

# Urban-Rural Happiness Gradient Theory: (Mechanisms of Urban Malaise)

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Urbanization, arguably the most dramatic disruption of human habitat, has received surprisingly little attention from happiness studies in terms of theory. We know that in the developed world urbanites are less happy, yet we miss theory: what can be the mechanism? This article aims to start filling this gap. We have reviewed happiness and urban literatures to find out the mechanisms of urbanness registering in human subjective wellbeing. An apparently surprising empirical finding that people are less happy in cities should not be surprising given that happiness theories indicate at least substantial or usually complete happiness disadvantage of cities.

KEYWORDS: CITIES, URBAN LIVING, URBANICITY, HAPPINESS THEORIES

## 1 Background

Cities are not just buildings, urbanism is a way of life (Wirth 1938), and our species' way of life has been disrupted dramatically. In 1800 a mere 1.7% of the world population lived in cities larger than 100k (Davis 1955), but urban population will explode from 30% in 1950 to 70% in 2050, or from .75b to 6.75b (<https://population.un.org/wup>)—that's an addition of 6 billion of people to cities over just 100 years. Arguably, this is the most dramatic change of human habitat in our species history.

Why cities exist in the first place? Economics tells us that cities are necessary because humans are not self sufficient (e.g., O'Sullivan 2009), that is labor specialization works best at high population level and density, and cities through agglomeration economies increase productivity and ultimately Gross Domestic Product (GDP), an end-in-itself (the ultimate goal of interest) (O'Sullivan 2009, Glaeser 2011b).

Yet we don't need more GDP, in fact a reasonable argument can be made that we need less (Skidelsky and Skidelsky 2012, Joutsenvirta 2016, Kallis et al. 2012, Kallis 2011, Kasser 2003, Roberts 2011, Roberts and Clement 2007, Klein 2014). And arguably the metric to be maximized is happiness (Stiglitz et al. 2009, Diener 2009, Okulicz-Kozaryn 2016a).

There is an apparent "urban unhappiness paradox." People flock to cities—6b over 100 years—and yet people in cities are less happy: across the developed world, the least happy places are largest cities: New York City (Okulicz-Kozaryn and Mazelis 2016, Senior 2006), London (Office for National Statistics 2011, Chatterji 2013) Helsinki (Morrison 2015), Bucharest (Lenzi and Perucca 2016), Sydney (cited in Morrison 2011), and so forth.

It is especially a puzzle for economists, who then try to cherry-pick data to argue that people are happier in cities Glaeser (2014, 2011b,a, 2007). Economic theory runs against the urban unhappiness phenomenon as it predicts

higher SWB in cities. To economist, money=utility (e.g., Autor 2010).<sup>1</sup> There is more money in cities, and so cities must be happier. And since economics also assumes that people are perfectly rational and fully informed, they must rationally flock to the happiest places of all, cities Glaeser (2011b).

A simple point is missed—people do not vote with their feet in favor of urbanism—substantial portion of city growth is not due to people preference, but actually against it (Molotch 1976) People move to places mostly for jobs (Campbell 1981). Contemporary companies locate most jobs in metropolitan areas and so people are forced to live there. Just like with industrial revolution—much of urban population is forced (Engels [1845] 1987, Harvey 2012, Molotch 1976).<sup>2</sup> Many others think they chose city consciously, but are actually driven by subconscious city size fetish (Okulicz-Kozaryn and Valente 2017).

It is of paramount importance to study the effect of cities on human condition. The question is long-standing and many have studied it, notably classical US urban sociologists such as Wirth, Burgess, and Park; but also notably German sociologists Simmel and Toennies. Some even suggest a new field e.g., 'neurourbanism' (Adli et al. 2017). This study is a continuation of <<<BLIND FOR PEER REVIEW>>>

As this article argues, an apparently surprising finding that people are less happy in cities in the developed world should not be surprising given that happiness theories indicate at least substantial or usually complete happiness disadvantage of cities.

Subjective Wellbeing (SWB) is an umbrella term for various subjective measures of wellbeing, notably positive and negative affects, happiness, and life satisfaction. This article doesn't concern itself with philosophical or measurement issues—for that see for instance Brulde (2007)—we agree that a hybrid version of happiness theory seems most plausible. Most of the urban SWB research uses life satisfaction measure, which is a global self-evaluation of one's life as a whole. This measure is rather cognitive than affective—respondent evaluates her life as whole globally (everything, including professional, personal, family, community, etc)—for discussion see Campbell et al. (1976), Diener (2009). Following usual practice, for simplicity, we use these terms interchangeably: SWB, happiness, and life satisfaction, but specifically we mostly mean life satisfaction as defined above. SWB measure is also at least adequately reliable and valid and considered good enough for public policy making and public administration (Diener 2009, Stiglitz et al. 2009).

Term urban-rural happiness gradient refers to happiness rising from its lowest in largest cities to highest in smallest ones Berry and Okulicz-Kozaryn (2011). While it is a gradient with ordinal steps or ranks, a major increase in happiness benefits places smaller than several hundred thousand Okulicz-Kozaryn (2016b). Hence, the gradient can be also conceptualized as a spectrum between, at one end, large cities, and at the other end, small places. While for simplicity we sometimes use urban-rural dichotomy, we specifically mean end categories of a gradient with major change in SWB around several hundred thousand.

## 2 Urbanicity and the Happiness Theories

This core section applies happiness theories to urbanicity.

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<sup>1</sup>To be sure there are exceptions, e.g., Easterlin and Oswald. Still, much of the so called economics of happiness is problematic—see Davies (2015).

<sup>2</sup>Wage slaves are “hired slaves instead of block slaves. You have to dread the idea of being unemployed and of being compelled to support your masters” (p. 283 Goldman et al. 2003).

There are many happiness theories, but the most relevant ones to the urban-rural happiness gradient can be subsumed under three major theories:

- genes/evolution: set point/adaptation (adjustment, “hedonic treadmill”) (Brickman et al. 1978); happiness as a motivator (Carver and Scheier 1990)
- comparisons/discrepancies (Michalos 1985)
- needs/livability (Veenhoven and Ehrhardt 1995)

The first two theories predict a major urban disadvantage of cities in terms of happiness. The livability theory does not make direct predictions on the urban-rural happiness gradient, but some urban disadvantage can be inferred from it. In what follows each of the theories is briefly described and applied to urbanicity.

## 2.1 Genes/Evolution: Set Point/Adaptation, and Happiness as Motivator Theories

Genes and evolution have bad reputation in social science due to eugenics, social Darwinism, and so forth, but the pendulum have swung too far in the other direction and avoidance or denial of evolution is counterproductive (Pinker 2003, Haidt 2012).

Humans’ behavior, as that of any animal, is dictated by genes (e.g., Dawkins 2006). It is notable that humans share with a chimp more than 95% of genes.<sup>3</sup> And a simple, yet remarkably overlooked point is that neither homo sapiens nor chimps have evolved to live at high population size or density—in cities. As hunters-gatherers, when our natural evolutionary habitat has formed for tens of thousands of years, humans have lived in bands of 50-80 people in wilderness Maryanski and Turner (1992).<sup>4</sup> A modern city of hundreds of thousands of people is a very recent invention in human evolutionary history—there was no such even single place in the world before around 1,000 BC. By 1850 AD only about 2.3% of world population lived in cities larger than 100,000 (Davis 1955).

Some argue that many species, e.g., ants and bees, thrive at high densities, but clearly humans are unlike ants or bees. By one estimate—we’re 90% chimp and only 10% bee (Haidt 2012). Small population level and density in natural setting is humans’ evolutionary home, not high population size and density in artificial setting Pretty (2012). Humans have evolved to live sparsely in a natural environment, not densely in a mixture of asphalt, concrete, steel, and glass—a city. To summarize, the key point is that it is not in human nature to live in a city.<sup>5</sup>

Genes/evolution are a foundation of several closely related happiness theories: set point/adaptation (adjustment, “hedonic treadmill”) (Brickman et al. 1978), and happiness as a motivator theory (Carver and Scheier 1990).

Set point/adaptation theory states that life events happen, even dramatic ones such as losing a limb or winning millions in a lottery, but humans have an extraordinary ability to adapt to just about anything, and so their

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<sup>3</sup><https://www.genome.gov/15515096/2005-release-new-genome-comparison-finds-chimps-humans-very-similar-at-dna-level>.

<sup>4</sup>Contemporary largest cities crowd millions of people at densities of about 25,000/sq km (Manhattan), which is 105 people per acre. Imagine about 3 times larger soccer field (2.7 acre) and 22 people on it (2 teams of 11 players)—it’s a livable density—Manhattan has 281 people on it. Of course it is only manageable thanks to towers and underground (subway, tunnels, etc) facilities. And there are dozens of cities more dense than Manhattan, and it is only getting denser and worse.

<sup>5</sup>A side point in terms of genes is about heritability of happiness. Genes also matter more than anything else for one’s happiness. About 50 percent of happiness, intelligence, personality, etc is determined by genes (Dawkins 2006, Krueger et al. 2008, Stangor and Walinga 2010, Stoolmiller 1999, Plomin et al. 1994, Bartels 2015). Hence of all the influences on our happiness level, genes have the greatest effect, as what is left for all the other influences is only the other 50%.

happiness over time comes back to status quo, a set-point (Brickman et al. 1978).<sup>6</sup> A useful closely related term is “hedonic treadmill”—we chase some goals, some greater happiness, but like on a treadmill, we never get anywhere, being stuck always at the same place despite running. Durkheim ([1895] 1950) put it well: “the more one has, the more one wants, since satisfactions received only stimulate instead of filling needs.” Human adaptation is astonishing indeed: winning millions in a lottery and losing limbs has little if any effect on happiness. Astonishingly, about half of world population lives on less than 6\$ per day and they somehow manage and don’t commit suicide—humans can adapt to just about anything.<sup>7</sup>

Then the city allure is overrated—people simply adapt to urban amenities.<sup>8</sup> People are often attracted to city not just by jobs, but also by its amenities—opera houses, museums, etc (Campbell 1981). Arguably expected urban happiness is higher than experienced urban happiness (Kahneman et al. 1997, Schkade and Kahneman 1998, Kahneman 2000, Kahneman and Krueger 2006), and it may help to explain the apparent paradox of urbanization and urban unhappiness at the same time.

But wouldn’t people by the same mechanism adapt to smaller places as well? Again, natural environment is a natural human habitat and it has consistently positive effect on human condition Pretty (2012). And why pay more for city life,<sup>9</sup> and have less time? Urbanites work longer hours (Rosenthal and Strange 2002, 2003, 2008)—to pay for skyrocketing urban crowded housing and other “urban amenities,” while free time is critical for human flourishing—one of the top regrets of the dying is “I wish I hadn’t worked so hard” (Ware 2012). People would arguably stayed rural if they could, by they were forced into metropolitan areas (cities and its suburbs) by jobs (Campbell 1981, Engels [1845] 1987, Harvey 2012, Molotch 1976).<sup>10</sup>

Happiness as a motivator is a critical and largely overlooked theory (Carver and Scheier 1990). Like set-point/adaptation theories, it also closely derives from genes/evolution. SWB merely signals that a task at hand has been accomplished, then happiness dissipates, so that the signal is that a person should move to another task. If a person was perfectly happy all the time, she would not accomplish much. Happiness is simply a reward for

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<sup>6</sup>Also see homeostasis, e.g., ch4 by Cummins in Brulé and Suter (2019): SWB, like any physiological system requires homeostasis, a stable narrow range to function properly about 70-90 on 0-100 scale. Still some people are chronically low say due to arthritis or caring for an elderly. And some over-time change is possible. Set-point is not rigidly set. See more on Brickman: Brickman et al. (1987).

<sup>7</sup>See <https://www.worldbank.org/en/news/press-release/2018/10/17/nearly-half-the-world-lives-on-less-than-550-a-day>. And yet the happiness distributions do differ, for instance, those of Denmark and Togo are almost non-overlapping—society can make a huge difference (Diener 2015). We also know that the adaptation is not full, e.g., people do not adapt fully to unemployment (Lucas et al. 2004), unexpected death of a child (cited in Headey 2008), etc. And see the next section per livability theory.

<sup>8</sup>People don’t adapt to urban disamenities—again city living is not in human nature. And one does not adapt to multiple city stressors such as air, noise, and light pollutions, skyrocketing housing prices, etc, as evidenced by poor mental health of urbanites (Lederbogen et al. 2011, Adli et al. 2017).

<sup>9</sup>In other words, for jobs, it is often necessary to be in a city or close to it (suburb), but one should be aware that she is likely to adapt to city amenities, and hence, she should discount the expected happiness from her decision making to live in a city. Furthermore, enjoyment of many of urban amenities is expensive and time consuming—one is likely to end up not enjoying the amenities. It is another explanation for the apparent paradox that cities grow and yet are unhappy—people think they will enjoy more amenities (opera houses, top universities, etc) than they actually do, and they don’t take into account the disamenities such as high prices and pollutions. Again it is expected v experienced utility (Kahneman et al. 1997, Schkade and Kahneman 1998, Kahneman 2000, Kahneman and Krueger 2006). Allure of moving to a city is similar allure of moving to California—many Americans would like to live there and many actually move. They have unrealistic ideas about happy lifestyle, but end up with unhappy congestion, pollution, and high prices (Schkade and Kahneman 1998).

<sup>10</sup>Contemporary Americans prefer suburban settings, close to city so that they have access to jobs and urban amenities, and yet outside of central city so they have at least some nature, and less of urban disamenities Fuguitt and Zuiches (1975), Fuguitt and Brown (1990). More recent data are at <http://today.yougov.com/news/2012/07/05/suburban-dream-suburbs-are-most-popular-place-live/>. And yet suburbs are not a viable solution (Duany et al. 2001) for a society—rather, it was “smart for one, but dumb for all”—if few suburbanized, they’d probably came close to the best of the two worlds—city amenities close by, but without city disamenities, and plenty of nature. But predictably what happened instead is massive suburbanization. And suburbs are morphing into city-like creatures with less nature, higher prices, more congestion, pollution, etc Okulicz-Kozaryn (2015).

accomplishing a task. Happiness is necessary to motivate a person to accomplish the task, and then the happiness must dissipate, so that a person is motivated to move to another task.<sup>11</sup>

A problem in the modern world, and especially in a city, is that majority find themselves on a hamster wheel accomplishing tasks until one lies on a deathbed and wishes one didn't work so hard—one of the top regrets of the dying is “I wish I hadn't worked so hard” (Ware 2012). There are many more tasks in the city and one cannot ever accomplish all of them, because there are always more (Rosenthal and Strange 2002, 2003, 2008).

Furthermore, ever-increasing complexity and abundance of choices, exemplified in cities, may lead to paralysis as opposed to liberation—for instance, people offered many choices become overloaded and confused as opposed to liberated and thrilled (Schwartz 2004). On the other hand, it is not so that people in smaller areas are disengaged or withdrawn, rather they are more sane and at peace (Thoreau 1995 [1854], Nietzsche 1896). People in big cities are cognitively overloaded. They are not at peace, always chasing something, their gaze is disconnected from present and focused on some future task or goal, or they are distracted, sometimes disoriented (Simmel 1903). Urbanism has a negative effect on human mental health in general (Adli et al. 2017). Cities stimulate and overstimulate human nervous system (Simmel 1903, Lederbogen et al. 2011)—one feels energetic, possibly hectic in the city—urban environment gives one quick short-lived excitement boosts from its towers, neons, shopping windows, etc (Pile et al. 1999, Pile 2005b,a, Okulicz-Kozaryn and Valente 2017). An urbanite has more of just about everything than a rural person, but also seem to want even more—“the more one has, the more one wants, since satisfactions received only stimulate instead of filling needs” (Durkheim [1895] 1950).

An urbanite has a fuller, more experiential and more challenging life and more utility (money or consumption) (Florida 2008, Glaeser 2011b). The urban challenging environment can potentially build a better fuller human being. But such an opportunity largely is limited to upper-middle and upper classes. An urbanite makes more money, but also cost of living is higher. An urbanite has a higher position in society, but hierarchies are taller, and so forth.

Urbanites find life frustrating and they think they weren't able to achieve their full share of happiness (Campbell 1981). Urbanites either have higher aspirations or lower achievement or both. But given extreme opportunity found in cities (Tönnies [1887] 2002, Milgram 1970, Fischer 1995, Glaeser 2011b, O'Sullivan 2009), it is rather aspirations. The end result is often cognitive overload and poor mental health (Simmel 1903, Lederbogen et al. 2011, Adli et al. 2017).

A problem with the city is that it is better to be a big fish in a small pond than a small fish in a big pond—reference line is higher in city Luttmer (2005), Firebaugh and Schroeder (2009), which brings us to comparisons in next section.

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<sup>11</sup>Also as in an equation: SWB=achievement/experience−expectations/aspirations, i.e. the higher the expectations or aspirations, the lower the SWB, Carver (2003) argues similar: if rate of progress is below the reference rate: negative affect; if above: positive affect also if doing well: become satisfied, comfortable, possibly complacent (Carver 2003) until you fall below the reference line and it goes over again. Homo sapiens is not designed by genes to be happy but to survive and reproduce (Euba 2019). Carver (2003) discusses various models: cruise control: going over the hill gets tough, increase velocity and fuel use, reach plateau; and going down the hill: decrease fuel coasting: positive affect leads to coasting opportunistic shifting: positive feelings promote play—also see Marcuse (2015, 2013).

## 2.2 Comparison/Discrepancies: Multiple Discrepancies Theory (MDT)

Multiple Discrepancy Theory (MDT) (Michalos 1985) states that happiness is a function of:

1. social comparison, e.g., co-workers, high school friends, relatives
2. comparison to various standards, e.g., clothes, car expected in a given profession
3. time: your SWB now is determined by how you were doing in the past and what you expect in the future

Per MDT, city is a negative influence on happiness: there is relative deprivation through upward comparisons and other mechanisms. Cities bestow great deal of freedom on a person “city air if free” Tönnies ([1887] 2002). But it is usually forgotten that cities also enslave through urban finish and manners, etiquette, visual recognition, etc Marcuse (2015), Freud et al. (1930), Okulicz-Kozaryn (2015). City intensifies conspicuous consumption: urban etiquette, sophistication, manners and finish (e.g., White and White 1977, p. 169). City intensifies vice, crime, indifference, strangeness, aversion, and repulsion (Bettencourt and West 2010, Simmel 1903, Wirth 1938, Thrift 2005, Amin 2006, Veblen 2005b, Park 1915, Park et al. [1925] 1984).

One mechanism is built environment—corporate buildings, shops, advertisements—they signal success is wealth and material possessions (Joye et al. 2020). One reason we move to a metropolis such as London, Shanghai, or New York is simply because we want to demonstrate that we are better than others (Okulicz-Kozaryn and Valente 2017)—dwellers of big cities feel consistently more proud than dwellers of smaller locations (Balducci and Checchi 2009, Morrison 2016, Fuller 2017, Hanson 2015).

Urban way of life increases chances, but not necessarily improves outcomes. City stimulates but instead of fulfilling, it increases wants and needs (“hedonic treadmill”).

Visual and social comparisons are more likely in urban areas as there are more people and more stimuli. Likewise, use of social media is higher in urban areas (Perrin 2015), and both visual and social comparisons in real life and on social media can make people seek status through money, material possessions, and conspicuous consumption (Taylor and Strutton 2016, Joye et al. 2020). This is also arguably why thinkers such as Nietzsche and Thoreau escaped urban crowds that are not only dull, energy-sucking, and uncreative, but also mired in endless petty competition and comparisons (Nietzsche and Parkes 2005, Tesson 2013, Thoreau 1995 [1854]).

Humans are usually unwilling and unable to make absolute judgments, rather they constantly draw comparisons from their environment (Frey et al. 2008). Higher aspirations reduce wellbeing (Frey et al. 2008). And cities induce higher aspirations (Okulicz-Kozaryn 2015, Okulicz-Kozaryn and Valente 2017). Cities are also consumerist and materialistic—e.g., urbanites try to classify others in terms of visible attributes such as dress (Wilson 1985). A key finding is that people tend to look upward, not downward, when making comparisons (Frey et al. 2008). Wealthier people impose negative external effect on poorer people but not vice versa (Frey and Stutzer 2002). Hence, cities induce positional concerns as income ladders are tallest in cities. Campbell et al. (1976) makes an important point that aspirations do adjust to reality, and there is no other place with more opportunity, inequality, and hierarchy than a city (Tönnies [1887] 2002, Milgram 1970, Fischer 1995, Glaeser 2011b, O’Sullivan 2009, Campbell 1981).

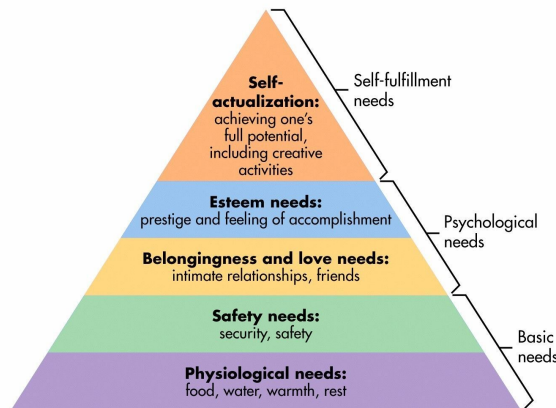
A notable comparison that people make is against neighbors: do I keep up with Joneses? We tend to compare to people in our geographic or social proximity—and there are more such people by definition in a city. “A house

may be large or small; as long as the neighboring houses are likewise small, it satisfies all social requirements for a residence. But let there arise next to the little house a palace, and the little house shrinks to a hut.” (Marx quoted in Dittmann and Goebel 2010). There are many mansions in urban areas, and many wealthy people, so a typical urbanite, by comparison, is poor and insignificant.

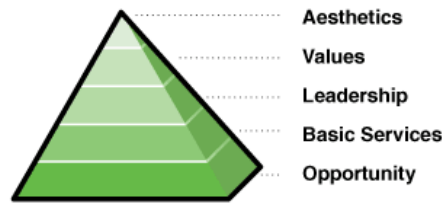
Notably, all these comparisons—against others, standards, and our own past, result in consumption arms race—people want to out-compete others—and demonstrate being better than others—but such race almost never can be won, end one ends up disappointed and unhappy (Frank 2004, 2005, 2012). People compare themselves with others who are richer (Frey and Stutzer 2002, Frey et al. 2008) and therefore feel poorer. Those living in less urban areas have fewer comparisons to make. Neighbors act as negatives Luttmer (2005), Firebaugh and Schroeder (2009)—rich neighbors make us unhappy—the denser the area, everything else equal, the more neighbors and more negatives—and again, people look upwards when making comparisons: wealthier people impose negative external effect on poorer people but not vice versa (Frey and Stutzer 2002).

## 2.3 Livability Theory

Livability theory (Veenhoven 2014, 2000) is also based on evolution/genes. Humans, as all animals, have innate needs—if those needs are satisfied, happiness follows. Human needs include those on Maslow hierarchy of needs in figure 1: physiological needs like water, food and sleep; social needs: e.g., contact with other living organisms (biophilia, social capital, nature, etc); and finally the highest human need, self-actualization. Then there are attributes of places (environment or ecology)—if it is “livable,” then happiness follows. Florida conceptualized this as a place pyramid in figure 2.



**Figure 1:** Maslow Pyramid, (Maslow [1954] 1987).



**Figure 2:** Place Pyramid, (Florida 2008, p 294).

It is necessary to increase city disamenities to have a sufficient population size as per central place theory (e.g., O’Sullivan 2009, p. 86) to produce city amenities such as opera houses (Molotch 1976)..Freud provides a wonderful discussion on civilization and its discontents (Freud et al. 1930).

Indicators of Quality Of Life (QOL) are high in urban areas, but SWB is higher in less populated areas (Sirgy 2002, Okulicz-Kozaryn and Valente 2019, Okulicz-Kozaryn 2013). Then people are also arguably attracted to cities because of high QOL (opera houses, etc), but end up with lower happiness than elsewhere.<sup>12</sup> The most conspicuous consumption or waste<sup>13</sup> tends to take place in metropolitan areas (cities and their extension, suburbs)–for striking examples of urban conspicuousness see Frank (2012).

Human flourishing does not require urban amenities, such as large opera houses. They are neither necessary nor sufficient for human flourishing. Such amenities may help with the very highest need, self-actualization, but more basic needs (such as physiological) are endangered in city. Humans do have a fundamental need for freedom from air, noise, and light pollutions exemplified in cities. Social relations, an important human need, are endangered, in turmoil, of lower quality, and more distrustful in a city (Wirth 1938, Thrift 2005, Amin 2006, Simmel 1903, Milgram 1970)<sup>14</sup> Humans also have a fundamental need for adequate living space without crowding and freedom from consistent stress.

High density such as that in New York City or Hong Kong usually implies some degree of crowding for most people, which is not livable. For instance, New York City offers 250 sq ft apartments–given that a couple lives there with one child–it is less than 100 sq feet per person. There are even so called “cubbyholes” at striking 40 square feet (Charlesworth 2014, Yoneda 2012, Weichselbaum 2013, Velsey 2016, Stevenson and Wu 2019).

Importantly, there are needs and wants (desires)–and much of urban glitz and attraction is about desires (Okulicz-Kozaryn and Valente 2017, Campbell 1981). In a way one’s happiness in a city is delusional as in Nozick’s experience machine (discussed in Brulde 2007). Modern city does not significantly help to satisfy human needs in developed countries. Human needs are already satisfied. If anything it was industrial revolution that produced city that helped to satisfy human needs such as shelter and clothing.

An important distinctive feature of city life is that of specialization–as opposed to rural area, one has to deeply specialize in the city. Human density forces differentiation and specialization as already observed by Darwin and Durkheim (Wirth 1938, p. 15). City not only enables, but what is often overlooked, forces differentiation and

<sup>12</sup>E.g., arguably most popular urban QOL index Mercer ranks Vienna #1 in the world. Opera house, symphony, museums, etc, are a distinctive feature of Vienna. But do most residents actually use these amenities on regular basis? Or are they just proud they are around (Balducci and Checchi 2009, Morrison 2016)?

<sup>13</sup>“Conspicuous consumption” and “waste” are used interchangeably by Veblen (2005a,b)–the key feature of conspicuousness is waste–wasting something so that it can be shown that one is rich enough to do so.

<sup>14</sup>Fischer (1995) presents an alternative in his sub-cultural theory.



specialization, because it's the only way that high density can be supported (e.g., Burgess 1926). And humans, as most other animals, have not evolved to spend abbot half of their wake time performing a repetitive task—it is against human nature: specialization alienates us from other humans and our nature (Marx 1844, [1867] 2010)—indeed one ideally should be able to “to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticize after dinner” (Marx and Engels [1845] 1965).

### 3 Conclusion And Discussion

We have reviewed urban and happiness literatures to find out the mechanisms of urbanness registering in human subjective wellbeing. The contribution of this study is to bring together happiness theories to explain urban-rural happiness gradient. An apparently surprising empirical finding that people are less happy in cities should not be surprising given that happiness theories indicate at least substantial or usually complete happiness disadvantage of cities.

A new theoretical approach to the relationship between urbanicity and subjective wellbeing should fully take into account the three major happiness theories. Mechanisms or pathways between urbanicity and SWB specifically follow from the three happiness theories: 1) genes/evolution: set point/adaptation and happiness as a motivator, 2) comparisons/discrepancies, and 3) needs/livability.

As argued earlier, urbanization is the most dramatic and disruptive change of habitat in our species history. It has a massive scale of 6 billion people urbanizing in just one century. The study of the effect of urbanization on human condition requires theory.

This is only the first study to bring the theoretical background together. And it is only from perspective of happiness theories. Future research should also attempt to incorporate theories from other disciplines. Notably neuroscience is beginning to form urban theory after the pioneering study of Lederbogen et al. (2011), calling for “neuro-urbanism” Adli et al. (2017), Pykett et al. (2020).

The relationship of urbanism and human flourishing can have implications for development in general.

A convincing case for degrowth of GDP has been made (Kallis 2011, Kallis et al. 2012). Cities are a growth machine (Molotch 1976). The present article, based on happiness theories, makes a case for degrowth of cities.

Urban economists view cities as a highly desirable development (O’Sullivan 2009, Glaeser 2011b). To (mainstream) economist, the end-in-itself or the final outcome of interest is income and consumption, not happiness (Autor 2010). And accordingly economists advise people to maximize income and consumption, not happiness (Becker and Rayo 2008).

If one cares only about money, cities are a desirable development, because the more people are crowded together (agglomeration and size economies), the more productivity, and the higher the GDP.

Except that we do not need to grow GDP anymore—we need to degrow it (Kallis 2011, Kallis et al. 2012, Klein 2014). If GDP is not to be maximized anymore, but SWB, then we should also degrow cities, because people are less happy there.

Cities are the most environmentally friendly way of housing billions of people (Meyer 2013)—we cannot degrow cities before we degrow human population. Hence, the first problem is over-population, not over-urbanization.

Proper discussion of over-population is beyond the scope of this happiness urban-rural gradient theory article.

Last, but not least, the article refers to the developed world; in poorest countries, cities actually may help satisfy human needs, and accordingly may increase SWB. In poorest countries, life is often unbearable outside of cities lacking basic necessities such as healthcare and clean water. Hence, at very early stages of economic development, some urbanization may be useful.

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