

The 10th International Sustainable Urban Transport Systems Forum

第十届可持续发展城市交通系统论坛（THNS 2017）

——新交通技术与城市治理转型

THNS 2017: Mobility and governance for new urbanization

2017.11.18-19 Shanghai 上海



Forum Background

The adoption in 2016 by 48 countries of the ISO 37101 standard on sustainable cities is an important event for professionals involved in urban design and management.

6 objectives are identified by the standard as allowing to select the most effective actions, which will be carried out in 12 areas of action.

The six goals :

- Attractiveness
- Preservation of the environment
- Wellness
- Resilience
- Use of renewable resources
- Social cohesion

12 fields of action :

1. Governance / Commitment / Autonomy
2. Education and ability to build.
3. Innovation / creativity / research.
4. Health and care.
5. Culture and collective identity.
6. Living together / interdependence / mutualisation.
7. Sustainable economics / production and consumption.
8. Sustainable living and working conditions.
9. Safety and security.
10. Collective Infrastructure.
11. Mobility.
12. Biodiversity and ecosystem services

12 domaines d'action :

The development of cities around the world creates the need to improve the governance of cities to face global challenges such as climate change. The use of certification methods, based on standards that are now to be constructed, seems a good way to convince people to participate in the collective efforts that they are asked to make.

Agenda of the Forum

Conference Registration and Contacts

The official websites <http://www.urba2000.com/forum-THNS> and <http://THNS.tongji.edu.cn> give updated information about the THNS events.

Program

Opening Ceremony

French Side:

Michel Rostagnat

Biography: TBD

Jean-François JANIN is a graduate of ParisTech (Ecole Polytechnique in 1972, ENPC in 1974) and of the Institute for Political Sciences of Paris in 1974. He worked for the French Ministries for Environment, Industry and Transport in Paris and Clermont-Ferrand. He was also General Manager of the Chamber of Commerce of Lille for 10 years. As ITS task force manager (2002-2015), in the French Ministry for ecology, sustainable development and energy he took a major role in the implementation of several ITS systems: smart cards in public transport, digital tachograph, automatic speed limits enforcement, national ITS architecture and the creation of the national agency for multimodal travel information and smart ticketing. He is consultant and chairman of Urba 2000 association.

Chinese side:

会议手册 Guidebook

主题报告

智能轨道快运系统

杨颖，中车株洲电力机车有限公司副总工程师

法国最新交通政策 The New French Mobility Policy.

Michel Rostagnat (罗天诺), 法国生态可持续发展和能源部, 交通事务负责人



Michel Rostagnat, Permanent Member of General Council for Environment and Sustainable Development (CGEDD), at the French Ministry for Ecological and Inclusive Transition, in charge of Mobility and Transportation items.

Lecture

Current French policy is restraining the development of major projects for the benefit of maintenance of rail and road networks, to answer the daily needs and expectations of French people.

Big data open up new mobility solutions : carpooling, shared bike, connected and autonomous vehicle...

In France, mobility activities are supervised by the public authorities. But new mobilities are usually the result of private initiatives. In this context a framing of this ecosystem by the way of the standard seems judicious. How could France integrate this project?

圆桌 1：城市与社区

轨道交通与低碳城市

潘海啸，同济大学建筑与城市规划学院教授

封闭社区，透视越南城市弹性和社会人际交互

Gated communities, identify the context of resilience and social interaction in vietnamese cities

Khanh Toan VUONG, Thai Huyen NGUYEN 越南河内建筑大学, 城市规划系, Hanoi Architectural University, Faculty of Urban Management

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LECTURE

In the world, urban areas with relatively "closed" or "separate" patterns have been formed for a long time due to particular origin, culture, religion or traditional habits and/or to guarantee certain level of living conditions. These closed spaces gradually become more developed for a variety of reasons and conditions such as class, standard of living, security, scientific and technological development, etc. Not only in developed countries such as France, USA, but also in developing countries such as China, Vietnam, these secured housing areas, closed communities or those for the high class are becoming more and more popular providing comfortable living spaces for society or communities. But at the same time, it also increases the separation in social structure, in community interaction, especially in urban areas. This paper analyses the design and social impacts during the formation and development of this urban model in

Vietnam since more than a decade ago and discuss possible activities to enhance resilience and community cohesion for urban society. Particular elements will be clarified by the spatial and morphological analysis of these urban areas in focusing on public spaces, where social interactions take place in the various and flexible ways.

在世界范围内，由于特殊的起源、文化、宗教或传统习俗，或/和为了保证一定的生活水准等原因，经过长时间的发展形成了相对“紧凑”或“分散”模式的城市地区。这些紧凑发展的地区空间，由于阶级、生活准则、安全性、科学和技术的发展等多种缘故或条件，逐渐变得更为发达。不仅是在法国、美国这些发达国家，在中国、越南这些发展中国家，这种安全的居住地区、封闭式社区或高档社区，为人们提供了舒适的居住空间，越来越受到欢迎。但与此同时也使社会结构、社区互动更加分化，特别是在城市地区。本文借助越南一城市模型十几年来形成和发展过程，分析设计与社会影响，并讨论能够在城市社会层面增强社区内部联系和韧性的可能活动，通过对这些城市地区的公共空间进行空间和形态学分析，理清这些要素，公共空间中承载了方式多样且灵活的社会联系。

ISO37101 标准：可持续发展城市的重要性

The international stakes of the ISO 37101 standard for sustainable cities ?

Francine Depras, 联合国教科文组织 CMA 副秘书长



Francine DEPRAS is Sociologist and Researcher (Urban Sociology – Mobility – Temporality). After studying classical literature and social psychology, her professional activity was based on organizational sociology for the Industrial Sociology Laboratory, the Marc Bloch Institute. A first professional period up until 1980: Conseilling and research for private companies and as part of contractual research programs for the Thematic Program Action (ATP – Socio Economic Transport issues) of the Ministry of Research.

The second period, from 1980 to 2010, was based on urban sociology and transports, as part of the Movement – Environment – Communication. Company that I created and ran for 20 years. In 2015, she is Executive Board Member of the CMA (Apprenticeship World Counsel – Tout au long de la vie) President – Yves Attou. Her research is based on mobility and temporality with the support of the SIMARIS society (Studies, Researches, Formation and Counsel marketing for the mobility for persons and goods) President: Bernard Coutrot.

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LECTURE

The adoption in 2016 of the international standard ISO 37101 by 48 countries, makes it possible to question the evolution of normative systems and their use by different public and private actors in different registers : cultural, economic and technical.

First I propose a brief history of the standard in the framework of the formal national and international devices, as well as the different interpretations of the standard.

Secondly, I shall introduce the stakes of normative systems, directly or indirectly controlled by the powers of States, international organizations and economic groupings.

In conclusion, we question the desirable developments in the knowledge and knowledge society, which require innovative, collaborative and open social and practical learning. The migration of concepts, such as mobility to new management and project management practices requires the articulation of the fields of action in a cross-sectoral way. In order to be credible and efficient, these actions must be highly legible and widely disseminated. The methods of evaluating the actions and their control are also to be defined in accordance with the cultures of civil servants and their citizens. Standard 37101 introduces the international normative system into the register of globalized practices of relations between states, territories and civil society actors, proposing a new conception of the “technical” standard and managerial practices.

2016 年，48 个国家通过了国际标准 ISO 37101，使得人们对规范体系的演进及其在文化、经济，技术不同系统的公私领域中的使用进行质疑成为可能。

首先，在正式国内与国际策略的框架下，对标准及标准的不同阐释的简史进行了梳理。

其次，对直接或间接地受国家、国际组织及经济集团操纵的规范体系间的利害关系进行介绍。

综上所述，我们对要求创新、协作、开放和实践学习的知识和知识社会的理想发展提出质疑。概念的迁移，如新型管理和项目管理实践的机动性，要求对行动的领域以跨部门的方式进行清晰的阐明。为了做到可信和高效，这些行动必须高度清晰易懂并且广为传播。评价这些行动及其控制的方法，也要根据市民公仆和公民的文化来进行界定。ISO 37101 将国际规范体系引入了国家、区域和民间社会主体间关系的全球化实践记录，提出了“技术”标准和管理实践的新概念。

环形城市：一种更可持续的城区形态

Loop city, a more sustainable urban form

Thierry MELOT, 法中建筑与城乡可持续发展研究院(IFADUR), 院长, 建筑师
Architect, Institut Franco-chinois d'architecture et développement durable urbain et rural (IFADUR)
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LECTURE

Since the “Beijing Declaration on Sustainable Development” was released in the seventh ASEM (Asia-Europe Meeting) in 2008, the Chinese government has become more and more involved in the promotion of sustainable development. In terms of urban planning, the New-type Urbanization Plan (NUP) was launched in March 2014, as a national plan proposed for a scientific and reasonable urban development model by 2020. In this context, some local governments began to change their planning approach and seek for a more sustainable way of urban development.

The Strategic Master Plan of Doumen District of Zhuhai City is an outcome of the cooperative efforts between the municipal government of Zhuhai and the urban planners of IFADUR (Franco-chinois d'Architecture et de Développement Durable Urbain et Rural). In this master plan, “loop city” was proposed as a more sustainable urban form for this area.

This concept stemmed from the ten principles of sustainable city advanced by IFADUR: 1) introspect the future, 2) Coproduce, interpenetrate territories, 3) Build a city from its network of public transport, 4) Build and focus on transfer nodes and connection hubs, 5) Develop urban porosity and percolation territory, 6) Promote the proximity and the diversity, 7) Encourage energy self-sufficiency, 8) Manage the resilience of water, 9) Reinforce the urban sense through “actes fondateur” and 10) Give an identity to neighborhoods.

Based on a diagnostic analysis of Doumen, we proposed the “loop city” as a structural answer to a more sustainable urban form for its future. Compared to the “linear city” advanced by Arturo Soria and Gilles Gauthier, the advantage of the loop city lies in its principle of equality in terms of spatial pattern along the loop. Moreover, the loop shape provides the center as a reserved area of future possibilities.

From this point of view, we proposed to plan the loops of Doumen around the central mountain massif, to form a series of rings with high density of structuring networks. These rings, or loops, adapt to the peculiarities of existing sites and facilities. By concentrating public transport along the loops, they will foster the attractiveness of the periphery that they serve, as well as natural space in their centers.

自 2008 年《北京可持续发展宣言》在第七届 ASEM(亚欧会议)发布以来, 中国政府越来越多地参与促进可持续发展。在城市规划方面, 2014 年 3 月国家启动了新型城镇化规划(NUP), 是到 2020 年的全国性规划, 提出了科学合理的城市发展模式。在这一背景下, 一些地方政府开始改变他们的规划方法, 寻求一种更可持续的城市发展方式。

珠海市斗门区战略总体规划是珠海市政府与城市规划师 IFADUR(城乡可持续发展的中法建筑)合作共同努力的成果。该战略总体规划提出“环形城市”是适用于该地区的更可持续的城市结构。

这一概念源于 IFADUR 所提出的可持续城市的十大原则: 1) 反思未来, 2) 不同领域相互渗透与合作, 3) 从公共交通网络开始建设城市, 4) 建设与关注换乘节点与连接中枢, 5) 发展城市孔隙与可渗透地区, 6) 促进临近性与多样性, 7) 鼓励能源自给自足, 8) 管理水源生态恢复力, 9) 通过“创造行动”加强城市意识, 10) 社区可识别性。

基于对斗门区的诊断分析, 我们提出将“环形城市”作为一种更可持续的城市形态, 在结构层面上回应其未来发展问题。与 Arturo Soria 和 Gilles Gauthier 的“线性城市”相比, 环形城市的优势在于其环形空间模式的公平性原则。此外, 环形的中心为未来发展提供了预留区域。

从这个角度出发, 我们提出围绕斗门区中部的山地, 规划形成一系列具有高密度结构网络的环形。这些圆圈或环状部分, 适应于现有场地和设施的特点。通过将公共交通集中在环路上, 培育其所服务的外围地区以及其中中心部分自然空间的吸引力。

上海 2040 与城市交通发展

卓健, 同济大学建筑与城市规划学院教授

Shanghai 2040, integration between urban transport and land use



卓健，同济大学城市规划系教授、博士生导师、副系主任。法国巴黎高科-路桥高等学院城市规划博士、国家注册城市规划师。《国际城市规划》杂志编委；中国城市科学学会名城委名城交通学部第一副主任；发展中国家城市交通发展促进协会（CODATU）科学技术委员会委员；法国斯特拉斯堡大学建筑形态与城市人文研究所（AMUP）研究员；城市规划高等教育与研究法语国际联盟（APERAU）委员；法国米其林集团可持续机动性顾问委员会委员。

Jian Zhuo is deputy head of the Department of Urban Planning at the College of Architecture and Urban Planning of the University of Tongji (Shanghai). He was awarded Ph. D in Urban Planning at Ecole Nationale des Ponts et Chaussees in 2007. He is now member of editorial board of Urban Planning International (Beijing, China), associate researcher of AMUP of ENSAS (Strasbourg, France), PTSC member of CODATU (Paris, France), individual member of APERAU International, committee member of Michelin Corporate Stakeholder Committee for sustainable mobility (Paris, France).

Lecture

新一轮上海城市总体规划《上海 2040》已编制完成，即将批复实施。新版总规以追求卓越的全球城市为总目标，提出了创新竞争力、可持续发展和幸福人文城市 3 个子目标，并且在转变城市发展模式上提出了创新性的思维。本次演讲将简要地介绍《上海 2040》所面临的主要城市发展问题和挑战，以及总体规划提出的关键性策略，重点阐述这些关键性规划策略与城市交通和机动性的密切关系。

The new comprehensive master plan of Shanghai, Shanghai 2040, has been elaborated and will be soon approved and implemented. It is the first time that the municipal government of Shanghai demonstrated her ambition “striving for the excellent Global City”. The global competitiveness, sustainable development and cultural attractiveness have been set up as the main goals for the urban development. This presentation will summarize the problems and challenges the city of Shanghai is facing, present the key strategies and initiatives that Shanghai 2040 suggests for transforming the urban development mode. In particular, their close relationship with urban mobility and transport will be highlighted.

五步提升城市品质

Five Steps to Raise City Quality

林微微，能源基金会低碳城市项目，项目主管



林微微女士现任能源基金会低碳城市项目主管，主要负责“城市实施”策略部分的项目管理工作。林微微女士在低碳城市发展，可持续城市规划方面积累了大量经验。在 2011 年加入能源基金会之前，她曾先后在中国标准化研究院以及美国国际开发署亚洲清洁能源与气候项目担任项目经理。林女士于 2005 年毕业于北京林业大学，获环境学硕士学位。

Ms. Weiwei Lin is a Program Officer of the Low Carbon Cities Program at Energy Foundation China. She manages the City Implementation Initiative. Over ten years working experience, she has accumulated extensive experience on sustainable urban planning and low carbon city development.

Before joining the foundation in 2011, she worked as a project manager at the China National Institute of Standardization and the USAID/ECO-Asia Clean Development and Climate Program. Ms. Lin received her MS degree from the Beijing Forestry University in 2005.

Lecture

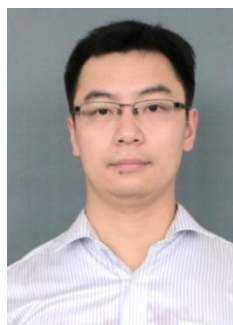
人们以 5 公里/小时步行所感知到的空间，和 50~60 公里/小时车驶所感知到的空间，大相径庭。前者，是街道的氛围、趣味，是细节化的生活和人与人的交往；而后者，只是速度、车流，是复杂的道路网络和隔离的空间。

本次演讲通过总结能源基金会多年来支持上海、重庆、昆明等在建设以人为本的城市实践案例基础上，提炼出 5 步原则和设计手段，帮助城市营造高品质的街道、公共空间和场所，提高城市品质、活力和宜居性，推动低碳城市的建设。

圆桌 2：新型公共交通

智轨快运系统

Autonomous-rail Rapid Transit



胡云卿，中车株洲所，电气技术与材料工程研究院，智能控制技术部部长

HU Yunqing, Director of Intelligent Control Technique Department, CRRC ZIC RESEARCH INSTITUTE OF ELECTRICAL TECHNOLOGY & MATERIAL ENGINEERING

胡云卿于 2013 年从浙江大学控制科学与工程专业毕业，获得工学博士学位。目前他在中车株洲 电力机车研究所下属的电气科学与材料工程研究院工作，担任智能控制技术部部长。他的当前 研究方向主要是轨道交通车辆动力学控制与自动驾驶，在 IEEE Transaction on Automatic control 等国际一流杂志上发表了多篇科研论文，2014 年出版学术专著《应用最优化方法及 MATLAB 实现》。

Yunqing Hu received the Ph.D. degree in Control science and engineering from Zhejiang university of Hangzhou in 2013. Presently he is the director of the Intelligent Control Technique

Department, in CRRC ZIC research institute of electrical technology & material engineering. His current research interests are in the area of rail transit, especially dynamic control and automatic driving. He has published several papers on top-level journals such as IEEE Transaction on Automatic control, and an academic monograph 《Optimization algorithms and realization by MATLAB》in 2014.

Lecture

随着我国近年来城市化进程加快，汽车保有量飞速增长，但其间城市道路面积增加严重不足。当前我国城市轨道交通制式以大运量的地铁为主（占到了 77%），而适合中小城市的中运量轨道交通制式没有得到应有的发展与运用。中车株洲所跨界创新了一种中运量城市公共交通解决方案——智轨快运系统，融合了准时、节能、环保、灵活、低成本等一系列优点。

With the fast-paced process of urbanization process, car ownership in China is increasing rapidly, however the road area increase very slow during this period. Currently our urban railway transport system mainly use metro mode (77%), which is for large capacity, lacking middle capacity urban railway transport mode for middle-sized and small cities. CRRC ZIC innovate a whole new railway transport mode for middle-sized and small cities ——Autonomous-rail Rapid Transit mode, the system has the several advantages such as punctuality, saving energy, environment-friendly, flexibility, low-investment.

如何通过公共交通带给我们城市的福祉？

How to bring well-being to our cities through public transport mobility ?

Régine CHARVET PELLO, RCP 设计公司总经理, Directrice Générale de RCP Design



As a designer of creative strategies for new lifestyles, Régine Charvet Pello has been developing projects since 1986, combining diversity, quality and innovation.

Her agency, RCP global design, works in her chosen fields: territory, city, mobility, energy, culture and education.

One of her latest news in the world of transport is the success story of the tram line in Tours, achieved with her team and a creative collective of designers, artists, urbanists and architects who came together exclusively for this project. She received 4 international awards for this project.

She was also in charge of the seat concept in the new high-speed train, TGV Océane.

She currently works on the design management of the Greater Paris metro and the metros in Lyon, Rennes and Marseille. She is also creating the identity of the tram lines in Ile-de-France (Paris region) for STIF and the public mobility of Nantes Metropolis.

In 2012, she created a laboratory specialized in sensory technologies, CERTESSENS, to develop the sciences of perception, sensation and emotion focused on uses.

Email : rcp@rcp.fr

LECTURE

Part 1

RCP is an industrial design agency specialized in urban mobility, public transportation, stations and public transport lines. RCP thinks of public space as a sensory experience to make urban mobility a success.

Design makes connections through emotion. In this context, « emotion » means human perception. Design the links between the user and the public space improve the travelling experience in order to provide security and comfort. Through design the service is more expressive and attractive.

What is Sensory design?

How does design facilitate the use of urban transport spaces?

Sensory design makes public transport user friendly, intuitive and attractive.

The results of sensory design provides the knowledge of where to put the design effort in order to create public spaces that meet users' needs, taking into account technical and industrial constraints within a given budget.

Part 2

The tram line in Tours is an example of how sensory design can make more people travel by tram.

In this project, sensory design played an important part to define passengers' needs. The success of the tram is based on an industrial understanding of the importance of sensory design.

Goal: Design urban equipment and spaces that correspond to travellers' needs and uses, to make people want to travel by urban transport because attractive and user friendly public transportation makes more people use them.

第一部分

RCP 是一个产业设计机构，专攻城市机动性、公共交通、站点与公共交通线路方面。RCP 将公共空间视为一种感觉体验，可以让城市机动性获得成功。

设计通过情感建立联系。在这种背景下，情感就是人类的感知。对使用者与公共空间之间的联系进行设计，改善出行体验，以提供安全性与舒适性。通过设计，这项服务更具表现力和吸引力。

什么是情感设计？

设计如何促进城市交通空间的使用？

感官设计使公共交通具有用户友好、直观、有吸引力等特点。感官设计告诉人们应在哪里进行设计以创造满足用户需求的公共空间，并在给定的预算范围内将技术和产业上的限制考虑在内。

第二部分

游览电车线路是一个说明感官设计如何使更多的人来乘坐电车出行的例子。在该项目中，感官设计对定义乘客需求起到重要作用。电车的成功建立在产业对感官设计的重视之上的。

目标：设计符合出行者需求和用途的城市设施和空间，使公共交通具有吸引力和用户友好性，从而促进人们对公共交通的使用。

城市轨道交通的全自动无人驾驶

刘会明，上海自仪泰雷兹交通自动化系统有限公司总工程师/系统工程总监

Mangroves urbaines / Du métro à la ville Paris / Montréal / Singapour

城市的红树林：以巴黎、蒙特利尔、新加坡的地铁网络为例

David MANGIN, 马恩拉瓦莱国立建筑学院和国立桥路学校建筑学教授, SEURA 建筑公司

Florence BOUGNOUX, DPLG 建筑师、规划师、设计师, SEURA 公司联合创始人/所有人



David Mangin Architect Professor at the School of Architecture of Marne-La-Vallée and ENPC (Ecole Nationale des Ponts et roadways) Associate architect-co-manager of SEURA Architects since 1996 (Florence Bougnoux, Jean-Marc Fritz, David Mangin, associate architects) Member of the scientific councils of Puca, the "Fabrique de la Cité", the AIGP (International Workshop of the Greater Paris) Grand Prix of Town Planning 2008 Author of "La Ville franchise", "Mangroves urbaines", "Paris Babel, a European mega-city", "Desire Lines"....

Teaching :

- Professor at the School of Architecture of the City and the Territories in Marne-la-Vallée since 2000; head of the "Paris Métropole" master and lecturer
- Professor at the Ecole des Ponts et Chaussées of the urban project course since 1998 and at the Master Amur from 1996 to 2004
- teacher of the DSA of architect-town planner since 2005
- seminar: The urban phenomenon: building the city of tomorrow. ENA. 2009
- Visiting Professor at the School of Architecture of Venice 2008
- Visiting professor at the Singapore School of Architecture (NUS) between 1997 and 2000
- teacher at the School of Architecture of Versailles from 1980 to 2000
- Chairman of the Board of Directors of the Versailles School of Architecture from 1995 to 1999

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LECTURE

Transportation system can be connected directly with the city within a network of buildings, (malls offices, housing)

this study shows lot of opportunity and now to connect both of those.

Lecture presented by David MANGIN and Françoise BONDOUX

交通系统可以在建筑物网络（购物中心、办公室、住房）中直接与城市发生联系，该研究说明了与上述两者相关的许多方面。由 David MANGIN 和 Florence BOUGNOUX 共同演讲。

对重庆公交路权规划实践的反思

The reflection of bus right road planning practice in Chongqing

傅彦 FU Yan 重庆市交通规划研究院 Chongqing Transport Planning Institute 副总工程师
Vice Chief Engineer



主要研究方向为交通规划、城市设计、物流规划等，多次参与国家标准规范、地方标准规范的编制，综合交通规划、交通专项规划等规划编制工作，致力于绿色交通规划，参与了多项步行交通规划、自行车交通规划、公交规划等工作。多次参与对外合作交流项目，包括重庆—图卢兹友好城市交通规划合作如何提高公共交通使用效率、两江新区公共交通系统规划、自行车与步行系统规划、有轨电车规划设计等。
The main research direction in traffic planning, city design, logistics planning, many times to participate in the formulation of national standards, norms of local standards, comprehensive traffic planning, traffic planning and other special planning work, is committed to green traffic planning, participated in a number of pedestrian traffic planning, traffic planning,

public bicycle planning etc.. Participated in the international cooperation and exchange projects, including Chongqing Toulouse friendly city traffic planning cooperation to improve public transport efficiency, Liangjiang New District public transportation system planning, bicycle and pedestrian system planning, streetcar planning and design.

Lecture

公交优先是城市交通发展的共识，公交优先关键在于公交路权优先，国内城市已走过十几年历程，重庆也是如此。2008 年，重庆主城区首条公交专用道——快速公交高九路示范线正式运营，由于 BRT 客流量较小，社会车辆交通拥堵，交通拥堵矛盾突出，于 2012 年 2 月开始拆除。作为规划者，我们一直在反思，为广大百姓服务的快速公交为何导致大家对它怨声载道？从国内外的经验来看，具有公交路权的道路基本都为单向至少 2~3 车道，但对交通条件，尤其是公交车流量、公交客流量的标准相差很大。因此，需根据城市自身的道路交通和公交运行特征，制定适用于本城市的公交专用道设置条件。通过大量的调研，我们提出了本城市的公交路权道路设置条件，并在此基础上开展了相关规划工作，并启动了示范线路的实施。2017 年 9 月 12 日，重庆市第一条拥有独立路权的公交优先道正式投入使用，在工作日的 7:00-9:00 和 17:00-19:00 两个时段内仅允许公交车、执行任务特种车辆以及校车驶入公交优先道通行，其他车辆禁止驶入。公交优先道投用后，对道路的交通改善十分明显，以此路段为基础，今年年底重庆主城区将陆续实施更多的公交优先道。通过前后的反思，我们认为，一定要找到适合本城市交通特征的公交发展之路。

City traffic development is the consensus of bus priority, bus priority is the key bus priority right, the domestic city has gone through ten years of history, Chongqing is also true. In 2008, Chongqing city's first bus lanes, bus rapid transit Gaojiu road demonstration line of formal operations, because BRT traffic is small, the social vehicle traffic congestion, traffic congestion contradiction, demolition began in February 2012. As planners, we have been on the bus rapid transit service for the majority of people lead everyone on it Voices of discontent. Why? From the perspective of domestic and international experience, with bus right of way roads are basically one-way at least 2 to 3 lanes, but the traffic conditions, especially the bus traffic, bus traffic standards vary greatly. Therefore, according to the city's own road traffic and bus operation characteristics, the establishment of suitable for the city bus lane setting conditions. Through a lot of research, we put forward the city bus route path set conditions, and carried out on the basis of the relevant planning work, and start the implementation of demonstration line. In September 12, 2017, Chongqing's first city to have independent right of way of bus priority road officially put into use, only buses, special vehicles and buses into the mission bus priority lane allows to work on 7:00-9:00 and 17:00-19:00 two hours, other vehicles are prohibited from driving into the. After the bus priority road is put into use, the road traffic improvement is very obvious. Based on this section, more bus priority roads will be implemented in the main urban area of Chongqing at the end of this year. Through the reflection before and after, we think, must find suitable for the city traffic characteristics of the road of public transportation development.

城市公共交通节能潜力展望

Lothar Fickert 德国格拉茨技术大学，教授 Professor emeritus ,Institute of Electrical Power Systems, Graz University of Technology



出生月 1949 年 1 月。现为奥地利格拉茨技术大学电力系统研究所所长及全职教授。自从 1998 年以来，在格拉茨技术大学电力系统研究所担任所长以及全职教授至今。2014 年由中国外国专家局聘任为外国高端专家，在同济大学担任客座教授。在奥地利电工协会以及奥地利供电协会担任要职。参与 CENELEC-TC77A, IEC-TC77A, CIGRE WG B5.40 以及 CIGRE-CIRED

WG B5-35 工作组。

研究方向：输配电，新能源，牵引供电，电能质量。

Since 1998 full time professor and the head of the Department for Electrical Power Systems at Graz University of Technology.

National and international activities comprise participation “National High-end Foreign Experts” in China, in the Austrian Electrotechnical Association (OVE) / the Austrian Association of Electricity Suppliers (VEOe), as well as being Austrian delegate to CENELEC-TC77A and member of IEC-TC77A, WG9 (Power Quality Parameter Measurement) and CIGRE WG B5.40 - Education, Qualification as well as CIGRE-CIRED WG B5-35 “Substation earthing system design optimisation through the application of quantified risk analysis“

Research areas: traction power system/ efficient utilization of electrical energy / power quality / supply reliability / production, transfer und distribution of electrical energy /decentralized power generation / EMF and EMC.

Lecture

近年来城市人口的增长使得大型城市对轨道交通的需求激增，为了满足日益增长的轨道交通，越来越多的电能被使用到公共交通出行中。本演讲以奥地利维也纳的公共交通（包含地铁、有轨电车和公共汽车）为例，介绍其在提高电能效率以及进一步挖掘节能潜力方面的经验。

The increase in urban population in recent years has led to a surge in demand for rail transit in large cities, and more and more electricity is being used for public transport to meet the growing mass transit. This presentation takes public transport in Vienna, Austria (including metros, trams and buses) as an example to introduce its experiences in improving energy efficiency and further the potential of energy saving.

圆桌 3：交通创新和大数据

创新的城市机动化技巧：Europe_2030

Skills for Innovative Metropolitan Mobility : Europe_2030



Cristiana MAZZONI 法国国立高等建筑学校联合研究所、法国国家科学研究中心 教授/建筑师/规划师
Cristiana MAZZONI is an Architect and Urban Planner, Professor of Urban design and PhD Director at the Ecole Nationale Supérieure d'Architecture of Strasbourg (ENSAS). She is Director of the Research Laboratory “Architecture, Morphology/Morphogenesis and Project” (AMUP EA 79309 - French Ministry of Culture). Currently, she coordinates two major research projects for the French Ministry of Environment (MEDDE) and the French Ministry of Culture and Communication (MCC) on the topic of mobility, railways and railway stations, and on the topic of metropolitan regional patterns. She is the French Director and Scientific Manager of the Sino-French Dual Master's Degree in Urbanism and Architecture (ENSAS-Tongji University) and the French Scientific Director of the Sino-French Chair of Innovative Metropolitan Mobility (ENSAS - CAUP Tongji University – SYSTRA, 2015).

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LECTURE

The idea is to establish a digital e-governance model (IMM-model) addressed to enhance innovative mobility and connectivity scenarios in the large metropolitan area of EU cities (polycentric area). The objective is also to enhance environmental and spatial issues, especially in the activity and housing area around the metropolitan and urban railway stations network.

Using indicators linked to a sustainable mobility planning (Poly-SUMP process) and adapted to each specific area, the project proposes interactive collaboration between actors. The FabLab – (fabrication laboratory) a small-scale workshop offering digital fabrication - is the framework able to organize the stakeholders in each EU city involved in the project.

The digital IMM e-governance model will manage this collaboration. It allows to share technic competences (of architects, engineers, stakeholders...) as well as philosophies and methods.

The SKIMME_2030 project is linked to the “preparing well” [Poly-SUMP](#) process and will develop scenarios managed by the IMM-model

数字化电子治理模型（IMM 模型）致力于在欧盟城市群（多中心地区）的大都市地区提高创新的机动性和连接性。目标还包括强化环境和空间方面的议题，特别是在都市区和城市火车站网周围的活动和住房地区。该项目采用与可持续的机动性规划（Poly-SUMP 过程）相关的指标，并适应于每一个特定的具体地区，提出在参与者之间进行互动合作。FabLab (制造实验室)是一个提供数字化制造的小型工作坊，为将参与该项目的每个欧盟城市的利益相关者组织起来提供了框架。数字化电子治理模型将对这一合作进行管理，允许技术（建筑师、工程师、利益相关者的）、理念和方法的共享。SKIMME_2030 项目致力于“准备好” Poly-SUMP 过程，并通过 IMM 模型进行情景模拟。

大数据下的轨道维护技术

罗雁云，同济大学铁道与城市轨道交通研究院，教授



上海市建交委技术顾问，中国铁道学会成员，上海交通工程学会成员，SC2/WG8 ISO/TC10 成员。主要研究方向：轨道结构动力学，轨道振动与噪声控制，高速铁路道岔研究。

Professor and Vice Dean of Railway & Urban Rail Transit Research Institute, Tongji University.

Technical Adviser of the Shanghai Construction and Transportation Commission.

Member of the Railway Society of China; member of the Shanghai Traffic Engineering Society; and member of SC2/WG8 ISO/TC108.

Field of research: Dynamic Characteristic and stability of continuous welded rail track

under the thermal force, vibration and noise control of railway track and dynamic Characteristic of track switch in high speed railway

Lecture

近年来随着铁路技术发展，对铁路轨道的安全性和舒适性要求不断提高，另一方面为轨道提供的维修时间不断压缩，为了保障日益增长的轨道交通安全维护，应用信息技术和大数据分析技术，通过对列车通过轨道所获得的信息，分析轨道的状态，从而提出对轨道系统的维护计划，摆脱传统的依靠人工进行轨道状态分析进而进行轨道状态维护，不但可以提高维修效率，还可以节省成本和时间。

In recent years, with the rapid development of railway technology, safety and comfort requirements of the railway track continues to require to improve. On the other hand, to provide track maintenance time continuous to reduced. In order to ensure the increasing demand of rail transit safety maintenance, application of information technology and data analysis technology, through the railway track through the information, analysis of the state of the railway system, and put forward the maintenance plan further. It can get rid of the traditional manual track state analysis and track condition maintenance. This method can not only improve the maintenance efficiency, but also save the cost and time.

大数据：来自欧洲铁路运营时刻表数据的影响

Big data : impact of timetable data on railway business In Europe



Marc Guigon, Senior Advisor, Passenger Transport, UIC
国际铁路联盟，客运高级顾问

Since June 2012, Marc has the responsibility for the Telematics applications for passengers in UIC Head Quarters. He is project leader for MERITS (timetables), PRIFIS (Tariffs and fares) and other Telematics projects. He is also involved in the station management (International conference NextStation2013 in Moscow), commuter and regional transport and High Speed.

Prior to UIC, Marc was working for French Prime Minister, responsible for the French national policy of transport in the field of spatial planning: railways, roads, urban transports, airports, ports, waterways.

He has also been engaged in the economic development of a French Region: Champagne-Ardenne. Lastly, he was responsible of some governmental cooperations between France and China, especially with CELAP (China Executive Leadership Academy of Pudong: 浦东干部学院): Water policy, rural policy, agriculture, urbanism and transport.

Prior, Marc was in charge of railway freight strategy, rolling-stock maintenance and management within the SNCF and

also carried out European projects of research in the field of railway transportation.

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LECTURE

In Europe, each railway undertaking builds its own timetable data, based on the needs of customers, company policies and local authorities for regional or commuter trains. The Forum Train Europe harmonises the production plan and the path requests in Europe, mainly for international passenger trains.

European passenger railway undertakings can be incumbent railways, or private companies. There are several hundred private passenger companies in Europe.

Timetables are the first part of the value chain of ticket distribution, before pricing, booking, ticketing, control and post-trip.

These timetable data comprise a lot of elements, such as station codes and coordinates, minimum connecting time, number of trains, running periods, classes and different services such as restaurant, sleeping cars, wheelchair, power supply sockets...

For international trains, timetable data of all railway undertakings (in large Europe comprising Russia, Turkey, Belarus, Ukraine) are weekly collected in a centralized tool in UIC, named MERITS, verified and integrated. Then the integrated data are delivered by UIC to all European railway undertakings which can use them as they want: customer information, journey planners, booking, Apps...

Recently, in April 2017, European railway undertakings gave the mandate to UIC to deliver these integrated data to third parties, and make contracts between UIC and third parties. Third parties are Global Distribution Services, Online Travel Agencies, public authorities, other transport modes, Start-ups, universities... So, from end 2017, Third Parties will give information to customers, and, for the Ticket Vendors, can sell railway tickets in the name of railway undertakings. UIC will also provide a hotline for third parties for all questions, problems and discussions with railway undertakings.

This evolution is a real revolution in the world of data which are directly linked to railway business.

In the next years, UIC will carry out some studies to develop new tools to make at disposal open data through APIs, and real-time data, combining planned data and real-time data.

在欧洲，每个铁路企业都基于顾客的需求、公司政策和当地的区际或通勤列车管理机构建有自己的时刻表数据。欧洲列车论坛协调生产计划和路径请求，主要是国际客运。

欧洲客运铁路企业可以负责铁路或私人公司。欧洲的私人客运公司就有几百家。在票额分配的价值链中，首要环节就是时刻表数据，排在价格、预定、出票，控制管理和旅途后这些环节之前。时刻表数据由很多要素构成，有站点代码与坐标、最小衔接时间、车辆数、运营周期、等级与不同服务如餐厅、卧铺、轮椅、电源等。对国际列车来说，所有铁路事业的时刻表数据（大欧洲范围包括俄国、土耳其、白俄、乌克兰）由 UIC 的中央管理器按周收集，进行核查和整合，称为 MERITS。整合后的数据由 UIC 发送到所有欧洲铁路事业以便应用于如乘客信息、行程计划、预定和 APP 等。

近期，2017 年 4 月欧洲铁路事业向 UIC 授权发送这种整合数据到第三方，并在 UIC 和第三方之间订立合同。第三方包括全球分销服务、线上旅游机构、公共部门、其他出行方式、初创企业、高等院校等。由此，到 2017 年底，第三方将为乘客提供信息，票务销售商能够以铁路事业的名义来进行售票。同时 UIC 为第三方提供热线电话来解答疑问，处理问题，与铁路事业进行商讨。

这一进步是数据领域的真正改革，将其直接与铁路业务联系起来。下一年中，UIC 会进行开发新工具的研究，通过 API 来处理开放数据，以及实时数据，将计划数据与实时数据结合起来。

题目待定

杨俊琴，上海市交通港航发展研究中心交通研究所所长

交通大数据：救兵还是窘境？

张轮，同济大学交通运输工程学院，教授

题目待定

洪天皓，摩拜单车，算法工程师

城市关爱与人体生态：SleepZone 概念在上海的验证

City Care and Body Ecology : Proof of Concept of Sleepzone in Shanghai



Nathalie PLET is Associated researcher French-Chinese Center Pitié Salpêtrière Hospital PARIS FRANCE, Scientific Director Phrc-N QICA Qigong Craving Addiction Pitié Salpêtrière Hospital, Member of CRPMS laboratory Research Center Psychoanalysis Medicine and Society univ.PRES Sorbonne Paris Cité, Educational psychology and Qigong Training Institute Psychomotor Orleans.

LECTURE

One part of the work of Nathalie Plet speak about Thinking-Body and Territory.

The setting « Sleepzone » was experimented three times in Picardie with support of Regional Council and CR (Regional Council) Hauts de France renew his support to experimente Sleepzone potentialy in Shanghai.

Indeed, this setting cross several disciplines and especially chinese medicine.

Which place for us, for pedestrian in the modern and contemporary city ? The intensive development of urbanism and construction permit or not a real adaptation for good enough health and circulation ? Which ways of presence in our modernity taken in ultra-mobility ?

The « Sleepzone© Project » consists in conception, design and realization of “recharge areas” in the city. The project organizes in a “path” several points, who are designed and managed in order to facilitate or induce the connection between the body and the space around it. Designers, architects and urban planners are requested to co-elaborate and conceive « objects » -urban furniture, pieces of urban art, interventions – able to support or to activate energy or poetic with its environment.

Nathalie Plet 的工作内容之一，谈到了思考——主体和领域。

睡眠区（Sleepzone）在区域委员会的支持下，在皮卡第进行了三次实验，而且法国的区域委员会将继续支持睡眠区在上海的试点。实际上这是一种包含中医学科在内的跨学科的实验。

在现代和当代城市中有我们步行的地方吗？城市化和建设许可的密集发展真的适于人们的健康和社交活动吗？在超机动性方面，我们的现代性体现于哪种方式？