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Livability as a Public Good

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Abstract
Interest in livability of cities has been on the rise for almost four decades. That livability, sustainability and resilience are intertwined is non-debatable. However, the definition of livability still remains marred with difficulties because of seemingly conflicting views. Therefore, it remains less understood among policy-makers and researchers with some perceiving it as quality of life while others perceive it as an environmental quality. This work brings in the views of Charles Tiebout into the livability debate. The objective of this paper is to categorically show that livability is a characteristic of the environment not a quality of life as argued by some authors. The results from the arguments presented show that livability is a public good which enhances life satisfaction and, therefore, quality of life. This corroborates the predictions of the Tiebout model. By so doing, the study managed to show that livability is not quality of life but a person-environment relationship to enhance happiness. Therefore, researchers, planners and policy-makers must understand livability in the context of the person-environment relationship with livability being a public good.

Keywords**:** *Environment, Livability, Policy- making, Public good, Quality of Life.*

1. Introduction

Interest in livability has been increasing for some time now (NRC, 2002; Gough, 2015). Various conceptions of livability are prevalent in literature. The two main being that livability is a determinant of quality of life (QoL) and that it is QoL itself (Veenhoven, 2000).

Its definition however remains somehow contentious. For example, according to the NRC (2002, p.24) livability "... refers to the extent to which the attributes of a particular place can, as they interact with one another and with activities in other places, satisfy residents by meeting their economic, social, and cultural needs, promoting their health and well-being, and protecting natural resources and ecosystem functions". By meeting socio-economic needs, it may be taken to imply that a livable environment must, at least be able to, satisfy some human needs. The environment must also help one to assess public and private actions and failures, externalities included. From the definition above, key aspects can be deduced. These include attributes, which may mean characteristics which make the quality of the said environment and with using this perspective, livability is a public good. The word interact, as used in the definition by NRC (2002), may mean relate. Using this definition of interact, one may deduce that livability of an area is interpreted in relation to other areas with which it may be compared. To this end, it may imply that when one evaluates an environment's livability, the evaluator has a comparison

environment they consider suitable. By so doing it may be deduced as to whether the environment in question satisfies residents' needs and therefore their capability. Thus, livability may be interpreted in relation to needs fulfilment of that particular place. In line with this Gough (2015) defined livability as experience of place and noted that it is about now and here. This experience also has the potential to create place attachment which is likely to increase satisfaction with the place through habituation. Place, however, does not only refer to the physical territory but includes the individuals' feelings towards the physical environment, among others (Gheitarani, El-Sayed, Cloutier, Budruk, Gibbons and Khanian, 2020).

Seemingly contrary to the above perspectives, Veenhoven (2000) argues that livability may be viewed as quality of life, welfare, level of living or what can be termed habitability. This seems to say livability is equivalent to the above items listed by Veenhoven (2000). However, one may be made to question whether livability is welfare or livability improves or reduces welfare of the inhabitant of such an environment. The best possible term might be habitability which implies that the environment is said to be habitable thereby improving welfare of its inhabitants. Again, livability enhances the quality of life one is leading but must not be considered to be the quality of life *per se*. By so doing one may be led to take livability as a characteristic of the environment.

While NRC (2002) and Timmer and Seymoar (2005) seem to concur that livability is a characteristic of the environment, Veenhoven (2000) may be taken to view it as an end result. Thus, NRC (2002) views livability as an enhancer of quality of life, while Veenhoven (2000) sees it as the end result meaning it is actually quality of life. However, as already indicated, the use of the word habitability by Veenhoven (2000) brings another view to this definition. While the level of living may be related to welfare of the resident, habitability refers to the environment itself not the resident. To this end, Veenhoven (2000)'s definition may be said to bring two sides together, the resident's view or the view internal to the person and the environmental characteristics, which is an external view of the environment. The view that livability refers to quality of life has also been shared by several authors such as Okulicz-Kozaryn and Valente (2018) and Kovacs-Györi *et al.* (2019). However, Okulicz-Kozaryn and Valente (2018) listed some of the synonyms of livability as environmental quality, urban quality and standard of living or level of living. In their perspective, environmental quality is more of characteristics of the environment. The two authors preferred the terms standard of living or level of living more than others since the two terms are measurable indicators of livability.

According to Veenhoven (1996), livability means habitability, quality of life in the nation, the degree to which its provisions and requirements fit with the needs and capacities of its citizens. From the above, the term habitability comes in again and as earlier explained becomes important. Of note is the word provision. The word, as used in this statement, means supply. Thus, Veenhoven (1996) is referring to the supply of livability but seems to treat supply of habitability to mean habitability. For example, one cannot take supply of oranges to mean oranges. While supply means make available, the question is what is made available. In the context of livability, it is livability that is supposed to be availed to, say, the consumers. Thus, Veenhoven seem to have made an error of terminology in this definition. From the definition of livability given by Veenhoven (1996), livability is again taken as a needs fulfilment; where a livable environment

needs to fulfil certain life expectations. This is true in the sense that one supplies something so as to fulfil a need or want in the market for that good.

Veenhoven (2000) in his four qualities of life views livability as a life chance. Thus, one may have a chance to live in a livable environment without necessarily experiencing a quality life. This means the environment may allow but the personal capabilities limit the attainment of a quality life. But the word capacity, in Veenhoven's (1996) definition of livability, means capability which according to Veenhoven (2000) may be interpreted as life-ability which is an inner quality of the person. According to Sen (1999) and Sen (2008), capabilities enable one to choose a life they have reason to live. The capabilities give one the freedom to choose, say what to consume. Thus, capabilities include opportunities (Sen, 1993, Terzi, 2007, Walker and Unterhalter, 2007) and incomes, among others. A given environmental quality gives its residents certain opportunities that may not be found in other areas. Such opportunities may include economic and social opportunities such as social capital building. However, it is up to the person's capabilities to live a quality life in such an enabling environment.

Again, income determines the demand for certain environmental qualities. It, therefore, means the environmental quality may also be determined by the demands of those within it (Tiebout, 1956) as also argued by Sirgy (2018) that community conditions are a result of community actions. If residents demand more quality, as is mostly known about the consumers of cars in Japan, the provider is expected to respond by providing the required quality even if it means at a higher cost, and if not provided residents will 'vote with the feet'. However, the provision is not instantaneous, hence, the probability of the consumer moving to the location where his or her preferences are currently met or are nearly met, as predicted by Tiebout's 1956 model. In the same way that Sen (1987) argues that living standards may be influenced by economic means, this study argues that livability may be a function of consumers' demands as informed by Tiebout (1956). In a residential area where residents are more concerned with quality and have democratic means of airing their demands, it is expected that better quality services will be provided as compared to other areas, just like consumer goods, *ceteris paribus*. While Sen (1999; 2008) views capabilities as both inner and outer qualities in the context of Veenhoven (2000), Veenhoven (2000) views capabilities as only the inner qualities, which the author prefers to call life-ability. Despite the differences in the perspectives by the two authors, capabilities expansion may be determined by the environment within which the person finds him/herself.

NRC (2002) noted that livability is broad and complex therefore its definition is difficult to be unanimously agreed upon. Therefore, van Kemp *et al* (2003, p. 6) said "[c]oncepts as livability, living quality, living environment, quality of place, residential-perception and -satisfaction, the evaluation of the residential and living environment, quality of life and sustainability do overlap, and are often used as synonyms—but every so often are contrasted". This statement implies that in as much as the term livability has been used for several decades now, its understanding remains oblique because of the various connotations it holds. Therefore, its understanding is obliterated by this ambiguity.

NRC (2002, p. 24) said "[a]s the interest in livability continues to grow, there is increasing concern about the influence of transportation systems on the environment, economic health, and

social well-being at geographic scales ranging from the local to the national". From a happiness economics perspective, livability interest has been as a result of the social well-being movement. This may be the reason for the increased interest in social well-being research viewing satisfaction with environmental characteristics as a determinant of satisfaction with life. Veenhoven (2006) concurs by saying livability is a condition for happiness. He argues that a condition for happiness does not mean happiness *per se*. Therefore, along the non-universality of livability, Ruth and Franklin (2014) argued that different age groups and geographical locations define livability differently. Such connotations bring again controversy because of differences in definitions as determine by social characteristics and environments.

As much as livability is an environment-person relationship, this study argues that it must be viewed more as a relative term which may not be universally agreed upon. Whilst there may be objective measures for a livable environment, the subjective measures are equally important since what one may consider to be a livable environment may not be what another may consider to be so. Given some difficulties in the measurement of the objective characteristics, the subjective approach seems better placed. As such, livability may then be better viewed as a relative and not an absolute characteristic.

The aim of the study is to show that, despite the different connotations associated with livability, livability is an impure public good as viewed from economics. The objectives of this study have also been derived from the findings that livability studies have been concentrated on urban environments, as could be seen from the usage of the term 'urban quality' by Okulicz-Kozaryn and Valente (2018), in developed nations and from city planning perspectives. The study aims to set an agenda for further studies including those in rural areas especially for satisfaction with life. Public policy aims at increasing well-being among citizens and one way among the many is to improve the livable environment. The understanding of this livable environment particularly from an economics perspective remains marred by various definitions from other disciplines. While the study accepts that livability is complemented by sustainability, for purposes of this discussion, however, that connection is not included here because of the guiding objectives.

2. Literature

Literature has it that livability is a characteristic of the environment. It is argued that living in a stressful environment reduces life satisfaction. Ng *et al.* (2009) argue that stress affects satisfaction with life. Stressful in what sense becomes a question that needs an answer. The answer to this question may bring one to conclude that livability is relative. The study says so because there are no universally livable conditions, thus stress in one environment may not be a stress in another. For instance, from the perspectives of Ruth and Franklin (2014) that geographical location determines livability differences, rural residents may view urban life differently from their own. In one sense they may view urban life better because of certain characteristics that may be perceived to make an urban environment seem better. On the one hand, for instance, in most rural areas in developing countries, having to travel several kilometres to fetch water and firewood will make one to conclude that life in the towns and cities is better because of tap water and electricity available inside the urban homes. On the other hand,

having to pay, in monetary terms[1], for everything consumed may be viewed as stressful by the rural residents who mostly depend on their farm produce. These two perspectives will most likely lead to different effects on happiness because of the differences in living conditions as stated by Ng *et al.* (2009). These conditions are analogous to what Veenhoven (2000) term livability; which reflects an interaction between the external environment and life chances to the person concerned. With the differing perspectives, as outline above, an optimisation approach may need to be used where the costs and benefits to the inhabitant concerned need to be weighed.

Contrastingly, congestion in urban roads may force urban dwellers to view rural life a bit satisfying. For instance, traffic jams associated with peak hours may make life more stressful than that in rural areas. Take for instance, a migrant worker who travels everyday to work in town. The said worker may find that to get transport to town is easy in the rural area, assuming ready transport because of a busy road that passes by his or her area, but he or she may be always delayed from work by traffic jams which start just a few kilometres into the city centre. This experience from both urban and rural life may lead the migrant worker to conclude that life in the urban area is more stressful. The two illustrations show that livability is relative. However, for the same person, the weighing of benefits and costs may help to solve the dilemma.

One other explanation for the above discussions is habituation. Habituation may, in line with Huron (2013) and Schmid, Wilson and Rankin (2015), be taken simply to mean learning. In the above discussions, one may conclude that although some environments may not generally be considered livable, people living in these environments may learn to live within those environments and, therefore, are habituated to the said environment. By so doing people become happy within their environment not because it is better than others but because they are acclimatised to it.
The above examples may also illustrate why then quality of life is relative. If one treats livability as quality of life, as Veenhoven (1996) did, then it is definitely relative as illustrated. But treating livability as quality of life is sometimes questionable because a livable life does not necessarily mean a quality life. The word livability reflects ability to attain that life but not necessarily the quality of the outcome variable which may be labelled life. Therefore, livability seems to be an input variable in this sense while quality of life is an outcome variable.

This debate about what livability is brings us again to another theory: the comparison theory. In this theory, satisfaction with life is dependent on how one compares themselves with the relevant others. Because comparison is a social phenomenon, the study briefly focuses on the social comparison theory. Probably one of the first proponents of this theory is Festinger (1954). Of note is that livability may be viewed as an absolute standards approach while comparison theory is truly a relative standards approach.

The argument of the comparison theory is that human, by nature, always make comparisons. The comparison is with previous experiences or other people (Jasso, 2001). Thus, happiness is a result of comparison, either with desired outcomes or relevant others who happen to be

[1] The study emphasises the word monetary because of the opportunity cost that is involved.

colleagues. If one feels being better than previous or envisioned self or other comparison groups, they feel happy. Thus, the comparison group usually is one's colleagues or those close to them. Within the livability argument, if one perceives his or her area to be of a better quality than surroundings, he or she is likely to view it as livable and therefore, will report higher satisfaction with life. This, however, does not rule out the possibility of place attachment and or habituation. Because of being attached to a place, one may perceive it to be better than the other comparison place possibly because the person has been habituated to that place.
Since the paper argues that livability is a public good, a brief introduction to the theory of public goods will do justice to the topic. To attain that, the next subsection introduces public goods.

2.1 A brief theory of public goods

The definition of goods may refer to physical goods and services (Smith, 2003). Thus, in the whole of this paper, this definition applies. A public good in economics is both non-rival and non-excludable (Kollhoff, 2014). Thus, once provided everyone who wish to benefit can do so at no extra cost to the provider. Also, it is very expensive or even impossible to deter non-payers from benefitting. These polar characteristics give rise to a pure public good. In contrast, a pure private good is both excludable and rival in consumption. Excludability is very possible at no or less cost. Table 1 shows the classification of goods according to the two aforementioned characteristics.

Table 1: Classification of Goods

Characteristics	**Excludable**	**Non-excludable**
Rivalry	Private goods	Common property resource (commons)
Non-rivalry	Congestible resources	Pure public goods

In terms of livability, in Table 1, the study argues that livability should be viewed as an impure public good, or what Holcombe (1997) calls, a Samuelsonian public good. Under Samuelsonian publicness, a good can be excludable but non-rival or non-excludable but rival. A common resource is one in whose consumption is non-excludable but continued consumption by many results in rivalry in consumption. A congestible resource is one where consumption up to a certain level is non-rival but when that certain level is reached, rivalry sets in. For example, a road is non-excludable (Holcombe, 1997), unless there are toll fees for its use, but an increase in number of users results in congestion which is a sign of rivalry. However, if toll fees are paid for its use, it becomes excludable but non-rival to a certain extent. The benefits from the toll gates may however not be commensurate with the associated costs. The inclusion of congestion and toll fees may affect livability of the said environment. These two have the ability to exclude other beneficiaries of the environment. However, for those who can pay the fees the environment becomes more livable because competition has been reduced. While competition is good in some instances like price determination in a market system, in situations like these it becomes detrimental to human life by affecting livability thereby reducing satisfaction with life.

Another example is a tower light in a residential area or even street lights. These lights are available to all people close-by but as more and more people come closer to it, it becomes rival in consumption. Not rival because it cannot supply light to all but space restrictions make it rival

because all those around would compete to be as close to it as possible to get as much light as they can. Thus, a certain distance away from the light will reduce visibility until further increases in distance away from the light will make the benefits from the light not obtained. Perceived from the security perspective, one will feel threatened at night to travel under darkness than in light. Therefore, a street furnished with street lights is perceived more secure and the area will likely be considered better livable than another without. This environmental characteristic is likely to enhance satisfaction with life for the community at large.

Livability has been defined sometimes in terms of transport services. Areas with well networked roads have been sometimes classified as livable communities. Such is true to some extent. This study argues that this is so because at times, especially during peak hours, these roads will be congested thus reducing potential life satisfaction hence quality of life. The same could be said about tower lights, as already alluded to before. They have the potential to improve quality of life because of presumed security when one is in light in a dark night, as alluded to before.

Holcombe (1997) noted that public goods can efficiently be supplied by private suppliers unlike the presumed theory that they can only be efficiently supplied by the government. The definition cited by Holcombe (1997, p. 2) of a public good is a good which has "... one or both of the characteristics of non-excludability and jointness in consumption". Thus, this definition includes both pure and impure public goods with impure public goods having been classified as common property resources and congestible goods in Table 1. As noted earlier on, Veenhoven (1996) viewed livability as being provided to meet human needs. Thus, livability may be viewed as a good as explained in the subsequent section.

3. Results: Livability as a Public good

Previous literature suggests that livability is a characteristic of the environment. From this perspective, the characteristics of the environment may be viewed from the perspective of the public and private good. As a public good, the outside environment must be conducive for an area to be livable. For instance, security-wise the area must be perceived as safe for it to be considered desirably livable. But security of an environment may come as a result of public policy issues. Investment in tower lights is an example. Once the tower light is or street lights are functional, security might be perceived as high unlike when the tower light is or street lights are non-functional. Once this perceived safety is inculcated in the resident, the area is perceived livable. Also investments in local security services, sometimes called neighbourhood watch[2], makes the environment secure. However, whether one honestly and consistently pays for the security services or not becomes another issue. For example, if one is located between two neighbours who have paid for these services, his or her probability of attack from the supposed robbers is limited because of the associated external benefits, unless the neighbourhood watch police become the robbers or alert the robbers of non-payers. This is so because they will know the payers and non-payers. The non-payer, therefore, becomes a free-rider (Holcombe, 1997) in

[2] A security services system whereby neighbours pool funds to pay for the security services within their neighbourhoods. These security guards may even be members of the neighbourhood or may be externally sourced.

economics terms. Thus, payment by the neighbours becomes a public action to the non-payer as in the example given by Tiebout (1956) of a neighbouring community, which sprays against diseases' spread with community being defined by Sirgy (2018, p.4) as "... a politically-recognized geographic area". However, if consecutive neighbouring homes in this community fail to pay then free riding becomes an option that does not pay off because these neighbours will be at high risk of robbery attacks. This analysis may also reflect that livability is both a public and private good. If free-riding is possible, the good is a public good but if it is not, the good is a private good in the economics sense. In the example given then, certain scenarios place the good in either category but not both simultaneously. The illustration of paying or not paying for the security services yields a private action with potential public consequences that the area is at high risk if, say, only one member pays or a few members pay the neighbourhood watch group fees. One notable characteristic that makes livability a public good from the above discussion is that it is cheaper at times to provide the good as a public good than as a private good (Kallhoff, 2014). For example, it is cheaper to pool funds and pay for the neighbourhood security services than to independently install CCTVs in homes or rapid response security services. Households, however, sometimes refrain from this approach because of the free-rider problem as explained earlier on.

With this categorisation of livability as a public good, NRC (2002) noted that livable places attract more residents. This observation was made with reference to livable cities. For example, a city with higher rates of armed robbers is not likely to attract as many residents as does one with few cases. The same applies even at local level. Other things being equal, residential areas with high probability of theft or robbery are not equally considered livable as those without but in the same city. Thus, just like any other public good provision, it is in the interest of those who supply livability to further their interests through provision of this public good. For example, Holcombe (1997) noted that it is for the interests of those in government to publicly supply defence not for the public interest *per se*.

Livability as a public good could also be seen in new urban locations. People are usually scared of being in new locations where usually the public utilities may still be lacking. It is usually the owners of those properties that prefer to reside in the said areas. Tenants will do so, however expecting lower rentals to compensate for the perceived risk. That livability helps in decisions on place of residence has also been observed by Okulicz-Kozaryn and Valente (2018).

The Tiebout (1956) model, popularly known as the 'voting with the feet theory' of local public goods, can equally be used to explain the choice of residential area using neighbourhood characteristics. Along this argument, Sirgy (2018) noted that areas with good neighbourhood characteristics are ranked high on being livable and, therefore, residents are satisfied with their lives. However, neighbourhood has been found to mean many things to many people (Holden, 2018). It can be understood to mean "... both physical, designed spaces and as webs of primarily social relations through which we accomplish human existence in timeframes from daily to inter-generational time" (Holden, 2018, p.49). This is, as could be deduced from previous discussions, the working definition of neighbourhood in this study. According to the Tiebout model, people choose to live in an area that satisfies their preferences thereby maximising their well-being (Hyman, 2011). Hillman (2009) noted that these neighbourhood characteristics create locational market for public goods. In line with this, Gheitarani, *et al.* (2020) states that the degree of

fulfilment of these needs by a place is called place dependence. Thus, once one feels their needs are fulfilled, they may depend on that place and consider it livable.

Again within the context of the Tiebout model, livability is contextualised as a non-perfect public good. Thus, livability can be appropriately termed neighbourhood characteristics or an example of a local public good. Neighbourhood characteristics may be preferred because it indicates the various elements of an environment that people consider for them to conclude as to whether a certain area is livable. The question that remains needing answers is: Livable in which contexts and, therefore, to whom? Each individual has their preferred standards for their living conditions as explained earlier under the perspective that livability is relative. Once these are met, the environment is considered livable by the person concerned. This is the basis of the popular voting with the feet model by Tiebout (1956). Therefore, to say livability is living standards, the current study observes, may be an error because living conditions are used as determinants of livability not as livability *per se*. Thus, standards are indicators of livability but not livability in its totality.

Additionally, the characteristics of livability include, among others, accessibility and equity. Access to particular services determines how livable a particular area is judged (Timmer and Seymoar, 2005). Differential accesses among residents also indicate the equity issue. How are these accesses distributed among different areas within a city or a region remains a key question. This question brings up public-policy issues. These differential accesses determine the type of lives people live and hence the livability of the environment. The end result is whether the residents are happy or not happy particularly with their neighbourhoods. From this, one can deduce that happiness is not livability but happiness may be a result of a livable environment. In line with this, Arvin (2019) listed a number of strategies and policies that improve happiness. The majority of these strategies and policies relate to livability as a public policy issue therefore a public good. Additionally, NRC (2002) noted the livability triad is made of the economy, social well-being and environment. The variables of the triad are interdependent, however. Thus, that social-well-being is also made of happiness makes one to conclude that livability is not necessarily happiness but an environmental issue that enhances happiness.

Momtaz and Elsemary (2015) noted that livability is a necessity for health, economic and social survival. Thus, livability is a contributing factor to these issues which enhance happiness and quality of life. Timmer and Seymoar (2005, p. 2) concur with Momtaz and Elsemary (2015) when they said "[l]ivability refers to an urban system that contributes to the physical, social and mental well being and personal development of all its inhabitants". Thus, livability is not equal to happiness or quality of life but improves the quality of life as perceived by residents. Thus, people who live in better livable environments are more likely to report better quality of life.

At times life satisfaction is sometimes viewed as subjective. This subjectivity element may explain why some environments may be viewed as livable by certain people. One possible explanation of this being the fear of possible victimisation. For example, in some states, residents may discuss informally about the unlivable environments they are experiencing but when asked formally to indicate how livable the environment is, they change goal posts and, therefore, report the environment as being livable. A good example is when one is in dictatorial environments.

People will likely report the environment as livable, not because it really is, but because the quality of institutions do not allow this, thus the people will fear for their lives to actually report the actual views. The actual views will only be obtained if interviewees really trust the researchers.

That livability is a public good may also be deduced from the following perspective. Suppose one wants to buy a house. The potential buyer has been shown two houses in different locations but located on the same stand size and the two have the same number of rooms and other characteristics except location. For one to choose a preferred residential location, their preference is determined by the external environment. The word external here refers to external to the house, that is, neighbourhood characteristics. Thus, neighbourhood characteristics are viewed as public elements to this potential buyer. For example, a noisy environment will be less likely to be preferred to a serene environment.

The same analysis done here may equally apply in rural areas. Migration decisions may be determined by various factors as can be deduced from urban centres. However, the livability of the environment also counts. Because in rural areas most people know each other by names and place of residence, the place attachment may count. But if the environment is less livable than comparison areas, one is likely to migrate leaving behind even the social connections made long back. A case in point is the land reform. When there is a land reform, those without land or who consider their current residential places less livable are likely to be the first to apply for land, *ceteris paribus*. Thus, livability remains an external environment issue under the public domain hence it is a public good, though mostly impure public good.

4. Conclusions

In the presentation above, the study has tried to show the various ways that livability is conceived by different authors. It has also argued that livability can be viewed as an impure public good which enhances happiness unlike most of the previous authors who saw it as equally happiness. The issue of livability as a public good has also been understudied in existing literature.

The majority of authors on public goods focus much on its efficient provision. They mostly conclude that a public good is provided by the government local or national government. This, however, poses many questions to issues such as public transport, public parking such as customer reserved parking and public roads (Local Government Forum, 2008). For instance, public transport is excludable and rival and is provided by the private sector. Where then is the publicness remains a question because public goods are associated with publicly supplied goods.

The study somehow concurs with Ruth and Franklin (2014) and Kovacs-Györi *et al* (2019) when they say livability is a person-environment relationship. It is the person concerned who judges an environment as to whether it is livable or not possibly because of habituation. Thus, livability is a relative term. Even though there may be minimum standards just like basic needs by Maslow (1943), characteristics of a livable environment vary from person to person. While the minimum might give one a starting point, what one considers desirable and, therefore, livable differs from person to person. However, the environment part of it is viewed in this paper as a public environment hence a public good.

Also, Tiebout (1956) predicted that residents vote with their feet when choosing residential locations. Certain considerations and determinants will come into play for a region to be considered livable. In this line of thought it means that what the voter will consider is: How livable is the area to be chosen compared to others? To make that decision, the voter will be assessing the external environment which is a public space issue. Thus, viewed this way, livability remains a public good.

While the analysis in this paper concentrated mostly on local public goods, it can be extended to global public goods. A world that is livable must have certain desirable characteristics that fulfil the needs of the current and future generations that encompass both livability and sustainability. A world filled with calamities, extreme poverty, wars and pandemics such as the corona virus disease (COVID-19) is not said to be livable. One would conclude that if there is a way for reducing these global problems, the world will be better. The world that we need as citizens is one where most, if not all, characteristics of a desirable livable environment are present such as absence of wars and pandemics. Therefore, livability is a public good. That livability is a public good was also possibly noted by Tiebout (1956) when he stated that public goods are a reflection of the preferences of the population. For one to consider an environment livable, there are certain environmental qualities that they would have considered which are preferable to them.

References

1. Arvin, M. (2019). Editorial, International Journal of Happiness and Development, Vol.5(2) pp. 89-94
2. Gheitarani, N., El-Sayed, S., Cloutier, S., Budruk, M., Gibbons, L., and Khanian, M. (2020). Investigating the mechanism of place and community impact on quality of life of rural-urban migrants, International Journal of Community Well-Being, 3, pp. 21–38, https://doi.org/10.1007/s42413-019-00052-8
3. Gough, M. Z. (2015). Reconciling livability and sustainability: Conceptual and practical implications for planning, Journal of Planning Education and Research, Vol. 35 (2), pp. 145-160, DOI: 10.1177/0739456X15570320
4. Grayson, L., and Young, K. (1994). *Quality of life in cities + an overview and guide to the literature*. The British Library, London
5. Hillman, A. L. (2009). *Public Finance and Public Policy, 2nd*, Cambridge University Press: Cambridge
6. Holcombe, R. G. (1997). A Theory of the Theory of Public Goods, Review of Australian Economics, 10(1), pp. 1-22
7. Holden, M. (2018). Community Well-being in neighbourhoods: Achieving community and open-minded space through engagement in neighbourhoods, International Journal of Community Well-Being, 1:45–61, https://doi.org/10.1007/s42413-018-0005-1
8. Hyman, D. N. (2011). *Public Finance: A Contemporary Application of Theory to Policy*, 10th, Mason, USA, South-Western Cengage learning.
9. Jasso, G. (2001). "Comparison Theory", in Turner J. H. Handbook of Sociological Theory, Kluwer Academic/Plenum Publishers: New York, pp. 669-698.
10. Kallhoff, A. (2014). Why Societies need public goods, Critical Review of International Social and Political Philosophy, Vol. 17, No. 6, pp. 635–651, http://dx.doi.org/10.1080/13698230.2014.904539

11. Kovacs-Györi, A., Cabrera-Barona, P., Resch, B., Mehaffy, M., and Blaschke, T (2019). Assessing and Representing Livability through the Analysis of Residential Preference, Sustainability, 11, 4934; doi:10.3390/su11184934
12. Marans, R.W., and Couper, M. (2000). "Measuring the quality of community life: a program for longitudinal and comparative international research", Proceedings of the Second International Conference on Quality of Life in Cities, vol. 2. Singapore
13. Maslow, A. H. (1943). A Theory of Human Motivation, Psychological Review, July 1, 1943
14. Momtaz, R., and Elsemary, Y. (2015). Qualitative Conceptions of Livability between Theory and Applications in Egypt, International Conference on IT, Architecture and Mechanical Engineering (ICITAME'2015), Dubai, (May, 22-23, 2015)
15. National Research Council. (2002). Community and Quality of Life: Data Needs for Informed Decision Making. Washington, D.C: The National Academies Press, https://doi.org/10.17226/10262
16. Ng, W., Diener, E., Aurora, R., and Harter, J. (2009). Affluence, Feelings of Stress, and Well-being, Soc Indic Res .94, pp. 257–271, DOI 10.1007/s11205-008-9422-5
17. Okulicz-Kozaryn, A., and Valente, R. R. (2018). Livability and Subjective Well-Being Across European Cities, Applied Research Quality Life https://doi.org/10.1007/s11482-017-9587-7
18. Ruth, M., and Franklin, R. S. (2014). Livability for all? Conceptual limits and practical implications, Appl Geogr, pp. 49: 18–23. doi:10.1016/j.apgeog.2013.09.018. (NIPH Author Manuscript).
19. Schmid, S., Wilson, D. A., and Rankin, C.H. (2015). Habituation mechanisms and their importance for cognitive function, Frontiers in Integrative Neuroscience, 8(97), pp.1-2
20. Sen, A. (1987). The Standard of Living: Lecture 11, Lives and Capabilities, in Hawthorn, G. The Standard of living, Cambridge, Cambridge University Press, pp.20-38
21. Sen, A. K. (1999). Development as Freedom, New York: Alfred. A Knopf Inc
22. Sen, A. (2008). The Economics of Happiness and Capability. In L. Bruni, F. Comim and M. Pugno, Capabilities and Happiness, Oxford: Oxford University Press, pp. 16-27),
23. Sirgy, M. J. (2018). What types of indicators should be used to capture community well-being comprehensively? International Journal of Community Well-Being, 1, pp. 3–9 https://doi.org/10.1007/s42413-018-0002-4
24. Smith, R. S. (2003). Global Public Goods and health, editorial, Bulletin of the World Health Organization, 81(7), pp. 475
25. Tiebout, C. M. (1956). A Pure Theory of Local Expenditures, The Journal of Political Economy, 64(5), pp. 416-424
26. Timmer, V., and Seymoar, N. K. (2005). The Livable City, The World Urban Forum 2006, Vancouver Working Group Discussion Paper, International Centre for Sustainable Cities
27. Veenhoven, R. (1996). Happy Life-Expectancy—A Comprehensive Measure of Quality-of-Life in Nations, Social Indicators Research 39, pp. 1–58
28. Veenhoven, R. (2000). The four qualities of life. Journal of Happiness Studies, 1, pp. 1–39.
29. Veenhoven, R. (2006). How do we assess how happy we are? Tenets, implications and tenability of three theories. Paper presented at conference on 'New Directions in the

Study of Happiness: United States and International Perspectives', University of Notre Dame, USA, **(October, 22-24, 2006)**.

30. World Health Organization. (1984). A Discussion Document on the Concept and Principles of Health Promotion. European Office of the WHO, Copenhagen, Denmark, 1984.