhood business activities, based on the results of a recent national research (2017).

The paper is divided into three parts. In the first, we present a synthetic picture of the concept of historic center aimed at highlighting how its evolution is characterized by the contamination with other concepts, such as that of marginality. This is the reason why it is necessary to conceptually as well as operationally update and renew what is considered as the contemporary historic and cultural heritage.

The second part summarizes what emerged from the national research, bringing out both the similarities and criticalities that characterize Italian historic centers by dividing them in some homogeneous groups.

The third part focuses on two representative case studies. The analysis and evaluation refer to Bergamo and Taranto, two cities which present opposite trends. Such trends help us define a coherent set of proposals for a new national urban agenda focusing on historic centers.

## 2. Historic centers and regeneration strategies

### 2.1 *Semantic and conceptual shifts: from the historic center to the historic territory*

Important scientific, political and cultural elaborations of the late Twentieth century have led to progressively extend the gaze first from the protection of monuments to the existing city, then to the territorial cultural systems and, finally, to the whole territory with its historic and natural values and its different spatial articulations. The second Gubbio Charter (Ancsa, 1990) testifies this evolution. These «semantic and conceptual shifts» (Terranova, 1993) are the consolidated references of the disciplinary debate, and state a new approach to the preservation and enhancement of the historic heritage concerning the contemporary city (Gambino, 2007).

The first Gubbio Charter (Ancsa, 1960) had already affirmed an overall and integrated vision of the historic center, overcoming the concept of a “white zone”, morphologically and functionally isolated from the urban context and object of a strictly conservative approach.

Urban planning culture and practices have therefore extended the morphological and functional recognition, traditionally reserved to it, to the whole historic territory considering the anthropic signs of territorialization. The historic territory, «overall expression of cultural identity and subject in all its parts of an organic intervention strategy» (Gubbio Charter, 1990), is characterized by a system of material and immaterial permanence (Gambino, 1994). It consists of a set of places (including historic centers) and relationships that outcome and testify a social, cultural and functional evolutionary process, strongly rooted in the territory. A system recognizable by its identity, namely by its tangible and intangible characteristics (Ancsa, 2010).



This paradigm is adopted by European Community documents that focus on the theme of cultural heritage, and the social and economic benefits related to its conservation, for the achievement of sustainable development (Poli, 2018), using a comprehensive and holistic conception of landscape, understood as «the set of distinctive factors of a place» (Gambino, 1994).

## 2.2 *Actuality of the historic territory: the new instances*

The metropolization process of the territory has led to a widespread, fragmented and porous settlement system (Indovina, 2005; Oliva, 2010). In such system the public space, an emblematic place for sociality, dissolves; ecological networks, structural environment and landscape elements get fragmented; mobility, based on individual movements, becomes congested. The outcome of this process is a territory characterized by homologation, degradation and pollution in which the historic, cultural and identity heritage risks disappearing. This loss of material and immaterial values underlies a widespread loss of «shared territorial memory» (Gambino, 2007). Today the Italian disciplinary debate puts at its center the reflection on the role of identity values and the rooting of local cultures, since new needs, are emerging from local communities, more and more culturally heterogeneous (Secchi, 2013), and it is thus necessary to contrast the global phenomena of economic crisis and climate change. These phenomena revive the «sense of places, understood as a living relation among people, of memory and use» (Gasparini, 2001), stimulating the definition of new regeneration strategies for the city and contemporary territories.

Nowadays, new importance is being given to historic centers because «they are threatened by old and new pitfalls, in the face of which existing regulations show weakness and inability to offer adequate solutions» (Ancsa-Cresme, 2017).

These threats affect them in a generalized way but are often divergent, assuming specific characters according to the physical and socio-economic reference frameworks (metropolises, inner areas, sprawled areas, protected areas etc.): phenomena such as touristification or depopulation, illegal building or musealization, gentrification or degradation require new and up-to-date knowledge, projects and financing skills.

## 2.3 *Historic centers: from problems to opportunities*

This reflection is part of the debate on the so-called “new urban issue” (Commissione Periferie, 2017) which has achieved «a real conceptual leap, stating that periphery is no longer an adequate conceptualization to describe and intervene in the contemporary city» (Ricci, 2018).

Periphery no longer measures the physical distance of a place compared to the central area but requires the presence of «economic and social marginality, degradation and lack of services» (Bando Periferie, 2016), also detected within historic urban fabrics.

This requires the development of an urban regeneration strategy that, in an integrated and unified way, intervene on the physical aspects of marginality, promoting economic development and social inclusion (Oliva, Ricci, 2017), rediscovering and enhancing the historic function of urban systems as social-economic and environmental territorial landmarks (Cerasoli, 2018).



Regeneration is necessary for two reasons: an endogenous and an exogenous one. Firstly, the physical and symbolic stratification of historic centers makes them emblematic places of quality to be safeguarded by pursuing a heritage-led development. Secondly, historic centers must reconfirm their role within the historic territory network starting from an awareness of the link between the quality of the contexts and the socio-economic development opportunities that they offer (Commissione Periferie, 2017). The objective is to reverse the emptying processes of the inner areas and the metropolization processes of contemporary territories by containing urban growth through the re-use of the building heritage, thus mending the fragmented tangible and intangible connections between city and territory. In order to define the up-to-date policies, plans and programs framework needed to address the topic of the present-day life of historic centers, it is first necessary to know the status of these realities.

In December 2017, in Rome, the National Association of Historic-Artistic Centers (Ancsa) and the Center for Economic, Sociological and Building Market Research (Cresme) presented a national research entitled "*Historic centers and Country future*" which highlighted the demographic, economic and real-estate situation of 109 Italian historic centers (provincial capitals) in the 2001/2011 decade. Starting from the outcome of this national research, this paper aims to suggest a set of possible strategies in order to update the national policies concerning historic centers.

### 3. The dynamics of historic centers in Italy

The aim of the national research carried out by Ancsa-Cresme is to bring the theme of historic centers back to the attention of national and local urban policies (Ancsa, 2017).

In the last thirty years, no national study on the overall situation of historic centers has been carried out in Italy (Gabrielli, 2009). In 1986, at the 10th National Congress of Ancsa, the need was stressed to establish a permanent observatory on historic cities (never founded) with the aim of systematically and continuously collecting information on their state in order to define and guide the urban planning agenda (Di Battista, Fontana, Polo, 1990). The absence of historic centers in national urban policies is probably due to the perception that heritage protection is ensured by two beliefs: firstly, the validity of the urban planning national reforms that took place between the '60s and '70s (Ancsa, 2017); secondly, by the consolidation of an "Italian planning federalism" (Oliva, 2012), which entails delegating to the Regions some legislative issues, and among them the protection and enhancement of the historic heritage.

The 109 provincial capital cities investigated cover only 0.06% of the Italian territory but, in 2011, 2.5% of the population and 2.9% of the families live, 8.4% of the employees work (about 95% of which in the tertiary sector), and 1.5% of the using housing stock is present within such cities.

The following paragraphs summarize the national research following three main issues, while the case studies of Bergamo (Lombardy Region, Northern Italy) and Taranto (Puglia Region, Southern Italy) help highlight the territorial differences and therefore the difficulty of identifying a national urban agenda. The issues are:

1. If there are a demographic decline and an ageing population (emerging issues in the definition of the new concept of "periphery"), what strategies should be used to keep these parts of the city alive?

2. If tourism and tertiary activities are on the rise, how can historic centers be used as the country's economic engine without distorting their identity?
3. In the light of demographic and economic changes, have historic centers adapted to new populations in terms of liveability and comfort?

### 3.1 *Small families and lonely people: are old town centers a place for the elder?*

In the collective imagination, Italy is a country characterized by historic centers that are filled with offices and tourists, but depopulated by residents. The national research presents data about residents, the presence of elderly and young people as well as families.

The national research shows that the population living in historic centers has been almost stable from 2001 until 20011, only decreasing by -0.1%. At the same time, the phenomenon shows very different inner dynamics, meaning: 1) a parallel growth of residents both in the municipality and in the historic center; 2) a parallel decrease of residents both in the municipality and in the historic center; 3) a municipality with growing residents but an historic center with falling residents (as in Bergamo); 4) a municipality with falling residents but an historic center with growing residents (as in Taranto).

The ageing of the population (Intini, 2016) seems to affect both the historic centers and the entire municipality. The average senility index (i.e. the elderly/residents ratio) for the Italian historic centers is 34.8%. Bergamo is among the historic centers with a senility index (37.2%) higher than the national average, even though it has had a decrease in the elderly population (-4.9%). On the other hand, Taranto is one of the historic centers with a senile dependency ratio (20.4%) lower than the national average, even though the elderly population is increasing (6.5%).

The fall in the number of young people (0-15 years old) affects various historic centers in Southern Italy with different percentages. In particular, Brindisi and Syracuse have experienced a drop of more than 30%. At the same time, the data on youth dependency index (i.e. the young people/residents ratio) report that only 6 historic centers have values above the national average (23.3%). Bergamo is one of the historic centers with a youth dependency index (19.2%) lower than the national average and the variation in the number of young people compared to 2001 is negative (-2.1%), while Taranto has a higher youth dependency index than the national average (29.1%) and the variation in the number of young people compared to 2001 is among the highest in the country (36.8%).

Only 15 out of 109 historic centers show a decrease in the number of families because, generally, the number increases both at the municipal level (17.3%) and in historic centers (8.8%). Bergamo and Taranto are in line with the trend but with different intensities. In Bergamo, the number of households has grown at a rate of 7.5%, while in Taranto the number of households has increased by 38.2% in ten years.

In historic centers, 47.3% of the families are composed of singles, 24% of them of two people, while only 29% of the families are composed of more than two people. In Bergamo, the percentages are as follows: 47.9% of families with singles and 24.2% families with two people. On the contrary, Taranto has 29.5% of families with singles and 19.8% of families with two people.

### 3.2 Employees and tourism are growing: are historic centers the engine of the country?

As far as the economic dimension is concerned, in 2011 the historic centers analyzed welcomed 7.6% of the local units and 8.4% of the national employees. Employees have increased by 18.7% due to two phenomena. First, the decrease in the number of employees in productive activities and production services, and second, the increase in the number of employees in public services, commerce and hospitality industry. The increase in the number of employees in the hospitality and commercial sectors is certainly influenced by the one in the tourism sector, which recorded a growth of 27% from 2010 to 2016.

The national research conducted so far shows four trends as regards employees: 1) a growth of employees both in the municipality and in the historic center (such as Bergamo); 2) a decrease of employees both in the municipality and in the historic center; 3) municipalities with growing employees but not in the historic centers (such as Taranto); 4) municipalities with falling employees but not in the historic centers.

On the contrary, the number of local units in historic centers has registered a slight decrease of -3.3%, but four national trends are underway: 1) a growth of local units both in the municipality and in the historic center (as in Taranto); 2) a decrease of units both in the municipality and in the historic center; 3) municipalities with growing local units but not in the historic centers (as in Bergamo); 4) municipalities with decreasing units but not in the historic centers.

Bergamo and Taranto are still at the opposite extremes as regards both the variations in the number of employees and the variations in the number of local units over the decade. In Bergamo, the number of employees increased by 40.6%, while in Taranto it fell by -5.6%. Considering local units, the trend is the opposite: while in Bergamo they drop by -12.7%, in Taranto they increase by 36.0%.

### 3.3 Liveability and building comfort: have historic centers adapted to the new populations?

Abandoned and under-used houses in Italian historic centers are the third theme that characterizes national research. The available data outline a mixed reality. In 2011, historic centers have 2.8% of Italian homes with an average size of 97.4 square meters and 2.2 inhabitants per house. In 2016 the average price of a house in the historic center was 1,886 €/sqm. Values range from 256 €/sqm in Taranto (the lowest in Italy) to 6,538 €/sqm in Milan (Bergamo being at the ninth place with 3,125 €/sqm).

In historic centers, inhabited dwellings account for 79.0% of the total, while unoccupied dwellings account for 21.0%. The historic centers whose houses are inhabited for less than the 60% are mainly concentrated in Central and Southern Italy. On the other hand, the historic centers with more than 90% of inhabited houses are large cities such as Milan, Naples and Florence. This lack of homogeneity may be due to the presence of second homes or be a consequence of the drop in the number of residents.

In 2011, in the historic center of Bergamo, unoccupied housing accounted for 29.1% of the total, while in Taranto it accounted for only 26.6%. Another important fact is the number of buildings used as residences. In Bergamo, they are 76.2%, 83.9% of which was built before 1919, while in Taranto they are 49.9%, only 29.3% of which was built before 1919.



### 3.4 First considerations following the national research

The study carried out by Ancsa-Cresme in 2017 shows a complex socio-demographic picture in which the historic center is not always an urban system that rejects inhabitants but a system which, in some cases, attracts them. Research dispels the collective imagination in which both the decline, the inadequacy of the old town center or, vice versa, the fact of being a privileged, exclusive or depersonalised context with non-residential functions, become reasons for its abandonment.

In Italy, there are historic centers where the ageing of residents is an important phenomenon (Bergamo), while in others a process of population replacement is getting started (Taranto). Moreover, the increase in the number of families and their tendency to reduce the average number of members testify that even in the historic centers there are mostly singles, elderly widowers, students, separated with children or couples without children, but there are still contexts in which the large family is an important phenomenon.

This complex situation makes it impossible to launch a homogeneous set of measures at national level, but it is necessary to calibrate the actions for each territory, coordinating economic and social aspects as well. These phenomena must first of all guide the new housing programmes. If the houses (mostly owned) in which these families composed of singles are too large (over 95 square meters), it is very likely that over time routine maintenance becomes an economic problem leading to processes of degradation, abandonment, replacement of housing with other more profitable functions, etc. At least it could be a problem for the preservation of historic centers.

The picture is even more complex if economic dynamics are mixed, too. There are contexts in which the number of local units decreases but the number of employees increases, and vice versa. The result is a weak and too fragmented system of local units (as in Taranto). At the same time, the growth in the number of employees (as in Bergamo) is a symptom of a system that has the characteristics to stimulate new economic flows, provided that the quality of the economic model is increased to compete both at local (historic center vs. municipality) and national level (North Italy vs. South Italy).

Within this framework, economic policies play an essential role and must be integrated with urban planning policies. They should aim to enhance the social dimension of historic centers by promoting specific proposals concerning vocational training that can increase the workers' performance and therefore the supply of local units.

The national research data confirm the need to coordinate the country's economic and planning policies, paying attention to the situations that need to be rebalanced. The tourism issue characterizes the country's economic system, and it could be studied according to the real estate dynamics. Historic centers such as Bergamo, still largely residential and with an original building fabric, maintain a high economic value that could be important to implement the presence of "traditional tourism". On the other hand, historic centers such as Taranto have undergone several building modifications and have reduced their real estate value. Yet, they retain the presence of young people who could start new touristic activities using new technologies and online tourist platforms, if supported by appropriate policies and economic resources.



## 4. Bergamo and Taranto: two representative case studies

### 4.1 The durability of the Città Alta in Bergamo

Bergamo is a city of about 120 thousand inhabitants, situated about 50 km east of Milan, and characterized by a hilly morphology that gave rise to its historic center called Città Alta (Upper Town). The town had many urban plans made by important scholars: M. Piacentini (1907), G. Muzio and M. Morini (1951-56), G. Astengo and L. Dodi (1965-72), B. Secchi and V. Gandolfi (1995-2000), and lastly B. Gabrielli (2006-10). This demonstrates the importance of historic centers both in the design of detailed plans and in the overall local urban planning policies.

The Roman urban structure, still visible today in the main axes that cross the historic center, was later adapted in the communal era to an extent that the Città Alta has become a medieval historic center par excellence. In the Sixteenth-century new fortifications built by the Republic of Venice were added to the Medieval historic center. The Venetian walls that surround the Upper Town are one of the peculiarities of the center and have been on the UNESCO list of World Heritage Sites since 2017.

#### 4.1.1 Plan innovations

The Città Alta has undergone many detailed plans. The oldest, made by L. Angelini (1926-33), proposed a series of changes to improve living conditions in the historic center, solving the structural and hygienic-sanitary precariousness of the ancient fabric by demolishing and renovating many buildings, as well as planning the opening of new streets (Bonfantini, 2008).

The latest detailed plan of 2005 (Piano Particolareggiato di Riqualificazione di Città Alta - PPRCA) presents some innovations regarding the guidelines and the method used. It interprets the historic center as a place of multiple interactions as well as a place that plays an active and propulsive role in the territorial system. This approach gives value to the new technological-infrastructural and the new socio-cultural contexts, thus responding to the different city users' (residents, traders, tourists and workers) needs. This means that the historic center must be able to resist and overcome the processes of homologation to which it (and, in general, the contemporary city) is subjected in terms of generational stereotypes, housing standards, and functional hybridizations. In 2010, the current Local Plan (Piano di Governo del territorio - PGT) was drawn up which introduced two important innovations for the historic center.

First, the historic center goes beyond the traditional boundary around the Venetian walls, to integrate the old core into a functional system of territorial scale called "historic city". In the historic city of Bergamo an architectural, cultural, social and mnemonic value (typical of the ancient parts) is also recognized to the modern parts of Bergamo. The second innovation is that the Local Plan subdivides the historic city into "urban tissues", i.e. minimum building units that are homogeneous from the morpho-typological, historic and functional point of view (Comune di Bergamo, 2010). For the historic city, the PGT identifies specific policies aimed at the protection, preservation and enhancement of the historic and testimonial value of the fabrics and at the redefinition of their urban and territorial role. The Local Plan also entails specific actions: it includes transformation programmes on the environment, building and mobility, ensuring that the historic city (and therefore the historic center) regains a role in the territorial reorganization.

#### 4.1.2 Città Alta's contemporary issues

Since 2017, and due as well to the city's inclusion in the UNESCO list, the Municipality of Bergamo has paid attention back to the Città Alta by launching a series of studies aimed at updating the knowledge concerning the historic center and then preparing a new detailed plan (the 2005 PPRCA being no longer effective). This research was commissioned to Anrsa. The inhabitants' perception of the Città Alta was that of an old, empty town center, populated only by the elderly, which is losing the young generations and being filled up with accommodation activities aimed at the exclusive support of tourists and hikers. This situation gives the opportunity to investigate these phenomena in-depth and then be able to direct the new policies for the old town center. Given the orographic conformation of the Città Alta, mobility and accessibility remain among of the most important issues for the local community. In particular, the parking areas and car transit in the Upper Town have a clear priority for residents and runners of economic activities, although the Municipality of Bergamo has promoted planning and programming tools (the 2008 Urban Mobility Plan and the 2013 update of the Traffic Plan) aimed at improving mobility and public transport in the Città Alta. Its main goal is to ensure accessibility, quality, liveability and comfort in the historic center.

Figure 1. Bergamo Città Alta



Source: Silvia Restelli's Photo, 2017 February.

The 2017 study of Città Alta shows that the historic center is characterized by an ageing population, a fall in the number of young people and an increase in the number of one-person families. The comparison showed that these phenomena are not exclusive of the historic center but pervasive to the entire municipality and it is necessary to frame the phenomena of population change considering not only the historic center but also the entire municipality (Fior, Restelli, 2020). In Bergamo, the set of urban planning tools has designed a homogeneously



preserved urban tissue (with few vacant or degraded buildings), vibrant and rich in services and functions both for tourists and inhabitants. While the theme of accessibility/mobility remains strategic as it is a structural factor that requires specific technical solutions, the study highlights that these solutions are already indicated in various of the planning tools in force and that they must be coordinated and implemented.

#### 4.2 *The revitalization of the Città Vecchia (Old City) in Taranto*

Taranto, the Apulian administrative city of the homonymous province, is located in the center of the Mediterranean Sea and compared to the rest of Europe has serious conditions of economic delay with an unemployment rate of 19% (Census, 2011). The presence of important industrial and port facilities (Ilva Company) aggravate those imbalances because they have affected the economy, the environment, the accessibility and the quality of life.

Taranto has a close link with the sea. In fact, the Città Vecchia (Old City) is today an island that took shape with the construction of the Aragonese Castle moat, then transformed into a navigable canal, which separates the Mare Grande (Great sea) from the natural basin of the Mare Piccolo (Little sea). This isolation has affected urban development in several ways. The historic center, in fact, had to renew itself, stratifying; while the eight-nineteenth-century expansions (including the industrial one) were carried out outside the historic center, those expansions boosted a new socio-economic structure for the city.

##### 4.2.1 *Plans for the Città Vecchia*

The "Detailed Plan for the restoration and conservative rehabilitation of the Città Vecchia" (1971) has conditioned this situation because among its previsions was the residential mono-function of the island (public housing), which caused phenomena such as ghettoization<sup>2</sup> and the start of a marginalization and peripheralization process.

Currently, the *Variation of the General Masterplan* (1978) is the reference urban planning tool, which was followed by several programs and projects aimed at the recovery and redevelopment of the Città Vecchia. Among these:

1. The *Città Vecchia Recovery Plan* of 2003, entrusted to Oriol Bohigas but never adopted;
2. The *Urban II European Programme*<sup>3</sup> aimed at the Città Vecchia's economic and social revitalization through the allocation, from 2001 to 2006, of 15 million euros for renovating historic buildings that now host public functions;
3. 2014-2020 Por-Fesr projects that include the enhancement and use of the places of identity of Puglia, including Taranto's Città Vecchia. Currently, however, funding has only involved the restoration of the Madonna della Salute Sanctuary (end of work December 2018).

These initiatives show that the city of Taranto has long been subject to the attention of the local and national Government. On December 30<sup>th</sup> 2015 the Government signed the Institutional Development Contract for the Taranto Area (CIS Taranto)<sup>4</sup>, within which the *Plan of interventions for the recovery, redevelopment and enhancement of Città Vecchia of Taranto* was drawn up to integrate the National City Plan (Law No. 20/2015).

<sup>2</sup> <http://www.opentaranto.invitalia.it/#home>

<sup>3</sup> [https://ec.europa.eu/regional\\_policy/it/atlas/programmes/2000-2006/european/urban-ii-taranto](https://ec.europa.eu/regional_policy/it/atlas/programmes/2000-2006/european/urban-ii-taranto)

<sup>4</sup> <http://cistaranto.coesionemezzogiorno.it/primo-piano/cis/>



#### 4.2.2 Strategic regeneration lines for the Città Vecchia

The 2015 *Plan of interventions* will be decisive for the regeneration of the Città Vecchia and was anticipated by the definition of a medium to long term strategy<sup>5</sup> aimed at defining new roles and functions of the Città Vecchia. In order to define the strategy, the CIS has promoted an International Ideas Competition to stimulate creativity and planning for the historic center. The 46 proposals collected have traced transformative scenarios taking into account the urban, historic, social and economic evolution of the Città Vecchia, thinking of it as a system to be lived in, yet integrated into the municipal territory. The strategic outcomes of the Competition will be included in the *Plan of interventions* to start a regeneration process and activate public and private resources. The objectives are to strengthen the central role of the Città Vecchia with public functions on an urban and territorial scale and make the historic center a new engine of economic development by including Taranto among the national tourist circuits. Furthermore, the idea is to re-use private and public real estate assets, stop degradation processes, rationalize mobility, improve the accessibility and usability of places and rethink the relationship to the sea.

Figure 2. Taranto Città Vecchia



Source: iStock.com/AGaeta.

#### 4.2.3 The priority goals of the new Taranto Urban Plan

As highlighted by the Ancsa-Cresme research of 2017, the revitalization of the Città Vecchia is already slowly taking place, as a result of the guidelines envisaged by the current urban

<sup>5</sup> Strategy developed by the Permanent Institutional Board, which is the coordinating board for CIS interventions.



planning. In recent years there has been an increase in the number of residents in the historic center, the senile dependency index is lower than the national average and young people are increasing, probably also due to the inclusion of the Università degli Studi di Bari within the historic buildings. The number of employees is still problematic, with decreases between 2001 and 2011, although a parallel increase in local activities has been registered. A slow and progressive re-appropriation of the Città Vecchia is taking place, a trend sustained as well by the Urban Plan developed, whose priority objectives are contained in the Preliminary Programmatic Document, approved in June 2019, and are:

1. the safety of buildings, to contain the phenomena of degradation and abandonment;
2. the promotion of residency, to contrast the possible depopulation of the island;
3. the improvement and strengthening of existing services, to develop the city's livability and attractiveness.

The new plan is in line both with the previous planning tools and with the strategic regeneration lines contained in the 2015 *Plan of Interventions*. However, unlike in the previous urban planning, which were episodic and sectoral operations, the importance of counteracting the conditions of depopulation, marginality and degradation is underlined through the introduction of new attractive urban functions, social housing, and temporary uses, coherent with various urban planning actions in a comprehensive and unitary vision, also aimed at optimizing national and European funding.

## 5. Conclusions

Given that the two case studies of Bergamo and Taranto show different trends in many phenomena, how is it possible to launch a new national urban planning agenda that focuses on the regeneration of historic centers, taking into account their peculiarities and without homologating actions?

The case studies reported start from a demographic, social and economic dimension that is generally the opposite: in the North of Italy, inhabitants and local units are being lost; while in the South people get back to living and opening activities in the historic center. If the number of families is a positive figure for both cities, the greatest increase occurs in Taranto, while in Bergamo there is the greatest percentage variation of one-person and two-people families. If in Bergamo the elderly in the historic center decrease while in Taranto increase, the senility dependency ratio remains lower than in the South, on the contrary, the youth dependency ratio remains lower than in the North.

From the information collected for two so different historic centers, however, it is possible to define convergent lines for urban planning policies.

First of all, the need to not isolate the historic center from the surrounding urban system. Secondly, by including the historic center in the historic territory network, it is also necessary to keep on considering historic centers as one of the urban tissues that characterizes the existing city (Gabrielli, 1993). This approach is fundamental to exclude phenomena such as the marginalization of historic centers and to avoid dealing with the problems of historic centers as typical and specific issues of these organisms. This is because historic centers, especially those of the medium-sized cities, constantly have synergies with the surrounding context from which it is not possible to exclude them (Carandini, 2017).



Furthermore, there is a need to coordinate the different policies (social, economic and environmental) but also to implement the existing urban planning and programs in order to foreshadow the effects and repercussions of their forecasts both at the territorial and local levels (Bonfantini, 2018).

In general, concerning the ageing of the population, the contraction of families and the loss of economic attractiveness, a possible national agenda for Italian historic centers should take into account the following aspects.

The preservation and promotion of historic centers make sense and have a meaning if they are the urban system within which the population will act. Hence the basic question to be answered: should urban planning policies aim at attracting young people, or should new prospects be defined for a population that continues to get old?

This population will certainly have an interest in living in the historic center because it feels the bond to it and grasps its intrinsic value, but it will also have more difficulty in accessing and moving within it given the advancement of the average age.

The awareness that society has drastically changed requires Administrations to choose the most coherent way with an incontrovertible demographic process, even in the perspective of a reversal of a trend that will require at least a couple of generations to be corrected. While trying to create the conditions to bring back a new social mix to the historic centers, in the short to medium term we cannot avoid the daily and contingent problems of the present-day and future elderly inhabitants. In the same way, the current presence of young people must be a stimulus to promote the construction of affordable and social housing, as well as activities and initiatives that keep these populations anchored to the existing city.

On the one hand, national policies should aim to consolidate young people in centers where they are still a significant population class, as in Taranto. On the other hand, the conditions in which older residents will live must be improved, recognizing that they are not a homogeneous class for which to formulate "one-size policies". Elderly people are a social class diversified within itself according to age, gender, geographical origin, education, earnings, and health conditions. A welcoming physical environment that promotes the development and use of innovative technologies to encourage active ageing is important. Just as older people must find accessible transport by fostering their independence and social contacts.

As far as families are concerned, it is important to check their presence concerning the housing stock. In the historic centers, in-depth surveys should be carried out on the built-up city which, in the event of unfavorable housing conditions for single-parent families and single persons (elderly or young), could develop urban planning and building regulations aimed at encouraging the division of housing or its functional re-articulation in order to adapt it to new types of families. Therefore, it would also be useful to monitor the underutilization of public property (state and religious properties) because they are likely to represent the future of the public building stock to be redeveloped and put back into the housing market. Thus, they must be subjected to a set of urban planning rules aimed at reusing them without altering their historic-architectural value.



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