

# **Supplementary evidence – Professor Nick Tyler, Centre for Transport Studies, University College London (PTC0047)**

## **Neighbourhoods after the Covid-19 Pandemic**

### **1. Introduction**

In response to Baroness Jay's questions towards the end of the session, when considering how to plan in towns and cities, it is essential to start from the basis of people – their needs, desires and preferences – and proceeding to understand how to incorporate these in the context of the future, including handling those wishes of the population that cannot be met for some reason or another.

### **2. People and numbers**

*Homo sapiens* is a social species, the ability to collaborate and cooperate is genetically hard-wired. However, although this was one of the primary reasons for the survival of the species after the last ice age, its practical basis, Sociality – the feeling that it is possible to communicate with a stranger without harm – requires delicate management to enable humanity to thrive. Dunbar (1993) sets out a theory to explain this phenomenon, which led to the "Dunbar number": the number of people beyond family who can be retained at a time in socially meaningful relationships. Based on neocortical brain capacity, this has proved remarkably consistent over time and across cultures, even into the advent of social media. There are two Dunbar Numbers that concern this discussion: The first is 150, the number of people a person can recognise and greet as someone in their 'group'. The second is 5, which is the group of people with whom a person can retain a deep meaningful relationship, sharing information, for example.

Another number is also important when we are considering neighbourhoods: 4 (Dunbar 1996). This is the number of people who can maintain a multi-way conversation (one where each member is actively involved). We now know that this is due to a number of factors – the way the voice, ears and eyes work together to send and receive micro-signals as part of the conversation (over 90% of information in a conversation is non-verbal, and includes, posture, facial expressions, gestures, tones of voice – the actual meaning of the words amounted only to some 7% (Mehrabian (2017))). The key to Sociality – which is the key to how people come together in a neighbourhood – is therefore the way in which they group together around conversations and the size of groups that can achieve this. A neighbourhood might consist of the 150 people in a street, or part of a street, who form the local group, and those groups of 5 closer neighbours who engage in chatting. The average size of a village in England, from the Domesday Book to the 1780s (i.e. the beginning of the Industrial Revolution) was 160.

### **3. People and Space**

Before Dunbar had established his ideas in the 1990s, Edward Hall had been observing people in social spaces in New York. His book (Hall 1996) shows how space in urban areas is actually quite small if it is considered in terms of social use. Although it is possible to see a person quite far away, it is not possible to start to recognise them until they are around 8m away, and conversations need a spacing between participants of about 1.2m. Interestingly this work, which was developed entirely on the basis of thousands of observations, corresponds with Dunbar's numbers – at 1.2m only 4 people can engage in a multiway conversation – the addition of a fifth person results in the group splitting into two groups, of 2 and 3.

Therefore, if we want to create a neighbourhood of people, we need to create small local places, where small groups of people feel they can gather informally for a chance conversation, with the concept that these might be characterised with the participation of a larger group, but of 150 or 500 rather than 1,500 to determine their needs, wishes and desires.

Another key difference in thinking about neighbourhoods was raised as long ago as 1889 in Vienna, but apparently largely forgotten since then. Camillo Sitte was an Austrian architect concerned about neighbourhoods in Vienna and he went to study piazzas in Italy. What he noticed were two important points: piazzas are places of greeting and trade where people come together to talk, share information, take a coffee etc.; and they have to be viewed from eye level to make sense of them, rather than from above in the more typical planner's and architect's view, where a shape like a square or a circle or an octagon might be thought to be more appropriate. Designing a space for conversation seems to be a good model for neighbourhood building.

#### 4. People and Neighbourhoods

Over a number of workshops held in various towns and cities around the world, we have enabled participatory discussions to take place to determine how a neighbourhood could be designed to enhance Sociality. A part of these workshops includes establishing the sorts of things that people would like within reach during a day, including, but not only, on a daily basis. The responses to this kind of question are remarkably consistent: a bakery seems to be very common, or a tea/coffee place. Places such as a hardware store rarely figure in this list. We characterised these desires in the form of a figure, in which we collated the various suggestions into 6 broad categories.

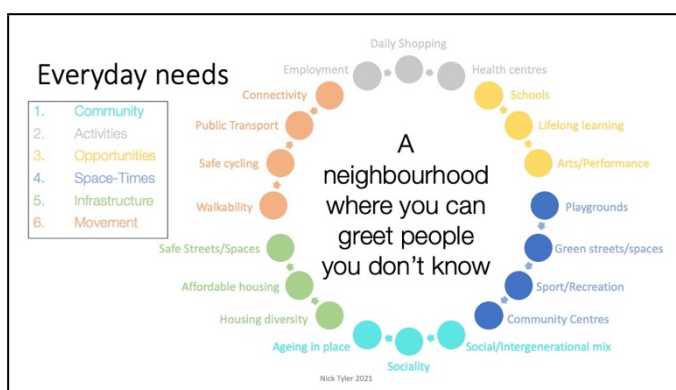


Figure 1 Neighbourhood: "what kind of activities would you like to access on a daily basis?"

Although the details vary, the concept – a place to gather informally and have a conversation if one wants to – is very consistent. It also fits with Hall's and Dunbar's thinking. As Jan Gehl, the Danish architect, has realised and practised, creating good social spaces for people means enabling small groups to gather together and have a chat (Gehl (2021). Dunbar's work shows that this is not just chance: it is a result of a combination of genetics, culture and society. This has profound implications on how we make urban spaces and

mobility systems work well for people.

#### 5. People and the future of neighbourhoods and mobility after Covid-19

From the work mentioned above we can begin to draw some conclusions about what steps to take to enhance sociality in the future, especially taking into account the effects of the Covid-19 pandemic. The first point is that the 2m physical distancing restriction is decidedly antisocial: to carry on a conversation at a distance involves raising the voice, shortening sentences and generally goes against having an informal conversation. Careful design of park benches, for example could alleviate this (a slightly curved bench enables people further away to be able to have such a conversation). We need to work from the small – those conversations – upwards towards the larger, from simple conversations around a 1.2m distancing towards the neighbourhood to decide where, when and how such conversation spaces might be

needed – is it in a coffee shop, or a park bench? Probably both, but the people in the local neighbourhood will know. Then group neighbourhoods together to form areas so that what is present in one neighbourhood but not in another could be shared, using well-designed public transport; thence to the larger town itself. To do this, it is necessary to engage in continuing participation activity, so that the conversations between planners and people in the neighbourhoods are continuous. In the city of Medellín, Colombia, the city planners spend 4 days a week on the street engaging with people so that they can have a deep understanding of what matters to the people in the communities that make up the city.

## 6. References

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19 July 2021