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## Kvaliteta života kao predmet geografskih istraživanja: osvrtna na razvoj interesa i teorijskih modela istraživanja

### Quality of life as a topic of geographic research: An overview of the development of interest and theoretical models of research

Kvaliteta života složen je i višedimenzijski konstrukt, preširok da bi se mogao opisati jednostavno, stoga je nemoguće razviti jedinstvenu definiciju. Postizanje konsenzusa u definiranju kvalitete života svakako komplicira činjenica da se tim konceptom bavi niz disciplina. Geografija, ekonomija, medicina, sociologija, psihologija, antropologija, filozofija, marketing nalaze interes u proučavanju određenih aspekata kvalitete života. U moru pristupa proučavanju kvalitete života specifično geografski doprinos nije lako razaznati, tj. nije lako odrediti u kojim bi aspektima proučavanja kvalitete života geografski pristup mogao biti najplodniji. Cilj je ovoga rada pojasniti odlike geografskoga pristupa u proučavanju kvalitete života kroz raspravu o nastanku i razvoju interesa za tu problematiku u okviru geografije te kroz prikaz teorijskih modela istraživanja.

Quality of life is a multi-dimensional and complex construct, too broad to be described in simple terms, and, as a result, it is impossible to develop a single, universally-accepted definition thereof. Reaching a consensus for a definition of quality of life is complicated by the fact that this concept is dealt with by a host of disciplines. Geography, economics, medicine, sociology, psychology, anthropology, philosophy, and marketing all find areas of interest in investigating certain aspects of quality of life. It is difficult to clarify the specific geographic contribution from the veritable sea of approaches to investigating quality of life, i.e. it is not easy to single out the aspects of investigation of quality of life for which the geographic approach could yield the best results. The goal of this paper is to clarify the qualities of the geographic approach in investigation of quality of life through discussion about the appearance and development of interest for this issue in the framework of geography, as well as by demonstrating theoretical models and classifications of research.

**Ključne riječi:** geografska istraživanja, kvaliteta života, povijesni osvrt, teorijski modeli

**Key words:** geographical research, quality of life, historical overview, theoretical models

## Uvod

Kvaliteta života složen je i višedimenzijski konstrukt, preširok da bi se mogao opisati jednostavno, stoga je nemoguće razviti jedinstvenu definiciju. Cummins (1999) je uspio izdvojiti više od sto definicija kvalitete života, što taj pojam čini jednim od najnedosljednije korištenih pojmova u humanističkim i društvenim znanostima (Cummins i dr., 2004). Definicije kvalitete života variraju u velikom rasponu: od općenitih, poput „stupanj onoga što život čini dobrim ili kvalitetnim” (Bowling, 1997) ili „nužni uvjeti za sreću” (McCall, 1975), do specifičnih, poput „poželjni rezultat politika i programa” (Schuessler i Fisher, 1985). Neki autori čak ističu besmislenost potrage za jedinstvenom konceptualizacijom s obzirom na neodređenost pojma i varijabilnost načina i perspektiva kroz koje se o njemu promišlja (Stover i Leven, 1992; Bowling, 2002). Izgleda da jedini zajednički nazivnik među mnogobrojnim znanstvenim konceptualizacijama kvalitete života jest činjenica da se u koncept kvalitete života u pravilu uključuju vanjske situacije ili uvjeti koje pojedinac percipira te ih zatim transformira u različite stupnjeve blagostanja (Wish, 1986). Nejasnoći koncepta pridonosi i terminološki kaos. Značenje koncepta varira kroz različite znanstvene perspektive te ga je često teško odvojiti od sličnih pojmova kao što su društveno blagostanje, životni standard, razina života, zadovoljstvo životom, osobna sreća i dr. Ponekad je doista teško zaključiti je li riječ o istim konceptima pod drugim nazivom ili je ipak riječ i o drukčijim nazivima i o drukčijim konceptima. Sadržajno preklapanje i terminološka neujednačenost dodatni su elementi koji pridonose konfuziji u razumijevanju i istraživanju koncepta kvalitete života (Slavuj, 2012a).

Suvremene rasprave o kvaliteti života intenzivirale su se u razvijenim zemljama od 1960-ih godina, usporedo s postizanjem određene materijalne sigurnosti i spoznajom da materijalno blagostanje ne donosi nužno sa sobom i poboljšanje u drugim aspektima života (Slavuj, 2012a). Interes geografa za ovu problematiku također se može pratiti od kraja 1960-ih. No, u mnoštvu pristupa proučavanju kvalitete života specifično geografski doprinos nije lako razaznati, tj. nije lako odrediti u kojim bi aspektima proučavanja

## Introduction

Quality of life is a multi-dimensional and complex construct, too broad to be described in simple terms, and, as a result, it is impossible to develop a single, universally-accepted definition thereof. Cummins (1999) succeeded in isolating over one hundred definitions of quality of life – a concept that is among the most inconsistently-used ideas in the humanities and social sciences (Cummins et. al., 2004). Definitions of quality of life vary wildly: from general definitions like “the level of that which makes life good or having quality” (Bowling, 1997) or “necessary conditions for happiness” (McCall, 1975), to specific definitions like “the desired result of policies and programs” (Schuessler and Fisher, 1985). Some authors even emphasise the futility of searching for a united conceptualisation, due to the ambiguity of the idea and variability in the ways and perspectives through which it is perceived (Stover and Leven, 1992; Bowling, 2002). It appears that the only common denominator among the many scientific conceptualisations of quality of life is the fact that the concept of quality of life, as a rule, includes external situations or conditions which an individual perceives and then converts into different levels of “well-being” (Wish, 1986). The terminological chaos also contributes to the unclarity of the concept. The meaning of the concept varies throughout different scientific perspectives and it is often difficult to separate it from similar notions, such as the notions of social well-being, standard of living, level of living, life satisfaction, personal happiness, etc. Sometimes it is truly difficult to conclude whether these are the same concept under different names, or if they are really different individual concepts. Overlap of content and terminological inequality are additional elements which add to the confusion in understanding and researching the concept of quality of life (Slavuj, 2012a).

Contemporary discussions on quality of life have been intensifying in developed countries since the 1960s, coinciding with the achievement of a certain material security and the knowledge that material well-being does not necessarily also bring an improvement in other aspects of life (Slavuj, 2012a). The interest of geographers in this issue can also be observed from the end of the 1960s. However, it is difficult to clarify the specific geographic contribution from the veritable sea of approaches to investigating quality of life, i.e. it is not easy to single out the aspects of investigation of quality of life for which the geographic approach could yield the best results. The goal

kvalitete života geografski pristup mogao biti najplodniji. Cilj je ovoga rada pojasniti odlike geografskoga pristupa u proučavanju kvalitete života kroz raspravu o nastanku i razvoju interesa za tu problematiku u okviru geografije te kroz prikaz teorijskih modela istraživanja.

## Kvaliteta života kao predmet geografskog interesa

Geografska istraživanja kvalitete života tijekom kasnih 1960-ih i 1970-ih godina

Postizanje konsenzusa u definiranju kvalitete života svakako komplicira činjenica da se tim konceptom bavi niz disciplina. Geografija, ekonomija, medicina, sociologija, psihologija, antropologija, filozofija, marketing nalaze područje interesa u proučavanju određenih aspekata kvalitete života. Gdje je u tome interdisciplinarnom području znanstvena niša geografije? U ovome ćemo se poglavljju pozabaviti razvojem interesa geografije prema istraživanju kvalitete života i osnovnim odlikama geografskoga pristupa toj problematici.

Iako praksa mjerenja razine života (*level of living*), i to prvenstveno ekonomskim pokazateljima, nastaje u geografiji još u 1960-ima (v. na primjer Lewis, 1968), povijest znanstvenoga istraživanja kvalitete života obično počinje od 1970-ih i povezuje se s prvim obuhvatnim i kompleksnim promišljanjima prostornih razlika u stupnju blagostanja. Radi se o knjigama Davida L. Smitha „Introduction to Welfare Geography” (1973a) i „The Geography of Social Well-Being in the United States” (1973b) te knjizi Paula L. Knoxa „Social Well-Being: A Spatial Perspective” (1975). Zaustavit ćemo se kratko na kontekstu u kojem su se ti radovi pojavili. U to vrijeme u akademskoj geografiji još uvijek prevladava znanstveni diskurs kvantitativno orijentirane geografije, s naglaskom na prostorne analize i izgradnju prostornih modela, a tu je tematiku i metodologiju inaugurirala upravo kvantitativna revolucija. Istodobno, od 1960-ih uzima zamah bihevioralna geografija koja, za razliku od apstraktnih dehumaniziranih prostornih modela, naglasak stavlja

of this paper is to clarify the qualities of the geographic approach in investigation of quality of life through discussion about the appearance and development of interest for this issue in the framework of geography, as well as by demonstrating theoretical models and classifications of research.

## Quality of life as a subject of geographic interest

Geographic research of quality of life during the late 1960s and 1970s

Reaching a consensus for a definition of quality of life is complicated by the fact that this concept is dealt with by a host of disciplines. Geography, economics, medicine, sociology, psychology, anthropology, philosophy, and marketing all find areas of interest in investigating certain aspects of quality of life. Where is the scientific niche of geography in this interdisciplinary area? This section deals with the development of interest of geography for investigation of quality of life, and the basic attributes of the geographic approach to this issue.

Although the practice of measuring the “level of living”, primarily using economic indicators, had already emerged in geography in the 1960s (See: Lewis, 1968), the history of scientific research on quality of life generally started in the 1970s and was linked with the first comprehensive and complex thinking on spatial differences in the level of well-being. This concerns the books by David L. Smith *Introduction to Welfare Geography* (1973a) and *The Geography of Social Well-Being in the United States* (1973b), as well as the book by Paul L. Knox *Social Well-Being: A Spatial Perspective* (1975). We will look at the context in which these works emerged. In academic geography of the time, the prevailing discourse was still that of quantitatively-oriented geography, with emphasis on spatial analyses and construction of spatial models – this theme and methodology was inaugurated by the quantitative revolution. Concurrently, starting in the 1960s, behavioural geography (which, as opposed to abstract de-humanised spatial models, places emphasis on the human factor – human psyche, individual-

na ljudski čimbenik – ljudsku psihu, individualnost, znanje, percepciju, izbor, potrebe. Krajem 1960-ih godina u SAD-u nastaje i radikalni pokret u geografiji koji traži da se pažnja akademske geografije usmjeri na proučavanje nasušnih društvenih problema: prostorne nejednakosti u raspodjeli bogatstva, gradskoga i regionalnoga siromaštva, rasne i rodne diskriminacije, nejednaka pristupa socijalnim uslugama, potrebe planiranja. Na inicijativu „radikala“ pokreće se javna rasprava o „društvenoj relevantnosti“ geografskih tema i istraživanja. Radikali se zalažu za „relevantnu“ geografiju (Prince, 1971), onu koja će pridonijeti bitnim društvenim promjenama u smjeru stvaranja pravednijega i ravnopravnijega društva. Popularnim postaje koncept „teritorijalne pravde“ (Davis, 1968), koji upozorava na značajne prostorne nejednakosti u stupnju raspoloživosti socijalnih resursa. Radikalni pokret postupno se povezuje s marksističkom teorijom te preko nje traži odgovor na pitanje kako postići teritorijalnu društvenu pravdu (Harvey, 1973). Formulira se potreba za djelovanjem, za *revolucijom geografske misli* koja bi trebala voditi do aktivnijega uključivanja geografa u stvaranje znanja koja pomažu u rješavanju stvarnih problema. U ključnoj knjizi toga diskursa „Social justice and the city“ David Harvey poziva geografе da djeluju u smjeru ostvarenja principa teritorijalne društvene pravde (Harvey, 1973, 116). A ti su principi, prema Harveyju, sljedeći: 1. raspodjela prihoda trebala bi biti takva da potrebe populacije svakoga teritorija budu zadovoljene; 2. mehanizmi (institucionalni, organizacijski, politički i ekonomski) bi trebali biti takvi da omoguće prostorima s najmanje prednosti što je moguće veće izgledе za razvoj.

Upravo u kontekstu takvih ciljeva pojavljuju se prvi geografski radovi koji promišljaju kvalitetu života. Polazeći od zanimanja za pitanja društvene pravde oni su usmjereni na to da opišu, izmjere i objasne prostorne nejednakosti. Iako su proistekli iz radikalnoga pokreta, oni ipak spajaju sva tri gore spomenuta geografska diskursa – pozitivistički, bihevioralni i radikalni (v. Knox, 1995). Iako su se vrlo kritički postavili u odnosu na preokupiranost kvantifikacijom i modelima geografije 1960-ih, oni i sami uključuju sofisticiran kvantitativni aparat nastojeći pokazati koliko korisna

ity, knowledge, perception, choice, and needs) took a leap forward. A radical movement in geography arose in the USA at the end of the 1960s, which sought to direct the attention of academic geography toward investigation of crucial social problems: spatial inequality in distribution of wealth; urban and regional poverty; racial and gender-based discrimination; unequal access to social services; and the need for planning. On the initiative of the “radicals”, public discussion on the “social relevance” of geographic themes and research was set into motion. The radicals advocated for “relevant” geography (Prince, 1971), which would contribute to important social changes and toward the creation of a more just and equal society. The concept of “territorial justice” became popular (Davis, 1968), which pointed out the significant spatial inequalities in the level of availability of social resources. The radical movement gradually linked itself with Marxist theory, seeking answers to the question of how to achieve territorial social justice (Harvey, 1973). A need for action was formed, i.e. for a “revolution in geographic thought” which would lead to the active inclusion of geographers in the creation of a knowledge base which would help solve real problems. In the key book of that discourse – *Social Justice and the City* – David Harvey calls on geographers to act toward creating principles of territorial justice (Harvey, 1973, 116). And these principles, according to Harvey, are as follows: 1. division of income should be such that the needs of the population of each territory are satisfied; and 2. mechanisms (institutional, organisational, political, and economic) should be such that they enable areas which have the fewest advantages to have the best possible development prospects.

Precisely in the context of such goals, we find the emergence of geographic papers which consider quality of life. Stemming from the interest in questions of social justice, these papers are focused on describing, measuring, and explaining spatial inequalities. Although they come from the radical movement, they still link all three aforementioned lines of geographic discourse – positivist, behavioural, and radical (See: Knox, 1995). Although they posed criticisms, in relation to quantification and models with which geography was preoccupied in the 1960s, they also included a sophisticated quantitative apparatus attempting



geografija može biti kada se služi kvantitativnim metodama i statističkim tehnikama (faktorskom analizom, klaster-analizom, regresijskim modelom i dr.) u analizi i rješavanju stvarnih problema. U novome diskursu reproducira se i teza o važnosti ljudskih potreba, karakteristična za bihevioralnu geografiju. Može se ukratko reći da se problematika kvalitete života pojavila u geografiji spajanjem različitih teorijskih geografskih doprinosa, u nastojanju da se geografija kompleksno i relevantno uključi u rješavanje društveno relevantnih pitanja.

Smith (1974; 1994) osnovni fokus geografskoga bavljenja kvalitetom života, odnosno osnovni fokus „geografije blagostanja” koju predlaže vidi u pitanju: „Tko dobiva što, gdje i kako?”. Pitanje „tko” odnosi se na stanovništvo određenoga areala (grada, regije ili države, čak cijeloga svijeta) podijeljeno na društvene skupine (rasa, rod, etničnost i dr.). „Što” se odnosi na dobra (robu, usluge, kvalitetu okoliša, društvene odnose) koje stanovništvo posjeduje (ili ne posjeduje). „Gdje” se odnosi na činjenicu da standard života prostorno varira i ovisan je o arealu na kojem populacija živi. Pitanje „kako” odnosi se na procese povećanja i smanjenja prostornih razlika u standardu života (Smith, 1994, 674–675). Drugim riječima, „blagostanje je na neki način funkcija distribucije pozitivnoga i negativnoga među grupama definiranim prema arealu na kojem žive” (Smith, 1994, 675). I u središtu pozornosti Knoxove knjige prostorni su dispariteti u kvaliteti života koje, kako smatra autor, treba proučavati ne samo na unutargradskoj razini (kao što je to već činila čikaška škola humane ekologije) nego i na međugradskoj i međuregionalnoj razini (Knox, 1975, 3). Pritom te razlike treba proučavati kompleksno, uzimajući u obzir različite aspekte života: stanovanje, zdravlje, obrazovanje, društveni status, zaposlenost, materijalno blagostanje, slobodno vrijeme, društvenu sigurnost i stabilnost u arealu, demografsku strukturu, okoliš i stupanj demokratske participacije (Knox, 1975, 31). Drugim riječima, obilježjem geografskih radova o kvaliteti života, od rane faze razvoja ovoga geografskog znanstvenog područja, postaje naglasak na prostornim razlikama, i to na različitim prostornim razinama – od unutargradske (susjedstva) do globalne.

to show how useful geography could be when using quantitative methods and statistical techniques (factor analysis, cluster analysis, regression models, etc.) in the analysis and resolution of real problems. The thesis regarding the importance of human needs, characteristic of behavioural geography, has re-emerged in the new discourse. In short, it can be said that the problem of quality of life emerged in geography from the combination of different theoretical geographic contributions, in the attempt to include geography in the resolution of socially-relevant questions in a relevant and complex manner.

As a basic focus of geographic dealings with quality of life, i.e. a basic focus of “geography of well-being”, Smith (1974; 1994) put forth the question: “who gets what, where, and how”? The question of “who” relates to the residents of a certain area (of a city, region or state, even the entire world) divided into social groups (of race, gender, ethnicity, etc.). “What” relates to goods (material goods, services, environmental quality, social relations, etc.) which residents possess (or do not possess). “Where” relates to the fact that the standard of living varies spatially, and depends on the area in which the population lives. The question of “how” relates to the processes of increase and reduction of spatial differences in the standard of living (Smith, 1994, 674-675). In other words: “well-being is, in a way, a function of distributing positives and negatives among groups, defined by the area in which they live” (Smith, 1994, 675). Knox’s book also places spatial disparities in quality of life at the centre of attention – those which he believed should also be investigated on an inter-city and inter-regional level, not only on an intra-city level as was done by the Chicago School (of urban sociology – a.k.a. the Ecological School) (Knox, 1975, 3). Accordingly, these differences should be investigated in a complex manner, taking different aspects of life into consideration: housing; health; education; social status; employment; affluence; leisure; social security; social stability in the area; demographic structure; physical environment; and level of democratic participation (Knox, 1975, 31). In other words, geographic papers on quality of life, from the early phase of the development of this geographic-scientific area, became characterised by the emphasis on spatial differences on different spatial levels – from intra-city to global.

Druga crta te rane „geografije blagostanja”, koja se očituje i u kasnijim geografskim radovima o kvaliteti života, jest intenzivna primjena kartografske metode. Smith (1975, 365) kritizira tada recentna velika kartografska izdanja u kojima većina karata sadrži uglavnom podatke o fizičkom okolišu, prirodnim resursima i čovjekovoj glavnoj ulozi kao proizvođača, a posve zanemaruju ulogu čovjeka kao potrošača i šire aspekte društvenoga blagostanja. Navodi primjere uglednih atlasa u kojima se društvenim problemima posvećuje isto toliko prostora koliko šumarstvu i ribarstvu, tj. odsutne su karte koje bi na bilo koji način prikazivale socijalne uvjete stanovništva, dok se ekonomska aktivnost prikazuje vrlo pomno – do detaljnog prikaza raspodjele proizvodnje *kokoši, purica i svinja* (Smith, 1975, 365).

Očito su već na početku bili jasni kartografski problemi (Smith, 1975) s kojima se i danas susreću geografi koji se bave tom temom. Kartografski prikaz kvalitete života predviđa donošenje mnoštva odluka koje mogu biti arbitrarne. Na primjer: Koje domene života prikazati, a da se kartografiranje ne pretvori u prikaz svega i svačega? Koje mjere odabrati za prikaz tih domena? Posebno su za prikaz na karti pogodni skupni indeksi, ali kako izračunati opći indeks koji bi relevantno upućivao na razinu blagostanja i uključio u sebe pokazatelje iz niza domena? Rad na takvim indeksima odmah je pokazao da „što bliže dolazimo krajnjim kriterijima ocjene čovjekova blagostanja, problem mjerenja postaje sve teži” (Smith, 1975, 366). Poteškoće je tada, a čini se i sada, izazivala činjenica da je teško kartografski prikazati prostornu distribuciju neke pojave u okviru jednoga areala jer se homogeniziranjem pojave unutar areala na karti zanemaruju razlike unutar njega (slikovito rečeno: „tko dobiva dio kolača u najmanju je ruku isto toliko važno kao i veličina i sastojci kolača”, Smith, 1975, 366). Problematična je i činjenica da različite prostorne razine agregacije mogu upućivati na različite zaključke o karakteru distribucije; na primjer, međuregionalne usporedbe, koje pokazuju male prostorne razlike u distribuciji fenomena, mogu skrivati jako velike unutarregionalne varijacije (Smith, 1975, 370). Problem čine i službeni prostorni podatci, od kojih su mnogi dostupni na razini administrativnih je-

The second strain of the early “geography of well-being”, which can also be seen in later geographic papers on quality of life, is the intense application of cartographic methods. Smith (1975, 365) criticised the large cartographic publications of the time, in which the majority of maps mainly contained data on the physical environment, natural resources, and the main role of humans as producers – the role of humans as consumers, as well as the wider aspects of social well-being, were disregarded. He cites the examples of respectable atlases in which social problems were given the same amount of attention as forestry and fishing, i.e. maps which would, in any way, show the social conditions of the population, were not present, while economic activity was carefully represented – the distribution of chicken, turkey, and hog production was shown in detail (Smith, 1975, 365).

There were clear cartographic problems already obvious at the beginning (Smith, 1975), with which geographers must contend even today. Cartographic representations of quality of life anticipate the making of many decisions which can be arbitrary. For example: which domains of life should be shown (without turning the cartography into a display of anything and everything)? Which measures should be chosen to represent those domains? Group indices are especially appropriate to be shown on a map, but how should one calculate a general index which would relevantly address the level of well-being and encompass indicators from a series of domains? Work on such indices immediately showed that “the closer we come to final criteria for gauging human well-being, the more difficult the problems with measuring become” (Smith, 1975, 366). The fact that it is difficult to cartographically display a non-spatial distribution of a given phenomenon in the framework of a single area is as much a difficulty today as it was then, because by homogenisation of the phenomenon within an area on the map, the area’s differences are disregarded (to illustrate: “who gets what share is at least as important as the size and ingredients of the cake”) (Smith, 1975, 366). Another problematic fact is that differences in spatial levels of aggregation can point to different conclusions regarding the character of the distribution; for example, inter-regional comparisons showing little differentiation may obscure large intra-regional inequalities (Smith, 1975, 370). The problem also involves official spatial data, of which many are available on the level of

dinica, a koji često nemaju veze s realnošću ekonomske, društvene i kulturne organizacije prostora, pa stoga upućuju na prosječne vrijednosti koje ne odražavaju uvjete na terenu. U kontekstu kartografiranja kvalitete života zanimljivim se čini i to da su, izgleda, još u vrijeme kada je primjena računala u geografskim analizama bila još u povojima bile jasne mogućnosti koje takva primjena može donijeti. Osim u brznoj obradi velike količine podataka Smith je već sredinom 1970-ih vidio prednosti računala u sposobnosti računalnih programa da omoguću agregaciju podataka na različitim prostornim razinama, uključujući razinu vrlo malih areala, te njihov kartografski prikaz. Doista, računalni softveri, osobito geografski informacijski sustavi, u sljedećim desetljećima postaju važnim alatom većine geografskih mjerenja kvalitete života.

Treća jasno izražena i prepoznatljiva crta geografskih studija kvalitete života njihova je primijenjenost. Ona je uvelike određena činjenicom da se to područje geografskoga znanja formiralo pod utjecajem radikalne geografije i rasprava o „relevantnosti” discipline.

Smith je pisao:

*„Kao geografi mi imamo posebnu ulogu – istinski kreativnu i revolucionarnu – da pomazemo otkriti prostorne neispravnosti i nepravедnosti i da pridonese-mo uređivanju prostornoga poretka društva u kojem će ljudi moći biti doista slobodni da se ostvare u sigurnoj društvenoj sredini u kojoj se uvažavaju prava svih”* (Smith, 1973a, 121).

Smith čak cjelokupnu humanu geografiju vidi kao geografiju blagostanja, upravo zbog njezine primjenjivosti. Na razvoj i primjenu geografije blagostanja on gleda kao na doprinos geografije u pravcu stvaranja pravedne prostorne organizacije društva. U Smithovoj koncepciji fokus na kvaliteti života trebao je učiniti humanu geografiju relevantnom, pridonijeti normativnom okviru unutar kojega se na osnovi analiza mogu donositi političke odluke s prostornim implikacijama. A to zahtijeva primijenjenu geografiju koja se proteže od opisa preko objašnjenja do vrednovanja i prijedloga za primjenu. Tim tezama Smith postaje jedan od prvih zagovornika problemski orijentirane i primijenjene geografije. Slično se tomu i Knox zalaže za

administrative units, which are often different from the reality of economic, social, and cultural organisation of a space, and therefore point to average values that are different from conditions on the ground. It is also interesting that, in the time when the application of computers in geographic analyses was in its infancy, the possibilities that such an approach could bring (in the context of cartography of quality of life) were seemingly apparent. Apart from quickly processing a large amount of data, by the mid-1970s Smith had already seen the advantages of computers and the abilities of computer programs to enable aggregation of data on different spatial levels, including the level of very small areas, and allow for cartographic display. Indeed, computer software (especially geographic information systems) would become an important tool in the majority of geographic measuring of quality of life in decades to follow.

The third clearly-expressed and recognisable feature of geographic studies of quality of life is its applicability. It has been largely determined by the fact that this area of geographic knowledge was formed under the influence of radical geography and the discussion regarding the “relevance” of discipline.

Smith wrote:

“As geographers we have a special role – a truly creative and revolutionary one – that of helping to reveal the *spatial* malfunctionings and injustices, and contributing to the design of a spatial order of society in which people can be really free to fulfill themselves in a secure social setting where the rights of all are respected” (Smith, 1973a, 121).

Smith sees the entirety of human geography in perspective as geography of well-being, due to its applicability. He sees the development and application of geography of well-being as the contribution of geography to the course of creating a just spatial organisation of society. In Smith’s conceptualisation, the focus on quality of life should make human geography relevant, and contribute to a normative framework within which political decisions with spatial implications could be made on the basis of analyses. But this would require an applied geography which would extend from description, through explanation, to evaluation and recommendations for implementation. With these theses, Smith became one of the first advocates of problem-oriented and applied geography. Knox similarly

geografiju koja će pomoći da se nađe „teritorijalna diskriminacija” (Knox, 1975, 3), a osnovnom zadaćom geografije vidi proučavanje društvenih i prostornih varijacija u kvaliteti života kao bi se evidencijom najhitniji problemi i formulirale odgovarajuće politike te se izgradio sustav izvještavanja koji bi provjeravao učinkovitost tih politika. Geografska su istraživanja za njega pomoć postupcima socioprostornoga planiranja i sredstvo političkoga monitoringa u svrhu unapređenja kvalitete života (Knox, 1975, 2).

Treba reći da su ti pomalo idealistički ciljevi u kasnijem razvoju geografskoga bavljenja kvalitetom života bili zamijenjeni realnijim zadaćama, osobito nakon razvoja neoliberalnih politika tačezizma i reganizma (Chisholm, 1995; Knox, 1995), s kojima je povezano smanjenje javne regulacije društva te povlačenje države iz mnogih sfera društvenih usluga i njihovo prepuštanje domeni tržišta (Harvey, 2005, 3). Ipak, okrenutost primijenjenim istraživanjima ostala je trajno obilježje geografskih radova o kvaliteti života.

Četvrta odlika znanstvenoga područja proučavanja kvalitete života jest trajni rad na razvoju pokazatelja. Vrijeme nastanka geografije blagostanja poklopilo se s javnim zanimanjem za razvoj društvenih pokazatelja (npr. U. S. Department of Health, Education and Welfare, 1969). Naime, spoznaja da kvaliteta života nije jednostavna funkcija materijalnoga bogatstva dovela je do potrebe razvoja novih kvantitativnih pokazatelja koji će moći bolje obuhvatiti koncept „dobroga života”. Takvi pokazatelji trebali su osim ekonomskih aspekata uključivati i socijalne, okolišne, osobne i političke dimenzije. Interes je bio toliko velik da ga je Smith opisao kao „pokret za društvene pokazatelje” (Smith, 1975, 364). Geografi tomu pokretu daju prostornu dimenziju postavljajući društvene indikatore u prostorne okvire. Razvijaju se tzv. teritorijalni društveni indikatori koji se definiraju kao „svaka mjera koja se primjenjuje na geografske jedinice (npr. države, regije ili gradska susjedstva) na način koji dopušta prostorne usporedbe” (Cant, 1975, prema Smith, 1975, 364). Uloga je takvih indikatora pritom višestruka. Kao prvo, oni su oblik društvenog izvještavanja o društvenim uvjetima u određenome prostoru i vremenu. Kao

advocated for geography which would help overcome “territorial discrimination” (Knox, 1975, 3), and he saw the basic task of geography to be the investigation of social and spatial variations in quality of life, aimed at finding evidence of the most-pressing problems and formulating proper policies, as well as creating an investigative system which would judge the efficiency of these policies. For Knox, geographic research is an aid for procedures of socio-spatial planning, and a tool for political monitoring, with the goal of improving quality of life (Knox, 1975, 2).

It should be mentioned that these slightly idealistic goals were replaced by more realistic tasks in the later development of geographic dealings with quality of life, especially after the development of neoliberal policies (e.g. Thatcherism and Reaganism) (Chisholm, 1995; Knox, 1995), which are linked with a reduction of public regulation of society and the withdrawal of the state from many spheres of social services that were left to the domain of the market (Harvey, 2005, 3). Even so, the orientation toward applied research has remained as a lasting characteristic of geographic papers on quality of life.

The fourth characteristic of the scientific field of investigating quality of life is long-term work on the development of indicators. The time in which geography of well-being came into being corresponded to public interest for the development of social indicators (e.g. U.S. Department of Health, Education and Welfare, 1969). Namely, the knowledge that quality of life is not a simple function of material wealth led to the need for the development of new quantitative indicators, which would better encompass the concept of “good” life. Such indicators should include (apart from economic aspects) social, environmental, personal, and political dimensions. The interest was so great that Smith described it as “a movement for social indicators” (Smith, 1975, 364). Geographers give this movement a spatial dimension, placing social indicators in a spatial framework. They develop so-called “territorial social indicators” which are defined as “each measure which is applied to a geographic unit (e.g. state, region, or city neighbourhood) in such a way as to allow spatial comparison” (Cant, 1975, as cited in Smith, 1975, 364). The role of such indicators is thereby multifaceted. First, they are a form of social reports regarding social conditions in a certain



drugo, teritorijalni su pokazatelji oblik usmjeravanja političkoga djelovanja, drugim riječima, oni su kvantitativni izraz specifičnih problema koji može senzibiliziranjem javnosti potaknuti akcije koje će dovesti do njihova rješavanja. Kao treće, oni su u funkciji društvenoga nadgledanja (monitoringa) – praćenja progressa i efikasnosti politika u odnosu na zacrtane ciljeve (npr. poboljšanja obrazovne infrastrukture u određenom arealu). Kao četvrto, pokazatelji omogućuju predviđanje budućih trendova u društvenim uvjetima te predviđanje prekretnica ili potencijalnih obrata u društvenim sustavima (Knox, 1975; Land, 2000).

Kao posljednje, peto obilježje geografskoga znanstvenog područja bavljenja kvalitetom života možemo izdvojiti interdisciplinarni pristup. Kao što je već rečeno, problematikom kvalitete života bavi se niz disciplina. Izgleda da pritom među istraživačima kvalitete života postoji suglasnost da ni jedna disciplinarna perspektiva ne može samostalno obuhvatiti sva značenja koja ovaj višedimenzijanski koncept nosi. Primjerenije je promišljati na način da različite znanstvene discipline istražuju pojedine aspekte toga kompleksnog koncepta na svoje karakteristične načine, u teorijskom i u metodološkom smislu. Istovremeno je, s obzirom na interdisciplinarni karakter ovoga područja istraživanja, besmisleno strogo razgraničavati zasebne discipline prema pristupima proučavanju stoga što se one uvelike preklapaju. Već u prvim gore spomenutim geografskim radovima posvećenima kvaliteti života utvrdila se praksa korištenja resursa iz raznih disciplina i životnih sfera: geografije, ekonomike blagostanja, javne administracije, političkih znanosti. Najveća dobrobit takva interdisciplinarnoga pristupa jest u tome što on pomaže da se integralno obuhvati „ekonomska, socijalna i politička dimenzija geografije stvarnoga svijeta” (Knox, 1995, 392).

Osim spomenutih područja, ključnih za pojavljivanje knjiga u 1970-ima, nastaju i druge geografske studije o prostornim varijacijama društvenoga blagostanja (Smith 1974; 1975; 1979; Knox, 1974a; 1974b; 1976a; 1976b; 1978; Knox i MacLaran, 1978; Kuz, 1978; Pinch, 1979; Giggs, 1979; Herbert, 1979; Murray i Boal, 1979).

space and time. Second, territorial indicators are a way to direct political action, in other words they are a quantitative expression of specific problems, which can, by informing the public, spur action which would bring about a resolution to said problems. Third, they are functions of social oversight (monitoring) – following the progress and efficiency of policies in relation to stated goals (e.g. bettering education infrastructure in a certain area). Fourth, indicators enable the prediction of future trends in social conditions, as well as the forecasting of turning points or potential reversals in social systems (Knox, 1975; Land, 2000).

Finally, as the fifth characteristic of the geographic-scientific area dealing with quality of life, we can isolate the interdisciplinary approach. As previously mentioned, many disciplines concern themselves with quality of life. Accordingly, as it seems, there is an agreement among quality of life researchers that no single disciplinary perspective (by itself) can encompass all aspects of knowledge contained in this multi-dimensional concept. It is more appropriate to understand that different scientific disciplines research individual aspects of this complex concept, in their own characteristic ways, in a theoretical and methodological sense. At the same time, with regard to the interdisciplinary character of this field of research, it is nonsensical to limit specific disciplines according to their investigative approaches because they largely overlap. The first of the aforementioned geographic papers had already determined the practice of using material from different disciplines and living spheres in quality of life research (e.g. geography, economy of well-being, public administration, and political science). The largest benefit of this kind of interdisciplinary approach is that it encompasses and helps integrate “the economic, social, and political dimensions of geography of the real world” (Knox, 1995, 392).

Apart from the mentioned areas, crucial for the appearance of books in the 1970s, other geographic studies on spatial variations of social well-being appeared (Smith 1974; 1975; 1979; Knox, 1974a; 1974b; 1976a; 1976b; 1978; Knox and MacLaran, 1978; Kuz, 1978; Pinch, 1979; Giggs, 1979; Herbert, 1979; Murray and Boal, 1979).

## Geografska istraživanja kvalitete života od 1980-ih godina

Početak 1980-ih pod utjecajem humanističkoga diskursa u geografskim radovima počinje prevladavati termin *kvaliteta života* umjesto termina *društveno blagostanje* ili *razina života* koji su do tada više bili u upotrebi. Sljedeća desetljeća donijela su brojne geografske studije na temu kvalitete života (MacLaran, 1981; Oyebanji, 1982; Pacione, 1982a; 1982b; 1984; 1986; 1990; 1995; 1999; 2003a; 2003b; Dale, 1987; Rogerson i dr., 1987; Rogerson i dr., 1989a; Rogerson i dr., 1989b; Rogerson, 1995; Rogerson i dr., 1996; Rogerson, 1999; Morris i dr., 1988; Helburn, 1982; Cutter, 1985; Pierce, 1984; 1985 prema Cutter, 1985; Stimson, 1982; Eyles, 1990; 1994; Lu, 1999; Ira i Kollar, 1994; Dzurova i Dragomirecka, 2000; Mee, 2002; Langlois i Anderson, 2002; Krevs, 1998; 1999; 2001; 2002; Tiran, 2015; Cavrić i dr., 2008; Šiljeg, 2016; Slavuj, 2011; 2012a; 2012b; 2012c; 2014; Dunning i dr., 2008; Morrison, 2007; McCrea i dr., 2005; McCrea i dr. 2006; Lukić i dr., 2005; Mahon i dr., 2009; Andraško, 2009; Gukalova i dr., 2009).

Bavljenje tom tematikom potaklo je geografe da češće prelaze granice struke te da sudjeluju u razvoju i integraciji društvene znanosti općenito. Utvrdio se u geografiji i integralni pristup s paralelnom primjenom objektivnih i subjektivnih indikatora. Takav pristup kvaliteti života najlakše je ostvariv u istraživanjima na nižim prostornim razinama, primjerice na razini grada ili gradskih susjedstava. Stoga, poglavito u urbanoj geografiji, kvaliteta života postaje važna tema od 1980-ih. Pacione (2003a) navodi da se tada glavni istraživački interes fokusirao na socioprostorne varijacije u kvaliteti života među gradovima i unutar njih. Taj trend prema *društveno relevantnim* istraživanjima u urbanoj geografiji doveo je, kao što su pioniri te ideje i zagovarali, do uključivanja geografije u razvoj konkretnih politika, programa i strategija koje mogu poboljšati blagostanje mjesta i stanovnika s lošijom kvalitetom života. Većina urbanogeografskih istraživanja kvalitete života usmjerila se na problematiku deprivacije i propadanja gradskih dijelova s ciljem identifikacije urbanih područja i skupina ljudi kojima je pomoć najpotrebnija. Pacione (2003a) smatra da se zbog

## Geographic research of quality of life from the 1980s

At the beginning of the 1980s, the term “quality of life”, used in place of “social well-being” or “level of living” (which had been the more commonly-used terms up to that point), became prevalent under the influence of the humanist discourse in geographic papers. The following decades brought numerous geographic studies on the topic (MacLaran, 1981; Oyebanji, 1982; Pacione, 1982a; 1982b; 1984; 1986; 1990; 1995; 1999; 2003a; 2003b; Dale, 1987; Rogerson et al., 1987; Rogerson et al., 1989a; Rogerson et al., 1989b; Rogerson, 1995; Rogerson et al., 1996; Rogerson, 1999; Morris et al., 1988; Helburn, 1982; Cutter, 1985; Pierce, 1984; 1985 as cited in Cutter, 1985; Stimson, 1982; Eyles, 1990; 1994; Lu, 1999; Ira and Kollar, 1994; Dzurova and Dragomirecka, 2000; Mee, 2002; Langlois and Anderson., 2002; Krevs, 1998; 1999; 2001; 2002; Tiran, 2015; Cavrić et al., 2008; Šiljeg, 2016; Slavuj, 2011; 2012a; 2012b; 2012c; 2014; Dunning et al., 2008; Zolnik, 2004; Morrison, 2007; McCrea et al., 2005; McCrea et al. 2006; Lukić et al., 2005; Mahon et al., 2009; Andraško, 2009; Gukalova et al., 2009).

Dealing with this theme caused geographers to cross the borders of their profession more often as well as to participate in the development and integration of the social sciences in general. An integral approach with the parallel application of objective and subjective indicators was also determined in geography. Such an approach to quality of life is easiest to achieve in research on smaller spatial levels, on the level of city or city neighbourhood for example. Therefore, mainly in urban geography, quality of life has been an important topic since the 1980s. Pacione (2003a) states that the main research focus of the time was on socio-spatial variations in quality of life among, and within, cities. This trend toward “socially relevant” research in urban geography has led to, as the pioneers of the idea advocated, the inclusion of geographers in the development of concrete policies, programmes, and strategies which could help better the well-being of a place and of inhabitants with poorer quality of life. The majority of urban geographic research on quality of life is aimed at the issue of deprivation and deterioration of parts of cities, with the goal of identifying urban areas and groups of people that need help the

praktične usmjerenosti ovakva istraživanja s punim pravom mogu smatrati dijelom primijenjene geografije.

Kulturnogeografska istraživanja dala su također velik doprinos spoznavanju iskustva života marginaliziranih društvenih grupa s obzirom na njihovu pripadnost različitim rasnim, etničkim ili rodnim identitetima. Pitanje društvene pravde odnosno pravednosti nejednakih životnih mogućnosti ostalo je do danas temeljna ideja u pozadini geografskih istraživanja kvalitete života (Smith, 1996).

Specifičnost geografskih istraživanja kvalitete života jest u tome da za razliku od drugih perspektiva (psiholoških, ekonomskih, socioloških) koje se bave ovom temom naglasak stavljaju na prostorni aspekt, odnosno s posebnim zanimanjem analiziraju prostorne manifestacije ovoga fenomena. Krevs (1998, 55) je dobro sumirao glavne metodološke značajke suvremene prakse istraživanja kvalitete života:

- U prvom planu istraživanja jest proučavanje prostornih razlika u kvaliteti života među različitim prostornim cjelinama te analiziranje uzroka takva razmještaja.
- Posebna pozornost obraća se na prostornu dostupnost (npr. dostupnost najbliže trgovine, ambulante ili rekreacijskih površina), prostornu udaljenost (npr. udaljenost od izvora buke ili izvora zagađenja zraka), prostorno preklapanje dviju ili više pojava koje objašnjavaju određeni aspekt kvalitete života stanovnika nekoga mjesta (npr. broj oboljelih od dišnih bolesti i blizina izvora zagađenja zraka).
- Potrebni podatci prikupljaju se po prostornim cjelinama (općine, gradovi, statistički krugovi, gradska susjedstva).
- Statističke analize u geografskim istraživanjima kvalitete života rabe se za zaključivanje o sličnostima i razlikama u kvaliteti života među različitim prostornim jedinicama.
- Rezultati analiza prikazuju se na prostorni način, odnosno na tematskim kartama.

Navedene značajke možemo dopuniti još dvjema:

- Bez obzira na interdisciplinarno povezivanje na

most. Pacione (2003a) argues that due to the practical direction of such research, one has the full right to consider it a part of applied geography.

Additionally, cultural-geographic research has given a large contribution toward understanding the life experiences of marginalised social groups, with regard to their racial, ethnic, or gender identities. The question of social justice, i.e. the morality of unequal possibilities in life, remains, to the present day, a fundamental background of geographic research of quality of life (Smith, 1996).

The specificity of geographic research on quality of life is that, as opposed to other perspectives (e.g. psychological, economic, sociological) which deal with this theme, the emphasis is placed on the spatial aspect, i.e. specific interest is invested in the analysis of the spatial manifestation of the phenomenon. Krevs (1998, 55) summed up the methodological characteristics of the contemporary practices in quality of life research well:

- first and foremost, the research investigates spatial differentiations in quality of life between different spatial wholes, and analyses the causes of such distribution;
- special attention is given to – spatial availability (e.g. availability of the nearest store, medical clinic, or recreational area), spatial distance (e.g. distance from sources of noise or sources of air pollution), spatial overlapping of two or more instances which explain certain aspects of the quality of life of residents of a place (e.g. number of people suffering from respiratory illnesses or proximity to sources of air pollution);
- the necessary data are gathered by spatial units (municipalities, cities, statistical districts, city neighbourhoods);
- statistical analyses in geographic research on quality of life are used to make conclusions on similarities and differences in quality of life between spatial units; and
- results of analyses are shown in a spatial manner, i.e. on thematic maps.

Two further characteristics can be added to the previous:

- regardless of the interdisciplinary linkage on

teorijskoj i metodološkoj razini u središtu je interesa prostor. Na primjer, i u istraživanjima koja se služe psihometrijskim analizama i pokazateljima kvalitete života zasnovanim na zadovoljstvu (subjektivni pokazatelji) konačni je cilj znanje o prostoru, a ne o pojedincu.

- Gotovo neizostavna u suvremenim geografskim istraživanjima kvalitete života postaje upotreba geografskih informacijskih sustava kao pogodna alata za kompleksne analize prostornih podataka.

Geografska istraživanja kvalitete života stavljaju dakle naglasak na elemente kao što su razmjешtaj, dostupnost te preklapanje različitih prirodnih i društvenih fenomena u prostoru (Krevs, 1998). Geografski je pristup inherentno sistematičan i kompleksan, što omogućuje cjelovito sagledavanje političkih, društvenih, ekonomskih i prirodnih aspekata zbilje te objektivnih karakteristika prostora i subjektivnih procjena tih objektivnih karakteristika. Sve navedeno, uz dobro poznavanje prostornih metoda analiza (uključujući kartografiju, GIS i daljinska istraživanja) i primjenu prostornih podataka, daje uvid u specifičan geografski doprinos razumijevanju kvalitete života u konkretnom prostoru.

### **Metodološka konceptualizacija i primjena pojma kvalitete života u geografskim istraživanjima**

Rani geografski radovi u 1970-ima koristili su prvenstveno objektivne pokazatelje (na razini jedinice kućanstva i pojedinca) u analizi kvalitete života (odnosno češće korišteni termini tada su bili društveno blagostanje, razina života). Primjerice, Smith (1973b) je u svom utjecajnom radu o gradu Tampa na Floridi upotrijebio četrdeset i sedam varijabli koje su obuhvatile šest ključnih kriterija: ekonomski status, okoliš, zdravlje, obrazovanje, socijalne probleme, sudjelovanje i jednakost. Cilj toga rada bio je stvaranje baze podataka za identifikaciju gradskih problemskih područja. Autor posebno naglašava činjenicu da su varijable iz popisa stanovništva u manjini, odnosno da je velik trud uložen u prikupljanje ostalih tipova podataka od lokalnih agencija te njihovu prilagodbu za istraživanje. Bilo je planirano

both theoretical and methodological levels, the space is at the centre of interest. For example, as is the case in research which uses psychometric analyses and indicators of quality of life based on satisfaction (subjective indicators), the final goal is to gain knowledge regarding the space, rather than regarding the individual; and

- the use of geographic information systems has become nearly irreplaceable in contemporary geographic research on quality of life – as a suitable tool for complex analyses of spatial data.

Geographic research of quality of life places emphasis on elements such as distribution, availability, and the overlap of different phenomena (natural and social) in a space (Krevs, 1998). The geographic approach is inherently systematic and complex, which enables integral consideration of political, social, economic, and natural aspects of reality, as well as objective characteristics of space and its subjective appraisals. The aforementioned, along with a good knowledge of spatial methods of analyses (including cartography, GIS, and remote sensing) and application of spatial data, provide insight into the specific geographic contribution to understanding quality of life in a certain space.

### **Methodological conceptualisation and implementation of the concept in geographic research**

Early geographic papers in the 1970s mainly used objective indicators in analysing quality of life (the frequently-used terms were: social well-being and level of living). For example, Smith (1973b), in his influential paper on the city of Tampa in Florida, used 47 variables which encompassed six key criteria: economic status; environment; health; education; social disorganization; (democratic) participation; and equality. The goal of that paper was to create a database for the identification of problematic areas of the city. The author especially emphasised the fact that the variables from the population census made up a smaller part (of the analysis), i.e. that a large effort had been made to gather the remaining types of data from local agencies, and to adjust them to the research. He also



i prikupljanje podataka o individualnoj percepciji kvalitete života i lokalnim problemima, što pokazuje autorovu spremnost da objektivne pokazatelje upotpuni sa subjektivnim pokazateljima, međutim anketiranje ispitanika izostalo je zbog prevelikih troškova (Smith, 1973b). Studiju sličnu ovoj proveo je Knox 1975. u Engleskoj i Walesu. Knox (1975) se uz društveno blagostanje koristio i terminom razine života koja po njemu označava činjenično stanje blagostanja, odnosno postignutu razinu zadovoljenja želja i potreba pojedine osobe ili skupine osoba. Upotrijebio je 53 objektivna pokazatelja kako bi proučio 12 glavnih područja koja utječu na razinu života. Pokazatelje koje je upotrijebio i Smith (1973b) poput stanovanja, zdravlja, obrazovanja, društvenoga statusa, zaposlenosti, materijalnoga blagostanja, fizičkoga okoliša, socijalne stabilnosti i stupnja demokratske participacije dopunio je novim elementima: demografskom strukturom te slobodnim vremenom i društvenom sigurnošću. Knoxova studija bila je pokušaj da se upozori na važnost mjerenja društvenoga blagostanja u društvu, jer kako autor navodi (Knox, 1975, 50): „ako nemamo osjetljivije mjere teritorijalnoga blagostanja, nećemo znati koliko su uspješne ili učinkovite teritorijalne politike; ako ne započnemo s redovitim mjerenjima blagostanja, prekasno ćemo shvatiti koliko su te politike bile djelotvorne”. Potencijalnu ulogu takva sustava regularno uspostavljenih i detaljnih mjera u nacionalnom i regionalnom planiranju prikazao je shematski (Knox, 1975; sl. 1).

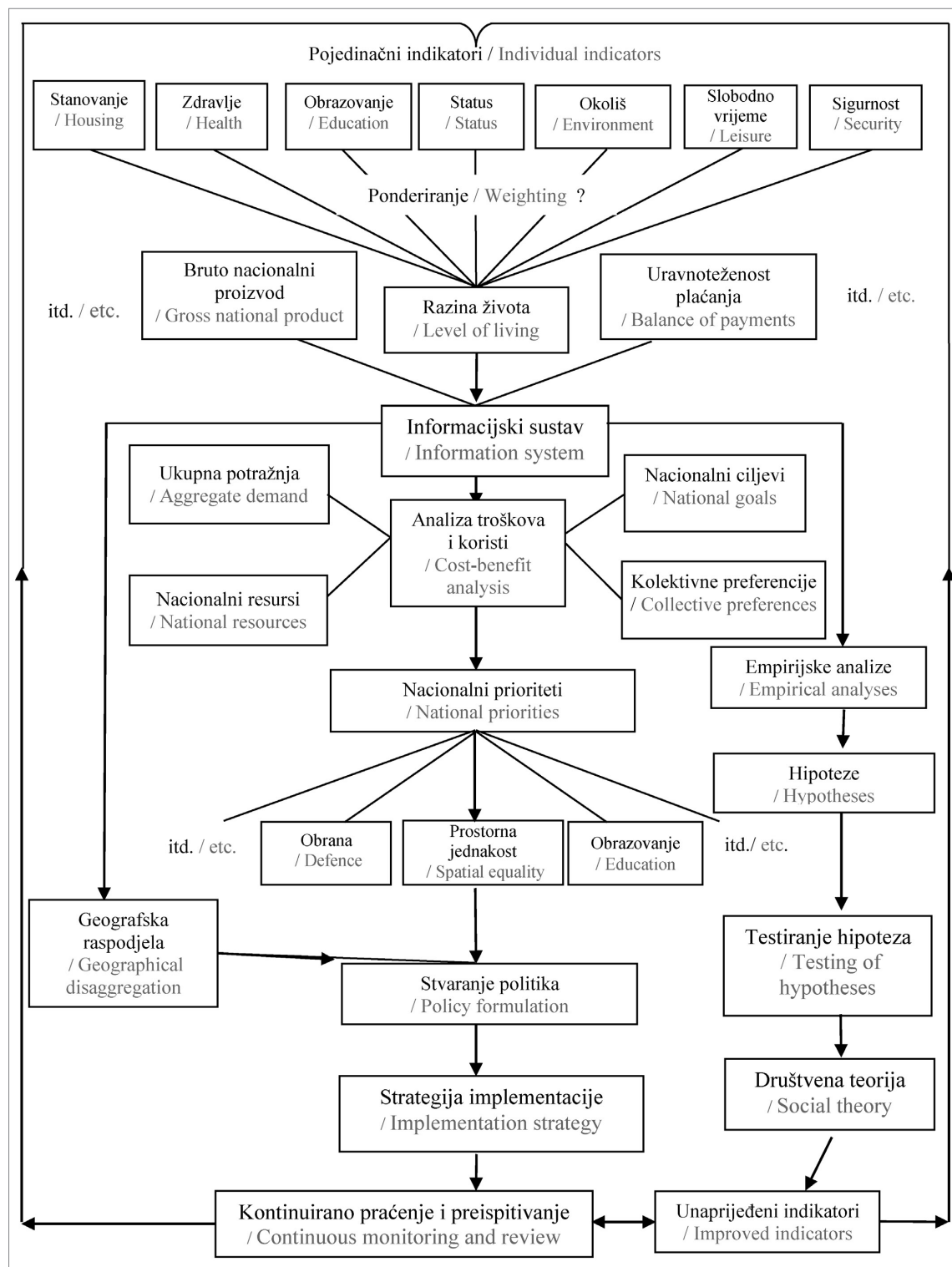
Jedinstvena mjera blagostanja poput indeksa života bila bi dio cjelovita sustava informiranja na nacionalnoj razini s ciljem pružanja podataka za usmjeravanje nacionalnih prioriteta s obzirom na nacionalne ciljeve, resurse, potrebe i kolektivne preferencije. Na regionalnoj razini mjere blagostanja omogućile bi praćenje socioekonomskih promjena u geografiji zemlje te bi tako osigurale temelj za informirani pristup u oblikovanju teritorijalnih politika i razumijevanje učinkovitosti prethodnih politika (Knox, 1975).

Međutim, ovako postavljen *top-down*-model koji polazi od mišljenja stručnjaka, odnosno pojedinaca ili skupine ljudi „koji znaju najbolje” ima nedostataka kojih je autor bio svjestan. U istraživanje se tako mogu uplesti osobne vrijednosti i pro-

planned to gather information on individual perceptions of quality of life and local problems, which shows the author's readiness to enhance objective indicators with subjective indicators; however, the planned questionnaire survey was not conducted, due to excessive cost (Smith, 1973b). A similar study to the previous was undertaken by Knox in 1975, in England and Wales. Knox (1975) used the term level of living alongside social well-being, which, according to him, signified the factual state of well-being, i.e. the achieved level of satisfaction of wants and needs of an individual person or a group of people. He used 53 objective indicators in order to investigate 12 main areas that influence the level of living. To the indicators that were used by Smith (1973b), such as: housing; health; education; social status; employment; affluence; physical environment; social stability; and level of democratic participation, he added new elements: demographic structure; leisure; and social security. Knox's study was an attempt to draw attention to the importance of measuring social well-being in society, because, as the author stated: “if we don't have more sensitive measures of territorial well-being, we will not know how successful or efficient territorial policies are; if we do not start regularly measuring well-being, we will be late in understanding how efficient those policies were” (Knox, 1975, 50). The potential role of such a system of regularly-established and detailed measures in national and regional planning was schematically displayed (Knox, 1975; Fig. 1).

A single measure of well-being, such as the index of living, would be a part of an integral system of informing (both the public and decision makers) on the national level, with the goal of providing information to be used to direct national priorities regarding national goals, resources, demands, and collective preferences. At the regional level, measures of well-being would enable the monitoring of changing socio-economic geography of the country, and ensure the basis for an informed approach to shaping territorial policies and understanding the effectiveness of past policies (Knox, 1975).

However, this top-down model, which starts with the opinions of experts, i.e. individuals or groups of people who “have the best knowledge”, has shortcomings of which the author was aware. Within the research, personal values and profes-



Sl. 1. Društveni pokazatelji i javne politike  
Fig. 1 Social indicators and public policy  
Izvor / Source: Knox (1975, 53)

fesionalni interesi što može rezultirati „kulturnim imperijalizmom stručnjaka” (Knox i MacLaran, 1978). Uključivanje subjektivnih indikatora koji bi mjerili percipirano blagostanje pojedinaca način je da se izbjegnu pristrana mišljenja akademika, planera i političara. Jedno od rješenja koje predlaže Knox (1975) moglo bi biti i ponderiranje objektivnih pokazatelja na temelju relativne važnosti koje pojedinim područjima blagostanja pridaje samo društvo, što opet dovodi do potrebe za subjektivnim mjerama.

Osim što ne upućuju na percipirano blagostanje, onako kako ga vide sami pojedinci, objektivne mjere opterećene su i nekim drugim nedostacima. Primjerice, jedan od najvećih problema je ograničeni skup pokazatelja koji su dostupni u statističkim publikacijama te koji kao takvi nisu dovoljno sveobuhvatni ili precizni da bi predstavljali kvalitetu života. Posljedica toga je da istraživači moraju posegnuti za indirektnim mjerama umjesto da se služe onima koje bi izravno mjerile pojedine dimenzije kvalitete života – npr. broj bolničkih kreveta uzima se kao pokazatelj pokrivenosti zdravstvenim uslugama (Rogerson i dr., 1987), vlasništvo nad nekretninom kao pokazatelj uvjeta stanovanja (Knox, 1976a) i sl. Nadalje, objektivnim pokazateljima zamjera se potencijalna višeznačnost i dvosmislenost te s time povezani problemi sumiranja različitih varijabli u jedinstveni pokazatelj kvalitete života (detaljnije o temi vidi u Slavuj, 2012b; 2014).

Navedene zamjerke oko objektivnih mjera potakle su geografe da istraže mogućnosti subjektivnih pokazatelja. Subjektivne mjere blagostanja počele su se razvijati prvenstveno unutar psihologije kasnih 1960-ih, a početkom 1970-ih nastaju i neke od najutjecajnijih studija o primjeni subjektivnih mjera kvalitete života (Campbell i Converse, 1972; Campbell i dr., 1976a; Andrews i Withey, 1974; Abrams, 1973; Allardt, 1976 i dr.). Iako su Knox i MacLaran (1978) kritički konstatirali da su geografi kasnili s upotrebom subjektivnih mjera u istraživanjima, treba istaknuti da su prve takve geografske studije nastale već 1976. (Knox, 1976a; Eyles, 1976). U svom radu Knox (1976a) putem subjektivnih pokazatelja istražuje zadovoljstvo, očekivanja i stavove stanovnika dvaju malih naselja na sjeveroistoku Škotske. Iako u istraživanju ne rabi

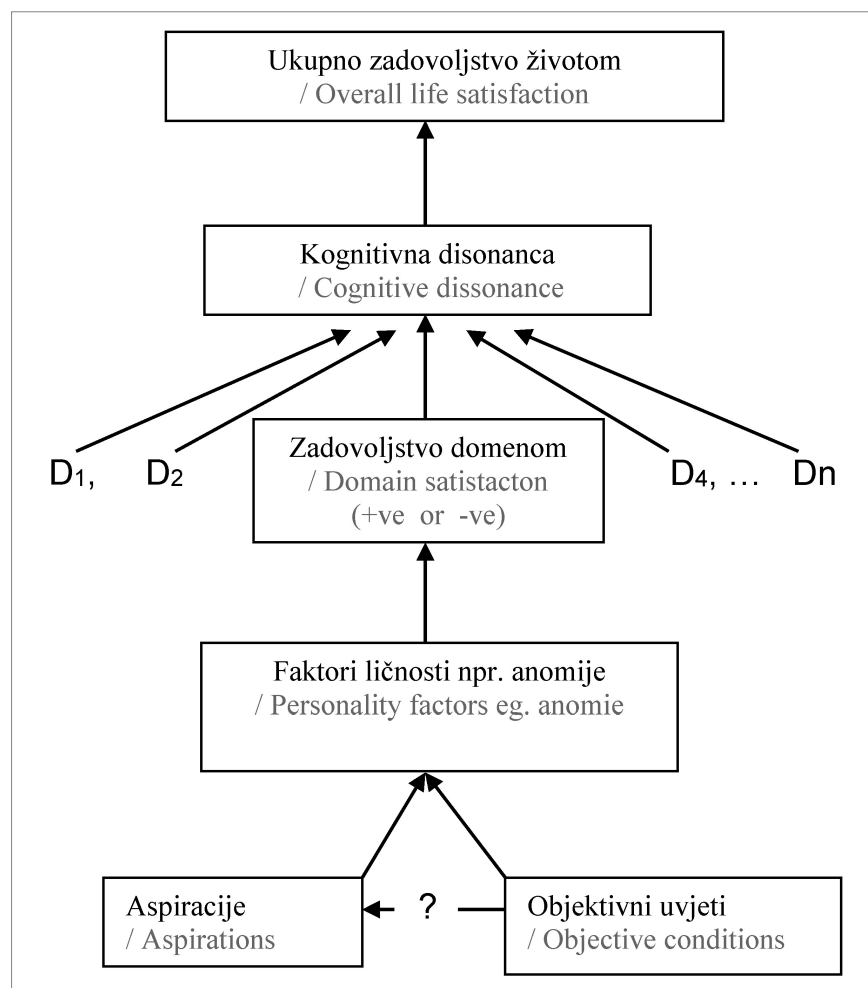
sional interests could get involved, which would result in “cultural imperialism of experts” (Knox and MacLaran, 1978). Including subjective indicators which would measure perceived well-being of individuals is a way of avoiding the biased opinions of academics, planners, and politicians. One of the solutions recommended by Knox (1975) could also be weighing objective indicators on the basis of the relative importance that society itself gives to individual areas of well-being, which leads again to the need for subjective measures.

Apart from the fact that they do not indicate perceived well-being from the point of view of the individuals themselves, objective measures are also burdened by some other shortcomings. For example, one of the largest problems is the limited set of indicators that are available from statistical publications, and which are, as such, not all-encompassing or precise enough to represent quality of life. The consequence of this is that researchers must use indirect measures, rather than using those that would directly measure individual dimensions of quality of life – e.g. number of hospital beds is taken as an indicator of health service coverage (Rogerson et al., 1987), ownership of property as an indicator of living conditions (Knox, 1976a), and so on. Furthermore, objective measures are criticised for their potential ambiguity and multiple meanings, along with the connected issues stemming from summing up different variables into single indicators of quality of life (for more details see: Slavuj, 2012b; 2014).

The presented criticisms concerning objective measures incited geographers to explore the possibilities of subjective indicators. Subjective measures of well-being began being developed mainly within psychology in the late 1960s, and some of the most influential studies regarding the application of subjective measures of quality of life were conducted at the start of the 1970s (Campbell and Converse, 1972; Campbell et al., 1976a; Andrews and Withey, 1974; Abrams, 1973; Allardt, 1976; etc.). Although Knox and MacLaran (1978) criticised that geographers were late with using subjective measures in research, it needs to be stressed that the first such geographic studies had already been conducted in 1976 (Knox, 1976a; Eyles, 1976). In his paper, Knox (1976a) researched satisfaction, expectations, and attitudes of the residents of two small settlements in Northern Scotland, using subjective indicators. Although he did not use ob-

objektivne pokazatelje, autor donosi širu sliku i priliku prostora, navodeći podatke o populaciji, ekonomskoj aktivnosti stanovništva, opremljenosti naselja osnovnim sadržajima, socijalnim problemima koji karakteriziraju ove periferne ruralne zajednice i sl. Dakle, subjektivne pokazatelje ipak sagledava u kontekstu znanja o tom prostoru. Autor zaključuje da su subjektivne mjere omogućile prikupljanje mnogo korisnih informacija o blagostanju tih zajednica te predlaže teorijski okvir zadovoljstva životom koji prikazuje međusobni utjecaj domena (specifičnih područja života) i ukupnoga zadovoljstva životom (sl. 2).

jective indicators in the research, the author painted a broader picture of the circumstances of the space in question, citing data on the population, economic activity of the residents, the array of basic services of the settlement, social problems that characterised these peripheral rural communities, and so on. Therefore, subjective measures were still considered in the context of knowledge about the space. The author concluded that subjective measures enabled the gathering of a great deal of useful information on the well-being of these communities and put forth a theoretical framework of life-satisfaction, which showed the mutual influence of the domains of life and overall life-satisfaction (Fig. 2).



Sl. 2. Model zadovoljstva životom

Fig. 2 Model of life-satisfaction

Izvor / Source: Knox (1976a, 431)



Model prikazuje ukupno zadovoljstvo životom kao funkciju zadovoljstva domenama i utjecaja disonance u afektivnim odgovorima. Zadovoljstvo se može sagledati kao afektivni odgovor (pozitivan ili negativan) na objektivne karakteristike niza domena života ( $D_1, D_2, \dots, D_n$ ) i aspiracija (želja) povezanih sa svakom od tih domena života. Modificirajući utjecaj na zadovoljstvo mogu imati i neke anomalije (društveni psihološki sindromi) ili kratkotrajna raspoloženja, a iskriviti ga može perceptivna disonanca (Knox, 1976a, 431). Ovaj model dobro oslikava složenost i međuzavisnost različitih elemenata u formiranju zadovoljstva životom, ali upozorava i na to gdje su mogući problemi u istraživanju prilikom korištenja subjektivnih pokazatelja. Očigledno, subjektivne mjere imaju svoje nedostatke, poput činjenice da različiti ljudi mogu različito poimati zadovoljstvo (za nekoga je to stanje čistog ushita, a za drugoga odsustvo boli), ispitanici mogu davati odgovore za koje misle da se od njih očekuju, ispitanici mogu biti kritičniji prema domenama života koje su izvan njihova utjecaja (npr. obrazovne usluge), a manje kritični prema onima za koje su sami odgovorni (npr. obiteljski život) i dr. (Knox, 1976a; detaljnije vidi u Slavuj, 2012b). Subjektivne mjere otvorile su nove mogućnosti u geografskim istraživanjima kvalitete života te su dovele do razvoja *bottom-up*-modela koji u razumijevanju kvalitete života polaze od pojedinaca ili društvenih skupina, a ne od stručnjaka ili političara. Međutim, s obzirom na činjenicu da je u geografiji naglasak na prostoru (a ne na pojedincu kao u psihologiji), vrlo brzo je postalo jasno da geografske studije kvalitete života ne mogu počivati isključivo na subjektivnim pokazateljima.

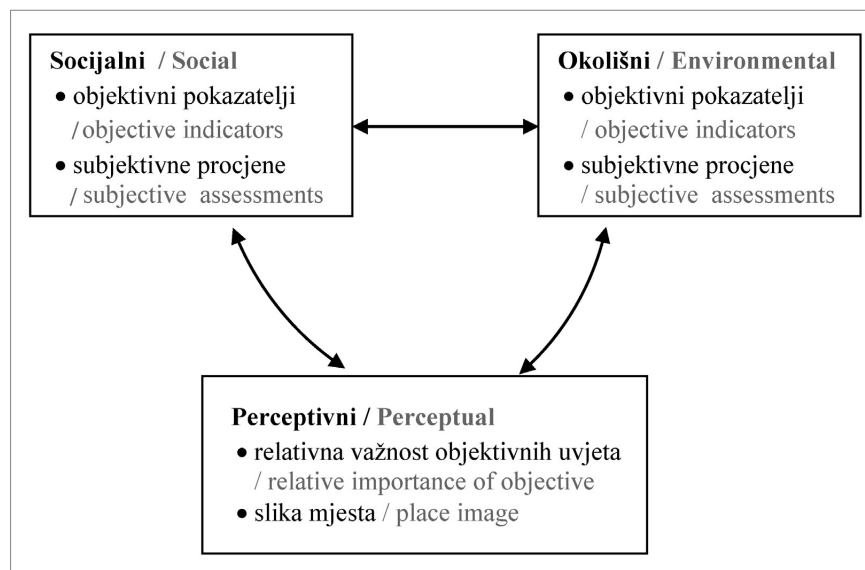
Naredne godine istraživanja donijele su složene konceptualne modele geografskih istraživanja kvalitete života koja uključuju i objektivne i subjektivne dimenzije.

Primjerice, u modelu koji je predstavila Cutter (1985) posebno su naglašena tri međusobno povezana aspekta geografskih mjerenja kvalitete života: socijalni, okolišni i perceptivni (sl. 3).

The model shows overall life-satisfaction as a function of satisfaction with domains and the influence of dissonance in affective answers. "In terms of a theoretical framework, satisfaction (as opposed to measures of satisfaction) could then be seen as the affective response (positive or negative) to (i) objective conditions across a set of life-domains ( $D_1, D_2, \dots, D_n$ ), and (ii) aspirations relating to each of these life-domains, the product of which may be modified by some social psychological syndrome (e.g. anomie) or short-term mood state and distorted by perceptual dissonance" (Knox, 1976a, 431). This model does a good job of displaying the complexity and interdependence of different elements in forming life-satisfaction, but also indicates where possible problems in research in the instance of using subjective indicators are found. Clearly, subjective measures have their disadvantages, like the fact that different people can understand satisfaction differently (for some it is a state of pure elation, for others absence of pain), respondents can give answers which they think are expected of them, respondents can be more critical toward domains of life which are beyond their control (e.g. education services), and less critical toward those for which they themselves are responsible (e.g. family life), etc. (Knox, 1976a; for more details see: Slavuj, 2012b). Subjective measures opened up new opportunities in geographic research on quality of life, and brought about the development of the bottom-up model, which, in understanding quality of life, starts from the individuals or social groups, rather than experts or politicians. However, with regard to the fact that geography places emphasis on the space (and not on the individual, as in psychology), it became clear very quickly that geographic studies on quality of life could not rest solely on subjective measures.

Consecutive years of research have brought complex conceptual models of geographic research of quality of life, which include both objective and subjective dimensions.

For Example, in the model presented by Cutter (1985), three aspects of geographic measures of quality of life were especially emphasised: social; environmental; and perceptual – which are mutually linked (Fig. 3).



Sl. 3. Sastavnice kvalitete života  
Fig. 3 Components of quality of life

Izvor / Source: Cutter (1985, 3)

Prilikom istraživanja potrebno je uzeti u obzir objektivne uvjete društvene sredine (npr. kriminal, stanovanje, prihodi) i fizičkog okoliša (npr. klima, zagađenje). Nadalje, potrebno je poznavati subjektivnu procjenu ovih uvjeta. Treća, perceptivna sastavnica, objedinjuje relativnu važnost objektivnih uvjeta (socijalnih i okolišnih) sa subjektivnom procjenom slike mjesta koju pojedinci imaju o njemu, kao i njihova iskustva i povezanost s mjestom. Naime, Cutter (1985) ističe da naša slika o mjestu utječe na to kako procjenjujemo kvalitetu života u njemu.

Nadalje, spomenut ćemo još jedan konceptualni model razvijen u sklopu proučavanja urbane kvalitete života (McCrea, 2007) koji prikazuje međudodnos objektivnih karakteristika urbanog okoliša,<sup>1</sup> subjektivne percepcije i evaluacije tih karakteristika te subjektivne kvalitete života (sl. 4). Sam model zapravo je modifikacija jednoga od najutjecajnijih teorijskih modela kvalitete života čiji su autori Campbell, Converse, Rodgers i Marans (1976b). S obzirom da taj koncept uključuje više teorijskih perspektiva (psihološku, sociološku i geografsku) može se smatrati meta-teorijom (McCrea i dr., 2005). McCrea (2007) ga je koristio kao teorijski okvir svojeg istraživanja te ga je modifi-

<sup>1</sup> U radu se naziv *okoliš* koristi kao izravan prijevod engleske riječi *environment*, pri čemu on podrazumijeva zbroj ukupnih uvjeta koji okružuju čovjeka na nekom mjestu Zemljine površine te koji se sastoji od dva dijela – prirodnog i društvenog (Haggett, 1972 prema Vresk, 1997).

In the course of research it is necessary to take into account the objective conditions of the social environment (e.g. crime, housing, income) and the physical environment (e.g. climate, pollution). Furthermore, some measure of subjective assessments of these conditions is needed. The third perceptiv component combines the relative importance of objective conditions (social and environmental) with a more subjective assessment of people's image of a place, their views toward that place and their experiences and attachments to a place.

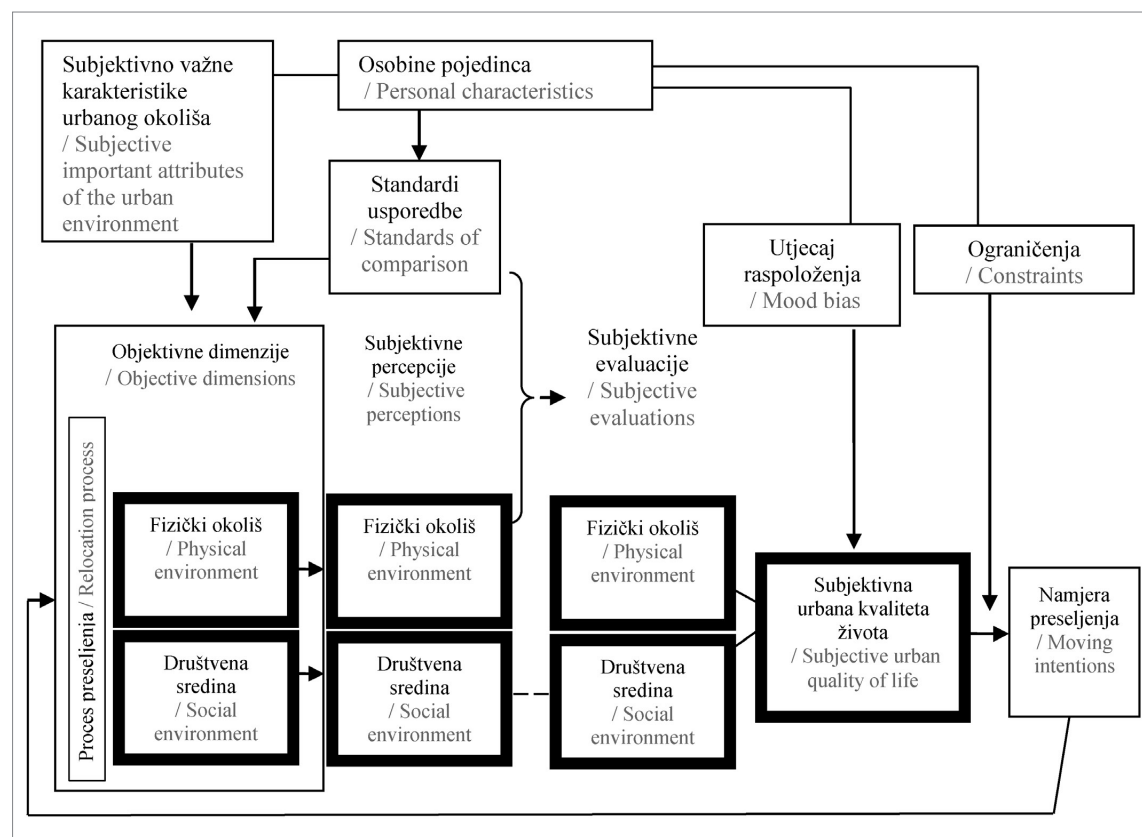
Additionally, one more conceptual model will be mentioned, which was developed in step with investigation of urban quality of life (McCrea, 2007), which shows the mutual relationship of objective characteristics of an urban environment, subjective perceptions and evaluations of those characteristics, and subjective quality of life (Fig. 4). The model itself is, in fact, a modification of one of the most influential theoretical models of quality of life – that of Campbell, Converse, Rodgers, and Marans (1976b). Given that this concept includes several theoretical perspectives (psychological, sociological, and geographic) it can be thought of as a metatheory (McCrea et al., 2005). McCrea (2007) used it as a theoretical framework for his research and modified it in relation to the results of the research in Southeastern Queensland (Australia). One of the

rao u skladu s rezultatima istraživanja u jugoistočnom Queenslandu (Australija). Jedan od osnovnih ciljeva rada bio je analizirati jačinu veze između objektivnih dimenzija urbanog okoliša i subjektivnih evaluacija tih dimenzija. Naime, taj je odnos pod utjecajem osobina pojedinaca i njihovih standarda usporedbe.

Rezultati istraživanja pokazali su da su te veze indirektno što je u modelu prikazano vitičastom strelicom između objektivnih dimenzija i subjektivnih evaluacija fizičkog okoliša. Slabe veze između subjektivnih percepcija i subjektivnih evaluacija društvene sredine prikazane su iscrtanom linijom. Autor je testirao nekoliko objašnjenja ovakvih slabih veza između objektivnih dimenzija i subjektivnih evaluacija urbanog okoliša (psihološke procese: individualne i grupne razlike u tome što je važno u urbanom prostoru te procese selidbe) te zaključuje da pojedinci kada odabiru mjesto stanovanja, biraju ona mjesta koja odgovaraju njihovim preferen-

basic goals of the paper was to analyse the strength of the link between objective dimensions of the urban environment and subjective evaluations of those dimensions. Namely, this relationship is under the influence of characteristics of individuals and their standards of comparison.

Results of the research show that the links between objective dimensions and subjective evaluations of the physical environment, which are shown in the model by a curly arrow, are indirect. The weak links between subjective perceptions and subjective evaluations of the social environment are shown by a plotted line. The author tested several explanations for these weak relationships between objective dimensions and subjective evaluations of the urban environment (psychological processes: individual and social group differences in what is subjectively important in the urban environment; and the residential relocation process) and concluded that, when choosing a place of residence, the individual chooses that which



Sl. 4. Model urbane kvalitete života  
Fig. 4 Model of urban quality of life  
Izvor / Source: McCrea (2007, 176)

cijama (a ti standardi prolaze i proces prilagodbe tijekom vremena). Upravo zato stanovnici općenito pozitivno ocjenjuju svoju subjektivnu urbanu kvalitetu života iako žive u objektivno različitim okolišima. U modelu je prikazano da je subjektivna kvaliteta života prediktor namjere preseljenja (što je pod utjecajem različitih ograničenja), odnosno ako su stanovnici nezadovoljni svojom kvalitetom života, mogli bi se preseliti na drugu lokaciju koja posjeduje one karakteristike prostora koji su njima važni. Povezivanjem namjere preseljenja s desne strane modela s procesom preseljenja stanovnika na lijevoj strani modela naglašena je ova dinamična veza između objektivnih dimenzija i subjektivnih evaluacija urbanog okoliša. Ovakav zaključak podudara se s onim što je Cutter komentirala još 1980-ih navodeći da naša slika mjesta i povezanost koju osjećamo prema mjestima utječe i na kvalitetu života koju u njima pronalazimo. Cutter je pisala da geografi nisu skloni rangirati mjesta prema objektivnim karakteristikama (kao što je popularno predstavljeno u nekim publikacijama, npr. *Places Rated Almanac* i sl.) upravo zato što prepoznaju da mjesta imaju različita značenja za različite ljude, odnosno da ih doživljavaju na svoj osobiti način (Cutter, 1985). I brojna druga istraživanja pokazala su da su statističke veze između objektivnih i subjektivnih pokazatelja slabe (Kuz, 1978; Cummins, 2000; Das, 2008), što je važan razlog zašto se mnogi geografi zalažu za njihovo zajedničko korištenje (omogućuju dobivanje potpunije slike) (v. npr. Pacione, 1990; 2003a; 2003b; Cutter, 1985; Rogerson, 1999). Objektivni pokazatelji mjere objektivne promjene i pokazuju jesu li postignuti objektivni standardi, dok subjektivni pokazatelji mjere jesu li i koliko zadovoljeni subjektivni standardi i očekivanja (McCrea, 2007).

Dakle, od 1970-ih geografska istraživanja kvalitete života prošla su put od primjene isključivo objektivnih pokazatelja u pokušaju razumijevanja društvenoga blagostanja preko uključivanja i eksperimentiranja sa subjektivnim mjerama do složenih koncepcija koje uključuju i jedne i druge pokazatelje. To su bitno različiti tipovi podataka koji omogućuju bolje razumijevanje odnosa čovjeka i okoliša. Bez obzira na razvojni put metodologije konstanta je ovih istraživanja to da je u središtu zanimanja prostor (mjesto), a ne pojedinac.

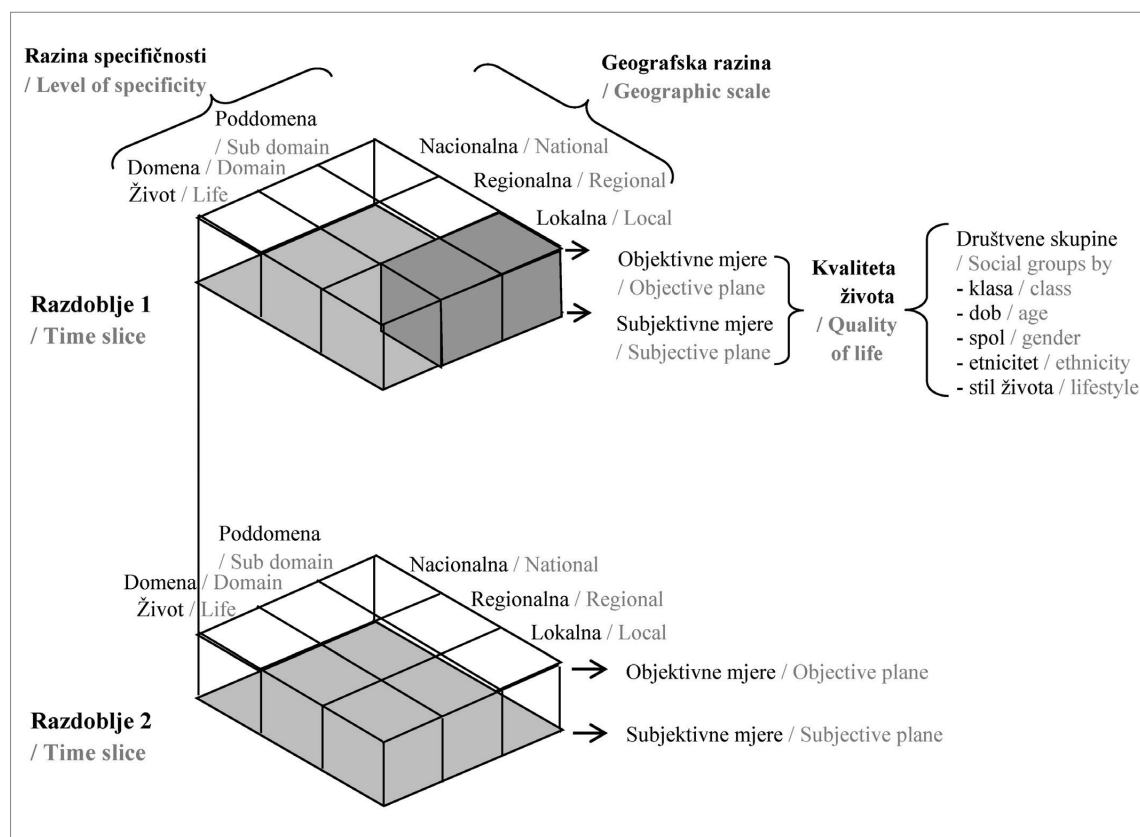
matches their standards (and these standards also undergo a process of adjustment over time). It is because of this that residents generally positively rate their subjective urban quality of life, although they live in objectively different environments. The model shows that subjective urban quality of life is a predictor of moving intentions (which is under the influence of different constraints), i.e. if residents are not satisfied with their quality of life, they might move to a different location that has the environmental characteristics which are important to them. By linking the intent to move, on the right side of the model, with the process of residential relocation process, on the left side of the model, the dynamic relationship between objective dimensions and subjective evaluations of the urban environment is emphasised. This conclusion coincides with Cutter's comments from the 1980s, stating that our image of a place, and the link that we feel toward places, also influences the quality of life that we find in them. Cutter wrote that geographers were not predisposed to rank spaces according to objective characteristics (as has been popularly presented in some publications like *Place Rated Almanac*, etc.), precisely because they have recognised that places have different meanings to different people, i.e. that every person experiences a place in their own way (Cutter, 1985). Additionally, a great deal of other research has shown that the statistical links between objective and subjective indicators are weak (Kuz, 1978; Cummins, 2000; Das, 2008), which is a significant reason that many geographers advocate for their joined use (they enable a more integral picture to be obtained) (See also: Pacione, 1990; 2003a; 2003b; Cutter, 1985; Rogerson, 1999). Objective indicators measure objective changes and point to whether objective standards are met (or not), while subjective indicators measure whether and to what extent subjective standards and expectations are fulfilled (McCrea, 2007).

Therefore, since the 1970s, geographic research of quality of life has grown from the exclusive application of objective indicators in the attempt to understand social well-being, through including and experimenting with subjective measures, to complex concepts which also include both types of indicators. These are essentially different types of data which enable a better understanding of the relationship between man and his environment. Regardless of the developmental path of the methodology, that which has remained a constant of such research is that the space (place), rather than the individual, is at the centre of interest.



**Kvaliteta života kao predmet geografskih istraživanja: osvrt na razvoj interesa i teorijskih modela istraživanja**

Quality of life as a topic of geographic research:  
An overview of the development of interest and theoretical models of research



Sl. 5. Peterodimenzijski model istraživanja kvalitete života  
Fig. 5 A five-dimensional structure for quality of life research  
Izvor / Source: Pacione (2003a, 20)

Svu složenost i različitost geografskih istraživanja kvalitete života uspio je dobro sažeti Pacione (2003a) u peterodimenzijском modelu (sl. 5).

Prva dimenzija može se smatrati razinom specifičnosti koja se odnosi na različite razine domena kvalitete života koje mogu biti predmetom istraživanja. Primjerice, istraživanja mogu biti u rasponu od fokusiranosti na ukupno iskustvo kvalitete života preko istraživanja specifičnih domena (poput zadovoljstva stanovanjem ili prirodnim okolišem) do istraživanja poddomena (primjerice učestalost javnoga prijevoza i sl.). Druga dimenzija je pitanje geografske razine istraživanja. Naime, koncept kvalitete života može se proučavati na razini susjedstva, grada, regije, države ili na internacionalnoj razini. Treća se dimenzija odnosi na vrstu indikatora koji se primjenjuju za mjerenje kvalitete života (objektivni i subjektivni pokazatelji). Četvrta dimenzija je vrijeme, a podrazumijeva mjerenje kvalitete života

Pacione (2003a) succeeded in summarising all the complexity and diversity of geographic research of quality of life into a five-dimensional structure (Fig. 5).

The first dimension can be understood as the level of specificity and it relates to different levels of domains of quality of life, which can be research topics. For example, the range of research goes from focusing on the complete experience of quality of life, through research of specific domains (e.g. satisfaction with residence or natural environment), to research on sub-domains (e.g. frequency of public transportation). The second dimension is the question of the geographic level of the research. Namely, the concept of quality of life can be investigated on the levels of neighbourhood, city, region, state, or the international level. The third dimension relates to the type of indicators which are applied to measure quality of life (objective and subjective indicators). The fourth dimension is time, and includes the measurement of

u različitim periodima kako bi se mogli vrednovati učinci politika i programa koji su razvijeni i implementirani s ciljem poboljšanja kvalitete života ljudi i naselja. Kao petu dimenziju Pacione navodi proučavanje kvalitete života različitih društvenih skupina (starijih osoba, djece, stanovnika s posebnim potrebama, etničkih skupina, prema životnim stilovima i sl.). Ovu posljednju dimenziju smatra veoma važnom za konkretnu primjenu rezultata istraživanja kvalitete života jer različite društvene skupine imaju i nešto drugačije zahtjeve od prostora, odnosno potrebni su im drugačiji resursi za zadovoljenje potreba (Pacione, 2003a). Navedena klasifikacija istraživanja zorno odražava raspon mogućnosti koje pred istraživača postavlja bavljenje kvalitetom života.

### **Umjesto zaključka – o perspektivi geografskih istraživanja kvalitete života**

Kvaliteta života intrigantno je područje istraživanja za mnoge znanstvene discipline. Geografske studije kvalitete života posebno su složene jer uključuju elemente različitih dimenzija društva (ekonomske, socijalne, kulturne, političke) kao i prirodnog okoliša. U istraživanju ovoga konstrukta prožimaju se faktori koji su nedvojbeno dio geografije, od odnosa čovjek-okoliš, prostorne organizacije, diferencijacije i klasifikacije prostora do općenito zanimanja kako se i zašto jedan prostor razlikuje od drugoga (Smith, 1973a). Iznimna vrijednost ovih istraživanja jest njihova primjenjivost. Krajnji je cilj većine takvih radova informiranje donosioca odluka te implementiranje rezultata u programe planiranja i razvoja prostora. No, jedan od ključnih ograničavajućih faktora provođenja analiza bio je i ostao problem dostupnosti statističkih podataka, odnosno njihove nedovoljne sveobuhvatnosti. U praksi to podrazumijeva korištenje indirektnih objektivnih pokazatelja, koji se mogu povezati s konceptom kvalitete života, ali daleko od toga da ga jednoznačno opisuju. Razvoj tehnologije geografskoga informacijskog sustava (GIS) i daljinskih istraživanja uvelike pridonosi rješavanju ovoga pitanja. Uz pomoć daljinskih istraživanja moguće je prikupiti mnoštvo prostornih podataka, odnosno različiti-

quality of life in different time periods in order to be able to evaluate the effects of policies and programmes, which were developed and implemented with the goal of bettering the quality of life of people and places. As the fifth dimension, Pacione put forth investigation of quality of life of different social groups (elderly people, children, residents with special needs, ethnic groups, according to lifestyle, etc.). He found this final dimension to be truly important for concrete application of results of quality of life research, because different social groups also make somewhat different demands of a space, i.e. different resources in the environment are needed to satisfy their needs. The aforementioned classifications of research clearly reflect the range of possibilities faced by researchers who deal with quality of life.

### **In place of a conclusion – a few words on perspectives of geographic research of quality of life**

Quality of life is an intriguing area of research for many scientific disciplines. Geographic studies of quality of life are especially complex, because they include elements of different dimensions of society (e.g. economic, social, cultural, political) as well as the natural environment. In researching this construct, factors that are indivisible from geography become intertwined, from the human-environment relationship, spatial organisation, differentiation and classification of spaces, to general interest in how and why one space differs from another (Smith, 1973a). The exceptional value of this research is its applicability. The end goal of the majority of such work is informing decision makers and implementing results in programmes of planning and development of space. However, one of the key limiting factors of conducting analyses was, and still is, the problem of availability of statistical data, i.e. their insufficiently integral nature. In practice, this assumes the use of indirect objective indicators, which can be linked to the concept of quality of life – without coming close to a uniform description. Development of technology of geographic information systems and remote sensing largely bring solutions to this problem. With the help of remote sensing, it is possible to collect a lot of spatial data, i.e. different multi-spectral images of phys-

te multispektralne snimke fizičkih karakteristika okoliša koje mogu poslužiti za kartiranje i praćenje promjena načina korištenja zemljišta (Herold i dr., 2002). GIS pruža učinkovito sučelje za prostorne analize tako prikupljenih podataka te drugih izvora prostornih podataka. Primjerice, statistički podatci prikupljeni iz sekundarnih publikacija mogu biti uvedeni u GIS kao atributivni podatci te zajedno s onima prikupljenima daljinskim istraživanjima poslužiti u analizi i modeliranju (Li i Weng, 2007). Do sada je već napravljen niz studija koje koriste ili kombiniraju ove podatke, primjerice za određivanje širenja gradova, procjenu gustoće naseljenosti, određivanje siromašnih dijelova gradova (Weng, 2002; Harris i Longley, 2000; Martin i dr., 2000; Hall i dr., 2001) kao i za procjenu stanja kvalitete života u gradu (Lo i Faber, 1997; Weber i Hirsch, 1992; Li i Weng, 2007; Witten i dr., 2003; Rahman i dr., 2011; Apparicio i dr., 2008; Jensen i dr., 2004; Tiran, 2015). U istraživanju koje su proveli Li i Weng (2007) analizirana je kvaliteta života u gradu Indianapolisu (SAD) pomoću sljedećih prostornih pokazatelja koji su preuzeti iz Landsat ETM+: udio vegetacije, udio nepropusnih dijelova urbane površine (prometne površine, komercijalne i industrijske površine, zgrade, pločnici) te temperatura urbane površine. Smatra se da urbano zelenilo i manja urbana izgrađenost pridonose većoj kvaliteti života te da su visoke temperature neprivačan faktor za većinu ljudi. Socioekonomski pokazatelji preuzeti iz popisa stanovništva su: primanja, razina obrazovanja, udio nezaposlenih, siromaštvo, obilježja kućanstva, prenapučenost i dr. Ove dvije vrste podataka preklapljene su u GIS-u na razini malih statističkih jedinica (engl. *block group level*). Analiza je između ostalog pokazala da je vegetacija pozitivno povezana s primanjima, vrijednošću nekretnine i razinom obrazovanja, a negativno povezana s temperaturom, nepropusnim površinama i gustoćom naseljenosti te izgrađenosti. Apparicio i dr. (2008) analizirali su kvalitetu okoliša u Montrealu (Kanada) te su pritom koristili nekoliko razina prostornih podataka koje su integrirali u GIS-u: bazu podataka javnih stambenih zgrada, podatke iz popisa stanovništva, satelitske snimke, karte korištenja zemljišta te podatke o lokacijama različitih javnih i privatnih usluga i objekata. Te lokacije su geokodirane prema adresi kako bi se mogla odrediti njihova dostupnost,

ical characteristics of the environment that can serve for mapping and tracking land-use changes (Herold et al., 2002). GIS offers an efficient interface for spatial analyses of data collected in such manner, as well as other sources of spatial data. For example, statistical data collected from secondary publications can be entered into GIS as attributive data, and, together with data collected by remote sensing, serve in analysis and modelling (Li and Weng, 2007). Up to this point, a series of studies that use or combine these data have been undertaken, e.g. for determining urban sprawl, assessing settlement density, determining poverty-afflicted urban areas (Weng, 2002; Harris and Longley, 2000; Martin et al., 2000; Hall et al., 2001), also for an assessment of the status of quality of life in the city (Lo and Faber, 1997; Weber and Hirsch, 1992; Li and Weng, 2007; Witten et al., 2003; Rahman et al., 2011; Apparicio et al., 2008; Jensen et al., 2004; Tiran, 2015). In the research undertaken by Li and Weng (2007) quality of life was analysed in the city of Indianapolis (USA) with the help of the following environmental indicators taken from Landsat ETM+: share of vegetation; share of impermeable parts of urban areas (e.g. traffic areas, commercial and industrial areas, buildings, sidewalks); and the temperature of urban areas. Urban greenery and less-urbanised land are seen as contributions to a higher quality of life, and high temperatures are seen as an unattractive factor by the majority of people. Socio-economic indicators taken from the population census are: income; level of education; share of unemployed persons; poverty; characteristics of households; population density; etc. These two types of data are overlapped in GIS on the block group level. The analysis showed, among other things, that vegetation is positively linked with income, property value, and level of education, and negatively linked to temperature, impermeable surfaces, dense settlement, and heavily urbanised areas. Apparicio et al. (2008) analysed the quality of the environment in Montreal (Canada), and for this they used several levels of spatial data that they integrated into GIS: a database of public housing buildings; data from the population census; satellite images; land-use maps; and data on the locations of different public and private services and facilities. These locations were geo-coded by address in order to be able to determine their accessibility, i.e. to calculate their respective distances from the (public housing) build-

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**Kvaliteta života  
kao predmet  
geografskih  
istraživanja: osvrt  
na razvoj interesa i  
teorijskih modela  
istraživanja**

Quality of life as a  
topic of geographic  
research:  
An overview of  
the development  
of interest and  
theoretical models  
of research

odnosno izračunati udaljenosti od zgrada. Na temelju toga skupa podataka autori su bili u mogućnosti analizirati prednosti ili nedostatke prisutne u neposrednom okruženju javnih stambenih zgrada.

Dakle, napredak tehnologije uveo je geografska istraživanja kvalitete života u novo razvojno poglavlje. Primjena GIS-a omogućila je integraciju i preklapanje satelitskih snimaka s kartama korištenja zemljišta i podacima iz popisa stanovništva, dajući time temelj za razvoj novih, drugačijih objektivnih pokazatelja. Uz dodatnu pomoć takvih pokazatelja i njihovim kombiniranjem sa subjektivnim mjerama geografske analize mogle bi postati još preciznije u pokušaju razumijevanja i poboljšanja kvalitete života stanovnika određenoga prostora.

ings. On the basis of this set of data, the authors had the opportunity to analyse the level of advantage or disadvantage, which was present in the direct vicinity of these public housing buildings.

Therefore, the advancement of technology has brought a new developmental chapter to geographic research on quality of life. The application of GIS has enabled the integration and overlapping of satellite images with land-use maps and census data, providing a basis for developing new, different objective indicators. With the additional help of such indicators, and by combining them with subjective measures, geographic analyses could become even more precise in their attempt to understand and improve quality of life of residents of a certain space.

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