'Remaining the same or becoming another?' Adaptive resilience versus transformative urban change

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Abstract

Structural change of cities has long been a central theme in urban studies. Recent manifestations of urban change have been described either as instances of 'adaptation', often associated with flexible adjustment and reorganisation, or of 'transformation', implying a deeper and more radical scope of change. The conceptual difference between these two ideas, however, remains surprisingly under-theorised and ambiguous in the extant literature. We find both notions casually (and at times even interchangeably) employed in recent debates on 'resilient cities'. Addressing this conceptual imprecision, our commentary focuses on the structure-identity relationship, coupling resilience thinking with an institutional perspective that has provided the intellectual moorings for recent scholarly approaches to city identity. Through this prism, city identity is firmly conceptualised as a distinctive set of socio-political values; the structure of a city, then, provides the means to realise these values. In consequence, we are able to offer a precise conceptual differentiation between what we here dub 'adaptive resilience' and 'transformative urban change' as the two facets of change in city contexts: if structural change is accompanied by a shift in socio-political values (and thus a change in identity), we refer to this as transformative; if no such identity shift takes place, this is an instance of adaptive urban change, primarily on the level of structures. We illustrate our argument with the empirical case of the city of Vienna. Overall, our commentary's ambition is to add nuance, clarity and conceptual precision to the debates on resilience currently raging in the field of urban change.

Keywords

adaptation, city identity, institutional perspective, resilience, transformation, urban change, values, Vienna

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摘要

城市的结构性变化一直是城市研究的中心主题。最近的城市变化的表现被描述为"适应" (通常与灵活的调整和重组联系在一起),或者"转变"(意味着变化范围更深刻、更激 进)。然而,在现存的文献中,这两个概念之间差异理论化不足、模糊不清,这点颇为令 人惊讶。我们发现这两个概念在最近关于"复原力城市"的辩论中被随意使用(有时甚至可 以互换)。针对这种概念上的不精确性,我们的评论侧重于探讨结构-身份关系,将复原 力思维与制度视角(其为最近的城市身份学术方法提供了知识基础)相结合。通过这一角 度,城市身份被坚实地概念化为一套独特的社会政治价值观;而城市结构则提供了实现这 些价值观的手段。藉此,我们能够对我们在文中称之为"适应性复原力"和"变革性城市变 化"(作为城市变化的两个方面)进行精确的概念区分:如果结构性变化伴随着社会政治 价值观的转变(进而身份的转变),我们称之为变革性的;如果没有发生这样的身份转变, 则是适应性城市变化(主要是在结构层面上)。我们用维也纳这个实证案例来说明我们的 论点。总的来说,我们评论的目标是推进城市变化领域当前正在发生的、关于复原力的激 烈辩论,使之更细致、清晰、概念更精确。

关键词

适应、城市身份、制度视角、复原力、转变、城市变化、价值观、维也纳

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Adaptation versus transformation of cities: The conceptual puzzle in urban change

Structural change in cities - whether affecting organisational forms, institutional arrangements, social network configurations, patterns of relations and interactions among a specific cast of actors, sources of 'legitimate' power or the socio-material infrastructure in place - has long been a central theme in urban studies. Within this domain of scholarly inquiry, 'adaptation' and 'transformation' are the two pivotal frames of reference for current debates on urban change (Elmqvist et al., 2019). While adaptation is associated with incremental adjustment and reorganisation, transformation often corresponds to the notion of deep, more radical and thus potentially disruptive change. But beyond the vague idea that these reflect a different scope of change, the conceptual distinction remains

surprisingly under-theorised and somewhat ambiguous, or even contested, in the extant literature. A widely accepted theorisation, in particular regarding their interrelation, has been largely missing (Elmqvist et al., 2019; Wolfram et al., 2019; see also Matyas and Pelling, 2015; Tanner et al., 2015; Wenger, 2017). Furthermore, as the notions of adaptation and transformation both have their roots in the discourse on resilience within the field of social ecology, we find the two constructs casually and at times even interchangeably applied to the context of 'resilient cities' (Meerow et al., 2016).

Our commentary aims to resolve such conceptual imprecision in the use of 'adaptation' and 'transformation' in urban studies. The ambition is to add nuance and clarity to the 'resilience' debates currently in vogue amongst scholars of urban change (for instance, in this journal: Beilin and Wilkinson, 2015; Gleeson, 2008; Miller et al., 2020).

Drawing inspiration from 'resilience thinking': Change as a matter of identity?

In the original socio-ecological understanding, resilience is defined as 'the capacity of a system to experience shocks while retaining essentially the same [...] identity' (Walker et al., 2004, 2006). Building on this notion, social ecologists then aimed to encapsulate adaptation and transformation as different aspects of change under the umbrella term 'resilience thinking' (Folke et al., 2010). Accordingly, change within a resilient system is referred to as 'adaptation'; in contrast, if a focal system becomes untenable (i.e. non-resilient) so that it has to be rebuilt, such fundamental change to the system's identity is labelled 'transformation'.¹ In this sense, transformation clearly implies transition to an entirely new system, whereby the old system ceases to exist and becomes a distinct other.

In more detail, the term 'panarchy' has been coined in social ecology to forge a conceptual link between adaptation and transformation (Gunderson and Holling, 2002). According to this model, resilience in complex social systems may be viewed as a dynamic process running across abstract stages or hierarchical levels, referred to as 'scales'. A system's primary scale constrains what happens on the secondary scale; in turn, change on the secondary scale (i.e. 'adaptation') may either bring stability (i.e. 'resilience' in a narrower sense) or trigger subsequent change (i.e. 'transformation') on the primary scale. It is in this way that transformation, from the view of resilience thinking, clearly goes beyond the limits of incremental adaptation. Rather, it is a 'cascading' (Holling et al., 2002) or 'scaling up' (Pelling et al., 2015) process of change that affects a system's primary scale.

Identity, portrayed as a system's primaryscale variable, therefore marks an Archimedean point that enables social ecologists to distinguish 'adaptation' from 'transformation': when 'essential' features of a system remain stable throughout a process of change, scholars speak of adaptation; when altered, such change is referred to as transformation.

Lost in translation: What is 'identity'?

Unfortunately, this seemingly rigorous distinction between adaptation and transformation turns out, on closer inspection, to be rather nebulous. As so often, the devil is in the detail. Even within the field of social ecology, an answer to what makes a system 'the same' ('idem' in Latin) over time and space, and therefore accounts for its identity, appears far from simple (Cumming and Collier, 2005). This is evident when identity is used as the key factor in defining resilience. Without a clear conceptualisation of identity, we are in danger of creating a circular argument: resilience is routinely characterised as the capacity of a system to retain its identity, while identity is referred to as a constant level of resilience.

Unsurprisingly, things get even more complicated when the concept of resilience is applied to urban settings: what exactly is essential or *distinctive* about a city to account for its identity? This conundrum is surely one reason why the focus on identity in social ecology was dropped entirely when the concept of resilience was introduced to the field of urban studies: it seemed unwise to build concepts about change on the rather vague notion of the 'identity' of social systems.

In establishing resilience thinking, Folke et al. (2010) seemed well aware of the manifold issues that result from applying their concept to social entities such as cities, speculating that identity and distinctiveness are here rooted in deep, primary-scale variables such as 'worldviews' and 'core values'.

The institutional perspective: Unpacking 'city identity'

Studies conducted on cities such as New York, Boston, Barcelona or Berlin have indeed found particular social and political values widely acknowledged by the people living there, persisting over a considerable period of time and often despite (ongoing) disturbances (Bell and De-Shalit, 2014). Such distinctive sets of values constitute what scholars refer to as a focal city's 'ethos', 'character' – or, simply, its 'identity' (e.g. Jones and Svejenova, 2017).

This argument is deeply rooted in an institutional perspective whereby the identity of collective social actors (such as organisations or other social entities) is defined as the result of an organisation's infusion with specific values; turning an engineered technical arrangement of building blocks into a social organism 'infuse[d] with value beyond the technical requirements of the task at hand' is referred to as 'institutionalisation' (Selznick, 1957: 17; see Phillips et al., 2016). In other words, through the flowering of values, an organisation morphs into an institution in its own right.

Originally, such institutional thinking focused on corporations and public organisations, yet it can equally be applied to social entities such as cities. In this sense, the 'city as an institution'² (Kornberger et al., 2021; Meyer et al., 2021) can be understood as a vehicle for the realisation of distinctive sets of values engendered by organisational forms, institutional arrangements, social network configurations, sources of 'legitimate' power and the socio-material infrastructure. All of these represent value-laden urban structures that express normative views of a

focal city's purpose rather than random and neutral products of contextual contingencies. In this understanding, the sustaining of identity in the face of disturbance is viewed as the defining problem of institutional life: the incorporation of fragile values into more stable structures is intended to safeguard these against exogenous disturbances such as external shocks, jolts or crises and endogenous disturbances such as the rise of illegitimate interests or value 'drift' (Kraatz et al., 2020). We argue, therefore, that scholarship on city identity which adopts an institutional perspective provides a sufficiently precise conceptualisation of identity as a construct separate from - yet interconnected with the structural features of a city. Specifically, identity can be understood as a distinctive set of socio-political values, while the structures of a city provide the very means to realise these.

City identity as fulcrum for adaptive resilience versus transformative urban change

This institutional perspective not only offers a more practical conceptualisation of city identity - it also firmly connects it to resilience thinking. The basic argument here is that a city's institutionalised cultural (infra-) structures are instantiations of the very values that imbue them with meaning and purpose. The dualism that conceptualises structure and identity in terms of a meansend relationship is pivotal to the endeavours of institutional scholars from the 1990s onwards to theorise organisational change (Greenwood and Hinings, 1993; Hinings et al., 1996). Here, structure and identity are features of interconnected yet hierarchically ordered levels that play out - akin to our notions of adaptation and transformation – in instances of 'incremental' or 'radical' change (Amis et al., 2004; Greenwood et al., 2002). This idea can be linked back to Gunderson and Holling's (2002) panarchy model, developed in the field of social ecology. Both approaches build on asymmetric relations between variables on different levels (or scales), together forming a coherent 'whole' of a social entity or system. Combining these, we conclude that identity emerges from institutionalised and enacted/ lived (infra-)structures which, in turn, are infused with distinctive values and serve as means to realise them – and that (a change in) identity is the key point of reference for distinguishing adaptive from transformative change.

This view of identity as a fulcrum allowing us to differentiate 'adaptation' from 'transformation' is equally useful in urban settings. As long as a city's identity, constituted out of a distinctive set of socio-political values, remains intact, we can say that the incremental change of urban (infra-)structures is adaptive; in other words, the city is resilient to change. Yet, when a city's identity is substantially altered, this radical change is described as transformative.

It is important to note that, in contrast to simple hierarchies, the 'panarchies' involved here are neither static nor do they suggest a top-down sequence. Rather, they imply the possibility of change from below and above (Holling et al., 2002): while adaptive change of urban (infra-)structures may eventually scale up and affect a city's distinctive sociopolitical values and thus identity, equally, manipulations of a city's identity and underlying value set can enforce subsequent change on its (infra-)structures in order to maintain the necessary coherence of identity and structure.

While an urban identity might shape and constrain developments at the structural level, this identity also accommodates variety, that is, the same set of distinctive values can be realised by different (infra-)structures. Therefore, urban structures (as the 'secondary-scale' variable) do not account for city identity. In a similar vein, a city's contingencies may place existing structures under pressures that they cannot absorb – the untenable structures may then be altered while the city's identity is maintained. Such structural shifts can be interpreted as adaptive change that constitutes a certain degree of resilience. And yet, substantial changes to a city's (infra-)structure certainly have the potential to erode its ideational foundation by triggering change on the identity scale. This is the case when external or internal contingencies successfully champion a structure that does not accord with the city's identity: the existing values lose their defining power, and the city's identity drifts towards a different value set.

Against these multiple considerations, we suggest the following two conceptualisations of change in the urban setting, namely *adaptive resilience* and *transformative urban change*. While the first describes a city that sustains its identity while undergoing structural change, the second denotes structural change that entails drifting socio-political values. Under transformative change, therefore, the city leaves its previous trajectory and, to a certain extent, changes its identity; in this sense, it essentially becomes another.

Illustration: Vienna as a 'resilient' city – and the risk of transformation

After this rather abstract discussion, we wish to illustrate our conceptual arguments by considering the city that we probably know best: Vienna, our hometown. While what follows is only a brief sketch to make our arguments more accessible, we feel it vividly demonstrates their relevance.

In a recent interview published in the *Financial Times* on Vienna's unique, century-long policy of public and social housing provision, a top municipal official remarked on one of the city's core values,

namely to ensure 'the highest quality of living for everyone'.³ The persistence of this value is confirmed by Vienna's top position in global city rankings: since 2009, the Austrian capital has occupied first place in a list compiled by *Mercer* and was also named by the *Economist* as the world's most liveable city in 2018 and 2019.

The roots of this remarkable achievement can be traced back to the late 19th century when Vienna's mayor, Karl Lueger (later credited with the city's rapid modernisation), introduced the idea that civic life requires the coordinated establishment of an urban infrastructure, including suitable organisational structures to provide necessary public services (Novy et al., 2019a). In 1919, the first social-democratic mayor of Vienna, Jakob Reumann, proclaimed that the city should become one 'that enables a liveable existence for all its residents [die allen ihren Bewohnern ein lebenswertes Dasein ermöglicht]' (Bauer and Trautinger, 2019: 4).4 Thus was born the idea of Vienna as a 'city for everyone'. The establishment of an adequate socio-material infrastructure, with public and social housing at its very core, also shaped policy-making in the so-called 'Red Vienna' of the 1920s and early 1930s and not without success, as Nobel Laureate Thomas Mann noted in 1932: 'It is astonishing and extremely admirable to see the exemplary hygienic, aesthetic and social developments achieved here, which have not been surpassed by any city in the world [Es ist erstaunlich und in höchstem Maß bewundernswert, was hier vom hygienischen, ästhetischen und sozialen Standpunkt an Vorbildlichem geschaffen und von keiner Stadt der Welt übertroffen wurde]' (Bauer and Trautinger, 2019: 4). From 1919, the city authorities developed the Gemeindebau programme of social housing and apartment blocks (built, owned and operated by the

city). After the disruption of the Second World War, the programme was immediately resumed in the post-war years; the city of Vienna's stock of municipal housing has now grown into one of the largest in Europe. To date, the city government allocates an annual budget of \notin 600 million for new buildings and renovations (Hammond, 2018).

Over the last seven decades, the system of public and social housing has been frequently reorganised to cope with novel challenges. In recent years, for instance, the city administration has reacted to the global diffusion of the idea of New Public Management as well as novel technologies and environmental pressures by introducing new ownership structures. These include more 'entrepreneurial' arrangements such as semi-public housing cooperatives, smart living initiatives and social housing developed by municipal non-profit enterprises, that is companies subsidised to build low-rent homes. Today, some 60% of Vienna's residences are in the form of public and social housing, with the city directly owning onequarter of the housing stock.

Nevertheless, some commentators have seen Vienna's identity at stake, with the danger of these up-scaling adaptive changes leading to transformative urban change. The gist of the argument is that structural adaptation in reaction to neoliberal pressures favouring marketisation might undermine the integrity and stability of Vienna's identity. By further excluding economically less privileged groups, private economic interests could threaten Vienna's core socio-political values. Indeed, some scholars believe this process to be already underway (Novy et al., 2019b). While adaptive change and flexible structures were previously welcomed as ways of fostering resilience and maintaining the city's identity, this alternative perspective

portrays such adaptive resilience as a potential trigger for transformative change. Not least as a reaction to such a threat, since 2019 the law requires that two-thirds of homes in any large new developments must be reserved as public or social housing.

This brief sketch of the history of public and social housing in Vienna reveals a remarkably persistent vision to provide continued access to the 'highest quality of living for everyone'. The continuity of this 'Viennese way [Wiener Weg]' indicates that the city has long established itself 'as an institution' (Kornberger et al., 2021; Meyer et al., 2021). Vienna's core identity has become defined by a set of values best represented by the motto: a 'city for everyone'. Accordingly, diverse urban (infra-)structures provide the means to realise these values in various policy fields - not just in housing but also in health and social care, public transport and culture (Leixnering et al., 2020). And it seems that the city has indeed proved rather resilient in this respect. On the one hand, politicians and administrators have fiercely resisted all structural shifts towards the liberalisation or 'marketisation' of the public and social housing sector, as advocated under a New Public Management mantra. Such ideals run counter to Vienna's core identity. On the other hand, the city's (infra-)structures have proved rather flexible and malleable over time, for instance with acceptance of new organisational forms of municipal housing providers, managerial steering tools as well as institutional arrangements with private-sector real estate developers. This has involved innovative configurations within social networks, patterned interactions among key actors in the field, as well as novel socio-material infrastructure. All such changes have, however, been geared towards serving the guiding rationale of being that 'city for everyone' by adequately reacting to shifting contingencies over time. Such flexibility impressively

demonstrates the city's capacity for adaptive resilience – the capacity to change in response to actual or potential disturbance while safeguarding the core 'identity'.

Nevertheless, the history of Vienna also shows that transformative change may be triggered on the primary scale. We can highlight a period in which the city's identity was radically transformed, namely between 1934 and 1945, following the rise of the Austro-Fascist Federal State [Ständestaat] and, more specifically, the country's annexation by Nazi Germany in 1938. Thereafter, the capital's identity as the 'city for everyone' quickly eroded, giving way to an authoritarian and totalitarian concept of extreme exclusion and systematic racism. It was, however, not the case that the values of 'the city for everyone' were suddenly abandoned but rather that these were crowded out by a radical redefinition (in the eyes of the authorities as well as local citizens) of who counts as 'everyone'. Soon after the annexation, all kinds of urban (infra-)structure became 'synchronised [gleichgeschaltet]' with those of Nazi Germany; this had the familiar brutal consequences for many citizens such as the once-thriving Jewish intelligentsia, political opponents on the left and various marginalised groups (Flügge, 2018). Such transformative change on the primary scale is certainly among the most radical and disastrous that can be imagined. It is important to note that this primary-scale shift of identity was reflected by a sufficient number of people who did not (or were unable to) defend or acknowledge the previously dominant socio-political values. And yet, after the end of the Second World War and during the years of Allied occupation until 1955, Vienna managed to revive and more or less uphold its pre-war trajectory of the 'city for everyone'. This re-transformation was not least the result of a fundamental 'shock': the terrible experiences between 1934 and 1945 made it obvious that the very

values on which these regimes were built were misguided if not perverse; such realisation, in turn, contributed to the collapse of an untenable identity. Hence, we can say that a shock helped to unleash the 'attention, understanding and commitment' (Reese, 2006) that were paramount for an effective restart and rebuilding.

In addition, it is worth highlighting the way in which the external perception and judgement concerning Vienna's identity (i.e. its 'image') greatly impacted the city's historical trajectory and internal identity. For instance, when Red Vienna became subject to fierce opposition from the conservative federal government in the late 1920s, such external disapproval of the city's identity crucially helped to strengthen rather than weaken the underlying value set. This attack on Vienna's identity mobilised heavy support across the city, eventually resulting in an armed conflict between Austro-Fascist and socialist forces in 1934. Even two decades after the end of the Second World War, Vienna's external image was still scarred by the relatively brief episode of totalitarianism. Paradoxically, such divergences between the external perception and the city's internal identity have in some instances provoked the city to take an active role in events such as the Prague Spring of 1968, when Vienna's well-organised welcoming of thousands of refugees from behind the Iron Curtain can be clearly interpreted as a public self-assertion of its meanwhile resurrected pre-war identity.

Indeed, the city's identity and its underlying set of values have proven considerably stable and institutionalised over time. This does not imply, however, a lack of opposition or even contestation. On the contrary, various crises have severely strained urban structures, in particular the waves of refugees that arrived not only during the Prague Spring but also in the early 1990s from the former Yugoslavia or as part of the

European Refugee Crisis in 2015. Such events triggered heated debates about how Vienna could and should react, thereby once again undermining a central pillar of its identity (for instance, the municipal council elections in 2015, fought over by the incumbent social-democrats and right-wing populists, were dubbed the 'Battle for Vienna' by political commentators, openly alluding to the historic Siege of Vienna by the Ottoman Empire in 1683). And yet during each of these challenges, the majority of local residents defended – despite all odds, some may argue, given the political climate – the city's traditional identity, safeguarding the underlying set of values (e.g. Kornberger et al., 2018, 2019).

The nature of urban change: A matter of values

In concluding, we wish to return to our core conceptual argument. A number of scholars have claimed that what we refer to here as 'adaptive resilience' and 'transformative urban change' are value-neutral concepts, that is neither inherently 'good' nor 'bad' (Chelleri et al., 2015; Elmqvist et al., 2019; see also Matyas and Pelling, 2015; Wolfram, 2019). Nevertheless, we believe there is a strongly normative aspect to urban change; indeed, at times even a moral aspect, as illustrated by the case of Vienna. In broader academic discourse, adaptive resilience seems highly desirable in order to conserve the status quo; yet there may be equally good reasons for a more radical transformation towards an envisaged (utopic) state of affairs (Pelling, 2011; Tanner et al., 2015; Wenger, 2017). For instance, some recent scholarly work has (re-)applied the normative framework of 'sustainability' to urban change, deeming any change as 'good' which either maintains or facilitates the development towards sustainability (Elmqvist et al., 2019; Wolfram, 2019). Yet, researchers find it difficult to create a normative or moral framework for 'sustainability' in regard to social entities. As with identity, such a framework would imply judgement of the underlying set of values (Davoudi, 2012). Here we seem to be lacking a clear concept about the *locus* of values within urban change.

In the final analysis, our approach suggests that urban identity is all about values. Whether adaptive resilience or transformative urban change of a given polity is referred to as 'good' or 'bad' depends on normative judgements about the very values that express its identity. The persistence of a particular set of values will only be regarded as desirable when these are broadly shared across the polity; if not, transformation will be seen as positive and desirable (and vice versa). As our illustrative case of Vienna demonstrates, critical events as well as external perceptions and judgements of identity can put the underlying set of values at risk; such pressures can either result in decisive support, that is ultimately in adaptive resilience, or the abandonment of values, that is transformative change.

In their editorial to a special issue of Urban Studies on 'governing for urban resilience', Beilin and Wilkinson (2015) note that scholars and practitioners alike 'grapple with how "resilience thinking" contributes to change' and ask whether it can provide 'a significant difference'. Our answer is a clear yes! We are convinced that a serious dialogue and exchange at the intersection of resilience thinking and organisational institutionalism adds much-needed nuance. clarity and conceptual precision to the multifaceted debates on resilience currently raging among scholars of urban change. In this way our commentary has aimed to provide a more precise conceptual approach to the adaptive resilience of cities and transformative urban change. Without doubt, additional work is still needed on how to

empirically capture and measure such change. However, we hope that our discussion constitutes a useful and fruitful springboard for future debate on the topic.

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Notes

- Although merely a side note, etymologically we find such use of terminology a bit confusing, as 'trans-formation' (from 'forma', Latin for 'shape' or 'expression') quite literally implies a change in visible characteristics (as suggested by 'adaptation'). However, with 'identity' (at least in the social sciences) referring to deeper and more fundamental features that per se cannot be directly observed, a change of identity requires 'expression' – that is, 'forma'.
- 2. This notion of city identity invites an obvious link to the idea of the 'resilient city'. Cities attributed a certain threshold of 'resilience' have become, in fact, 'institutionalised' in their own right; such 'relative permanence' has long been seen as a key feature of institutions (Hughes, 1936). These cities have developed a distinct and stable identity that 'shields' them from environmental disturbance.
- 3. For the interview with Wolfgang Müller, deputy municipal director of the City of Vienna, see Lawford (2019).
- 4. All translations are by the authors.

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