# SUSTAINABLE GOVERNANCE OF THE URBAN NIGHT

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#### Introduction

Since humans are day active primates the differences between day and night seem to be so deeply rooted that a holistic, integrative view of the 24 hours cycle of the city is far from being established. Notwithstanding all the topical talking about the 24/7 city, the analysis of cities and their governance focuses mainly on the day, even if we witness an increasing "colonization of the world after dark" (Melbin, 1987). This extension of activity into the night is producing a growing number of conflicts. A key consequence of the conquest of the night is the demand for two conflicting public goods:

- the access to the night (right to the night),
- the protection of the night (right to an undisturbed night).

Since using the night relies on artificial light at night, one of the specific contradictions in this respect is the right to light on the one hand and the right to darkness on the other. These contradictions indicate problems in sustainability on different levels (ecological, economic, social) and a need to handle these contradictory requirements, i.d. to develop a governance of the night which takes the three sustainability aspects (Camagni, n.d) into account.

The following text is going to disentangle the debate on the 24/7 city relying on literature, to sketch some eclectic empirical evidence (from different sources and of different quality). On this basis the multiple selectivity of 24/7, the clustering of conflicts and the relations with sustainability issues are described. Taking the provision of two contradictory public goods as one of the core problems of a sustainable dealing with the urban night some arguments for an equal valuation of both public goods – the right to the night and the right to a protected night – and the need of an integrative and holistic night governance are raised.

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# 24/7 as a topic and topos

24/7 has not only become very topical – an icon for the always-on society, mainly in the context of the city. It has also become a topos for most international, globalized and touristy cities and is therefore often used in their marketing activities. Berlin might serve as an example: "Berlin 365/24 is a promise: Berlin is worth getting to know at every time of year and every time of day." (Berlin 365/24a) And especially regarding the night: "The day isn't long enough – which isn't to say it's too late, just dark outside. Or maybe the sun's already back up" (Berlin 365/24b).

These quotes of one city's marketing give the impression as if the colonization of the night was a fact – an impression, which is also fostered by more serious and even scientific publications: The trend towards a complete colonization of the night, i.e. 24/7, seems to be taken for granted:

- "The 24 Hour Society means completely rethinking how we observe and use time, breaking away from the traditional constraints of night and day, week and weekend. People are going to have to rework their sleeping patterns, perhaps even their internal body-clocks, to cope with a world that is always open. ... The old time markers of night and day, morning, noon and night, weekday and weekend, are losing their relevance" (Kreitzman, 1999).
- "A growing percentage of social and economic life now takes place in the hours after dark. Currently developments towards 24h cities tend to blur our perception of day and night" (ARUP, 2015).

The analogy of the colonization of the night was coined by Murray Melbin and elaborated in his seminal book "Night as Frontier. Colonizing the World after Dark" (1987) in which he analyzed the development of a continuous extension of (economic) activities into the night towards incessance. But Melbin was rather cautious in his diagnosis: "Nor will incessance spread everywhere, because its causes are not uniformly distributed geographically. There will be quiet hours in many places. Our globe will be punctuated with enclaves of after-dark activity rather than blanketed by it" (1987, p. 135).

His successors in describing and analyzing the phenomenon were much less differentiated (e.g. Moore-Ede, 1993; Kreitzman, 1999; Crary, 2013). Only recently the debate seems to become subtler again (Shaw, 2018): "Urban nightlife – and the 'night-time economy', as it has been labelled – in many ways reveals how partial and limited the spread of activity actually is in the night-time city. ... almost every city remains reduced, limited and significantly less active at night than during the day" (Shaw, 2018, p. 68).

Even if the extension of economic activities into the night did always exist to a very small extent a more relevant extension is a rather young development in the history of humankind, but – as already Melbin (1987) describes – at a remarkable pace. The most important starting point, the most relevant enabler was the invention and the diffusion of rather cheap artificial illumination, i.e. gas light and especially electric light. In a rather short period, the cost for artificial illumination fell dramatically (Posch, 2013), making the use of the timespace night economically viable for different purposes:

- Night as the "other space" entertainment
- Night as an extension of production time
- Night as a time for repair

The governance of the night in pre-electric illumination times had been primarily focused on containing and forbidding activities. The diffusion of public illumination worked as an enabler for more and more diverse nighttime activities (Shaw, 2018). Therefore, the role changed from policing to open up possibilities, which meant and still means safeguarding technical (infrastructure) and social (police, fire brigades, emergency) systems also during the night.

#### 24/7 – a myth? Scarce empirical evidence

Empirical evidence that would allow for a comprehensive description and analysis of the urban night is rather scarce and in no way systematic. Empirical knowledge about the night and the day-night relation is insufficient. Consequently, there is a great need for research in this field.

The problems start with the difficulty to define "night" in the first place. Definitions vary from "night is when it is dark" to statistical definitions (which differ between countries, functional entities etc.), to labor agreements (for additional nighttime labor costs), extra costs for nighttime services etc. This holds even more for the notion of 24/7 - as in "24/7 city" or "24/7 society". Even if it is widely diffused, its exact meaning remains rather unclear.

The obviously most advanced report on a city's night, the GLA-report for London (GLA, 2018), which provides "an evidence base for a 24-hour city" (subtitle) uses a very broad definition of the night: from 6 pm to 6 am. Since this categorization does not really (admittedly due to a lack of data) differentiate between evening and night it is not possible to make a distinction between the temporal *extension* of activities into the evening and the night and *incessance*.

Looking for precise demarcations or even operationalizations of thresholds beyond which a city might be called 24/7 lead to the following questions (Henckel, 2018):

- For specific functions (e.g. online-services) this threshold is easy to define, because only availability of the 24-hour service is the indicator; but what about spaces?
- Beyond which threshold is it possible to speak of a leveling of the differences between day and night, and beyond which temporal extension concerning how many functions a location, a quarter or city might be defined as incessant?
- How spatially selective might 24/7 be for a city to be still called 24/7? Is the existence of some spaces (or some functions) sufficient?

Strictly speaking, a definition of 24/7 would have to include thresholds of leveling between day and night that are based on specific indicators, on the one hand, and valuations of the relevance of these indicators for urban (public) spaces, on the other hand, since automatized functions do not seem relevant in this context. Cities may well become 24/7 in a virtual sense: given the proliferation of many types of surveillance (especially in the context of smart city development) ever more control functions are implemented which operate for technical reasons round the clock (and produce data that may be relevant even for urban studies). But this does not mean that cities as social entities in public space are getting more temporally extended.

Thus the 24/7 city and society seem to be fuzzy concepts in the sense described by Ann Markusen (1999): Everybody can talk about them – which is part of their fascination and contributes to their proliferation – but you never know whether everybody is really talking about the same thing. Even Kreitzman wrote that "… the 24-hour city is more a collection of ideas and methods than a literal description" (Kreitzman, 1999: 137). For 24/7 to become a valid concept, a definition of a threshold or a range of leveling between day and night is necessary. For the 24/7 *society*, one decisive question is how many people are active in economically relevant terms during the night. For the 24/7 *city* (or parts of it), one of the decisive questions is the degree of leveling between daytime and nighttime activities in public space.

Letting aside an exact definition of thresholds for the moment a relevant data base for the comparison of (a great variety of) urban activities between day and night would be necessary, e.g.:

- An ideal, yet unrealistic, indicator would be the ratio between the nighttime and daytime turnover, or the nighttime and daytime GDP (cf. also GLA 2018). Its change could be an exact measure of a levelling between day and night.
- A tendency toward 24/7 would also require a continuous relative increase in nighttime (even in the small hours not only in the evening) employment.
- Also, nighttime public transport would diffuse widely and become similar to daytime provision.

- A consistent stronger relative increase in emergency calls during the night would also indicate a development towards incessance.
- The use of online services may be the easiest data to get, because the data produced as a by-product of the use itself should show a clear leveling.
- Sleep is a very interesting phenomenon, since recent chronobiological research shows the still very strong dependency on natural rhythms. A 24/7 city (or a city moving strongly in that direction) should show up in higher proportions of people sleeping at day and being awake during the night.

I tried to collect available data for these aspects elsewhere (Henckel, 2018). The data are rather sketchy and eclectic, of different quality and reliability, but nearly all point into the same direction: They support skepticism regarding a relevant leveling between night and day or a real incessance beyond certain "enclaves" – as Melbin put it. To give a few examples:

- For Germany and the European Union, the percentage rate of nighttime employment did not rise very much during the last ten to fifteen years (Eurostat, 2015). The rate lies at 6.8 per cent in 2014 for EU 28 (with great differences between countries).
- There is some contested evidence that sleep duration declined by about one hour during the last century. The analysis of not representative, but indicative data of jaw bone, a smart band firm, in a comparison of major cities worldwide shows that during the hours after midnight at least 80 per cent of the urban populations sleep (Wilt, 2014).
- Public transport in most even world cities and metropolises are far from running all night long beyond a very reduced nighttime bus network.
- Even the function most prone to incessancy, the processing of servers, shows a clear and massive difference of activity levels between day and night on a worldwide scale as the analysis of a hack reveals (cara botnet 2012).

For data which allow a more detailed analysis of the entire course of the night even the GLA report (2018) shows significantly lower number and rates after midnight (e.g. public transport (p 121), notified crimes (p.139), accidents and emergency attendances (p.153). The skepticism about the reality of a 24/7 city based on empirical material – albeit on a sketchy basis– is also strengthened by looking at structural conditions which work as relevant barriers to extension.

The most important impediment for a real leveling of day and night regarding human activities is the genetic constitution: As day active primates humans run the risk to worsen their health and wellbeing quite dramatically by working at night over longer periods.

As quite a few studies show (e.g. Moore-Ede, 1993; Zulley, Knab 2001) many of the major catastrophes had their starting point during the small hours of the night and/or were caused by overtired personnel. Since attention, reaction etc. are

reduced during the night the risk of errors and mistakes is much higher during the night. Therefore, production costs increase during the night: directly because of the extra cost for night time salaries, the damages of mistakes and lost output. Much more relevant are the indirect cost (external effects), which do not show up in the calculation of the entrepreneurs but are externalized and borne by society in terms of – among others – environmental damages, reduced health (borne by the individuals and the health insurances).

Tradition and cultural habits also provide strong barriers against an unrestricted temporal extension of activities. Countervailing powers – like religions and trade unions – fight for traditional modes of organizing society and contribute to hamper extension and incessance. Moreover, there are quite a few regulations (e.g. protection laws for children, women, workers; labor agreements with higher salaries during the night; curfews) which also work against a deliberate extension.

#### The selectivity of 24/7 and the clustering of conflicts

The skepticism against a complete 24/7 city does not imply that 24/7 does not exist but that it is highly selective – characterized by "enclaves", as Melbin (1987, p. 135) put it – in different ways. In my view there are four types of selectivity: functional, spatial, social, temporal.

Several (economic) *functions* are especially prone to extension or even incessancy. Firstly, necessary functions to keep a city going: infrastructure management, surveillance of infrastructure functioning, provision of services and maintenance, provision of safety/security (emergency, health care, police, fire brigades, etc.). Secondly, productions where technical necessities require a 24/7 running because production processes cannot be interrupted (e.g. steel production, chemical production). Thirdly, – especially under conditions of globalization – industries which are under an economic pressure for temporal extension due to the exposure to very fierce international competition (textiles were the first prime example in Germany). Fourthly, the growing nighttime leisure industries which are an important driver in many cities for a temporal extension of activities and sometimes even incessance. Fifthly, the increase in the international division of labor, especially the integration of functions over time zones (time zone shifts), on the one hand and the worldwide distribution of media services on the other hand contribute to an international colonization of times, partly of the night.

Some *spaces* are specialized if not specifically designed for extended functions (e.g. specific production zones, logistic hubs). Relating to the Italian discussion (Brioschi, 1997) they might be called "citadels of incessance" or "24h-zones (Eberling, Henckel, 2002). Of course, the existence of 24/7 zones do not imply a 24/7 city, but describes "enclaves" (Melbin, 1987) of incessance. At best they might form an archipelago of incessance in an urban agglomeration. A less explicit

spatial selectivity are clusters of different functions with different schedules and rates of extension (e.g. mixed-use areas, locations around transport hubs, entertainment clusters). The spatial selectivity of extended functions implies that most of the city's spaces are used in a rather conventional day and night rhythm.

*Socially* there are also rather complex selectivities regarding gender, age, color, social status etc. Nighttime work is strongly biased towards male, lower class, younger, foreign and colored workers (foreign languages are more prevalent during the night (Duijzings, 2018)), people who are forced into the night to earn their living or for whom nighttime work is a transition phase during their education and career (e.g. doctors). This does not deny that there are persons who deliberately opt for nighttime work – but as studies show it is normally a small minority. Along the same lines there are also selectivities in the possibilities to take advantage of the offers of nightlife. Studies describe the selective access to and the selective exclusion from the night (e.g. Colaboratorio, 2014; Roberts, Eldridge 2009; Shaw, 2018). And it must be kept in mind, that the nighttime workforce is much smaller than the daytime workforce, and that the clients of the nighttime leisure industry is only a small fraction of a city's inhabitants (even if increased by tourists in many cities).

Taken literally, 24/7 would mean that a temporal selectivity should be a contradictio in adjecto. But in real urban life – especially regarding the latenight leisure industry (Shaw, 2018, p. 68) – the nights are much livelier and more extended on weekends. A good indicator is the provision of nighttime public transport, which is much more extended and frequent on weekends, nighttime subway services in many cities are only provided on weekends.

Even if the "seven-day circle" (Zerubavel, 1985) has lost much of its formative power, it is still prevalent in most (at least western) cities. And even the seasons still play a major role in urban rhythms (Henckel, 1995): the conflicts in the nighttime leisure economy are much less pronounced in cities in winter (in latitudes where the seasons are rather distinct).

These multiple selectivities lead also to a clustering or concentration of conflicts along the similar lines: functionally, spatially, socially, temporally.

Functional areas of conflict are e.g. sound and noise, light (pollution), traffic, safety/security, incivilities, the degree of extension, expectations, regulation, different expectations regarding law and order (alcohol, drugs, noise levels, incivilities – and related security problems).

Spatially areas of conflict revolve around mainly the same factors, but with the emphasis on their spatial significance, the assignment of uses to specific uses at different times.

In social terms conflicts differ substantially between e.g. nighttime workers and nighttime users (leisure people). Conflicts arise regarding forced vs. deliberate flexibility of (working) times and other uses of time, regarding inclusion or easy access to the night vs. exclusion and high barriers to entry of the night. Moreover, social conflicts arise due to (unequal, unjust) distributional effects with respect to income, gender, race, generation, health, health hazards (noise, light, drugs, unsocial working hours) and wellbeing, the right to one's own time.

Temporal conflicts revolve around the degree of (possible, allowed) extension, the introduction of curfews and other temporal limitations and the degree of deliberation to use one's own time (Mückenberger, 2004, 2016).

These types of nighttime conflicts have relevant impacts an all three sustainability dimensions. To give but some indications here:

- Ecologic sustainability is severely impacted by the colonization of the night: Light pollution (e.g. Meier, 2016) and noise pollution (e.g. Münzel et al., 2017) which are major by-products of the colonization of the night have major impacts on flora and fauna, on ecosystem services, on human health and wellbeing, especially by the disruption of the natural day and night cycle. Coping with these questions is key not only for nature but also for human health and wellbeing, for the livability of cities.
- Economic sustainability is questioned by the negative impact of nighttime work on efficiency, cost and accidents (even if the costs are externalized) (e.g. Moore-Ede, 1993; Zulley, Knab, 2001), by the impairment of human health (due to the impacts of shift work, light pollution and noise pollution on sleep and health (the "sleep crisis" is an economically much underrated issue (Hafner et al., 2016)). In terms of economic sustainability, a very important and highly neglected aspect also regarding the night is the internalization of external effects.
- Social sustainability is impaired by the uneven distribution of the chances and risks of the colonization if the night. The environmental injustice discourse provides ample material (e.g. Senat Berlin, 2011) on the disproportional share of hazards of pollution for already underprivileged parts of society. The same holds for the nighttime risks. Likewise, the possibilities to avoid the negative impacts and exploit the chances are socially unevenly distributed. In a broader sense social and cultural sustainability could also mean safeguarding and enhancing the cultural values and specificities of the night and providing temporally just nights (Colaboratorio, 2013; Weber, Henckel, 2018).

There is no inbuilt mechanism to level the conflicts and care for sustainability in its different dimensions, which raises the question of night governance.

## The need for a sustainable and integrative governance

The case for a sustainable governance of the urban has to be made on the base of the different kinds of increasing conflicts and their relevance for sustainability issues. Regarding the night the core problem on a rather general level is the need to provide two conflicting public goods, as the night has and will have two very distinct functions

- the extension of a timespace for (economic) activities, as an extension of options and possibilities, i.e. the right to the night and
- the safeguard of the night as a timespace for rest, repair, calmness, darkness, i.e. the right to the protected night.

To provide both is obviously conflicting in many instances. Both claims are legitimate and public goods in the textbook's definition. Either good – the access to the night and the protection of the night – are characterized by the fact that neither the exclusion principle can be applied nor is there a rivalry between users of the respective good. If the access to the night (infrastructurally, legally etc.) is provided, everybody is entitled to use this timespace and cannot be excluded. And if one opts for this opportunity it does not reduce the possibility of others to opt for it, too. Since public goods are not or not sufficiently produced under market conditions even neoclassical economics calls for state intervention. Even more so if – as in this case – there are conflicting public goods at stake.

The prevalent discussion on the urban night seems to emphasize the right to the night, the question what the night has to offer, what the obstacles to an access to the night are and how the night time offer could be improved (GLA, 2018; Colaboratorio, 2014). The right to a protected night against noise, light pollution, loss of temporal self-determination is rather underrated in the common discourse.

Here the very difficult challenge insuring ecologic, economic and social sustainability of the urban night comes into play: Finding strategies, organizational structures and procedures to cope with the necessity providing conflicting public goods. Sustainable governance in this sense is far from being trivial, because dealing with these public goods must see the night as a timespace for colonization and a timespace for protection. Obviously, there is an urgent need for a more systematic and integrative vision of the night and its function to develop a governance of the urban night, taking the contested issues into account and finding ways to mitigate them – solutions serving all aspirations seem virtually impossible.

Serving such complex requirements needs a transversal, transdisciplinary policy – transversal regarding urban government departments (urban planning, traffic, infrastructure provision, services, security, finance, law, ...), transversal regarding formal and informal institutions, transversal regarding different groups of stakeholders and citizens, and transversal regarding day and night. Today's

urban governance is rather far from this vision, I do not know of any city which comes close to this idea even though many cities worldwide deal with night time issues. Even the appointment of "night mayors", "night zars" etc. in many cities do not indicate an integrative nighttime policy. Mostly they are 'only' commissioners for the night life, the – in imprecisely termed "nighttime economy", or what Shaw calls more precisely "late night alcohol and leisure industry" (Shaw, 2018: 70) – which is only a small part of what is happening during the urban night, but economically for marketing and tourism reasons an important one.

One conclusion is, that there is hardly an urban night time policy (which deserves the name) which takes systematically the relation between day and night and the contradictory requirements into account. These contradictions prevail not only between different actors and stakeholders, they are also inherent in the specific policies of different departments of the urban administration. The "nighttime economy" could serve as an example of different views by the marketing and tourism offices, which foster a vibrant night life as an economic attractor for the cities, whereas environment, security and planning departments see these perspectives driven by the idea of economic growth with much more reservation, because of rising conflicts, security issues, gentrification problems (Vogelpohl, 2011) and negative environmental impacts. Even if some of these nighttime conflicts are high on the agenda in many cities now the result is not (yet?) an integrative perspective. Arising conflicts are not dealt with in a systematic manor but only as ad-hoc measures in specific urgent situations (ibid.).

An example of the complexities of an integrative governance (or the problems of a lack of it) is the introduction of the night tube in London (Weber, Henckel, 2018). Despite its image of being a 24/7 city London has only a nighttime bus system and is looking back on long lasting discussion on introducing also a nighttime underground service. Finally, in 2016 a weekend tube service was introduced on several lines replacing some of the bus lines. The conflicts revolved around this replacement, because tube services are quicker but more expensive (different prices for different modes are a specificity of the London public transport), leading to a redistribution of temporal and economic access to the night venues for the clients and the workforce (also for other nighttime activities). Moreover, there was a conflict with the tube drivers and the trade unions because of the redistribution of working times.

It is only possible to touch upon the challenges for integrative/transversal/ transdisciplinary day and night policy. A very important issue in temporal policy is the question of temporal self-determination or as (Mückenberger, 2004, 2016) puts it "the right for one's own time". Mückenberger states several claims and rules for safeguarding a containment of temporal heteronomy.

If sustainability in its various dimension is taken seriously the importance of chronobiology and other health hazards must be considered.

Chronobiology is gaining importance in general but the chronobiological aspects of city planning are only recently getting more recognition (Wieden, Weber, 2018) and do not play any specific role in night governance.

If night governance means the provision of conflicting public goods (serving the demand for free access to the night – night as a timespace of possibilities and serving the demand for quietness/calmness – the night as a timespace of recreation) the identification of functional, spatial, social and temporal conflict zones must be the first step for developing solutions. This also means to deal with the question of top down regulation versus bottom-up strategies with the coproduction of agreements by all the involved stakeholders. A panel of cities (Amsterdam, Berlin, London, Munich) on the Stadt Nach Acht 2017 conference in Berlin showed a consistent view on the problems of nighttime leisure zones and their conflicts. All the four city representatives agreed that only communication between all stakeholders and a coproduction of agreements on how to handle the conflicts could be seen as viable pathways to deal with the conflicts. But great differences prevailed in the willingness and power to enforce the agreements (Stadt Nach Acht, 2017).

#### Final remarks

The cities are – as I argue – far from being in a substantial way 24/7. Incessance is a functionally, spatially, socially and temporally highly selective phenomenon. Yet over the last ca. 150 years – after the introduction of artificial light and its ever-cheaper proliferation – the "colonization of the world after dark" (Melbin, 1987) started and is still going on. Even in today's cities zones of incessance are only "enclaves" (Melbin, 1987) "citadels" (Brioschi, 1997) or an archipelago in the cities' territory.

Even if extension is a general trend since the introduction of artificial light, there are also cycles of extension and reduction (Eberling, Henckel, 2002). Catastrophes and wars often lead to a reduction of nighttime economic activities, because if the damages. To use the reduced infrastructure and material capital efficiently there are periods of extension in times of recovery, which might again be reduced after recovery. Economic structural change might also lead to reductions because specifically extended or incessant functions are declining – often in specific countries while relocated to others (steel production being an example). Declining industries of this type sometimes lead to massive reductions in nighttime employment, as can be seen in the Eastern European countries after the fall of the Iron Curtain (Eurostat, 2015), and even to a decline in the provision of nighttime public transport (Vozyanov, 2018).

As indicated there is no clear "borderline" between day and night. The definitions and regulations vary for functions, locations, countries, historic

periods. It is a contested zone with various types of conflicts, since there is a lot at stake. Using the night economically can be highly profitable, but the degree of profitability is highly dependent on how "night" is delineated and how easy it is to externalize part of the costs of extension. The stronger the definition the higher are the costs for extra pay, for instance. The smaller the possibility to externalize costs (e.g. health hazards due to night time work) to the individual or the insurance system the less profitable the extension is.

The more night and day would really level, also the salaries would become less different, because the timespace "night" would lose its specificity. For employers the night would eventually become cheaper (beyond the social, racial etc. selectivity). The stronger the definition and regulation taking the specificities of the night for a day active primate (and other parts of the environment) into account the easier the recovery function of the night could be protected.

Urban governance is still mostly focused on the daytime. But since the importance of the night as an economically, socially, environmentally important timespace is coming more and more to the fore, the awareness for a more complex and integrated governance of the city in terms of a holistic view on day *and* night is rising. Consistent urban policies require account of day and night – and especially the entire night with all its relevant functions. This is far from being trivial and is yet another development which makes the government and governance of cities more complex. Even if a real leveling of day and night is not going to happen, sustaining the quality of urban life or better improving it, requires much more explicit policy efforts.

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# SUSTAINABLE GOVERNANCE OF THE URBAN NIGHT

## Abstract

The article deals with the topic and topos of the 24/7 city. Notwithstanding, a tendency for extended times the rather inconclusive evidence of a leveling of day time and night time activity incessance or 24/7 is a highly selective urban phenomenon – functionally, spatially, socially and temporally. The selectivity of 24/7 leads also to a e selectivity and concentration of conflicts during the night. Night governance has to provide two public conflicting public goods: the access to the night (the night as a timespace of possibilities, of extended options) the protection of the night (the night as a timespace or rest, repair, calmness and darkness). The provision of these public goods has to take the three classic sustainability dimensions into account. This requires an integrative and transversal governance of the urban night.

Key words: 24/7, incessance, urban night, urban night time governance, sustainable nights

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