



4th Conference on Smart and Sustainable Cities

27 – 28 October, Lille, France

Organisers : S. BENAMROUZ., V. FLAMBARD, A. KARAMI

Thursday 27 October	Reception - 10h - 10h30 Aula Maxima	
	Opening ceremony- 10h30 - 11h00 Elisabetta Magnaghi - Dean Faculté de Gestion, Economie et Sciences. Nicolas Vaillant – Vice-President, Vice-Rector of Research and Vice-Rector for Social -Health Université Catholique de Lille Aula Maxima	
	Plenary conference - 11h00 - 13h00 La révolution des proximités Carlos Moreno – professor and expert city and territory of tomorrow - IAE Paris–Université Panthéon Sorbonne Aula Maxima	
	Lunch break - 13h00 - 14h00	
	Session 1 - 14h00 à 15h30 Biodiversité en milieu urbain Room RZ 148H	Workshop (KEOLIS) - 14h00 - 16h00 Imaginons la mobilité en 2050 Room RZ 152H
	Session 2 - 16h00 - 18h00 Nature en ville- - Nature in the City Room RZ 148H	
Friday 28 October	Session 3 - 9h00 - 10h00 International perspectives of Smart Cities Room RZ 148H	Debate- 9h30 - 11h00 Voyage en 2050 : la conférence-débat dont vous êtes les héro.ines ! 4 scénarios de l'ADEME pour atteindre la neutralité carbone Room RZ 152H
	Different perspectives – 10h00 - 11h00 Session Villes intelligentes en Asie (Singapour, Tokyo, Bangkok) Room RZ 113B	
	Session 4 - 11h00 - 13h00 Urban morphology, smart mobility and technologies Room RZ 148H	
	Lunch break - 13h00 - 14h30	
	Session 5 - 14h30 - 16h00 Governance and resilience Room RZ 148H	Round table - 14h30 - 16h00 Penser les enjeux énergétiques des villes de demain avec: EDF; Dalkia; Voltalia-Helixia Room RZ 152H
	Round table - 16h00 - 17h30 Enjeux des villes de demain - le potentiel du biomimétisme Room RZ 148H	Restitution - 16h00 - 17h30 (Canceled) Agence Haut de France 2020-2040 Prospective centre-ville horizon 2020-2040 Room RZ 152H

**Thursday 27
October 2022**

Room Aula Maxima

Thursday 27 October @ 10:00

Welcome to the Conference

Thursday 27 October @ 10:30

Opening the Conference

Elisabetta Magnaghi - Dean Faculté de Gestion, Economie et Sciences.

Nicolas Vaillant – Vice-President, Vice-Rector of Research and Vice-Rector for Social -Health
Université Catholique de Lille

Thursday 27 October @ 11:00

Carlos Moreno (IAE Paris–Université Panthéon Sorbonne)- La révolution des proximités
Directeur scientifique de la Chaire ETI “Entrepreneuriat–Territoire–Innovation” (IAE Paris–
Université Panthéon Sorbonne)

Abstract :

La crise du Covid-19 a montré la force des villes car il s'agit d'une crise urbaine systémique à caractère sanitaire. Devoir mettre la ville sous cloche afin d'éviter la propagation du virus montre la nécessité de repenser l'urbanisme de nos villes pour privilégier la valeur économique, écologique et sociale de la proximité.

Pour faire face au changement climatique sur le long terme et au COVID-19 sur le court terme, nous devons changer, radicalement, notre mode de vie urbaine. Il faut repenser les longs trajets dans nos villes et les concentrations qui leur sont associées. Il faut revoir les pôles mono-spécialisés de nos villes et donner une plus grande impulsion à la ville polycentrique. Il faut aller vers la ville multipolaire et multi-fonctionnelle. Nous devons donner priorité à un large accès aux services de proximité essentiels, dans un rayon maximum de 10 à 15 minutes à pied ou à vélo, pour créer cette nouvelle ville multi-centre. A Paris, nous l'avons nommée la ville des proximités, « La ville du quart d'heure ».

En juin 2022, il a lancé l'Observatoire des proximités (Global Observatory of proximities) avec UN-Habitat, C40 Cities, UCLG et les autres partenaires lors du World Urban Forum #WUF11.

Thursday 27 October @ 13:00-14:00

Lunch break

Room RZ 148H

Thursday 27 October @ 14:00-15:30

Session 1 : Biodiversité en milieu urbain

Présidente de séance / Session Chair : Sadia Benamrouz (Université Catholique de Lille)

- Marianne Hedont : La nature source de solutions face aux changements climatiques : panorama d'actions exemplaires de collectivités françaises

- Plante & Cité

Abstract :

Depuis 2010, le Concours Capitale française de la Biodiversité identifie, valorise et diffuse les meilleures pratiques des communes et intercommunalités françaises en matière de préservation et de restauration de la nature. Au-delà d'un concours, l'opération est avant tout un dispositif de sensibilisation, d'animation territoriale et d'échanges entre acteurs locaux : élus, services techniques, entreprises associations, habitants... Ce panorama donnera à voir des actions inspirantes de préservation, de gestion et de reconquête des écosystèmes dans différents contextes géographiques et à différentes échelles pour garantir la résilience des territoires face aux changements globaux.

- Philippe Julve : Flore et végétation des interstices urbains : l'exemple de Lille (Nord / France)

- Université Catholique de Lille

Abstract:

Une étude de la flore et de la végétation de 13 interstices urbains de la ville de Lille a été menée sur deux années. Elle s'est organisée autour de 14 questions. Quelques résultats généraux portant sur une demi-douzaine de ces questions seront présentés en séance. Ils permettront de discuter les problématiques de gestion des interstices urbains dans une optique de connectivité biologique des sites et d'amélioration de leur biodiversité.

- Cédric Devigne et Yohan Tison : biodiversité urbaine vision à 2040 - -

- Ville de Lille

Abstract:

Difficile d'imaginer l'évolution de la biodiversité d'espace restreint et urbain sur un pas de temps relativement court (30 à 50 ans), c'est pourtant ce que les services des villes essaient d'anticiper dans leur plan nature, plan biodiversité en adaptant la gestion des espaces pour accueillir une biodiversité toujours plus importante. Y aura t-il un jour le castor à Lille ? Nul ne le sait mais il est déjà au canal de Roubaix et la ville organise son arrivée en plantant les berges de Deûle pour le rassasier. Le réchauffement climatique modifie les conditions de vie des espèces, faut-il planter des espèces méditerranéennes à Lille ? A une époque où l'on privilégie le végétal local, il est parfois nécessaire de déroger à cela et d'élargir la géographie de nos sources... jusqu'où aller, c'est la question actuelle dont la réponse aura son résultat en 2050 !



Cette présentation sera l'occasion de présenter les efforts d'aménagements de la ville de Lille pour faire profiter aux citoyens d'un environnement de qualité.

Thursday 27 October @ 16:00-18:00

Session 2 : Nature en ville

Présidente de séance / Session Chair : Agathe Douchet and Florian Kletty (Université Catholique de Lille)

Amélie Dakouré, Marie Pelé and Jean-Yves Georges: Reconsidering human and animals' ways of inhabiting in the post-lockdown urban era

- Laboratoire EVS, CNRS-UMR 5600, Université de Lyon 3 ; IPHC CNRS-UMR 7178 ; Une Fabrique de la Ville

Abstract:

The city is the territory of major societal and environmental challenges that has for several years now been accentuated by the loss of experiencing nature. The great 2020 lockdown led to a (re)-discovery of wild animals by residents. This situation invites us to question the different ways of co-existence by humans and wild animals in the same urbanized territory. This study, carried out during the great 2020 lockdown and based on a national survey, describes the spaces, species and way of meetings of city dwellers with wild animals in urban territories. A reflective discussion proposed by a geographer, an ethologist and an ecologist shows how these meetings first constrained to the private space opened up to public sensory spaces in response to a greater need for experiencing nature.

Jean-Yves Georges, Adine Hector, Gildas Lemonnier, Sandrine Glatron, Yves Meinard and Véronique Philippot : What nature in the city of tomorrow? Toward a new paradigm about exoticism

- Université de Strasbourg, CNRS, IPHC UMR 7178, F-67000 Strasbourg & LTSER France ZAEU, Misha, F-67000 Strasbourg

Abstract:

*Two public parks in the city of Strasbourg, France, were studied through an interdisciplinary approach aiming at quantifying populations of aquatic turtles and evaluating public knowledge, representations and opinions about them. The naturalist inventory resulting from 4 years of monitoring revealed the presence of 12 species and subspecies, all exotic (some of them being invasive in the wild) totaling some 80 individuals including newborns. Only one single specimen of the local, protected European pond turtle *Emys orbicularis* was contacted in 2019 until it was brought by unknown people to a dedicated care center. Ethnographic interviews with park users and agents revealed a general lack of knowledge of this urban biodiversity. Although the sensitivity to the turtle (in the general term) was slightly exacerbated, its presence in the parks provoked various reactions between curiosity and indignation, 40% of users however saying they were satisfied having turtles in the urban parks. Opinions on the relevance of this alien presence diverged between agents and users and all discussed the risks of biological invasion in the city. Agents and users mainly offered interventionist or preventive solutions, with a preference for extracting individuals to*

dedicated spaces. The destruction of the species was globally rejected. These operational solutions require a fine and local understanding of the relationship between citizens and the living, a new paradigm on alien species that can contribute to a reconnection of citizens with nature, with the potential rise of a new nature in the city to be understood and to be accepted thanks to the co-construction of positions energized by citizen and scientific knowledge. The marked presence of exoticism instead of a natural heritage that could be regaining its place raises the question of the management of invasives in the city, and more generally of the function of the parks of the city of tomorrow, between an outlet for exotic species to limit invasions in the natural environment and a new springboard for heritage species. This research is part of the Project TortuEEES with the support of LTSER France, Zone Atelier Environnementale Urbaine.

Jean-Yves Georges, Rémi Barbier, Mina Charnaux, Philippe Hamman, Mathieu Hertzog, Tristan Lambry, Lisa Remords, Marie-Laure Rizzi, Hugo Tichit and Adine Hector: Feeding wild animals in the city: focus on the Strasbourg Eurometropolis
- Université de Strasbourg, CNRS, IPHC UMR 7178, F-67000 Strasbourg & LTSER France ZAEU, Misha, F-67000 Strasbourg

Abstract:

The feeding of wild animals in the city is a growing global phenomenon that raises questions. If some sociologists believe that it allows city dwellers a certain experience of nature, other biologists show that it is harmful to animal health and potentially risky for feeders. The city of Strasbourg, with a Territorial Ecology Department involved in the subject, carries out monitoring and information and awareness campaigns with the aim of limiting the feeding of wild animals in the city. In 2021, we initiated a transdisciplinary action oriented research program intended to identify levers allowing the city to consolidate its policy of limiting feeding. To this end, the survey focused on (1) identify the mechanisms, motivations and modalities involved in this human behavior that is the feeding of animals in the city; (2) assess the citizen's perception and the effectiveness of the information campaign launched in Strasbourg simultaneously with this study. This study is part of the project ALIMALENVILLE with the support of LTSER France, Zone Atelier Environnementale Urbaine.

Amélie Dakouré, Lise Bourdeau-Lepage, Sébastien Harlaux and Jean-Yves Georges : Bringing together people and nature in town: an original Participatory System Combining Urban Planning and Science for the new bioclimatic urban plan of Paris, France
- EVS CNRS-UMR 5600, F-69000 Lyon & Université de Strasbourg, IPHC UMR 7178, F-67000 Strasbourg & UFDLV, F-75003 Paris

Abstract:

According to the United Nations, 68% of the world population will live in cities by 2050. To offer a livable environment to their inhabitants while globally facing climate change and associated biodiversity crisis, cities have to adapt their urban plan to become sustainable. This highly urgent need prompted the City of Paris to change its urban development strategy, by currently revisiting its local urban plan into a bioclimatic one. Novelties included in this new bioclimatic urban plan is aimed at changing city dwellers living environment. This paper will present our first results of a new governance system called "Participatory System Combining Town Planning and Science" (2P.S-C.T) that aims to become an answer to these two challenges. This



new system is currently experimented as part of a PhD project conducted by Amélie Dakouré. The main hypothesis is that thanks to 2P.S-C.T, city dwellers will improve their knowledge about local biodiversity and facilitate biodiversity integration in cities during the design and management phase of urban planning project for permitting people and nature to live sustainably in the town of tomorrow.

Room RZ 152H

Thursday 27 October @ 14:00-16:00

Atelier de prospective KEOLIS : Imaginons la mobilité en 2050

Register to be part of a team!

Session chair: Matthieu REMY Resp. Open Innovation chez Keolis avec l'Association FUTURA Mobility

Abstract:

A quoi ressemblera le monde et la mobilité en 2050 ? Quels sont les grands enjeux dont il faut se saisir ?

Keolis vous invite avec Futura Mobility à vous saisir de scénarios futuristes, à réfléchir aux enjeux et solutions pour adapter l'offre de mobilité d'un territoire en fonction de ces scénarios. Soyez acteurs de la mobilité de demain ! Atelier par équipe, sur inscription préalable

**Friday 28 October
2022**

Room RZ 148H

Friday 28 October @ 9:00-10:00

Session 3. International perspectives of Smart Cities

Session Chair : Talah Arabiyat (Hussein Technical University)

Nada Mallah Boustani and Qing Xu: Getting smarter: blockchain and IoT mixture in China smart public services

- Université Saint-Joseph de Beyrouth
- Université Catholique de Lille

Abstract:

Due to the tremendous technological breakthroughs, an increasing number of cities are transforming into "smart cities" by utilizing the Internet of Things (IOT), artificial intelligence, or other information technologies. The Chinese government announced that the development of "digital cities smart cities" was a national priority. The goal of this study is to examine the success variables that can influence IoT service adoption aspirations while also serving as a mediator for enhanced security via Blockchain technologies.

A conceptual model is created with a strong theoretical underpinning and body of literature. A quantitative survey was conducted among 1008 Chinese citizens who utilized IoT services to test the suggested model using SEM (structural equation modeling) and to analyze the impact of identified variables on the continuous usage intention.

According to the Unified Theory of Acceptance and Use of Technology (UTAUT), the adoption of IoT by citizens and their continuous use are strongly correlated, and blockchain will provide many new prospects for IoT system implementation. The authors of this study examined how perceived security and public value can increase people's engagement with IoT public services. Additionally, the experts talked about challenges that IoT in smart cities faces and potential remedies based on blockchain technology. A framework for integrating blockchain with IoT was created based on sociodemographic characteristics (age, education, IoT experience) to carry out IoT public services more successfully and sustainably in the future.

Keywords: Internet of Things (IOT), blockchain, smart cities

Nammi Kim and Seungwoo Yang : Socio-technical Characteristics of the Conceptually Related Smart Cities (CRSCs)' Services from the International Perspectives

- University of Seoul

Abstract:

Sustainable Smart Cities(SSCs) have developed with diverse services and technologies in multi-stakeholderism under various names. Many scholars point out that in-depth empirical studies of Conceptually Related Smart Cities(CRSCs) clarify the nature of the socio-technical transition of the SSCs with avoiding the oversimplified narratives of techno-utopia. Based on the comprehensive research question of "What are the socio-technical characteristics of the Conceptually

Related Smart Cities(CRSCs)'s services from international perspectives?", this study aims to identify socio-technical characteristics of the CRSCs' services from international perspectives by utilizing the periodic matrix taxonomy. The city data are sampled by cluster sampling and complied with a literature review. The outcomes are about commonalities of sampled European cities from perspectives of multistakeholderism and different services' socio-technical transitions led by three types of stakeholders' cooperation for service implementation. The outcomes have implications in terms of providing empirical results to the existing theories through and specifying the stakeholders' partnerships in the CRSCs' evolutions from international perspectives.

Keywords: Smart Cities Services, Sustainability, Socio-technical Transitions

Room RZ 113B

Friday 28 October @ 10h00-11h00

Session Villes intelligentes en Asie (Singapour, Tokyo, Bangkok)

Session chair: Eric Mottet

Eric Mottet (Université Catholique de Lille) et Raphaël Languillon-Aussel: Infrastructures vertes, architecture durable et green tech : Singapour, une smart city au cœur de l'innovation

- Université Catholique de Lille
- Institut Français de recherche sur le Japon, Maison franco-japonaise de Tokyo ainsi que Chercheur associé à l'Université de Genève et de Strasbourg

Abstract: La cité-État la plus célèbre d'Asie est devenue la ville intelligente par excellence. Singapour, nation insulaire d'Asie du Sud-Est forte de quelque 5,5 millions d'habitants, est déjà connue comme l'une des zones urbaines les plus vertes au monde. Surnommée « la ville jardin », Singapour a su se faire remarquer ces dernières années grâce à ses efforts pour construire un avenir véritablement durable, mêlant innovation numérique, architecture et infrastructures vertes et réglementations strictes sur les émissions de carbone. En tête de nombreux classements internationaux comme le Green View Index, et surtout, le IMD Smart Cities Index, Singapour est sans conteste la ville intelligente la plus en avance au monde. Au-delà de Singapour, l'Asie est l'une des régions du monde comptant le plus de projets de Smart Cities. De Singapour à Tokyo, en passant par Bangkok, cette communication propose d'approcher les politiques asiatiques de villes intelligentes par leur action publique et les stratégies d'acteurs tout en interrogeant la place de cette partie du monde dans la structuration d'un éventuel modèle asiatique de la ville intelligente.

Keywords : Singapour, Asie, green tech

Room RZ 148H

Friday 28 October @ 11:00-13:00

Session 4. Urban morphology and Smart mobility

Session Chair : Guillaume Bourgeois (Université Catholique de Lille)

Pascale Champalaune : Air Pollution and Urban Morphology: Evidence from French Cities
- Paris School of Economics

Abstract:

I use French panel data over the 2006-2017 period to uncover the impact of urban morphological aspects, including density and polycentricity, on local air pollution. Compact cities are uniformly seen as both environmentally-friendly and more productive, through, respectively, reduced car use and agglomeration externalities. Using an instrumental variable strategy to tackle endogeneity issues, I show that urban density also has a downside, as it fosters higher fine particulate matter (PM_{2.5}) concentration. However, results also show that a more polycentric structure would allow to weaken the negative impact of density.

Katarzyna Turoń: Obsolete or up-to-date? Analysis of functioning and perceptions of shared mobility services

- Silesian University of Technology, Faculty of Transport and Aviation Engineering, Department of Road Transport, Poland

Abstract:

Every year, shared mobility services are becoming an increasingly popular and accessible solution for urban transport systems. Along with the growing requirements of users and changes in market trends, many new improvements are introduced to the systems. These improvements are related to the updating of existing services to the creation of new business solutions known as innovative. All implemented changes are to counteract the phenomenon of the so-called "obsolescence of services". Despite this, many services are not functioning properly, transport efficiently and economically. Nevertheless, the analysis of global case studies shows that many services do not function properly, efficiently and, above all, economically. Disruptions in the functioning of systems may translate into negative effects on users in the form of their reluctance to use the services. And in this case, the idea of "new mobility" which was supposed to replace the old transport habits of society cannot be fully implemented. The paper presents the results of survey conducted for the Polish market of shared mobility services. The article identifies the main issues considered by society to be outdated and indicates improvements that can be applied to improve the adjustment of services to current requirements, especially in the times of the COVID-19 pandemic and inflation.

Work supports the development of shared mobility services in urban centers striving to be referred to as smart cities.

Andrzej Kubik: Operational aspects of electric scooter from electric shared mobility systems
- Silesian University of Technology, Poland

Abstract:

The article was devoted to the energy intensity of driving electric scooters used in shared mobility systems. Due to the emerging demand for excessive energy consumption m.in by electric scooters (including shared mobility system vehicles), the author conducted research to determine the factors affecting the energy consumption of the tested vehicle. Due to the existence of a research gap related to the lack of reliable scientific information on the actual electricity consumption of electric scooters used in shared mobility systems, the author attempted to determine these values on the basis of a proposed research experiment. The aim of the study was to identify factors that increase energy consumption while driving a vehicle in the case of shared mobility systems and to develop recommendations for users and

operators of these systems in relation to energy consumption. The scientific experiment was based on Hartley's experimental plan. Author made rides on electric scooters (measurements) in order to compare the actual consumption with the data provided by vehicle manufacturers. As a result, the author has compiled a list of factors that negatively affect the energy consumption of electric scooters from shared mobility systems. In summary, a number of recommendations have been developed for operators of shared mobility systems on how to manage their systems in order to reduce excessive energy consumption in electric scooters.

Mohamed Cherif, Boubekeur Dokkar et Naoui Khenfer: Heating of a standalone construction trailer in a desert climate using PEM fuel cells (Canceled)

Room RZ 152H

Friday 28 October @ 9:30-11 :00

Voyage en 2050 : la conférence-débat dont vous êtes les héro.ines ! 4 scénarios de l'ADEME pour atteindre la neutralité carbone

Éric Vidalenc, directeur adjoint de l'Ademe Hauts-de-France

Abstract:

La neutralité carbone à l'horizon 2050 appartient désormais au langage commun. Si sa définition est à peu près partagée, le chemin pour l'atteindre reste encore flou, voire totalement inconnu, pour la plupart des décideurs et des citoyens. Face à l'urgence climatique, les changements à opérer sont d'une telle ampleur qu'il est pourtant indispensable d'accélérer les débats sur les choix de société à conduire mais le chemin pour l'atteindre reste encore flou, voire inconnu, pour les décideurs et les citoyens. C'est pourquoi l'ADEME a souhaité soumettre au débat quatre chemins « types », cohérents et contrastés pour conduire la France vers la neutralité carbone.

Cet exercice de prospective inédit repose sur deux ans de travaux d'élaboration, la mobilisation d'une centaine de collaborateurs de l'ADEME et des échanges réguliers avec un comité scientifique et des partenaires et prestataires extérieurs, spécialistes des différents domaines. Imaginés pour la France métropolitaine, ils reposent sur les mêmes données macroéconomiques démographiques et d'évolution climatique (+2,1 °C en 2100). Ils aboutissent tous à la neutralité carbone du pays, mais empruntent des voies distinctes et correspondent à des choix de société différents.

Eric Vidalenc, directeur adjoint de l'ADEME Hauts-de-France a largement contribué à cet exercice de prospective. Il présentera les 4 scénarios dénommés ainsi : 1. Génération frugale ; 2. Coopérations territoriales ; 3. Technologies vertes ; 4. Pari réparateur.

L'ADEME Hauts-de-France s'associe avec La Belle Boîte (une troupe de comédiens improvisateurs) pour proposer une conférence/débat et pour présenter avec simplicité et humour les 4 scénarios vers la neutralité carbone en 2050. Les vulgariser pour les rendre accessible au grand public et les amener à imaginer leur vie en 2050.



Friday 28 October @ 13:00-14:30

Lunch break

Room RZ 148H

Friday 28 October @ 14:30-16:00

Session 5. Governance and resilience

Session Chair : Claire Thibout (Université Catholique de Lille)

Giulia Sandri and Felix von Nostitz: Smart cities, smart citizens: Attitudes des citoyens et des acteurs politiques à l'égard des villes intelligentes

- Université Catholique de Lille

Abstract:

Digitalization and urbanization represent central societal challenges in the 21st century and both are key aspects of the smart cities' phenomenon. Smart mobility, smart work, innovations in local e-government and smart urban planning are the key nodes in a networked world. However, the promises of digital innovations in smart cities, where traditional networks and services would be made more efficient by the use of digital solutions for the benefit of its inhabitants and businesses, have not been entirely met. This is especially true from the citizens' needs perspective (Kaplan 2013; Cardullo and Kitchin 2029; Liethaiser and Follman 2020). Rather, challenges such as data protection problems, low citizens' and stakeholders' engagement, excessive influence by private companies, inefficiencies in digital governance and cybercrime indicate considerable deficits and challenges in the existing, mostly top-down, model of smart cities (Przebylovicz et al. 2020; Mabi 2021). This paper presents a new analytical framework for empirically mapping political actors' and citizens' opinions on the smart city issue in France, exploring whether a high politicization of the issue leads to more participatory smart city models. The aim is to build a multi-level dataset on citizens and parties' preferences on models of smart cities that would assess the bottom-up or top-down nature of the smartification process, providing useful data on citizens' involvement, which can lead to policy recommendations for local institutions and key stakeholders. The analytical framework will allow to asses empirically the political and social support for smartification processes in order to provide targeted policy recommendations and an innovative roadmap for implementing participatory models of smart city initiatives for policymakers, local and national level decision-makers, and urban planners, in order to foster citizens' acceptance of urban technologies.

Feriştah Yılmaz and Elif Balam Sizan: Examining the relationship of smart cities with social resilience in the framework of metropolitan municipalities in Turkey

- Bartın University, Turkey

Abstract:

The study deals with resilience and the concept of smart city together. The main problem of the study is how smart cities should be organized and resisted against crises. The aim of the study is to solve the fragility of smart cities with a social urban space. The assumption of the study is that a community-based organization can be effective in risk

reduction, urban space planning and social resilience. The sample of the study consists of metropolitan municipalities in Turkey. Metropolitan municipalities are successful in smart cities; they provide continuity in smart city policies. At the same time, metropolitan municipalities (like other municipalities) have traditional neighbourhood governances that shape urban life, social identity and living conditions. In the first part, the concept of resilience will be defined based on international conventions and the relationship between smart city and resilience will be revealed. In the second part, information about the traditional neighbourhood governance in Turkey will be given and the use of community-based participation neighbourhoods as a place in crises management will be emphasized. In the third part, the historical process of the metropolitan administrations regarding the smart city will be discussed; the strategic plans of the municipalities, the annual reports and the smart city applications will be evaluated within the framework of the concept of resistance. In the conclusion part, information will be given about community-based disaster projects at the neighbourhood scale, emphasizing a structuring based on cooperation with neighbourhood governance in order to ensure resilience in smart cities.

Sara Roversi, Sonia Massari, Erika Solimeo, Stefano Pisani and Benedetto Zacchiroli : Creating the model of integral ecological regeneration in Italian rural villages through sustainable food systems: the case of Pollica 2050

- Future Food Institute & University of Pisa (Department of Agriculture, Food and Environment), Italy

Abstract:

The Paideia Campus is an experimental hub and open-air laboratory of education and co-creation with the local community of an innovative concept of paideia, starting from shared human values. The involvement of the community has been paramount in order to establishing this model of integral ecological regeneration.

Pollica 2050 is the path that, through the implementation of this model, the FFI and the Municipality of Pollica envision for the integral regeneration of the territories: an eco-centric strategy able to involve both Pollica and the surrounding villages of Cilento, so that the local community is involved, sensitized, and empowered starting from the sense of belonging and responsibility to the territory to build sites of trust and communities of intentions.

keywords: Mediterranean diet, prosperity, regeneration

Room RZ 148H

Friday 28 October @ 16:00-17:30

Table ronde : Enjeux des villes de demain : le potentiel du biomimétisme

Session chair: Loïc Aubrée (Université Catholique de Lille)

Hugo Bachellier (Ceebios), Isabelle Denantes-Verdier (biomim+)

Abstract:

Observer le vivant et s'en inspirer pour innover : tel est le principe du biomimétisme. Le biomimétisme, par la compréhension et l'imitation des systèmes vivants et en particulier des écosystèmes, est à la fois une opportunité et un outil pour repenser les villes de demain. Les stratégies bio-inspirées peuvent ainsi être utilisées pour la mobilité, la gestion des flux - de l'énergie en particulier. Par ailleurs, les bâtiments doivent être conçus comme des organismes

vivants intégrés, adaptés à leur milieu et capables de fournir des services écosystémiques comme accueillir la biodiversité, assurer une bonne qualité d'air, purifier et stocker les eaux de pluie ou convertir la lumière du soleil en énergie utilisable.

L'objet de la table ronde est de présenter les principales notions que recouvre le biomimétisme, de considérer comment cette démarche innovante peut inspirer et même guider les aménagements de la ville, la construction et la rénovation des bâtiments, et des services qui y sont proposés. Il s'agira enfin de montrer que la place accordée à la biodiversité pour élaborer et choisir des politiques publiques peut constituer un support d'initiation à une réflexion prospective -notamment auprès des publics étudiants.

La table ronde sera animée par Loïc Aubrée (Université Catholique de Lille). Les intervenants sont : Hugo Bachelier (Ceebios) et Isabelle Verdier (Biomim+), enseignante à l'Université Catholique de Lille. Cette table ronde s'inscrit dans la dynamique de structuration d'un collectif d'acteurs bio-inspirés en Hauts-de-France, et de développement du projet BLOOM.

Room RZ 152H

Friday 21 October @ 14:30-16:00

Table ronde : Penser les enjeux énergétiques des villes de demain avec EDF ; Dalkia ; Voltalia-Helexia

Session chair: Véronique Flambard (Université Catholique de Lille)

- Helexia : Christophe Constant, France Managing General Director
- EDF : Matthieu Meese, Territorial Development Director
- Dalkia : Denis Bobillier, Director of Technical Affairs and Project

Abstract:

Nous vivons dans un monde VUCA qui se traduit notamment par une crise énergétique durable. Nous illustrerons la place de l'énergie dans notre quotidien et mettrons en perspective les facteurs clés de succès de la transition énergétique vers un modèle plus résilient. (C. Constant, Helexia)

Puis nous aborderons la question de l'optimisation de la gestion énergétique avec une illustration technique des différentes innovations en lien avec l'énergie du futur et des propositions d'efficacité énergétique au service des populations et ceci dans notre région des Hauts de France (M. Meese, EDF).

Enfin, les solutions de transition énergétique dans l'industrie, l'habitat et le tertiaire seront présentées. Le démonstrateur de chaudière pour captation de CO₂ à Dunkerque sera présenté comme exemple saillant. Nous nous interrogerons sur la captation de CO₂ : solution incontournable de décarbonation ou délire de chercheur? (D. Bobillier, Dalkia)

Room RZ 152H

Friday 21 October @ 16:00-17:30 (Canceled)

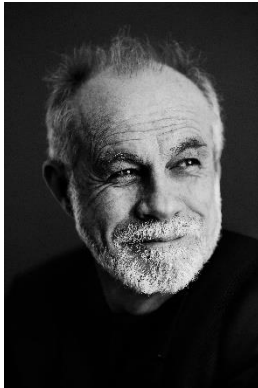
Restitution des analyses de prospective de l'agence Haut de France sur les centres-villes à l'horizon 2020-2040

Aurore Sorin et Stéphane Humbert : Service observation et prospective de l'agence Haut-de-France 2020-2040

Biographies

Thursday in Aula Maxima

11:00-13:00



Carlos Moreno

Carlos Moreno is a university professor and researcher who has gained international recognition for his major contributions and pioneering concepts, bringing an innovative perspective to urban issues.

Thursday in RZ 148H

14:00-15:30



Marianne Hédont

Marianne Hédont has been project manager on "Ecology and landscape" themes at Plante & Cité since 2016. Plante & Cité develops and builds a network of public-private actors to experiment and share knowledge about nature in the city. In addition, Plante & Cité co-organizes the French Capital of Biodiversity Competition with the Ile de France Regional Biodiversity Agency, which each year makes it possible to identify and promote inspiring initiatives in favor of natural areas and biodiversity, carried by the communities.



Philippe Julve

Philippe Julve currently works at the Faculté de Gestion, Economie et Sciences, of Université Catholique de Lille. He is an expert in regional and international organizations in ecology and phytosociology. He has contributed to the field with the French Flora Index (baseflor) which contains more than 6000 taxa, the synonymic repertory of the plant groups of France (baseveg) with more than 3500 entries, the world list of peatland plants, the departmental chorology and departmental synchorology lists, the algae database of France, the bryophytes database of France, various cross-referenced animal and vegetation databases. His research activity is mainly devoted to the flora and vegetation of France (description of habitats, ecology and chorology of species, floristic statistics...); the flora, vegetation and functioning of peatlands worldwide (world lists of peatland plants, synthesis of holarctic peatland vegetation, functional aspects); the flora, vegetation and biocenology of functional ecological networks, with the examples of ponds and estuaries, vertical ecosystems, linear and point ecosystems; landscape phytosociology and the terroirs of France.

16:00-18:00



Amélie Dakouré

After a bachelor in geography and a master degree in human ecology, Amélie Dakouré followed the “Biodiversity and Land use planning” master program offered by the French National Museum of Natural History in Paris. As a part of this program, she did a research internship on city dwellers perception of urban wildlife at the National Center of Scientific Research, in Strasbourg, supervised by Marie Pelé, researcher in ethology, and Jean-Yves Georges, senior researcher in ecology. Now, Amélie Dakouré is enrolled at the University of Jean-Moulin Lyon 3 to conduct her PhD in geography and land use planning, entitled “Combining urban planning

and participatory science in Paris: a winning strategy for well-being and biodiversity in the city of tomorrow.” This PhD is framed by the French System of Industrial Conventions for Training Through Research and supervised by Lise Bourdeau-Lepage, geography professor, Jean-Yves Georges, senior researcher in ecology, and Sébastien Harlaux, urban planning project manager.



Lise Bourdeau-Lepage is 1st class full professor of geography at the University of Lyon. She is a doctor in economics and accredited to supervise research. As researcher of the CNRS Laboratory Environment Ville Société, she conducts research in geography and urban economy (place of nature in the city, measure of the individuals’ well-being, socio-spatial inequalities and territorial attractiveness). She is President of French speaking section of the ERSA (ASRDLF). She is co-editor of the journal “Revue d’économie régionale et urbaine” and co-editor-in-chief of the journals “Géographie, économie, société”. This year, she was named by the media as one of the 100 personalities who make the city in France.

Thursday in RZ 152H

14:00-16/00



Matthieu REMY

Matthieu REMY is an Open Innovation Manager at Keolis Group Innovation Department. He has a 20-year background in innovation topics: first in e-commerce and digital marketing when he was working for major retail players (Kiabi, Leroy Merlin, Auchan, Decathlon...) and then when launching a start-up with the mission to develop technologies to improve the autonomy

of people with reduced mobility. He joins the Keolis Group in 2019 to develop and lead the Open Innovation approach, whose objective is to promote the replication of innovations within the Group and collaboration with innovative ecosystems.

Friday in RZ 148H

9:00-10:00



Qing XU

Qing XU is currently an associate professor at Université Catholique de Lille (Faculté de Gestion, Économie & Sciences) and an associate member of GREDEG research team (CNRS). She received a PhD in economics from Université Côte d'Azur in 2014. Her primary research interest is in m-payment in Asia & Africa, exporting the m-payment models to other countries, but also fintech development, digital currency, and innovation in finance.

Nammi Kim



Nammi Kim is a Ph.D. candidate in Urban Planning and Design Department, College of Urban Science, University of Seoul. She is interested in Sustainable Smart Cities' conceptualization and service strategy concerning sustainable development for urban planning applications, and participated in related research and projects. She published the article "Characteristics of Conceptually Related Smart Cities (CRSCs) Services from the Perspective of Sustainability" in Sustainability.



Seungwoo Yang

Seungwoo Yang is a professor in Urban Planning and Design Department, College of Urban Science, University of Seoul, and operates a Laboratory of Urban Design and Form in the university. He is a former Dean of College of Urban Science in University of Seoul(2017-2019) and a head of The Institute of Seoul Studies(2019-2021). He studied the German urban form in Germany Otto Friedrich University Bamberg geography with W. Krings in 1998; he studied on the theme of action and urban design in the United States UC Davis Civil Construction in

2007. The main academic interests are, urban design, urban form, urban planning and he is carrying out research and projects related to them.

Friday in RZ 152H

9:30-11:00



Hervé Pignon

A graduate of the University of Artois in 1981, civil engineering option, he began his career in a building-public works company, as an account manager. In 1983, he joined the French Agency for Energy Management (AFME). In 1992, when ADEME was created, he became head of the Planning, Buildings and Transport unit, within the Nord-Pas de Calais Regional Department. He was appointed Regional Director of ADEME in Nord-Pas de Calais on July 17, 1998 then appointed Regional Director of ADEME Hauts-de-France on January 1, 2016. Since 2020, he has been Chairman of the UNI-REV3 Scientific Council.

Friday in RZ 148H

14:30-16:00

Feriştah Yılmaz



Feriştah Yılmaz completed her MA at Dokuz Eylül University Graduate School of Social Sciences in department of Public Administration her thesis title is "Integrated Borderland Management". Following her MA, she started PhD at Gazi University Graduate School of Social Sciences in department of Public Administration. Her PhD thesis title is "Examining Metropolitan Management in Turkey from the Point of Rural Areas: Issues and Solution Proposals". Her research interests are local government, local democracy, urbanization and urban studies. She worked Gazi University (Ankara), Dokuz Eylül University (İzmir) and Bartın University (Bartın) as a research assistant. She is still working in Bartın University as a research assistant. After receiving her doctorate, she began teaching. She continues to lecture about disaster management, local government, urban policy, and contemporary approaches in public administration. Her latest studies focus on development agencies, rural neighbourhoods and borders of municipalities, social municipality, and violence against women.



Elif Balam Sızan

Elif Balam Sızan is research assistant in the Department of Political Sciences and Public Administration at the Ankara Hacı Bayram Veli University. She completed her MA at Ankara University Graduate School of Social Sciences in department of Public Administration and her thesis title is “Understanding the State through Crises of Capitalism: A Discussion of a Capitalist Form and Function”. She continues her PhD study, which she started in 2017 at Gazi University Graduate School of Social Sciences in department of Public Administration. Her research interests are urban theory, urban sociology, and urban politics.

Sara Roversi



Sara Roversi is an entrepreneur and the founder of the Future Food Institute. Expert in innovation in the agri-food supply chain and sustainability; she promotes social innovation projects, international cooperation and advanced training programs. In 2014 she founded the Future Food Institute, a research and training center born in Bologna with offices today in San Francisco, Tokyo and Shanghai and from 2021 also in Pollica, UNESCO Emblematic Community of the Mediterranean Diet.

Sonia Massari



Dr. Sonia Massari has more than 20 years of experience as an educator, researcher, consultant, and designer in the fields of human-food interaction design, sustainability education, design thinking and creative methods for innovative agri-food systems. She currently is the Academic Director at the Future Food Academy, a Research Fellow at Department of Agriculture, Food and Environment (PAGE) at the University of Pisa and a senior consultant at the Barilla Foundation. Co-founder of the FORK Organization, an international no-profit organization dedicated to food+design. The title of her book is: "Trans-disciplinary Case Studies on Design for Food and Sustainability" (2021, Elsevier)

Erika Solimeno



As an environmental legal specialist and activist, Erika Solimeno focused her earlier career on global water policy, international water law, and human right to water, which evolved towards a detailed analysis of marine conservation and ocean ecosystems. Currently, Erika is coordinating the Future Food Initiatives team and leads the Future Food Content and Research Department, giving her the chance to develop the water framework for regenerative purposes and take part in several hackathons on water efficiency.

Benedetto Zacchioli



After graduating in Theology from the Pontifical University of St. Thomas Aquinas in Rome, he started actively participating in politics. From 2004 to 2009 he was appointed head of international relations for the city of Bologna, continuing as a City Councilor till the year 2016. Since 2015 he acts as President of ECCAR (European Coalition of Cities Against Racism and Discrimination), a role he interprets in a global political way, recognizing networking as source of strength for every government policy that wishes to be called humane and just.

Stefano Pisani - Mayor of Pollica

In September 2010, he became Mayor, continuing the commitment undertaken by his predecessor in the defense of legality and in the enhancement of sustainable development. During its administration, the "Mediterranean Diet Study Center - Angelo Vassallo" was activated for the enhancement of the UNESCO recognition of "Mediterranean Diet as intangible cultural heritage of humanity", obtained in November 2010. In September 2012, again by UNESCO, he received the Michelangelo medal for the "One Hundred Mayors for beauty and landscape" initiative.

Friday in RZ 148H

16:00-17:30



Hugo Bachellier

Hugo Bachellier, a UTC engineer by training, has been working for several years for Ceebios on the deployment of biomimicry in pedagogy in France as well as in the public policies of regional territories. He also recently joined the Institut des Futurs Souhaitables to accompany the development of a network of actors willing to reintroduce the consideration of caring for the living in organizations.



Isabelle Denantes-Verdier

Isabelle Denantes-Verdier: Teacher, Lecturer and facilitator of workshops on Biomimicry in several higher education institutions (Université Catholique de Lille, Arts&Métiers ParisTech - Lille...). Co-founder of Biomim'+, a structure for raising awareness of bio-inspired innovation in science & technology and organizations. Co-design and animation:

- Conferences and workshops: Drawing inspiration from living organisms for a sustainable transformation of organizations, This living being that wants us well (companies and organizations)

- University modules on Biomimicry and bio-inspired innovations (engineering schools and universities): helping future socio-economic actors to make the best decisions in uncertain situations.

- hackathons on the theme of sustainable development (engineering school)

Education: PhD in Life and Health Sciences (University of Lille - 2000); Master pro Strategic Watch, Intelligence, Innovation - University of Lille - 2017; Training on desirable organizations

- Institute of Desirable Futures - 2019

Friday in RZ 152H

14:30-16:00

Christophe Constant



Christophe Constant began his career as an energy engineer at Areva. He then joined the aeronautics, space and then railway sectors. Throughout his 10 years of activity within Alstom, he has held various strategic positions internationally, allowing him today to have a global vision, oriented business and operational performance. Christophe has also embraced a career as an entrepreneur, giving him a good understanding of business issues.

At the beginning of 2022, Christophe Constant joined Helexia, a major player in the energy and carbon transition of companies and communities, as Director of Operations, in order to engage in a sector that makes sense and whose challenges are changing and intensifying. each day. Now Managing Director of Helexia France, Christophe Constant wishes more than ever to combine the various expertise acquired during his career to create an efficient operational model capable of meeting the needs of the sector.



Matthieu Meese

Married, father of 2 children, a man from the North, an engineer by training, he started his career in the automotive industry and then in construction before joining the exciting Energy sector about ten years ago. Recently appointed Director of EDF Territorial Development for the European Metropolis of Lille, he supports innovative projects in the

territory and contributes to communities and industry in the construction of solutions for decarbonizing their environment.



Denis Bobillier

A graduate of ENSTA Paris, I began my international career at GEC Alstom and then joined the Dalkia Group 35 years ago, where I have spent most of my career.

Currently Technical and Major Projects Director at Dalkia Nord Ouest, I manage the design and construction of industrial facilities aimed at contributing to energy performance, the energy transition and decarbonization in industry, the service sector and health, as well as urban heating networks.

Friday in RZ 152H

16:00-17:30



Aurore Sorin

Aurore Sorin, leader of the prospective project “Which city centers by 2040”, Hauts-de-France 2020-2040 Agency.

An economist by education, with a strong interest in the economic development of territories, Aurore Sorin began her professional career at the Economic Department of the French Embassy in Korea. She works there more particularly on industrial issues and energy transition, in the context of international negotiations for COP 15, which was held in Copenhagen in 2009. Back in France, she joined the CARMEE, Center for the Analysis of Economic Changes and Employment in the Picardy region, where common questions arise on the transition from an industrial territory to a carbon-free economy. She then joined the Picardie Region a year before the merger with the Nord-Pas-de-Calais Region to create the Hauts-de-France Region, where she held the position of observation and prospective mission officer within the Hauts-de-France 2020-2040 Agency. Since 2019, she has been working on issues around the revitalization of city centers, and in particular leads the prospective approach "Which city centers by 2040" of the Hauts-de-France Region.



Stéphane Humbert

A statistician, Stéphane Humbert joined INSEE in Lille. He initially worked on socio-economic surveys before moving towards the study of regional territories around demographic, social and economic issues. In 2011, he joined the Nord-Pas de Calais Region as project manager. He then became head of the observation and forecasting service within the Hauts-de-France 2020-2040 agency. The Agency is a department of the Hauts-de-France Region which is responsible in particular for coordinating regional data and knowledge strategies with regional and local players and for carrying out study and prospective approaches to bring out the long-term issues of the territory. It also translates these issues into regional strategies and policies through the development and implementation of the SRADDET (Regional Plan for Sustainable Development of the Territory).