## Healthy places and spaces: the impact of the built environment and active transport on physical activity and population health

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This issue of the *Journal* presents several papers on the impact of the built environment and active transport on physical activity and population health. The suggestion that the way we build our environment can affect our health and how we move about is not a new idea. However, as the world becomes more urbanised, the impact of the built environment is increasingly of concern to more and more people. The majority (54%) of the world's population now live in an urban context for the first time in history.<sup>1</sup>

As early as 500 BC, the ancient Greeks designed city grid patterns with a north–south orientation to maximise heating and cooling effects. As most available wood had been used for fuel, solar energy was important. Greek houses were built with south-facing façades that received little to no sun in the summer but full sun in the winter, warming the house. This practice of solar architecture continued with the Romans, but appears to have been forgotten in the design of some modern suburban housing, where houses fill the allotted block and have no eaves at all, thus requiring heating in winter and cooling in summer.

There is evidence throughout history of spaces being designed for people. This practice was well established in the 19th century, when Frederick Olmstead designed Central Park in New York City to be the 'lungs of the city' and a critical place for physical activity and recreation. Only recently have planners and civic officials given renewed consideration and awareness to how community design intricacies and urban planning processes can lead to environments that either reduce or exacerbate health inequities.<sup>2</sup> In their haste to 'modernise', some developing countries are focusing on roads and highways for motorised transport, rather than attending to the lessons from countries where this emphasis is being seriously reconsidered.

We need new leadership in this space, and rethinking of a reliance on private motor vehicles – with health as an integral part of planning. There is a resurgence of interest in healthy places and spaces, and some indications of significant political endorsement in planning circles. For example, New South Wales has invested in a Healthy Built Environment program, and is considering formally including 'health' in a substantial update of planning legislation (see Thompson *et al.*).<sup>3</sup> In addition, new theories and approaches are needed, such as a path dependent framework (see Hensley *et al.*).<sup>4</sup>

The recent international walking conference in Sydney, 'Walk21', gathered ideas and learning about how we can create better spaces for walking. These included examples of tactical urbanism by Mike Lydon, in which creative and popular temporary changes to spaces were embraced and then became permanent.<sup>5</sup> There was a reinvigoration of 'Walktober' as a potential annual walking promotion event in New South Wales, and a proposed Parramatta Shared Space laneway project design. Local government plays a significant role in creating local spaces that support active travel, and at the conference, 21 local council mayors (and this number is growing) signed the Walk21 International Walking Charter. In addition, there was a focus on children's mobility, and the launch of the NSW Active Travel Charter for Children,<sup>6</sup> which is to be followed by resources for parents and the school community to support active travel.

Population health is not only physical health. It is well known that sterile impersonal environments can have negative effects upon mental health, and conversely that parks and natural environments can have positive mental health outcomes. In this issue of the *Journal*, Francis *et al.* found that mental health was strongly influenced by a sense of community and security, as well as an aesthetically pleasing environment.<sup>7</sup> The natural environment can be enhanced by adding facilities such as exercise equipment, and Furber *et al.*<sup>8</sup> and Scott *et al.*<sup>9</sup> report on the positive response to this. Sometimes, the addition of items to the environment can have mixed effects, with artificial light in the urban environment adversely affecting sleep in susceptible people (see Grose).<sup>10</sup>

Areas of considerable research interest include the influence of the built environment on physical activity and active travel. The design of aesthetically pleasing and practical pedestrian and cycling paths has been clearly shown to increase both physical activity and active travel, yet proximity to destinations remains an important influence on active travel (see Zander *et al.*).<sup>11</sup> Distance from the city centre is adversely associated with adequate physical activity, yet if active

travel patterns were to improve, there would be considerable health benefits (see Beavis *et al.*).<sup>12</sup>

New research is now extending the traditional health benefits of cycling to links with quality of life measures (Crane *et al.*).<sup>13</sup> Planning for travel demand management, including workplace travel planning, will likely further increase active travel (see Petrunoff *et al.*).<sup>14</sup> The ability to reliably measure aspects of our physical environment, such as 'walkability', is important for researchers, and the development of tools for this measurement are becoming increasingly available (see Giles-Corti *et al.*).<sup>15</sup>

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