

cooperative. Taking the example of driving, in some cases it might be beneficial for a driver to drive in such a way that affects negatively other drivers, tempting them to do the same. When a few drivers follow this behavior, the traffic becomes worse for everybody, including those that attempt to get a benefit. Cooperation has been extensively studied with game theory [11, 100]. Living technology can provide several alternatives to promote cooperation. On the one hand, those who do not cooperate could be punished automatically. On the other hand, those who do cooperate could be rewarded. Moreover, living technology could help change situations in such a way that it will be beneficial for individuals to behave in such a way that is beneficial for the society as well. In other words, if the payoff for cooperating is always the highest, there will be no social dilemmas: everybody will selfishly cooperate.

3.7 Society and Culture

One example of a social benefit is given with innovation, which is already promoted by cities [24]. Can living technology accelerate innovation in cities? It seems that the answer is affirmative, at least indirectly: if living technology can solve at least some of the urban problems mentioned above, it will increase the attractiveness of cities to citizens. Moreover, it will increase the “carrying capacity” of sustainable cities. Since larger cities tend to be more innovative, and living technology would allow cities to grow even more, it can be concluded that such “living cities” will have an increased innovation rate. And innovation not only in science and technology, but in culture, education, and art as well.

Since IT and the Internet are reducing the burden of transportation, people are exchanging information remotely and globally, overflowing the benefits of urbanization across cities.

Social media—such as Twitter and Facebook—are transforming and facilitating social interactions. For example, “Social moods” have been detected [26]. Technology over social networks could potentially be used to steer social behavior, for example preventing unhealthy habits and promoting healthy ones [56].