

ODRŽIVOST I NJEZINE SASTAVNICE KAO NOVA PARADIGMA U TEORIJI I PRAKSI HRVATSKOG PLANIRANJA

SUSTAINABILITY AND ITS COMPLEMENTS AS THE NEW PARADIGM IN CROATIAN PLANNING THEORY AND PRACTICE

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Napor na uključenju načela održivosti u osnove prostornog planiranja u današnjem postsocijalističkom svijetu traži nove odnose između ustaljenih i suvremenih sudionika. Pojedini interesenti uključeni u razvoj, upravljanje i politiku djeluju na ishod regionalnih i urbanih sustava u Hrvatskoj ponekad bez obraćanja pozornosti na održivost. Njihovo djelovanje pokazuje nedostatak svijesti i negativan odnos prema održivosti u planerskoj praksi gdje je glavni cilj unaprijediti kakvoću života sadašnjih i budućih naraštaja. Bez dobrih ideja o nosivim kapacitetima i održivosti, neki od ovih sudionika zanemaruju planerska znanja i ekspertizu (CAVRIĆ, NEDOVIĆ – BUDIĆ, 2007.). Vještinama i znanjima planeri ih savjetuju, međutim, glavna pokretačka sila još je uvijek politički utjecaj. Takvi predlagачi uspijevaju zaštititi svoje osobne probitke glede prostora i zemljišta nauštrb javnosti i običnih građana, podržavajući sustav izrade "preslikanih" planerskih izvješća, pogodujući tek daljem urbanom širenju i nenadziranoj izgradnji.

Na žalost, poradi dužega vremenskog društvenog ignoriranja i jake sveze lobija investitora, arhitekata i građevinarara, različite međunarodne planerske ideje s "održivošću na umu" još ne utječu na hrvatsku teoriju i praksu planiranja. Neke su od njih jednostavno neprihvaćane, netočno tumačene ili odbacivane zahvaljujući krutoj zakonskoj regulativi, nepostojanju formalnog školovanja planera i povlaštenom položaju tek jednog tipa ovlaštenih planera tj. arhitekata¹. Osjetljivost za alternativna razvojna rješenja, sudjelovanje javnosti, novine u ponašanju, organizaciji i tehnologijama, raznovrsnost pomagala za provedbu u planerskoj "kutiji s alatima", kao i različite vrste planerskih poslova u usmjeravanju održivih promjena, tek treba prepoznati u zemlji koja je u procesu pristupanja EU.

Unatoč tomu, ovaj rad teži sumirati održivost i njezine sastavnice kao nove postavke, u kojima je glavna misao vodilja novoga globalnog pristupa planiranju, objavljena od Centra za ljudska naselja Ujedinjenih Naroda (UNCHS) kako slijedi: "Novo planiranje je manje kodirano i tehničko, više inovativno i poduzetničko. Ono je više sudioničko i usmjerenije projektima nego cjelovitim prostornim sustavima. Plansku ekspertizu sve češće ne zahtijeva samo država već i dioničarski i javni dijelovi građanskog društva. Prijeporno nije planiranje samo po sebi, nego njegov cilj: da li ga voditi uglavnom učinkovitošću, jačajući postojeću razdiobu bogatstva i moći, ili bi trebalo odigrati distribucijsku ulogu da može pomoći pri stvaranju minimalnih standarda urbanog življenja" (Hague, 2001.).

Ključne riječi: prostorno planiranje, održivi razvoj, održivo planiranje, evolucijska sposobnost

¹ Očito je iz zakonskih odredbi i izjava poznatih akademskih građana da postoji poseban status i monopol arhitekata u urbanom planiranju. "U načelu, struka koja najviše obrazuje urbaniste je arhitektura, zbog toga što je obrazovanje arhitekata usmjereno prema prostoru, i arhitekti posjeduju svu potrebnu opću kulturu i široke horizonte. Urbanizam je znanost, tehnika, zakon, i umjetnost" (MARINOVIĆ – UZELAC, 2001.).

¹ It is clear from legislation and statements given by prominent academics that there is an exclusive status and monopoly of architects in urban planning. "In principle, the most suitable profession for education of urbanists is architecture, because the education of architects is initially oriented towards the space, and architects possess necessary general culture and wide horizons. Urbanism is science, technique, law and art" (MARINOVIĆ-UZELAC, 2001).

Effort to incorporate sustainability aspects into the spatial planning agenda requires new relationships between conventional and new players in today's post-socialist world. Some stakeholders engaged in development, management and governance are sometimes tailoring the destiny of regional and urban systems in Croatia without sustainability concerns. Their activities show the lack of awareness and negative attitude towards sustainable planning practices where the major goal is to improve the quality of life of current and future generations. Without sound ideas about carrying capacities and sustainability, some of these actors have ignored the planning knowledge and expertise (CAVRIĆ, NEDOVIĆ – BUDIĆ, 2007). Planners advise upon them with their professional skill and knowledge but the driving force is still political power. These proponents have managed to safeguard their own spatial and land interests on the expense of the public and ordinary citizens, by maintaining the system of "copy-paste" planning blue prints, suitable for supporting emerging urban sprawl and uncontrolled construction activities.

Unfortunately, due to the long-term social ignorance and strong alliance of developer's lobbies, architects and constructors, various international planning ideas with "sustainability in mind" have not affected Croatian planning theory and practice, yet. Some of them are petrified, misinterpreted or simply abolished owing to obstinate legislation, the non-existence of formal planning education, and the privileged position of only one brand of chartered planners (e.g. architects)¹. Alternative development solutions, such as public participation, behavioral, organizational and technological advances, diversity of implementing instruments in the planner's "toolkit", and the planner's numerous tasks in guiding sustainable change, are still to be recognized in this EU accession country.

Notwithstanding, this paper aims to summaries sustainability and its derivatives as the new paradigms, in which the guiding *leitmotif* of the new global agenda for planning is spelled out by the United Nations Centre for Human Settlements (2001b) as follows: "The new planning is less coded and technical, more innovative and entrepreneurial. It is more participatory and concerned with projects rather than whole spatial systems. Planning expertise is increasingly sought not only by the state, but also by the corporate sector and civil society. What is controversial is not planning per se, but its *goal*: whether it should be directed chiefly at efficiency, reinforcing the current distribution of wealth and power, or whether it should play a distributive role to help create minimum standards of urban liveability" (Hague, 2001).

Key words: spatial planning, sustainability, sustainable planning, evolutionability

Uvod u održivost planiranja

Urbano i regionalno planiranje² u novom tisućljeću dodatno je unaprijeđeno i utemeljeno. Prihvaćeno kao samostalna disciplina tek početkom 19. st., premda poznato još ranim civilizacijama i u vrijeme Hippodamusa, danas dostiže novi trenutak i dobiva na važnosti diljem svijeta. Stručno područje planiranja znatno se izmijenilo zadnjih 30 godina, zacijelo više nego u prethodnih 100 godina, stoga što je suvremeno planiranje privlačno zanimanje koje uključuje brojne interdisciplinarne vještine, poput poznavanja društvenih i prirodnih znanosti, zatim političko vizionarstvo, umijeće pregovaranja, kreiranje i futurizam urbanog dizajna i mnogo drugog.

² Urbano i regionalno planiranje također se opisuje kao planiranje grada i okolice, fizičko planiranje korištenja prostora, planiranje okoliša, razvojno planiranje i čak jednostavno planiranje (RATCLIFE, 1993) te u zadnje vrijeme kao prostorno planiranje, koje – prevedeno ugrubo na engleski – obuhvaća i širi pristup prostorima od tradicionalnoga gradskog planiranja ili urbanizma.

Introduction to sustainable development

Urban and regional planning² in the new millennium is being improved and consolidated. Formally accepted and acknowledged as a discipline only at the beginning of the 19th century, although known to early civilizations and during Hippodamus's time, it is now gaining new momentum and importance all over the world. The professional field of planning has changed enormously in the last 30 years, possibly much more than it was the case in previous 100 years, because the planning of today is an attractive profession which includes numerous interdisciplinary skills, like the knowledge of social and natural sciences, the vision of politics, vocation of negotiations, and the creation and futurism of urban design and many more.

² Urban and regional planning has also been described as town and country planning, physical land use planning, environmental planning, development planning and even simply planning (RATCLIFE, 1993), and most recently as spatial planning, which translates poorly into English, although conveys a more broadly based approach to spaces than traditional town planning or urbanism.

Kao što Simon Davoudi (2000.) procjenjuje, pojedine ustaljene pristupe, poput usmjeravajućeg planiranja, treba nanovo razmotriti dinamičnim, fleksibilnim i trajnijim metodologijama u svrhu nadzora i praćenja složenih urbanih i regionalnih sustava. Proces donošenja odluka prebačen je s jednostranog motrišta na svestranost raznih prirodnih i ljudskim radom stvorenih sustava. Više nije aktualan stari geddesianski pristup: istraživanje – analiza – plan. Umjesto toga, proces planiranja sastoji se od nizova susljedno pročišćavanih logičkih koraka koji uključuju: utvrđivanje cilja, predviđanje promjena, ocjenjivanje alternativa, procjenu troškova i dobiti i praćenje. Uz široku primjenu informacijske tehnologije, računalnog modeliranja, GIS-a, EIA i interneta, stvoren je novi naraštaj planera. Zanimanje planera usmjerava se na nove vrste istraživanja koje uključuju: upravljanje i namicanje informacija; koordinaciju uređenja i unapređenja zemljišta; pregovaranje i posredovanje; podržavanje i iniciranje; političko savjetovanje; dizajniranje i zastupanje. Ovisno o tome gdje rade, planeri mogu preuzeti sve ove uloge i postati vješti kao "majstori za sve", ili specijalisti u nekim od tih uloga.

Tiha "revolucija" još je uvijek u tijeku u prostornom i urbanom te u planiranju i upravljanju okolišem. Već dugo vremena pojedini kolege zamišljaju planiranje kao znanje, a sada trebaju shvatiti da je planiranje učenje. Nastaju novi pristupi planiranju kao odgovor na rastuću složenost naslijeđenih problema, otegnutih nesporazuma, ograničenih vladinih proračuna i nedavno započete pokrete za deregulaciju i zaštitu prava vlasništva. Oni teže namaknuti djelotvornije, učinkovitije i javno prihvatljivije odlučivanje u upravljanju okolišem. Ti pristupi dobili su različite nazive: "civilna ekologija", "integrirano upravljanje resursima", "zaštita okoliša zasnovana na zajednici", "upravljanje ekosustavima", "upravljanje vodnim slivovima", i "dogovorno sporazumijevanje" (RANDOLPH, 2004.).

Nezabilježeni pomak zbiva se u sustavu razvoja hrvatskih gradova i regija, međutim, za uspješni profesionalni pomak hrvatski planeri trebaju ponajprije razviti potrebu za pouzdanim teoretskim temeljem, relevantnim za održivost i održivi razvoj. Suvremeni teoretičari planiranja nude različite modalitete za takav pothvat ulaska u svijet "teoretskih načela" i "pragmatičnih implementacija" koje su primjenjive u razvoju i održavanju prihvatljive kakvoće okoliša urbanih i regionalnih prostora. Koncept i ideje održivog razvoja nude poticaj i upućuju na brojne aspekte

As Simon Davoudi (2000) appraises some conventional approaches such as master planning need to be reinstated with more dynamic, flexible and continuous methodologies aimed at controlling and monitoring the complex urban and regional systems. The decision-making process shifted from a single focus to a complexity of different natural and man-made systems. Old fashion Geddesian approach of survey – analysis – plan is not current any more. Instead, the planning process is comprised of a constantly recycled series of logical steps which include: goal setting, forecasting changes, assessing alternatives, appraising costs and benefits, and monitoring. With extensive use of information technology, computer modelling, GIS, EIA, and internet resources, the new generation of planners has been born. The planning profession is focused on new types of expertise which include: technocracy and information provision; regulation and land development co-ordination; negotiation and mediation; facilitation and initiation; political advising; designing and advocacy. Depending on where they work planners can undertake all these roles and become skilful as a "jacks of all trades", or specialists in some of them.

A quiet "revolution" is still underway in spatial, urban and environmental planning and management. For a long time some fellow colleagues used to think of planning as being about knowing, now they have to realize that planning is about learning. In response to the increasing complexity of the remaining problems, protracted disputes, constrained government budgets, and recent movements toward deregulation and property rights protection, new planning approaches have emerged. They aim to provide more effective, more efficient, and more publicly accepted decisions in environmental management. These approaches are given different labels, such as "civic environmentalism", "integrated resource management", "community-based environmental protection", "ecosystem management", "watershed management", and "negotiated agreements" (RANDOLPH, 2004.).

An unprecedented shift is occurring in the development patterns of Croatian cities and regions. But, for a successful professional shift, Croatian planners first must develop a sound theoretical background that addresses sustainability and sustainable development. Contemporary planning thinkers offer different modalities for such a venture into the world of "theoretical principles" and "pragmatic implementations" needed for the development and maintenance of sustainable urban

bolje kvalitete života u smislu uravnoteženja sastavnica prirodne, društvene, gospodarske i političke stvarnosti.

U svom radu Davoudi (2000.) ide dalje tvrdeći da svestranost paradigme održivosti pretpostavlja holistički i koherentni pristup donošenju odluka koji upotpunjuje ciljeve održivosti okoliša s onima socijalne jednakosti i gospodarskog blagostanja (Tab. 1.). Za većinu međunarodnih planera to su sve dobro poznata načela, a u postsocijalističkoj Hrvatskoj nerijetko su zaboravljena. Iz toga proizlazi jak razlog koji ukazuje da uključivanje održivosti i društvene odgovornosti kao središnjih dijelova zadaće planiranja može objasniti novi smjer za budućnost hrvatskog planiranja.

Pokret održivosti, slično kao i *brzi rast* i ekološki pokret, razvija se kao odgovor na opadajuću kakvoću regionalnog i urbanog okoliša širom svijeta. Sastanak na vrhu u Rijju 1992. godine brzo je, širom svijeta, pretvoren u Lokalni plan 21 inicijative. Konferencija HABITAT II (Istanbul, 1996.) proglasila je pravo svakoga pojedinca na prostor za prikladno življenje, a svjetska konferencija URBAN21 (Berlin, 2000.) pokazala je primjer "najbolje prakse" održivog razvoja gradova. Održivi razvoj gradova također je bila tema na JOHANNESBURG SUMMIT 2002 (KEINER, 2004.).

Posljedice za planiranje u tradicionalnim planerskim teorijama kao što su "društvena reforma", "analize upravljanja", "društveno učenje" i "društvena mobilizacija" koje je elaborirao Friedman (1987.) razmjerno su slabije u odnosu na one održivog razvoja (ROSELAND, 2000). Njih treba povezivati i osvježavati obrascima koji se odnose na "zdrave zajednice" (WHO, 1986.), "prikladnu i čistu tehnologiju" (SHUMACHER, 1973; FOSTER, 1987.), "socijalnu ekologiju" (BOOKCHIN, 1987.), "pokret zelenih" (CAPRA, ŠPRETNAK, 1984; SWIFT, 1987.), "bioregionalizam" (SALE, 1985;

and regional environs. The concept and ideas of sustainable development offer an inspiration and address numerous aspects of better quality of life by means of balancing components of the natural, social, economic, and political reality.

In his work, Davoudi (2000) goes further by arguing that the multiplicity of the sustainable paradigm stipulates a holistic and coherent approach to policy-making, one which combines the objectives of environmental sustainability with those of social equality and economic well-being shown in Table 1. For the majority of international planners, these are all familiar principles, though mostly forgotten in post-socialist Croatia. There is therefore a strong argument suggesting that incorporating sustainability and social responsiveness as the central feature of planning agenda can articulate a new direction for the future of Croatian planning.

The sustainability movement, like the smart growth and ecological movement, evolved as a response to declining quality of regional and urban environments worldwide. The Rio 1992 Earth Summit was quickly translated into Local Agenda 21 initiatives around the globe. The HABITAT II conference (Istanbul, 1996) proclaimed the right of appropriate living space to everybody and the world conference URBAN21 (Berlin, 2000) showed "best practice" examples of sustainable development of cities. Sustainable urban development was also treated as a crosscutting theme on the JOHANNESBURG SUMMIT 2002 (KEINER, 2004).

The consequences for planning in traditional planning theories like "social reform", "policy analysis", "social learning" and "social mobilization" elaborated by Friedman (1987) are relatively impoverished in relation to sustainable development (ROSELAND, 2000). They need to be coupled and refreshed with paradigms associated with "healthy communities" (WHO, 1986), "appropriate and clean technology" (SCHUMACHER,

Tablica 1. Zadaća održivog razvoja
Table 1 A sustainable development agenda

Strateško razmišljanje Holistički pristup Stručnost i nestručnost Politička angažiranost Društvena odgovornost Etičke smjernice Sudionički procesi Refleksivne ustanove	Strategic thinking Holistic approach Expert and non-expert knowledge Political commitment Social responsiveness Ethical guidelines Participative processes Reflexive institutions
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Izvor / Source: DAVOUDI (2000.)

DODGE, 1981; BERG I DR., 1989; ABERLEY, 1994; WACKERNAGAL, REES, 1996.), i "prirodan pogled na svijet" (CALLICOT, 1982; SMITH, 1989.). Druge teoretske osnove ideja o održivosti dobila je razradom u obliku modela kao što su: "trokut održivosti" (SEREGELDIN, 1995.), "prizma održivosti" (STENBERG, 2001.), i "jaje održivosti" (IDRC, 1997.), kao i s najnovijim teoretskim razmišljanjima o "sposobnosti opstanka", "jednakosti", "evolucijskoj sposobnosti" i "dobrom naslijeđu" (MEADOWS, 1995; MARCUSE, 1998; KEINER, 2004; 2006; VEENHOVEN, 2000.).

Svi ti pristupi mogu se mijenjati ovisno o gospodarskim, socijalnim, ekološkim ili institucijskim prioritetima prostornog razvoja zemlje. Međutim, njihovo uvođenje i preuzimanje u održivu praksu u zemljama postsocijalizma općenito, a posebice u zemljama JI Europe i Zapadnog Balkana, još je uvijek u tijeku. Sve u svemu, oni stvaraju nove pozitivne okvire u procesima razumijevanja gradova i širih teritorija kao sofisticiranih sustava gdje je potrebno osigurati učinkovite mehanizme nadzora i suradnje između različitih utjecajnih sudionika i grupa.

Iz pregleda literature (NEDOVIĆ – BUDIĆ, CAVRIĆ, 2004; CAVRIĆ, NEDOVIĆ – BUDIĆ, 2007.), analize postojećih generalnih urbanističkih planova i rada planerske službe u više hrvatskih gradova (Dubrovnik, Split, Zadar, Pula, Rijeka, Zagreb, Čakovec), kao i iz nedavnoga terenskog istraživanja i sudjelovanja u radionicama u Zadru i Puli (CAVRIĆ I DR., 2008.), očito je da postoji rastuća potreba za osvježavanjem teorijskih i praktičnih vještina kod hrvatskih planera, radi povećanja produktivnosti i samostojnosti. Oni trebaju žurno prihvatiti "program održivosti", potrebne teorije, alate i ciljne studije koji mogu objasniti različite pristupe i otvoriti šire vidike u domeni održivog razvoja. Imajući to u vidu, korisno je razmotriti nekoliko teoretskih naslova nastalih u kontekstu održivosti, širenju znanja i učenju. Svaki rasvjetljava različito gledište izazova održivosti koje treba uključiti u spoznaje operativnog planiranja, jer izolacijska obilježja hrvatske planerske profesije uistinu traži nove perspektive.

Postoji jak pokazatelj da dosta onoga što se trenutno uči i primjenjuje u ime teorije planiranja ima ograničenu vrijednost pri rješavanju pitanja održivog razvoja u Hrvatskoj, i da planeri usmjereni na različite aspekte održivog razvoja trebaju potražiti relevantne teoretske predloške (ROSELAND, 2000.). Primjerice, izvanprostorna

1973; FOSTER, 1987), "social ecology" (BOOKCHIN, 1987), "green movement" (CAPRA, SPRETNAK, 1984; SWIFT, 1987), "bio-regionalism" (SALE, 1985; DODGE, 1981; BERG ET AL., 1989, ABERLEY, 1994; WACKERNAGEL, REES, 1996), and "native world view" (CALLICOT, 1982; SMITH 1989). Other theoretical backbones of the idea have received an additional elaboration in the form of models of "sustainable triangle" (SEREGELDIN, 1995), "sustainable prism" (STENBERG, 2001) and "sustainable egg" (IDRC, 1997), as well as, with the most recent theoretical contemplations on "survival ability", "equity", "evolution ability" and "good heritage" (MEADOWS, 1995; MARCUSE, 1998; KEINER, 2004, 2006; VEENHOVEN, 2000).

All these notions may alternate depending on economic, social, ecological or institutional priorities in the country's spatial development. However, their implementation and translation to sustainable practices in post-socialist world in general, and south-east Europe and Western Balkan in particular, are still pending. All together, they produce new positive dimensions in the processes of understanding cities and wider territories as sophisticated systems where it is necessary to secure efficient mechanisms of control and co-operation between different influential actors and groups.

From the literature review (NEDOVIĆ – BUDIĆ, CAVRIĆ, 2004; CAVRIĆ, NEDOVIĆ – BUDIĆ, 2007) and analysis of current master planning reports and planning services in several Croatian cities (Dubrovnik, Split, Zadar, Pula, Rijeka, Zagreb, Čakovec), and the most recent field surveys and workshops in Zadar and Pula (CAVRIĆ ET AL., 2008), it is evident that there is a growing need for Croatian planners to rejuvenate theoretical and practical skills, and become more productive and self-sustained. They have to pick up urgently the sustainability agenda, and necessary theories, tools, and case studies which may highlight different approaches and open wider horizons of sustainable development. With that cautionary note in mind, it is worth considering several theoretical themes that have arisen in the context of sustainability, knowledge dissemination and learning. Each highlights a different aspect of the challenge of sustainability, that should be incorporated into operational planning knowledge as the insular nature of the Croatian planning profession badly needs these new perspectives.

There is strong indication that much of what is currently taught and practiced in the name of planning theory is of limited value in addressing sustainable development in Croatia, and that the planners that are concerned with these aspects of

pitanja djelokruga planiranja poput gospodarskih, upravljačkih i političkih snaga i odluka koje potiču potrebu razvoja i oblikovanja okoliša (GREED, 2000.), nisu u središtu pozornosti i smatraju se manje važnim. Cavrić i Nedović-Budić (2007.) potvrdili su da je najveći dio planiranja usmjeren na krajnji prostorni proizvod, to jest na izgrađeni okoliš, umjesto na društvene, političke i gospodarske probleme. Stoga sljedeće kratke upute o relevantnim obrascima planiranja mogu imati značajne pedagoške implikacije u produljenom obrazovanju planera i drugih djelatnika koji u svom radu trebaju razmatrati probleme održivosti.

Mogućnosti za provedbu različitih koncepata održivosti

Zdrave zajednice, zdravi ljudi i zdravi gradovi

Koncept zdravog planiranja jedan je od vrlo omiljenih predložaka koji rasvjetljava važnost zdravog okoliša, društva i pojedinaca. Počiva na korijenima planerskoga zanimanja i tradicionalno je godinama bio njegova odgovornost sve dok pojedina druga zanimanja nisu napredovala i preuzela prvenstvo. Premda naziv "zdrave zajednice" ostavlja dojam o komunalnoj medicini i javnom zdravstvu, *Ottawa Charter* za promociju zdravlja (WHO, 1986.) daje dosta prostora planerima za razborito korištenje prirodnih uvjeta i resursa, osiguranje stanovanja i komunalnih usluga, uravnoteženje ekosustava, održivo korištenje resursa, društvenu pravdu i jednakost (HARPHAM, ALLISON, 2000.). Gomilanje različitih nezdravih uvjeta upozoravajući je znak da planeri preuzmu ulogu u "boljoj rehabilitaciji" osoba zahvaćenih različitim zdravstvenim ograničenjima.

Jedan zajednički prostorno-planski projekt isto je tako proširen idejom "zdravih gradova" (BARTON, TSOROU, 2000; BOARNET I DR. 2003.). U tom istraživanju, razvoj pravila javnog zdravstva od strane lokalne vlasti predstavlja glavni preduvjet za ugradnju pristupa procjene utjecaja na zdravlje (HIA) koji daje odgovore na bitna pitanja o tome kako postojeće ili planirano korištenje prostora, oblikovanje zajednice i prometna politika, projekti i programi utječu na javno zdravlje. Nadalje, koncept zdravih gradova utječe na razumijevanje i akcije glede održivosti suvremenih gradova gdje svatko ima pravo na zdravi život. Nedoumice o nezdravu načinu života (pušenje, pretilost, ovisnosti) ili učinci nekontroliranog širenja gradova

sustainable development must look for relevant theoretical guidance (ROSELAND, 2000). For example, the non-spatial matters of the planning agenda such as economic, managerial and political forces and decisions which generate the need for development and for shaping of the "built-up environment" (GREED, 2000), have not come into focus and they have been treated as less important by professionals involved in physical space creation. Cavrić and Nedović – Budić (2007) have confirmed that much of planning has been dealing with the spatial "end product", that is with the built environment, rather than with social, economic, environmental and policy issues. For these reasons the following briefs on relevant planning paradigms may have significant pedagogical implications in continuous education of practicing planners and other officials who increasingly must address sustainability concerns in their work.

Opportunities for implementing diverse sustainability concepts

Healthy communities, healthy people and healthy cities

A healthy planning agenda is the one of the very popular concepts which highlights the importance of a healthy environment, society and individuals. It is hidden in the grassroots of the planning profession and it was traditionally their responsibility for years until some other professions have recently advanced and taken over. Although the name "healthy communities" makes an impression on communal medicine and public health issues, the *Ottawa Charter for Health Promotion* (WHO, 1986) gives a lot of room for planners to influence programs for smart use of natural conditions and resources, provision of shelter and services, stabilization of eco-systems, sustainable resource use, social justice, and equity (HARPHAM, ALLISON, 2000). Proliferation of different unhealthy conditions is a warning sign and strong motion for planners to take a role in "better physical facilitating" of people affected by different health obstacles.

A joint spatial planning project has also been extended by the idea of "healthy cities" (BARTON, TSOROU, 2000; BOARNET ET AL., 2003). In that research, the development of healthy public policies by local government presents a crucial prerequisite for implementing the health impact assessment (HIA) approach which gives the answer to the important question on how the existing or planned land use, community design, and transportation

uz preveliku količinu vremena koja se provede u automobilima, neka su od razmišljanja koja stoje iza potrebe za daljnjom primjenom koncepta "zdravih gradova" u planskoj ekspertizi.

Tako je Sanjay Gupta, izabran na mjesto glavnog kirurga američkog predsjednika Obame, u svom nedavnom intervjuu (World Changing, 2008.) izjavio: "Previše naših gradova izgrađeno je prema pravilima trgovine umjesto prema pravilima zdravlja. Kao rezultat toga imamo parkirališta umjesto perivoja i ceste umjesto šetališta. Postoje brojni primjeri gdje se može i jedno i drugo. Zdraviji gradovi su uspješniji gradovi. Ja bih se usredotočio na povećanje obujma zelenih površina jer je to dobro za ljudsko tijelo i za zemlju. Mogao bih kupiti tisuće bicikla, obojiti ih nekom ružnom bojom (da ih nitko ne ukrade) i jednostavno ih podijeliti gradom. Obojio bih oznake kilometraže na pločnicima, tako da građani mogu imati uvida u to koliko dugo hodaju. Ujedno bih volio vidjeti urbane vrtove kakve imaju na jugu Čikaga. Učenje moje djece vrtlarstvu pruža nemjerljiva zadovoljstva i za njih i za zajednicu u kojoj žive."

Prikladne i čistije tehnologije (AT i CT)

Tehnologije koje čine naš život produktivnijim, zdravijim i održivijim uvijek su dobrodošle, u usporedbi s tehnologijama koje su usmjerene samo prema profitu i nisu prijateljske za okoliš. AT i CT predstavljaju složene sheme ljudskog djelovanja koje objedinjuju pozitivne učinke za mnoge zajednice širom svijeta. Osim zajedničkih javnih učinaka ove tehnologije mogu poboljšati život prosječnog čovjeka i osigurati njegove potrebe čak i u teškim uvjetima, što se primjerice kod Hrvatske odnosi na priobalna, planinska i pogranična područja kao što su Lika, Kordun, Banovina, Dalmatinska zagora, Gorski kotar, Istočna Slavonija, i dr.

Brojni su primjeri prihvatljivih tehnoloških rješenja koja mogu odgovarati promjenjivim uvjetima okoline. Tu spadaju pasivna i aktivna solarna oprema koja uključuje kolektore za grijanje i hlađenje, velike i male vjetrenjače i vodospreme za proizvodnju struje, biogoriva, vrtove na krovovima zgrada i vodene staklenike, prometne tehnologije, male proizvodne pogone, ekopoljoprivredu i mnogo drugog. Njihova primjena jamči čistiju proizvodnju i prethodnu strategiju oblikovanja proizvoda, procesa ili usluga koji se smatraju najboljim tehnološkim rješenjima i sredstvima održivog razvoja.

policies, projects and programs are likely to affect public's health? Furthermore, a healthy city concept fuels the reasoning and actions along the line of today's city sustainability where everyone has a right to have a healthy life. Dilemmas on unhealthy ways of life (smoking, obesity, addictions), or effects of city sprawling patterns adding to the time budget spent in automobiles, are some of the many thoughts that go behind the need for further employment of the "healthy cities" concept in planning expertise.

As Sanjay Gupta, who has been tapped to fill the Surgeon General position by President-elect Obama said in his recent interview (World Changing, 2008) that: "Too many of our cities are built with an eye toward commerce, instead of health. As a result, we have parking structures instead of parks and roads instead of walkways. There are plenty of examples where you can do both. Healthier cities are successful cities. I would focus on increasing the amount of green space, because it is good for the earth and for our own bodies. I might buy thousands of bikes, paint them a really ugly color (so people wouldn't steal them...) and simply distribute them around a city. I would paint quarter mile markers on every walkway, so citizens could always have feedback on how far they are walking. I would also want to see urban gardens like they have in the south side of Chicago. Teaching my kids to garden would provide immeasurable rewards both for them and for their community."

Appropriate and cleaner technologies (AT and CT)

Technologies which make our lives more productive, healthier and sustainable are always welcomed, compared to technologies which are only profit oriented and not environmentally friendly. The ATs and CTs are presented by complex human-processing schemes which convey positive effects to many communities worldwide. Besides common public effects these technologies can improve the lives of the average lay-man and secure his self-subsistence needs even in the harsh environmental conditions which in the case of Croatia are prevalent in its coastal, mountainous and border areas like Lika, Kordun, Banija, Dalmatinska Zagora, Gorski Kotar, Eastern Slavonia, and other.

There are numerous examples of sustainable technological solutions which can be appropriate for the unreliable environmental settings. These include passive and active solar design including

Mnoge uspješni primjeri pokazuju da čišća proizvodnja često donosi ekološke i gospodarske koristi, jer potiče djelotvorno korištenje opreme, smanjuje potrebu za skupim i iscrpljujućim zahvatima i raspoloživim tehnologijama, kao i dugotrajno izlaganje vezano za ispuštanje onečišćenja u okoliš. Uz pozitivne učinke na okoliš, ove tehnologije također mogu poticati proces gospodarskog rasta, što je trenutačno jedan od "gorućih" izazova važan za buduće stanje zemlje, i mogu poboljšati kvalitetu života u težnji za zdravijim i ugodnijim okolišem. Prema Brandu (2002.), jedan od istaknutih uspješnih primjera oslikava spajanje tehnologije i urbanog ponašanja u belgijskom gradu Hasseltu u kom je glavna prometna žila središta grada sužena, zasađeno 400 stabala i proširen otvoreni prostor. Grad se temeljito osuvremenio i povećao učestalost korištenja autobusnog parka uz uvođenje besplatnih voznih karata. To je rezultiralo povećanjem korisnika autobusa za osam puta. Hasseltov uspjeh nije nastao zbog korištenja djelotvornijih tehnologija niti zbog provođenja kampanja osvješćivanja. Prije će biti da je nova infrastruktura (zapravo urbane tehnologije) omogućila građanima da se ponašaju "održivo", bez povlačenja sudbonosnih poteza.

Ako hrvatska rastuća predgrađa prihvate spoznaje iz novijih iskustava razvijenih zemalja, tada zacijelo mogu gajiti nade. Ponajprije, potrebno je odmah započeti planiranje umjerenijeg rasta zbog neizvjesnoga gospodarskog stanja. Premda će se možda othrvati sadašnjem stanju koje postaje sve više uznemiravajuće, ne će tek standardne vrste poslova održati ljude između središta gradova i okolnih urbaniziranih naselja. Pojedina planska rješenja mogu se pronaći u zadržavanju zaposlenosti u novim visokovrijednim industrijama poput nano- i bio-tehnologije, u sprezi s vidovima kao što su visoka tehnologija, proizvodnja ekološke hrane, seoski i gradski turizam, razvoj umjetnosti i kulturnih vrijednosti, koji, udruženi, mogu uvjeriti postojeće stanovnike da ostanu u tehnološki zdravijem i življem urbanom i suburbanom okruženju.

collectors for heating and cooling, large and small windmills and water dams to provide electricity, bio-fuels, roof-top gardens and hydroponic greenhouses, permaculture, transport technologies, worker-managed craft industries, eco-farming, and many more. Their application secures cleaner production and a preventative integrated strategy for modifying products, processes or services that have been considered as the best technological scenarios and means of sustainable development.

Many successful stories show that cleaner production can often yield both environmental and economic benefits, because it promotes facility efficiency, reduces the need for expensive end-of-pipe treatment and disposal technologies, and reduces the long-term liabilities associated with the release of pollution into the environment. In addition to their environmentally positive effects, these technologies can also support a process of economic hilling which is one of the "most burning" issues for the future of a country's prospects and can improve the quality of life streaming toward healthier and more user friendly surroundings. According to Brand (2002), one of the remarkably successful cases, illustrated by the merger of technology and urban behaviors in the Belgian city of Hasselt, narrowed an inner city traffic artery and planted 400 trees in the resulting open space co-evolve. Additionally, the city radically modernized and increased the frequency of their bus fleet and made all bus rides free. Consequently, the number of bus users increased eightfold. The point is that Hasselt's success was neither due to vastly more efficient technologies, nor to resounding awareness campaigns. Rather, new infrastructure (i.e. urban technologies) enabled people to behave sustainably without making heroic choices.

If Croatia's growing suburbs accept knowledge from the recent experiences of developed countries, they just might have a chance. First, it is necessary to start planning now for slower growth because of erratic economic situation. While they might eventually survive the current situation which is getting more distressful, it's not only the conventional types of jobs that will keep people between city cores and surrounding urban satellites. Some planning solutions could be found in keeping employment in new high-value industries like nanotechnology and bio-tech, combined with sectors such as high-tech, eco-food production, rural and urban tourism, the development of arts and cultural amenities that all mutually might persuade existing residents to remain in a more technologically healthy and vibrant urban and sub-urban milieus.

Društvena ekologija nasuprot društvenom uslojavanju

Veći dio suvremenog planiranja uz prostorne, fizičke i okolišne dimenzije teži ostvarenju veze između rezultata planiranja i "krajnjih korisnika ili potrošača prostora", koji se mogu grupirati prema različitim društveno-gospodarskim, političkim i osobnim interesima. Očito je da je takva težnja povijesno-zemljopisno određena ljudskom prirodom i sadržajima prostora. Primjerice, očuvanje gradova i zaštita arhitektonskih, povijesnih ili prirodnih obilježja može biti prioritet vladinih tijela, javnosti, nevladinih udruga ili nekih drugih sudionika koji podržavaju takve postupke. Međutim, istodobno privatno poduzetništvo, industrijski i poslovni subjekti u nekom području ili zoni ne moraju imati isti odnos prema održanju i zaštiti takvog obilježja okoliša. Ipak, skoro svaki novi urbani razvoj, sve obnove, dogradnje, revitalizacije i druge fizičke intervencije zahtijevaju uključivanje "protivnika i predlagača" koji imaju različite uloge u areni planiranja.

Teoretski okvir društvene ekologije primjenjivan je u Hrvatskoj za vrijeme socijalizma. Pristup je bio zasnovan na posebnom fokusu stvaranja izgrađenih okoliša u kojima je trebalo biti onemogućeno društveno razdvajanje zasnovano na prihodu. Međutim, to nije bilo moguće zbog naslijeđenog urbanog strukturiranja i prepoznatljive povijesno-zemljopisne urbane matrice koja vuče korijenje još iz vremena rimske uprave. Ujedno, provjeravane su i neke druge važne dimenzije društvene ekologije. Nedavno istraživanje o pokazateljima održivog razvoja za grad Zadar (Cavrić i dr., 2008), pokazuje da donekle postoje nedostatna jednakost postupanja u odnosu na spol i potreba za povoljnijim položajem industrijskog radništva kao i zapostavljenih društvenih skupina, poput gradske sirotinje, *gay* populacije, manjina, izbjeglica, ratnih veterana, itd. To su tek neki primjeri "onečišćenja" društvenog okoliša i kao takvi nedvojbeno su dio težnji protiv dominacije i neprikladnih radnih, životnih, političkih i društveno-gospodarskih uvjeta.

"Društvena ekologija unapređuje holistički pristup, prikladnu tehnologiju, rekonstrukciju oštećenih ekosustava i stvaralačko humano poduzetništvo. Spaja jednakost i društvenu pravdu s djelotvornošću energije i prikladnim tehnologijama. Društvena ekologija smatra da problem humanizma nije samo zaštita prirode nego i ostvarenje ekološkog društva koje je u skladu s prirodom. Osnovna društvena jedinica predloženog

Social ecology vs. social stratification

Much of the contemporary planning besides spatial, physical and environmental dimensions aims to introduce the link between the planning outcomes and "end users or customers" that can be classified according to diverse socio-economic, political and personal interests. As it is clearly evident such perspective, historically and geographically, is framed by human nature and production of space. For example, urban conservation and the preservation of architectural, historic or natural landmarks can be prioritized by government agencies, general public, NGOs or some other parties that support such an action. However, at the same time private enterprises, industries and businesses in an area or zone might not have the same attitude towards the need for preserving the character. Nevertheless, nearly all new urban developments, or renewals, upgrades, revitalization and other physical interventions require involvement of "opponents and proponents" who play different roles in planning arena.

The theoretical framework of social ecology was applied in Croatia during socialist era. The concept had a special focus on creation of the built-up environments in which the social segregation based on income should be avoided. However, this was not possible due to the traditional urban structuring and the distinctive historical-geographical urban matrix dating back to Roman rule times. However, some other important dimensions of social ecology have also been tested. A most recent research on sustainability indicators for the city of Zadar (Cavrić et al., 2008) has shown that there is a deficiency in equal gender treatment, a need for a more liberal position for the industrial class, as well as disadvantaged social groups like the urban poor, gays and lesbians, minorities, refugees, war veterans etc. These are just a few examples of the "polluted" social environment and they are ultimately all part of the struggle against domination and unfavorable working, living, political, and socio-economic conditions.

"Social ecology advances a holistic worldview, appropriate technology, reconstruction of damaged ecosystems, and creative human enterprise. It combines considerations of equity and social justice with energy efficiency and appropriate technologies. Social ecology goes beyond environmentalism, insisting that the issue at hand for humanity is not simply protecting nature but rather creating an ecological society in harmony

ekološkog društva je ekozajednica, humano, održivo naselje zasnovano na ekološkoj ravnoteži, samostojnosti i demokraciji sudionika" (ROSELAND, 2000.).

Pokret zelenih i ozelenjavanje razvojnih promjena

Zeleni vjeruju u "četiri stupa": ekologiju, društvenu odgovornost, najširu demokraciju i nenasilje (CAPRA, SPRETNAK, 1984.). Ti temelji zapravo znače načela samosvojnosti zajednice, poboljšanje kvalitete života, sklad s prirodom, decentralizaciju i različitosti, a ujedno slobodu, jednakost i demokraciju (TOKAR, 1987.), tj. podržavanje građanskih sloboda, poticanje solidarnosti s narodima Trećeg svijeta, i napore za zaustavljanje utrke za naoružanjem (SWIFT, 1987.). Prema tim načelima, zeleni preispituju mnoga stečena prava veleposjednika nad zemljištem, trajnost ustanova, značenje napretka i ustaljene oblike uprave unutar društva.

Polazišta pokreta zelenih mogu imati različite oblike u različitim zemljama. Mnoge ekološki usmjerene međunarodne i lokalne nevladine udruge djeluju prema programu rada pokreta zelenih. U nekim su zemljama postali ravnopravni politički partneri (Njemačka), dok u drugim tek podržavaju kampanje i napore protiv zagađenja i degradacije okoliša. Premda su pojedina od spomenutih načela (npr. decentralizacija, različitost, demokracija, sloboda) navedena u brojnim hrvatskim političkim dokumentima, još uvijek predstoji dugi put do njihove potpune primjene.

Na žalost, važna pitanja, poput većeg udjela "zelenih površina", njihova sagledavanja u planskim odlukama, učinka nadzora uzgoja zelenila, skromnosti spoznaja o ozelenjivanju kod većine ljudi, povećavaju troškovne stavke planskih odluka. Jaka veza između vlasništva i poreza još se uvijek ne smatra važnim dijelom postavki ozelenjivanja u lokalnim planskim zavodima, kao i njihov praktični udio u zaštiti otvorenih prostora i prirodnih resursa. Proračunati pojedinci i njihovi sljedbenici, često lukavi i nerijetko korumpirani, nerijetko ograničavaju planiranje zelenila (što ga je manje to bolje) (LEVY, 2003; CAVRIĆ, 2005.).

Unatoč tome, vrijedi spomenuti (CAVRIĆ, NEDOVIĆ – BUDIĆ, 2007.), neke nevladine udruge poput Zelene akcije i Zelenog foruma iz glavnog grada Zagreba, Zelene Istre iz Pule, i Plavog foruma iz Splita, sudjeluju u nekoliko akcija koje se tiču

with nature. The primary social unit of a proposed ecological society is the eco-community, a human-scale, sustainable settlement based on ecological balance, community self-reliance, and participatory democracy" (ROSELAND, 2000).

The Green Movement and greening of development change

The Greens believe in the "four pillars": ecology, social responsibility, grassroots democracy, and non violence (CAPRA, SPRETNAK, 1984). These pillars translate into principles of community self-reliance, improving the quality of life, harmony with nature, decentralization, and diversity, as well as freedom, equality and democracy (TOKAR, 1987), or supporting civil liberties, working for solidarity with Third World peoples, and standing for an end to the arms race (SWIFT, 1987). From these principles, the Greens question many cherished assumptions about the rights of land ownership, the permanence of institutions, the meaning of progress, and the traditional patterns of authority within society.

The postulates of a green movement can have different forms in different countries. Many ecologically oriented international and local NGOs operate by following the green movement agenda. In some countries they became equal political partners (Germany), while in other countries they only back-up environmental campaigns and struggles against environmental pollution and degradation. Although some of the above principles (e.g. decentralization, diversity, democracy, freedom) are proclaimed in numerous Croatian policy documents, there is still a long way to go before their real implementation.

Unfortunately, the important matters such as a larger amount of "greenery", its visibility in planning decisions, effectiveness of the green development control, common knowledge about greening by ordinary people, large financial consequences of planning decisions. The strong links between property issues and taxes are still not considered as important part of green agenda in backing-up planning agencies and its operational divisions to protect open spaces and natural resources. Politics and its developers' flagman ships are usually seen as a seamy and often corrupt, and the more that green planning could be kept out of it, the better (LEVY, 2003; CAVRIĆ, 2005).

In spite of this, it is worth mentioning (CAVRIĆ, NEDOVIĆ – BUDIĆ, 2007), some NGOs like Green Action and Green Forum from the capital city of

pitanja planiranja prostora i okoliša (prostorni plan Medvednice, Plan upravljanja čvrstim otpadom grada Zagreba, izgradnja spalionice otpada, kampanja oko javnog i biciklističkog prometa, generalni urbanistički plan Pule, podrška očuvanju obalnog područja, itd.). Glavna načela ovih udruga vrlo su slična načelima pokreta zelenih i ukazuju da zelena *agenda* može pomoći lokalnim planerima da otvorenije izađu s izazovnim alternativama pred ponekad rigidnu upravu i privatno sponzorirane razvojne projekte.

Bioregionalizam i ocjena okoliša

Smisao bioregionalizma obuhvaća prostorno planiranje i upravljanje zasnovano na pravilima prirode i primjeni postupaka procjene okoliša poradi zaštite racionalnosti u njegovu planiranju, upravljanju i donošenju odluka. Ti se pristupi kreću od uvodnih analiza, nosivog kapaciteta i položajnog rangiranja, poput ekozoniranja, do radikalnijih ideja (McMANUS, HAUGHTON, 2006.) o mjerenju okoliša metodologijom "ekoloških stopa" koju su razvili Wackernagel i Rees (1996.) kao bioregionalno pomagalo koje može razmotriti utjecaj gradova na prirodne resurse i ekosustave.

Utjecaji bioregionalnoga društvenog ustroja jasni su kod lokalnoga političkog nadzora koji vrše pojedine zajednice u široj sprezi s institucionalnom strukturom koja rukovodi u skladu s ekološkom etikom. Bioregionalizam smatra ljude dijelom životnog prostora, ovisnim o prirodnim sustavima kao i mjesne biljke ili životinje. Zbog naglaska koji se stavlja na prirodne sustave, bioregionalizam se možda može doimati slabijim u odnosu na humane sustave, međutim, neke ideje o "zelenim gradovima" (pr. BERG I DR., 1989.) temelje se na bioregionalizmu. Istraživačka djela bioregionalista Douga Aberlyja (1994.) razjašnjavaju kako obaviti bioregionalno kartiranje za potrebe unapređenja mjesta i kako primijeniti povijest i teoriju ekološki prihvatljivog planiranja.

Međutim, ove tehnike nisu primjenjivane u pripremi prostornih planova u Hrvatskoj otkada je ona promijenila politički i društveno-gospodarski status. Velik broj prostornih planova u postsocijalističkoj eri prihvaća se bez izrade potrebnih studija o okolišu zasnovanih, primjerice, na kapacitetima nosivosti, pogodnostima zemljišta i "što ako" analizi. Čak i danas ograničen je broj detaljnih tematskih planova u omjeru 1 : 5000 vezanih uz okoliš, tlo i inženjerska svojstva, a posebna tematska izvješća pristupačna su za

Zagreb, Zelena Istra from the city of Pula, and Blue Forum from Split have participated in several actions concerning important environmental and planning issues (the spatial plan of Medvednica, Zagreb's solid waste management plan, the construction of a communal incinerator, public and bicycle transport campaigning, the master plan of Pula campaign, bolstering of attractive costal areas, etc.). The basic principles of these NGOs are very similar to those of the green movement and they suggest that the green agenda may aid local planners to come freer out with challenging alternatives to the sometimes rigid government and privately sponsored development projects.

Bio-regionalism and environmental appraisal

The meaning of bio-regionalism encompasses territorial planning and governance based on the rules of nature and application of environmental appraisal techniques able to shelter rationality in environmental planning, management and decision making. These approaches range from threshold analysis, carrying capacity and suitability ratings such as eco-zoning, to more radical ideas (McMANUS, HAUGHTON, 2006) on environmental metric found in "eco-foot printing" methodology developed by Wackernagel and Rees (1996) as a bioregional tool which can consider the impact of cities on natural resources and ecosystems.

The implications of bio-regional social organization are clearly for local political control by communities on their own behalf combined with broader allegiance to an institutional structure that governs according to an ecological ethic. Bioregionalism considers people as part of a life-place, as dependent on natural systems as are native plants or animals. By virtue of the emphasis it places on natural systems, bio-regionalism may perhaps appear weak in terms of human systems; however, some "Green City" ideas (e.g. BERG ET AL., 1989) are rooted in bioregionalism. Research volumes edited by bio-regionalist Doug Aberley (1994) explain how to do bio-regional mapping for local empowerment and cover the history and theory of ecologically sound planning.

However, these techniques have not been applied during preparation of spatial plans since Croatia changed its political and socio-economic status. A large number of physical plans in the post-socialist era are adopted without accomplishing necessary environmental studies based on carrying capacity, suitability and "what if analysis", to mention just a few. Even today, detailed thematic soil, engineering, and environmental maps in scale 1 : 5000 and

ograničene geografske zone. EIA se primjenjuje samo za kontroverzne zemljišne lokacije.

Također, osnivanje i oblikovanje novih županijskih upravnih jedinica obavljeno je bez osmišljene regionalne analize i razumijevanja ograničenja i mogućnosti za održivi regionalni razvoj. Istodobno, planiranje naselja često se obavlja bez primjene suvremene planerske *know-how* metode ocjene utjecaja naselja na njihove okolice. Naime, bioregionalna praksa i metode nisu ponekad dobrodošle jer su usmjerene na otpor uništavanju prirodnih prostora, što je najvidljivije u nepredvidljivom urbanom širenju. Tužno je reći da oživljavanje zahvaćenih prirodnih sustava skoro i ne postoji. Čak i kad se neke mjere primjenjuju, one nisu zasnovane na temeljitom poznavanju načina funkcioniranja prirodnih sustava, kao i na poznavanju prikladnih razvojnih tehnika koje odgovaraju specifičnim lokalitetima (DODGE, 1981.).

Trenutne mogućnosti prihvaćanja polazišta koja podržavaju i ljudski faktor i faktor "prirodnih uvjeta i izvora", prilično su ograničene u uvjetima hrvatskog planiranja, premda su one jedini logični i pravi put. Vjerojatno će neki novi naraštaji formalno obrazovanih planera biti u mogućnosti praktično iskoristiti svoje kvalifikacije ako ne bude kasno za popravak štete koju su nanijeli pojedini kolege i njihovi politički nalogodavci.

Pogled prirodnog svijeta, starodrevne i domorodačke spoznaje

Ovaj teoretski koncept postao je vrlo poticajan u akademskim i profesionalnim raspravama. Neki autori smatraju da su održivi oblici korištenja i upravljanja prirodnim resursima stoljećima bili sadržani u vjerovanjima i sustavima ponašanja domorodačkih kultura. Ti su sustavi tradicionalno bili zasnovani na gledištu koje ne izdvaja ljude od njihova okoliša (CALLICOTT, 1982.). Dobra ilustracija za ova zapažanja može se naći u praksi domorodačkih poglavica i običnih ljudi koji su dragovoljno spremni sudjelovati u akcijama lokalne zajednice i u okolišu koje mogu poboljšati kakvoću života.

Primjerice, struktura i oblici urbanih jezgri hrvatskih obalnih naselja simboliziraju starodrevni način života, posebno društveno grupiranje i gospodarske djelatnosti koje zrcale snažnu povezanost s dostupnim dobrima mora, okolnih planina, plodnih dolina rijeka, obrađenih polja i brojnih otoka. Najvišu razinu na društvenoj

specific thematic reports are available for limited geographical areas only. The EIA is only practiced to bind controversial land allocations.

Also, the constitution and the forming of the new county (županija) administrative units were forced without prudent regional analysis and understanding of constraints and opportunities for sustainable regional development. In the same time, settlement planning is often executed without embracing contemporary planning know-how of the settlements' impact on their hinterlands. Practically, bio-regional practices and methods are sometimes not welcomed because they are oriented toward resistance against the destruction of natural areas mostly visible through unprecedented urban sprawl. It is sad to say, that the renewal of affected natural systems is almost non-existent. Even if there is application of some measures, they are not based on a thorough knowledge of how natural systems work and which developmental techniques are appropriate to specific sites (DODGE, 1981).

Current possibilities for accepting concepts which support both human dictate, as well as the dictate of "natural conditions and resources", are very narrow in the Croatian planning realm, although they are only logical way forward. Probably some new generations of formally trained planners will be able to use them practically if it is not too late to recover the damage already made by some fellow colleagues and their political superiors.

Native world view, traditional and indigenous knowledge

This theoretical concept has become very intriguing in academic and professional debates. Some authors observe that sustainable patterns of natural resource use and management have for centuries been reflected in the belief and behavior systems of indigenous cultures. These systems have traditionally been based in a world view that does not separate humans from their environment (CALLICOTT, 1982). A good illustration for these observations can be found in indigenous practices of local leaders and ordinary people involved in community services and environmental actions which can improve the quality of life.

For example, the structure and shapes of the urban cores of Croatian coastal settlements symbolize the traditional way of life, specific social grouping and economic activities which reflects strong linkages to resources available from the sea, the surrounding mountains, fertile

ljestvici i organizaciji svakodnevnog života i rada u malim radnim naseljima oduvijek su imali stari i obrazovani ljudi iz središta. U usporedbi s ostalim stanovnicima, bili su prihvaćani prema svojoj sposobnosti da utječu na lokalne događaje i potiču određene aktivnosti zajednice. Pojedine odluke glede odabira mjesta za razvoj naselja, za napajanje stoke ili za obrađivanje zemlje, ribarenje, itd., isključivo su, primjerice, ovisile o njima. U tehničkom smislu, imali su ulogu javnog vođe, poduzetnika, planera i promicatelja, uz sve oznake koji prate takav položaj. Ponekad, njihovo osobno iskustvo i mudrost, upotpunjeno s naslijeđem, iskustvom prošlih naraštaja i prepoznavanjem zakonitosti prirode i okoliša, bilo je od istaknute važnosti. Na žalost, ovaj tip iskonske stručnosti i znanja više nije značajna poticajna snaga za lokalnu promjenu, svijest i djelo. Preostaje samo u kolektivnom sjećanju starijih i u antologijskim zbirkama.

Svjetska komisija za okoliš i razvoj prepoznala je važnost korištenja tradicionalnih znanja ljudi u donošenju odluka o održivosti u industrijskim društvima, i u isto vrijeme, o ranjivosti tradicionalnih u odnosu na snagu industrijskih kultura (WCED, 1987.). Kao što je to izjavio jedan domorodački poglavar na simpoziju o održivom razvoju, svjetski poredak trebalo bi razmotriti domorodačku "povijest, kulturu, i tradicije i prakse, i utvrditi kako su oni uspjeli opstati tisućama godina prije dodira s Europom" (SMITH, 1989.). Ove riječi pružaju nadu za ponovnim oživljavanjem starodrevnog pristupa, pogotovo u situacijama s učestalim teškoćama koje uzrokuju devastacije, nepogode i izumiranje. Ponekad kaotični, slučajni i neplanski oblici razvoja u suvremenoj Hrvatskoj, kao i prenaplašeno zgušnjavanje razvojnog potencijala većinom unutar zagrebačke aglomeracije, upućuje na urbano siromašenje i nejednak regionalni razvoj, a to se ne može riješiti bez osnovnog poznavanja uzroka. U potrazi za uzrocima, primjena prokušanih i izvornih koncepata zajedno s drugim pristupima može pridonijeti smanjenju lanca pogrešaka za koje sadašnji naraštaji već plaćaju cijenu. Pitanje je što budući naraštaji mogu očekivati?

Od održivosti do razvojne sposobnosti

Zadnjih godina neki vodeći teoretičari i praktičari pokušali su proširiti i poboljšati koncept održivosti kroz razvoj prihvatljivijih alternativa kao što su "sposobnost preživljavanja", "jednakost",

river valleys, meticulous fields and mushrooming islands. The highest rank in social hierarchy and organization of everyday life and work in small settlements always had the old and knowledgeable people at its centre. Compared to other dwellers, they were recognized by ability to influence local affairs and stimulate regular community actions. For example, some decisions in connection with selection of place for settlement development, grazing the livestock or ploughing, fishing etc. were delegated exclusively to them. Technically speaking, they played the role of civic leader, manager, planner, and developer, with all the attributes that accompany such a position. Sometimes, their personal intuition and wisdom, combined with heritage, experience of past generations and cognition of principles of nature and environment were of extreme importance. Unfortunately, this type of indigenous expertise and skills is not any longer significant driving force for a local change, awareness and action. It remains only in collective memories of our older and anthological collections.

The World Commission on Environment and Development recognized how much industrialized cultures have to learn about sustainability from traditional people, and at the same time, how vulnerable the latter are to encroachment by the former (WCED, 1987). As a native chief speaking at a symposium on sustainable development suggested, mainstream society would be wise to look at native "history, culture, and traditions and practices, and find out how they managed to survive for thousands of years before European contact" (SMITH, 1989). These words open the hope for rejuvenation of traditional approaches, especially in situation with frequent difficulties which tremor the pillars of humankind, causing devastation, disasters and demise. Sometimes the chaotic, haphazard and sprawling development patterns in contemporary Croatia, as well as an enormous concentration of development potential mostly within the Zagreb agglomeration, implies urban decay and uneven regional development and these cannot be solved without essential knowledge of their causes. In the search for causes, application of traditional and indigenous concepts together with other approaches can contribute to curb the chain of mistakes for which current generations are already paying the price. The question is what can future generations expect?

From sustainability to evolutionability

In recent years, some leading theoreticians and practitioners have tried to diversify and re-load the

"dobro naslijeđe", i "razvojna sposobnost" (KEINER, 2004; 2006; VEENHOVEN, 2000; MEADOWS, 1995; MARCUSE 1998.).

Svi ti poboljšani modeli spekuliraju sa širim teoretskim matricama poradi uravnoteženja političkih, društvenih, gospodarskih, etičkih i ekoloških pojmova izvorne Bruntlandove zamisli koja polazi od toga da "održivi razvoj treba ispunjavati potrebe sadašnjih naraštaja bez ugrožavanja sposobnosti budućih naraštaja da zadovolje svoje potrebe" (WCED, 1987.). Raznolikost izvornih polazišta razgranala se u nizove jednostavnih i složenijih preslika, a svaki od njih teži dokazati skromnu prirodu njihove osnove.

U zadnjih nekoliko desetljeća, izvorni koncept opisan kao model "tri stupa" ili "tri kruga" prilagođen je radi obuhvaćanja zahtjeva za podjednakim balansiranjem glavnih zaliha okoliša te gospodarskih i društvenih zaliha na globalnoj i lokalnoj razini (SERAGELDIN, 1995.). Njegovi kritički ciljevi preinačeni su s dva osnovna alternativna prizmatična oblika s njihovim proširenjima: 1) prizmom održivosti i 2) glavnom prizmom održivosti, te 3) jajetom održivosti (Sl. 1.). Drugim riječima, cilj je istaknuti činjenicu da se sva četiri nositelja ne mogu povećati u isto vrijeme bez usporavanja drugih i nagrđivanja osnovne uravnoteženosti. Odnos između ljudi i ekosustava najvažniji je, i jedni ovise o drugome (KEINER, 2004.). Glavna kritika usmjerena je prema okolišu kao preduvjetu za nesmetano djelovanje ostalih triju nositelja (npr., gospodarskog, institucionalnog, društvenog). To razgranjivanje izravna je posljedica kritičnih pogleda na održivost, obrazloženih u izvornom modelu održivosti.

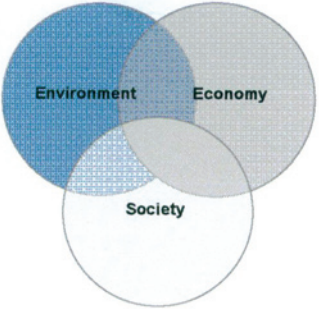
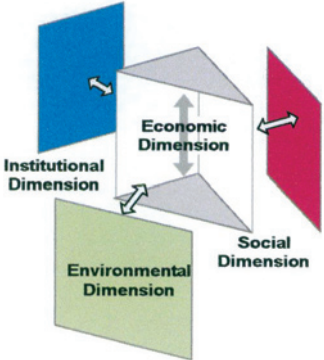
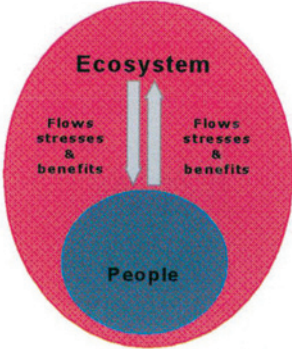
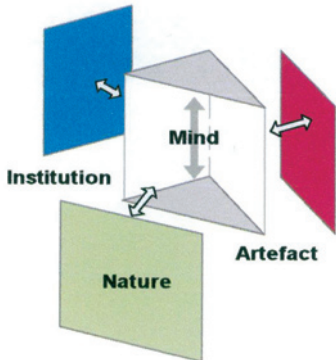
Trenutno globalno stanje i njegovo lokalno zrcaljenje pokazuju da su brojni socijalni, okolišni, i gospodarski kolapsi neizbježni. S gledišta trenutnog stanja u Hrvatskoj, vidljiva je kriza duž svih šest kritičnih ciljeva koje predlaže Glasby (2003.). Na žalost, na mnogim razinama uprave postoji neodlučnost za prihvaćanjem spoznaje da se živi na očito neodrživi način. Lokalno gospodarstvo preraslo je regionalne ekosustave i okvire prostornog razvoja. Zadovoljavanje pojedinih ljudskih potreba gotovo je na rubu pogotovo u urbanim područjima, gdje čak i kratka skretanja od ciljeva održivosti prijete teškoćama u nabavi osnovnih zaliha i radu urbanih i regionalnih infrastruktura, što je, primjerice, bilo srećom izbjegnuto zimi 2008.-2009. pri zastoju u opskrbi plinom.

concept of sustainability through the development of more suitable alternatives such as "survival ability", "equity", "good heritage" and "evolution ability" (KEINER, 2004, 2006; VEENHOVEN, 2000; MEADOWS, 1995; MARCUSE, 1998).

All these improved models speculate with broader theoretical matrices in order to balance political, social, economical, ethical and ecological clues of the original Bruntland idea which proclaims that: "sustainable development should meet the needs of the present generation without compromising the ability of future generations to meet their needs" (WCED, 1987). The diversification of fundamental ideas has branched into a series of simple and more complex replicas each striving to prove the humble nature of their foundation.

Over the past decades or so, the original concept described as the "three pillar" or "three circles model", has been modified to encompass the request for equitable balances of the principal environmental, economical and social (human) stocks at global and local levels (SERAGELDIN, 1995). Furthermore, its critical objectives were re-phrased by stipulating alternative prism models with the two basic extensions: 1) prism of sustainability and 2) main prism of sustainability, and 3) sustainability egg (Fig. 1). In other words, the intention was to highlight the fact that all four capitals can't increase in the same time without slowing down others, and deforming essential equilibrium. In addition, the relationship between people and an ecosystem is underlined as a must, and that ultimately one is entirely dependent upon the other (KEINER, 2004). A key critique has been oriented towards the environment as pre-condition for the smooth operation of other 3 constituents (e.g. economic, institutional, social). These divergences are a direct result of sustainability critical objectives spelled out in original sustainability model.

The current global situation and its local reflections show that numerous social, environmental, and economic collapses are inevitable. Translated to present state of affairs in Croatia, there is evident crisis along all six critical objectives suggested by Glasby (2003). Unfortunately, there is reluctance at almost all government levels to accept the notion that we live in a noticeably unsustainable manner. The local economy has outgrown the regional ecosystems and spatial development frameworks. Fulfillment of some human needs is almost on the verge particularly in urban areas where even short departures from sustainability initiate collapses in essential supplies and operations of basic urban and regional infrastructures that was, i.e., luckily

a. Osnovne dimenzije održivosti <i>Basic sustainability dimensions</i>	b. Prizma održivosti <i>Sustainability prisms</i>	c. Jaje održivosti <i>Sustainability egg</i>
	<p>Model I. Prizma održivog razvoja <i>Prism of sustainable development</i></p> 	
<p><u>Kritički ciljevi / Critical objectives</u></p> <p>Oživljavajući rast / Reviving growth</p> <ol style="list-style-type: none"> 1. Promjena kvalitete rasta / <i>Changing the quality of growth</i> 2. Ispunjavanje osnovnih potreba glede zaposlenosti, hrane, energije, vode i sanitarne kvalitete / <i>Meeting essential needs for jobs, food, energy, water and sanitation</i> 3. Osiguranje održive razine broja stanovnika / <i>Ensuring a sustainable level of population</i> 4. Očuvanje i unapređivanje osnova resursa / <i>Conserving and enhancing the resource base</i> 5. Preusmjeravanje tehnologije i upravljanje rizikom / <i>Reorienting technology and managing risk</i> 6. Prožimanje okoliša i gospodarstva pri donošenju odluka / <i>Merging environment and economics in decision making</i> <p>Izvor / Source: GLASBY (2003)</p>	<p><u>Model II. Glavna prizma održivog razvoja / Main prism of sustainability</u></p>  <p><u>Kritički ciljevi / Critical objectives</u></p> <p>Model I.</p> <p>Golem utjecaj gospodarstva koji uključuje ostala 3 oblika <i>Overwhelming influence of economy which tends to include other 3 assets</i></p> <p>Model II.</p> <p>Pomaže izbjegavanju utjecaja jednog segmenta (npr. gospodarskog). Balansira (usklađuje?) sva 4 gledišta i nijedan se ne može povećati u isto vrijeme u istoj količini. <i>Helps to avoid higher influence of one segment (e.g. economic). It balances all 4 aspects and neither of them can increase at the same time at the same amount.</i></p> <p>Izvor / Source: STENBERG (2001)</p>	<p><u>Hipoteza / Hypothesis</u></p> <p>SD = HWB + ECSWB SD - održivi razvoj / <i>sustainable development</i> HWB – blagostanje ljudi / <i>human well being</i> ESWB – blagostanje ekosustava / <i>ecosystem well being</i></p> <p>Ekosustav / Ecosystem</p> <p>Kao nadređen u osiguravanju neophodnih resursa / <i>As superordinated providing necessary resources</i></p> <p>Ljudi / People</p> <p>Ljudi mogu prosperirati samo ako su resursi raspoloživi / <i>Can only prosper if necessary resources are available</i></p> <p>Izvor / Source: IDRC (1997)</p>

Slika 1. Razvoj koncepta održivosti
Figure 1 Evolution of sustainability concept

Depopulacija također jača i djeluje kao skrivena prijetnja označavajući mogućnost gubljenja ljudske mase sposobne reagirati na konfliktne situacije. Gubitci poljoprivrednih i pošumljenih površina, životinjskih vrsta, vode i onečišćenje zraka traju i povećavaju se. To se ujedno poklapa s povećanjem broja osoba sa zdravstvenim problemima s lošim ishodom ili produženim patnjama zbog raka, debljine, psihoza, stresa i poslijeratnih sindroma. Prirodno i kulturno naslijeđe zaštićeni su dobrim dijelom deklarativno, jer na dnevnoj osnovi se može svjedočiti nepoštivanju mjera zaštite i očuvanja. Tehnološko preusmjerenje postaje golem zadatak i za djelatnike i za profesionalce zbog različitosti njihovih interesa, sukobljavanja i nedostatka suradničkog razumijevanja. Konačno, usklađenje zahtjeva ekonomičnosti i zaštite okoliša, premda se deklarira na svim razinama, posrće na više razina poradi nesposobnosti donošenja pravilnih odluka da se ne ugroze prava sadašnjeg i budućih naraštaja. Sumnja li netko u ova razmatranja, treba samo pratiti hrvatske medije prepune proturječja i ministarska izvješća o stanju i provedbi prostornih planova i planova upravljanja okolišem. Nije li to dostatno, međunarodna teoretska literatura o dobroj i lošoj praksi uvijek je na raspolaganju putem interneta i u znanstvenim knjižnicama (WACHTEL, 1989; DUANNY I DR., 2000.).

U potrazi za novom ravnotežom održivosti pojedini znanstvenici (VEENHOVEN, 2000; KEINER, 2004.), predlažu prijelazno rješenje nazvano "razvojna sposobnost" koje se oslanja na proširenju ideja o evoluciji, blagostanju i naslijeđu, gdje se kao glavna zamisao ističe ostavljanje manje tereta budućim naraštajima u odnosu na dosad naslijeđeni. Stoga postoji potreba za stvaranjem radikalne promjene i smanjenja postojećih teškoća i naslijeđa, prelaskom s gubitka na dobitak. U osnovi, "razvojna sposobnost ispunjava potrebe sadašnje generacije i obogaćuje sposobnost budućih naraštaja da postignu blagostanje zadovoljavanjem svojih potreba oslobođenih naslijeđenih opterećenja" (KEINER, 2004.). Ovaj projekt teži postizanju takvog razvoja koji ne prelazi dostupnu količinu prirodnih izvora unutar evolucijske putanje (Sl. 2.).


Ujedno podržava prirodni oporavak i ozdravljenje od stresa "tako da budući naraštaji zateknu, u razumskim okvirima, netaknut okoliš s dovoljno resursa koji im omogućuju život na isti ili bolji način nego je to danas" (Ibid.: 390). Razumijevajući da bi takva novina iziskivala i

avoided during the winter 2008-2009 gas supply difficulties.

Depopulation is also spreading and acts as hidden threat marking the likelihood of losing critical human mass able to handle conflicting situations. The loss of agricultural and forest land, animal species, water and air pollution are persistent and accelerating. This also corresponds to increased number of human health cases with fatalities and prolonged suffering in the form of cancerogenesis, obesity, psychoses, stresses and post war syndromes. A natural and cultural heritage is protected mostly in declarative sense, because on daily basis one can witness violation of protective and conservative measures. Technology reorientation becomes mammoth task for officials and professional alike, due to their persistent disparate interests, conflicts and lack of co-operative knowledge. Finally, the merger of economics and environment is stumbling at many levels due to often inability to make prudent decisions without compromising the rights of current and future generations. If anyone doubts these observations, they have only to carefully follow Croatian media which is full of controversy and discrepancy and ministerial reporting on the state and art of environmental and spatial planning. If this is not enough to direct a more sustainable future on waste, international literature on theory for both good and bad practices is available through world web and scientific libraries (WACHTEL, 1989; DUANNY ET AL., 2000).

In a search for the new sustainability equilibrium some researchers (VEENHOVEN, 2000; KEINER, 2004) propose intermediate solution called "evolutionability" which rests on broadening ideas of evolution, wellbeing and legacy, where the idea is to leave less burden to future generations than we inherited ourselves. Therefore, there is the need to impose a radical makeover, and alter our current headaches and heritage from burden to gain. In its essence, "evolutionable development meets the needs of the present generation and enhances the ability of future generations to achieve well-being by meeting their needs free of inherited burdens" (KEINER, 2004). This project aims to achieve the development which does not go beyond available quantity of natural resources within evolutionary path (Fig. 2).

It is also supportive to natural rehabilitation and stress recovery, "so that future generations will find a reasonably intact environment with enough resources, which enable them to live in a same or better wealth than we do today" (Ibid: 390). Whilst recognizing that such sustainable novelty would

Put ka razvojnoj sposobnosti <i>Path to the evolutionability</i>	Glavne prednosti razvojne sposobnosti <i>Main evolutionability advantages</i>
	<p>Pomaže u kombiniranju prednosti glavne prizme i dobrog naslijeđa koje podržava: <i>Helps in combining advantages of main prism and good heritage which in contrary supports more:</i></p> <ul style="list-style-type: none"> - Više mogućnosti u životu / <i>Living chances</i> - Manje suprotnosti između naraštaja i bolji ili jednak život / <i>Less generation contrast with better or equal life</i> - Prilagodljivost / <i>Flexibility</i> - Mogućnost proširivanja / <i>Expandability</i> - Sposobnost nastajanja / <i>Evolvability</i>

Slika 2. Razvojna sposobnost

Izvor: Prihvaćeno i preoblikovano prema Keineru (2004.)

Figure 2 Evolutionability

Source: Adopted and re-designed from Keiner (2004)

temeljitu promjenu, pogotovo u krugovima bliskim politici i stručni prostornog planiranja, ovaj koncept upućuje na vidik koji niti ugrožava niti troši osnove opstanka sadašnjeg i budućih naraštaja.

Primjenjivost ideja održivosti u prostornom planiranju

Mnogi istražitelji prepoznali su važnost izmijenjene uloge suvremenoga profesionalca u planiranju (BATEY, 1994; HAGUE, 2001; KELLY, BECKER, 2000; KRIZEK, POWER, 1996; RANDOLPH, 2004; ROSELAND, 2000.). Svakako, time se podrazumijeva usmjeravanje prema primjeni koncepta i tehnika održivog planiranja uz pomoć kojih prostorni planeri trebaju postati vodeća profesionalna snaga u rješavanju razvojnih izazova postojećih i novih naselja. Planeri uvijek moraju imati svoj način razmišljanja i prosuđivanja. Njihov proaktivni i izazovni pristup problemima razvoja i okoliša osnova je njihova postojanja u svijetu ograničenih prirodnih i društvenih resursa. Igra planiranja je mati raspodjele resursa, u kojoj su planeri sa svojim multidisciplinarnim vještinama vrlo korisni. Planeri trebaju shvatiti da ova izmijenjena uloga ne će biti dugotrajna jer mnoge temeljne filozofije koje stoje iza održivosti također čine sastavni dio onoga što se godinama smatra dobrim planiranjem.

Planiranje gradova i prostora kao susljedni pokušaj usmjeravanja njihova budućeg i ponovnog razvoja treba biti oslonjeno na

require a fundamental rethinking especially in political and spatial planning professional circles, this concept does show the vision that neither wastes nor destroys the means of existence current and future generations.

Applicability of sustainability ideas in spatial planning

Many researchers have recognized the importance of the changing role of the contemporary planning professional (BATEY, 1994; HAGUE, 2001; KELLY, BECKER, 2000; KRIZEK, POWER, 1996; RANDOLPH, 2004; ROSELAND, 2000). However, this also needs to move towards application of sustainable planning concepts and techniques by which physical planners should actively be exposed as a leading professional force in solving the developmental challenges of existing and new places. Planners must always have their own way of thinking and judging. Their proactive and provocative approach towards developmental and environmental issues is the basic premise of their existence in the world of limited natural and social resources. The game of planning is a mother of resource distribution, in which planners and their multidisciplinary skills are very useful. Planners should recognize that this changing role won't be a major stretch because many of the fundamental philosophies behind sustainability are also an integral part of what for years has been considered good planning.

Planning of cities and territories as an ongoing attempt to guide their future development and

pretpostavke održivosti i na primjenu pristupa u kojem gradove i gradiće treba razmatrati skupa s njihovim okruženjima sagledavajući ih kao jedinstveni ekosustav. Snaga ovog programa je njegova sposobnost da se gradovi i regije razmatraju holistički, učinkovitom primjenom modela i tehnika planiranja razvijenih da podržavaju "ekološki prihvatljivu promjenu". Premda je ovo bitan korak u pravcu stvaranja različitijih i održivijih urbanih okoliša u postsocijalističkoj Hrvatskoj, još je uvijek upitna sposobnost donositelja odluka da prihvate i razumiju nedostatke postojećih "prostornih obrazaca" i potrebe za njihovim prepravkama na osnovi ekoloških načela i sudioničkog obrazovanja.

Glavne pouke koje treba svladati iz studije održivosti i sličnih ideja očito su početne točke u političkoj i stručnoj sprezi. Koncept razvojne sposobnosti može postati glavno načelo za upravu, gospodarstvo i društvo ako se glavni sudionici probude iz svojih lažnih snova. Prvi pokušaj promicanja ove izazovne zamisli može biti u prostornom planiranju, disciplini koja upravlja prostornim razvojem područja našega sadašnjeg i budućeg življenja i rada. U mnogim zemljama zacrtana je provedba održivog razvoja, pametnog rasta, kao i usklađivanja troškova i zahtjeva svih vrsta. Ovaj zadatak trebao bi biti prednost za hrvatske planere, ako se odluče prestati ponašati poput lutki na koncu i/ili korumpiranih posrednika. Pod njihovim pokroviteljstvom, razni gradski projekti i izbor regija za primjenu evolucijskog razvoja mogli bi biti holistički određeni, a vodeća načela prostornog planiranja mogla bi biti usmjerena prema zamislima razmotrenim u ovom radu. Jednostavne i zastarjele instrumente planiranja, kao što su lokacijska i građevinska dozvola, treba zamijeniti sofisticiranijim provedbenim aparatom kroz uvođenje zakonskih, financijskih, okolišnih, tehnoloških, tržišnih i drugih alata (Tab. 2.). Od svih njih očekuje se da povećaju kapital, da stvaraju bolji i zdraviji okoliš i da potaknu skrivene snage društvenih slojeva koji iščekuju nove vidike.

Trenutno brojne državne strategije utječu na prosperitet isključivo kroz gospodarsku prizmu, dok se ekološka održivost, koja uključuje promjene prirodne i društvene osnove, ne razmatra ozbiljno. U slici današnjeg razvoja prevladavaju gospodarsko oblikovanje i predviđanje urbanog rasta često bez korisnih ekoloških alata. Sukob između stranaka crvenih, zelenih, smeđih i bijelih na jednoj strani, i profitno usmjerenih na drugoj,

redevelopment should rest on sustainability premises, and application of approach where cities and towns should be treated together with their hinterlands and seen as the entire ecosystem. The strength of this agenda is its capacity to treat cities and regions holistically through an effective application of planning models and techniques that have been developed to support "ecologically sustainable change". While this is an essential step in moving toward creating different and more sustainable urban environs in post-socialist Croatia, there is also concern about the ability of decision makers to accept and understand disadvantages of current "spatial patterns" and need for their rectification based on ecological principles and collaborative learning.

The principal lessons to be learned from a study of sustainability and its allied ideas are probably starting points in political and professional cohesion. The concept of evolutionability could become a leading principle for politics, economy, and society if the main stakeholders wake up from their forged dreams. A first attempt of selling this appealing perception could be made to spatial planning, the discipline that manoeuvres the spatial growth of our present and future living and working areas. In many countries it has been assigned to implement sustainable development, smart growth and to balance expenditures and demands of all kinds. This worthy task should also be a prerogative for Croatian planners, if they decide to stop acting as the string-marionettes and/or corruption conduits. Under their auspices, the diversity of city projects and case regions for evolutionable development could be determined holistically, and the guiding principles of spatial planning re-thinking could be oriented towards the ideas discussed in this paper. Simple and old fashioned planning instruments such as a location and building permit should be replaced with more sophisticated implementing apparatus, encompassing variety of legal, financial, environmental, techno-technological, marketing, branding and other tools (Tab. 2). All these are expected in order to increase the capital stocks, create more responsive and reflective environment and engage hidden energy of diverse societal strata that are waiting for additional prospects.

Currently, many national policies are driving prosperity through the economic prism only, where ecological sustainability that includes trends in natural and social capital are not considered seriously. Economic modelling and prediction of urban growth often without sound ecological instruments, are domineering today's development landscape. The battle between parties of reds, greens, browns

Tablica 2. Alati pametnog rasta koji se koriste za nadzor i ograničavanje urbanog širenja
Table 2 Smart growth tools used to prevent and control urban sprawl

<p>Ograničenja i odredbe</p> <ul style="list-style-type: none"> - Ograničenja u izdavanju dozvola za gradnju - Granice urbanog rasta - Zeleni pojasevi oko gradova - Javna rasprava nove izgradnje/razvoja <p>Zoniranje</p> <ul style="list-style-type: none"> - Podrška mješovitim namjenama prostora - Koncentracija prostornog razvoja duž pravaca masovnog prometa - Promicanje stambenih sklopova velikih gustoća <p>Planiranje</p> <ul style="list-style-type: none"> - Ekološko planiranje korištenja zemljišta - Analiza utjecaja na okoliš - Integrirano regionalno planiranje - Nacionalno i međuregionalno planiranje <p>Zaštita</p> <ul style="list-style-type: none"> - Zaštita postojećih slobodnih prostora - Kupnja novih slobodnih prostora - Kupnja razvojnih prava kojim se štite određeni tipovi razvoja na zemljišnim česticama <p>Porezi</p> <ul style="list-style-type: none"> - Porez na zemljište ne na zgrade - Oporezivanje vrijednosti zemljišta prema aktualnom tipu korištenja (npr. šumsko I poljoprivredno) umjesto kao izgrađeno zemljište. <p>Porezne olakšice</p> <ul style="list-style-type: none"> - Za vlasnike koji se legalno slažu da ne dopuste određene tipove izgradnje (konzervacijske olakšice) - Za čišćenje i razvoj zapuštenih gradskih prostora tzv. <i>smeđih polja</i> <p>Oživljavanje i novi razvoj</p> <ul style="list-style-type: none"> - Oživljavanje postojećih naselja i gradova - Izgradnja dobro isplaniranih naselja 	<p>Limits and Regulations</p> <ul style="list-style-type: none"> - Limited building permits - Urban growth boundaries - Green belts around cities - Public review of new development <p>Zoning</p> <ul style="list-style-type: none"> - Encourage mixed use - Concentrate development along mass transportation routes - Promote high-density cluster housing <p>Planning</p> <ul style="list-style-type: none"> - Ecological land-use planning - Environmental impact analysis - Integrated regional planning - State and national planning <p>Protection</p> <ul style="list-style-type: none"> - Preserve existing open space - Buy new open space - Buy development rights that prohibit certain types of development on land parcels <p>Taxes</p> <ul style="list-style-type: none"> - Tax land, not buildings - Tax land on value of actual use (such as forest and agriculture) instead of highest value as developed land <p>Tax relaxation</p> <ul style="list-style-type: none"> - For owners agreeing legally to not allow certain types of development (conservation easements) - For cleaning up and developing abandoned urban sites (brownfields) <p>Revitalization and New Growth</p> <ul style="list-style-type: none"> - Revitalize existing towns and cities - Build well-planned new towns
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Izvor / Source: MILLER (2004)

stalno traje. Što neka strana više koristi praktičnije sredstvo, to ima više izgleda pobijediti ili barem utvrditi jasnu crtu obrane na osnovi okolišnih i društvenih vrijednosti.

Zaključci

Održiva budućnost postsocijalističke Hrvatske ne će doći niti lako niti preko noći. Bit će potrebni izmjena i preoblikovanje obrasca u našim kulturalnim i društveno-gospodarskim vrijednostima i ponašanju koji su sve sličniji vrijednostima posrnuloga zapadnjačkog društva koje ne bi trebale biti isključivi model ovdašnje očekivane sudbine. Sve aktivnija i izmijenjena uloga prostornih planera u oblikovanju i

and whites on one side, and the profit oriented on another side is still on. The more practical tools one has in this battle, the better possibility of winning or at least establishing a clear line of defence of basic "environmental and social values".

Conclusions

Sustainable future of post-socialist Croatia will not come easily and overnight. It will require a transition and paradigm shift in our cultural, behavioral and socio-economic values which are becoming more and more like the attitudes of fallen western society values that should not be always an absolute model for our anticipated destiny. The more active and changing role of physical planners



Slika 3. Kako je daleko EU?

Figure 3 How far is EU?

Izvor / Source: www.news.bbc.co.uk

unapređenju prostora prihvaća da ključ održivosti leži u razlici u percepciji svakodnevnice prepune zapreka. Prostorni planeri kao glavni glasnici održive promjene trebali bi stručno i oštroumno razumjeti i usmjeravati javnost kao i političare kako iznaći zamjenska rješenja za poboljšanje društvenog blagostanja. "Nije uvijek bitno materijalno vlasništvo, već nečije psihološko gospodarenje, njegovo bogatstvo odnosa s ljudima i sloboda od sukoba i ograničenja koji ljude onemogućuju uživati u onom što imaju" (WACHTEL, 1989.). Primjeri "užitaka psihološkog gospodarenja" postaju dio hrvatske svakodnevnice koja je puna političkih, gospodarskih i društvenih neusklađenosti.

Ne tako davno Hrvatska je bila zemlja koja je pripadala socijalističkom svijetu. Poslije ratnih nevolja postala je dosta stabilna zemlja i sada je usmjerena prema EU (Sl. 3.). Promjena njezina gospodarstva s modela samoupravljanja na model slobodne ekonomije donijela je mnoge izazove u manje od 15 godina. Međutim, danas ima dosta znakova gospodarskoga, društvenog i okolišnog slabljenja. Utrka za brzim gospodarskim rastom, zasnovana na zapadnjačkim načelima, izbrisala je neke održive oblike iz ekonomije bivšeg sustava. Taj obratni tijek brzo je prepoznat u urbanim dijelovima ovdašnjega društva, gdje negativni utjecaji sežu gotovo do svakog pojedinca. Takav se trend i dalje nastavlja i donosit će sve više problema ukoliko ne dođe do buđenja iz sna i

in designing and developing spaces and places recognizes that the key to a sustainable shift lies in the difference in perception of every day life which is full of obstacles. Physical planners as frontrunners for sustainable change should professionally and intuitively understand and guide the public as well as politicians on how to sense the alternative solutions for the improvement of societal well being. "What really matters is not always one's material possessions but one's psychological economy, one's richness of human relations and freedom from the conflicts and constrictions that prevent us from enjoying what we have" (WACHTEL, 1989). Examples of "psychological economy enjoyments" are becoming parts of Croatian daily life which is full of clashing political, economical and social discrepancies.

Not long ago, Croatia was one of the countries that belonged to the socialist world. After the war turmoil, it became a pretty stable country and is now heading toward EU accession (Fig. 3). The change of its economy from self-management model to the free economy has brought many challenges in less than 15 years. However, today there is lots of signs of economic, social and environmental decline. The race for fast economic growth based on western principles has melted some sustainable form of the economy from previous system. This retrograde trend is immediately recognized in the urban part of this society, where negative impacts are reaching almost every individual. This trend still continues and it will bring more problems if we don't wake

krivih uvjerenja o našoj snazi (STIPERSKI I DR., 2005.) u odnosu na države Zapadnog Balkana. Jedino s bogatim, obrazovanim i obučanim ljudima mogu se zaustaviti negativne posljedice ugrožene matrice gospodarstva, kao i pragova i nosivih kapaciteta urbanih i ruralnih prostora.

Održivo planiranje ekogradova i ekozona zahtijeva dosad neostvareni i istodobni naglasak na učinkovito korištenje prostora, zasnovano na minimiziranju trošenja osnovnoga prirodnog kapitala, povećanju društvenog kapitala i na mobiliziranju građana i mještana, njihovih udruga i vlasti prema ovim vrijednostima. Ovaj sinergetski pristup omogućava da kapital bude čišći, zdraviji i jeftiniji; da ima veću dostupnost i koheziju; da se više oslanja sam na sebe u zahtjevima za hranom i energijom i da pruža veću gospodarsku sigurnost nego sada. Stoga, primjena održivosti ne će samo "održati" kakvoću življenja već će ju dramatično poboljšati (ROSELAND, 2000.). Primjeri naselja poput Curitiba (Brazil), Waitakerea (Novi Zeland), Tapiola (Finska), Portlanda, Davis i Chattanooga (USA), potvrđuju da "održivo planiranje" treba biti cilj i u budućem hrvatskom planiranju, što nije samo futuristička ideja nego treba obuhvaćati sljedeće (MILLER, 2004; CAVRIĆ, 2005.):

- Sprečavanje zagađenja/onečišćenja i smanjenje svih vrsta otpada
- Upotrebu energije i izvora djelotvorno i na način koji osigurava dovoljno domaćih i stranih zaliha
- Recikliranje i ponovnu upotrebu najmanje 60% ukupnoga čvrstog otpada
- Upotrebu solarne i druge lokalno dostupne obnovljive energije i izvora (npr., prirodni plin, voda, bio-plin, vjetar)
- Podržavanje bioraznolikosti životinjskih vrsta i biljaka
- Zaštitu zemljišta i vlasništva od kupnji stranaca bez nadzora
- Upotrebu gnojiva za obnavljanje i obogaćenje tla
- Upotrebu strojeva na osnovi solarne energije (npr., javni strojevi, generatori, signalizacija) i električnih uređaja dugog vijeka trajanja
- Upotrebu instrumenata mjerenja okoliša u kombinaciji s GIS i drugim naprednim sustavima nadzora i upravljanja
- Hodanje ili vožnju biciklom do većine mjesta, uključujući mjesto rada, do kuće, škole, kulturnih i športskih objekata

up from fallen dreams and false notions about our greatness (STIPERSKI ET AL., 2005) amongst western Balkan nations. Only with wealthy, educated and knowledgeable people we can curb negative consequences of endangered economic matrix, thresholds and carrying capacities of our urban and rural areas.

Sustainable planning of eco-cities and eco-zones require unprecedented and simultaneous emphasis on the efficient use of its spaces, based on minimizing the consumption of essential natural capital, on multiplying social capital, and on mobilizing citizens and villagers, their associations and governments toward these ends. This synergistic approach will enable capital to be cleaner, healthier, and less expensive; to have greater accessibility and cohesion; and to be more self-reliant in energy and food demand, and economic security than it is now. Sustainable practices will not, therefore, merely "sustain" the quality of our lives; they will dramatically improve it (ROSELAND, 2000). The case examples of places like Curitiba (Brazil), Waitakere (New Zealand), Tapiola (Finland), Portland, Davis and Chattanooga (USA), confirm that "sustainable planning", which should be the target in future Croatian planning is not a futuristic notion, and it should encompass the following (MILLER, 2004; CAVRIĆ, 2005):

- preventing pollution and reducing all sorts of waste
- using energy and matter resources efficiently and securing reliable domestic and foreign supplies
- recycling and reusing at least 60% of all municipal solid waste
- using solar and other locally available (e.g. natural gas, water, bio-gas, wind) renewable energy resources
- encouraging biodiversity of animal species and plants
- protecting lands and properties from uncontrolled purchase by foreigners
- using composting to help create soil recovery and enrichment
- using solar-powered living machines (e.g. public machines, generators, displays, signalization) and life long electrical appliances
- using environmental measurement instruments in combination with GIS and other advanced monitoring controlling and management systems.
- walk or bike to most places, including work, home, school, cultural and sports amenities

- Upotrebu sredstava transporta koja manje onečišćuju poput tramvaja, trolejbusa
- Zahtijevanje da sva javna mjesta, zgrade, vozila, i uređaji ispunjavaju standarde visoke učinkovitosti upotrebe energije
- Sadnju stabala i drugog zelenila koje odgovara lokalnoj klimi i tlu
- Uvođenje malih organskih vrtova i raznih vrsta raslinja koje ispunjava kriterij različitosti
- Smanjenje onečišćenja, buke i erozije tla korištenjem građevinskih i tehnoloških metoda
- Osiguravanje zaliha za ograničeni urbani život divljači
- Čišćenje i obnavljanje zagađenih napuštenih područja, industrijskih zona, i drugih "smeđih" područja i mjesta
- Zaštitu urbanih šuma, zelenih površina, vodenih površina i gospodarstava od urbanog širenja
- Ugradnju politike i instrumenata urbane obnove, ponovnog razvoja, oživljavanja, restauracije, očuvanja i zaštite
- Zaštitu područja i značajki od posebne prirodne, kulturne, povijesne, arheološke i arhitektonske važnosti
- Zaštitu i očuvanje obalnih i drugih područja od izgradnje apartmana i pokrivanja betonom bez nadzora
- Stvaranje hrane na organskih farmama, solarnih staklenika, vrtova i malih vrtova na zgradama

Navedeno potiče planere da prihvate izmijenjenu i jaču ulogu u planiranju budućnosti hrvatskih gradova i sela. Većina ljudi smatra da je uloga planera uvijek bila osiguravati održiviju budućnost (npr., svrsishodno razmjешtanje resursa, smanjivanje otpada, pojeftinjenje i poboljšanje prometa). Cijeneći to, održivost može zahtijevati od novih naraštaja planera da potvrde ono što su ljudi mislili da je njihov posao u pomaganju drugima u ostvarenju željene budućnosti. Ono što može biti novo ili iznova otkriveno, jest obveza širenja vremenskog horizonta preko predvidljive budućnosti i objašnjenja mogućih raspoloživih izlaza i izgleda. Budući da su članovi struke koja se posvećuje stvaranju humanijih i ugodnijih zajednica, država, naroda (stoga i svijeta), profesionalna odgovornost u planiranju jest osigurati da im vizija uključuje ne samo suvremene naraštaje već isto tako i buduće generacije (KRIZEK, POWER, 1996.).

Ljudi koji žele planirati i živjeti u održivim područjima trebaju ozbiljno razmotriti vizijsku

- use low-polluting mass transit like trams, trolleybuses, light rail,
- requiring that all public spaces, buildings, vehicles, and appliances meet high energy efficiency standards
- planting the trees and other greenery that is adapted to the local climate and soils only
- introducing small organic gardens and a variety of plants adapted to bio diversity criteria
- reducing pollution, noise, and soil erosion by engineering and technological methods
- securing supply for limited urban wildlife habitats
- cleaning and restoring polluted and abandoned plots, industrial sites, landfills and other brown field areas and sites
- preserving urban forests, grasslands, wetlands, and farms from urban sprawl
- implementing policies and instruments of urban renewal, redevelopment, revitalization, restoration, conservation and protection
- preserving areas and landmarks of special natural, cultural, historical, archaeological and architectural values
- preserving and protecting coastal and other areas from uncontrolled apartments developments and land covering with concrete
- producing food from organic farms, solar greenhouses, community gardens, and small gardens on rooftops, in yards, and in window boxes

The above words urge planners to assume a changing and stronger role in planning the future of Croatian town and country side. In many people's minds, the role of the planner has always been about securing a more sustainable future (i.e., allocating resources wisely, reducing waste, making transport cheaper, easier, and better). In this respect, sustainability may require new generations of planners to emphasize what people thought they should have been doing all along helping others arrive at the future they desire. What may be new, or rediscovered, is the commitment to extend the time horizon beyond a reasonably predictable future and to clarify possible outcomes and opportunities that are available. As members of a profession dedicated to making communities, states, nations (and for that matter, the world) more liveable and humane, it is the planning profession's responsibility to ensure that their vision includes not just the current generation but future generations as well (KRIZEK, POWER, 1996).

izjavu Lewisa Mumforda (1961.) u kojoj je on prije više od tri desetljeća savjetovao da se mora "zaboraviti automobil i da treba graditi gradove i druge prostore za ljubavnike i prijatelje". U svrhu postizanja tako visokog ideala, naši planeri imaju cijeli niz primjenjivih pomagala. Neki od alata planiranja spomenuti u ovom članku tek su dio mogućega planerskog arsenala i nisu iscrpivi. Većina njih može se preoblikovati i uklapati u lokalnu zbilju. Mogu imati posebniji i iskustveniji pristup i motrište djelovanja, kao i način na koji mogu pomoći podržavajući praksu održivog planiranja. Njihov izbor u tablici 2. služi samo kao ilustracija, ali primijenjeni u praksi, mogu imati katalitički učinak na druge interdisciplinarne sudionike uključene u stvaranje odgovarajućih okoliša. To zahtijeva snažnu reformu znanja planera i donositelja odluka, kao i viđenje javnosti o poslovima planiranja.

Parafrazirajući riječi Johna Ormsbeea Simonds (1997.), može se reći da ljudi u većini privlačnih prostora Hrvatske i dalje trebaju nastaviti živjeti i raditi u prijateljskom okolišu. Oni trebaju uživati u zalascima sunca, plavom nebu i plavom moru i zelenilu planina. Oni trebaju odgajati svoju djecu i pričati im priče svojih djedova. Trebaju biti svjesni svojih prava i odgovornosti da održavaju zemlju bogatu prostornim različitostima i posebitostima prirodnog okoliša. Svaka od njih treba biti pomno isplanirana tako da najbolje izrazi svoju individualnu funkciju; strukture u kojima se svatko može sigurno i s užitkom kretati i u koje može biti uključen. Građanstvo ove "male sredozemne oaze" treba imati zdravlje, mobilnost i praktičnost na razini o kojoj se samo može sanjati. Također treba postojati i odgovarajući red. Ne neki antiseptički, stilski, ili grandiozni red ograničenih geometrijskih oblika ili velike praznine, već funkcionalni red koji će držati mjesta skupa i činiti ih tako živima poput žive stanice, lista, stabla. Prilagođeni, povezujući i ugodan red koji dopušta omanje omaške, fleksibilan je i objedinjuje najbolje od starog i novog svijeta. Red koji je blizak strukturama, stvarima i djelatnostima što priuštaju zanimanje, različitost, iznenađenje i suprotnost, i koji ima snagu dirnuti u srce. Danas i u budućnosti, ljudi u Hrvatskoj trebaju svoju zemlju i naselja kao izvor nadahnuća, poticaja, osvježenja, ljepote i zadovoljstva. Oni također moraju imati, kratko rečeno, zdravo podneblje i čist urbani i prirodni okoliš koji omogućuju cjelovito ispunjenje života.

People who want to plan and live in sustainable areas should take seriously the visionary statement of Lewis Mumford (1961) in which he advised more than three decades ago that we have to "forget the damned motor car and build cities and other spaces for lovers and friends." In reaching such a lofty ideal, our planners have a whole fan of applicable tools. Some of planning instruments mentioned in this article are only a part of potential planners' arsenal and they are not exhausted. Most of them can be modified to the local context. They can have more specific and indigenous approach and the scope, and the way in which they can help supporting sustainable development practices. Their selection in Table 2 is given for an illustrative purpose, but if they are practically implemented, they can have the catalytic effect on other interdisciplinary stakeholders involved in creating responsive environments. This requires powerful reform in planners and decision makers' knowledge, as well as in public perception of the planning profession.

Paraphrasing the words of John Ormsbee Simonds (1997), we can say that the people in many attractive Croatian areas have to continue to live and work in friendly environments. They should enjoy their sunsets, blue skies and blue sea and mountain's green. They have to raise their children and tell them the stories of grand-grand fathers. They have to be aware of their rights and responsibilities and to keep the country rich in a variety of its spaces and environmental settings. Each of them should be planned with sensitivity to best express and accommodate their individual function; patterns through which everyone may move with safety and with pleasure and in which they may congregate. Citizenry of this "*petite Mediterranean oasis*" must have health, convenience, and mobility on scales as yet undreamed of. There must be also an order. Not an antiseptic, stylish, or grandiose order of contrived geometric dullness or sweeping emptiness, but a functional order that will hold the places together and make them work in order as organic as that of the living cell, the leaf, and the tree. A sensed cohesive and satisfying order that permits the happy accident, is flexible, and combines the best of the old with the best of the new. An order that is sympathetic to those structures, things, and activities that afford interest, variety, surprise, and contrast and that have the power to charm the heart. Today and in the future, the people of Croatia need their land and settlements as a source of inspiration, stimulation, refreshment, beauty, and delight. They also must have, in short, a salubrious, pollution-free urban and natural environment conducive to the living of the whole, full life.

LITERATURA / LITERATURE

- ABERLY, D., ed. (1994): *Futures By Design: The Practice of Ecological Planning*, New Society Publishers, Gabriola Island, British Columbia.
- BARTON H., TSOROU C. (2000): *Healthy Urban Planning*, SPON Press.
- BATEY, P. (1994): *The changing face of specialization*, in Planning Week education special, A Special Supplement on careers and Education, London.
- BERG, R., ET AL., (1989): *A Green City Program for San Francisco Bay Area Cities and Towns*, Planet Drum Books, San Francisco, CA.
- BOARNET, M. G., GREENWALD, M., McMILLAN, T. (2003): *Planning and health promotion: Quantifying links between land use, walking, and physical activity*. Unpublished manuscript. Department of Planning, Policy, and Design, University of California, Irvine.
- BOOKCHIN, M. (1987): *The Rise of Urbanization and the Decline of Citizenship*, Sierra Club, San Francisco, CA.
- BRAND, R. (2002): *Smart Technologies Versus Heroic Choices*, (available at www.planetizen.com/node/69#2)
- CALLICOTT, J. (1982): *Traditional American Indian and Western European attitudes toward nature: an overview*, Environmental Ethics, 4, 293-318.
- CAPRA, R., SPRETNAK, C. (1984): *Green Politics: The Global Promise*, E.P. Dutton, New York.
- CAVRIĆ, B. (2005): *Summary of Interview Protocol with planning professionals, land developers, and academicians*, June-July 2005, Zagreb.
- CAVRIĆ, B., Nedović – Budić, Z., (2007): *Urban development, legislation, and planning in post-socialist Zagreb*. 373-398, in Stanilov, K. (ed.) (2007) *The Post-Socialist City – Urban Form and Space Transformations in Central and eastern Europe after Socialism*, Springer, Netherlands.
- CAVRIĆ, B., TOPLEK, S., ŠILJEG, A. (2008): *Participatory measurements of sustainable urban development and quality of life in post-socialist Zadar (Croatia)*, SPATIUM, International Review, 15, 53-76.
- DAVOUDI, S. (2000): *Sustainability: a new vision for the British planning system*, Planning Perspectives, 15, 123-137.
- Dodge, J. (1981): *Living by Life: Some bio-regional Theory and Practice*, Co-Evolution Quarterly, 32, 6-12.
- DUANNY, A., PLATER-ZYBERK, E., SPECK, J. (2000): *Suburban Nation: The Rise of Sprawl and the Decline of American Dream*, North Point Press.
- FOSTER, T.W. (1987): *The Taoists and the Amish kindred expressions of eco-anarchism*, The Ecologist, 17/1, 9-14.
- FRIEDMAN, J., (1987): *Planning in the Planning Domain*, Princeton University Press. Princeton.
- GLASBY, G. (2003): *Sustainable Development: The need for a New Paradigm*. Environment, Development and Sustainability, 4, 333-345.
- GREED, C. (2000): *Introducing Planning*, The Athlone Press, New Jersey.
- HAGUE, C. (2001): *Planning and Planning Education under Conditions of Globalization*. Comment. Planning Theory & Practice, 2/3, 375-376.
- Harpham T., Allison M. (2000): *Health, Governance and the Environment*, in Pugh C. (ed.), 2000. Sustainable Cities in Developing Countries, EARTHSCAN, 115-134.
- IDRC - International Development Research Centre (1997): *Assessment Tools*, Ottawa.
- KEINER, M. et. al., ed. (2004): *From understanding to action: Sustainable urban Development in Medium-Sized Cities in Africa and Latin America*, Springer.
- KEINER, M. (2004): *Re-emphasizing sustainable development – The concept of "Evolutionability" On living chances, equity, and good heritage*. Environment, Development and Sustainability, 6, 379-392.

- KEINER, M. (2006): *Advancing Sustainable Development and its Implementation*, in M. Keiner (ed.): *The Future of Sustainability*, Springer, 211-229.
- KELLY, E. D., BECKER, B. (2000): *Community Planning – An Introduction to the Comprehensive Plan*, Island Press.
- KRIZEK K. J., POWER J. (1996): *A Planners Guide to Sustainable Development*, PAS Report, American Planning Association, 1-51.
- LETICA, S. (2007): *Let iznad kukavičjeg gnezda (One Flew over the Cuckoo's Nest)*, Naklada Jesenski i Turk, Zagreb
- LEVY, M. J. (2003): *Contemporary Urban Planning*, Prentice Hall, New York
- MARINOVIĆ – UZELAC, A. (2001): *Prostorno planiranje (Spatial Planning)*, DOM Svijet, Zagreb.
- MARCUSE, P. (1998): *Sustainability is not enough*, *Environment and Urbanization* 10/2, 103-111.
- MCMANUS, P., HAUGHTON, G. (2006): *Planning with ecological footprints: a sympathetic critique of theory and practice*, *Environment and Urbanization*, 18/1, 113-127.
- MEADOWS, D. H. (1995): *It is too late to achieve sustainable development, now let us strive for survivable development*, in S. Murai (ed.): *Towards Global Planning of Sustainable Use of the Earth – Development of Global Eco-engineering*, Amsterdam, 359-374.
- MUMFORD, L. (1961): *The City in History: Its Origins, Its Transformations, and Its Prospects*, Harcourt, Brace & World, New York.
- MILLER T. G., JR. (2004): *Living in the Environment*, Thomson Brooks/Cole Inc.
- NEDOVIĆ – BUDIĆ, Z., CAVRIĆ, B. (2006): *Waves of planning: a framework for studying the evolution of planning systems and empirical insights from Serbia and Montenegro*, *Planning Perspectives*, 21, 393-425.
- RANDOLPH, J. (2004): *Environmental Land use Planning and Management*. Island Press.
- RATCLIFE, J. (1993): *An Introduction to Town and Country Planning*, Eight Impression, UCL Press, London.
- ROSELAND, M. (2000): *Sustainable community development: integrating environmental, economic and social objective*, *Progress in Planning*, 54, 73-132.
- SALE, K. (1985): *Dwellers in the Land: The Bioregional Vision*, Sierra Club, San Francisco
- Schumacher, E.F. (1973): *Small is Beautiful: A Study of Economics as if People Mattered*, Harper & Row, New York.
- SEREGELDIN, I. (1995): *Promoting sustainable development – toward a new paradigm*, in Seregeldin I., Steer A. (eds.), "Valuing the Environment", *Proceedings of the first annual Conference on Environmentally Sustainable Development*, Washington D.C., World Bank, 13-21.
- SIMONDS, J. O. (1997): *Landscape Architecture*, McGraw-Hill.
- SMITH, E. J. (1989): *A Perspective from a Nuu-chah-nulth on Planning Sustainable Communities*, in: Rees, W.E. (Ed.) *Planning for Sustainable Development: A Resource Book*, UBC Centre for Human Settlements, Vancouver, 127-129.
- STENBERG, J. (2001): *Bridging gaps – sustainable development and local democracy processes*, Gothenburg.
- STIPERSKI, Z., YAMAMOTO, Y., NJAVRO, Đ. (2005): *Samurai and Knight – How Japan Succeeded in its Economic Development – The Croatian Road to Success*, Merdijani – Japanese Centre at Zagreb School of Economic and Management, Samobor.
- SWIFT, R. (1987): *What if the greens achieved power?*, *Utne Reader*, 23, 32-33.
- TOKAR, B. (1987). *The Green alternative: Creating an ecological future*. San Pedro, CA: R. & E. Miles.
- VEENHOVEN, R. (2000): *Well-being in the welfare state: level not higher, distribution not more equitable*, *Journal of Comparative Policy Analysis*, 2, 91-125.
- WACHTEL, P. (1989): *The Poverty of Affluence: A Psychological Portrait of the American way of Life*, New Society Publishers, Gabriola Island, BC.

WACKERNAGEL, M., REES, W. (1996): *Our Ecological Footprint: Reducing Human Impact on the Earth*, New Society Publishers, Gabriola Island, British Columbia.

WCED - World Commission on Environment and Development (1987): *Our Common Future*, Oxford University Press, New York.

WorldChanging (2008): available at <http://www.worldchanging.com/archives/009154.html>

World Health Organisation, (WHO), (1986): *Health and Welfare Canada, and the Canadian public health association*, Ottawa Charter for Health Promotion. Canadian Journal of Public Health 77, 425-427.

www.news.bbc.co.uk