

URBAN ENERGY



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Architektury i Ochrony Zabytków
Urzędu Miejskiego w Gdańsku**

URBAN ENERGY

**Praca zbiorowa pod redakcją
Izabeli M. Burda, Alicji Kopec, Gabrieli Rembarz**

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Publikacja jest podsumowaniem wydarzeń, które wpisane zostały w działania rewitalizacyjne prowadzone w obrębie dzielnicy Dolne Miasto w Gdańsku.

Przybliżając sytuację tego miejsca oraz planowane przedsięwzięcia, stanowi jednocześnie zbiór refleksji odnoszących się do zagadnienia szeroko rozumianej „energii miasta”, przedstawionych w postaci 26 artykułów oraz efektów międzynarodowych warsztatów studenckich zorganizowanych w 2010 roku przez:

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Architektury i Ochrony Zabytków
Urzędu Miejskiego w Gdańsku



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CZEŚĆ III

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WSTĘP

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Dolne Miasto ze swoją bogatą historią, różnorodnością form zagospodarowania terenu i zabudowy jest miejscem wyjątkowym nie tylko w skali całego miasta, ale i regionu. Bez wahania wskazać można wiele atutów tej dzielnicy. O jej atrakcyjności w dużej mierze decyduje obecność autentycznej tkanki historycznej oraz terenów rekreacyjnych, których ważną część stanowią dawne bastiony i wody Nowej Motławy. Nie jest to jednak obszar pozbawiony problemów. Ich nagromadzenie przyczyniło się do podjęcia decyzji o przygotowaniu programu rewitalizacji dzielnicy. Co istotne, zbudowano go w oparciu o trzy filary: historię, sztukę i rekreację. Stanowią one o ogromnym potencjale tego miejsca i jego szeroko rozumianej energii.

Do wyboru Dolnego Miasta na miejsce i przedmiot Międzynarodowych Warsztatów Studenckich „European Urban Energy Box” - „Europejska Skrzynka Energii Miasta” przyczyniło się zatem wiele czynników. Warsztaty te wpisały się znakomicie ze swoją problematyką w zapoczątkowany w 2004 roku proces rewitalizacji. Zadaniem uczestników była identyfikacja występujących w obrębie dzielnicy problemów i wskazanie możliwych rozwiązań, które przyczynią się do poprawy zastanej sytuacji. Rozpatrując problematykę energii miasta w różnych ujęciach, studenci wzięli pod uwagę kwestie takie jak: społeczność lokalna, sztuka, dziedzictwo kulturowe, mobilność, zamieszkiwanie, technika, natura, zasoby. Pracując w kilkusobowych zespołach zaproponowali konkretne działania, które zostały zaprezentowane w formie wykonanych w trakcie warsztatów opracowań.

Szeroko rozumiana energia miasta jest przedmiotem rozważań przedstawicieli różnych dziedzin nauki. Cieszy się także zainteresowaniem młodych architektów i urbanistów. W trakcie debaty poświęconej temu zagadnieniu próbowali oni odpowiedzieć na pytanie: czym jest i jak można wykorzystać „energię miasta” przy rozwiązywaniu współczesnych problemów miejskiej polityki przestrzennej.

Gdańsk, 2010 r.

CZEŚĆ I

ENERGIA DOLNEGO MIASTA

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Gdański program rewitalizacji

Gdańsk, stolica województwa pomorskiego, jest największym ośrodkiem regionu, zamieszkiwanym przez 460.500 osób¹. Zajmując obszar o powierzchni 262 km², charakteryzuje się bogactwem form ukształtowania terenu oraz różnorodnością sposobów jego zagospodarowania. Obecność wielu obiektów zabytkowych oraz szeroka oferta kulturalna, sprawia, że miasto jest miejscem o wysokiej atrakcyjności turystycznej. Jako regionalne centrum gospodarcze, cieszy się również zainteresowaniem inwestorów².

Charakterystyczny dla Gdańska nierównomierny rozwój jego poszczególnych obszarów jest aktualnie jednym z ważniejszych problemów. W obrębie miasta znajduje się bowiem wiele takich miejsc, które w wyniku przemian np. gospodarczych, czy demograficznych utraciły pełnią wcześniej funkcję bądź swoje pierwotne znaczenie. Zjawisko to przyniosło w konsekwencji zagrożenie degradacją sporych fragmentów miasta.

Znaczny stopień dekapitalizacji zabudowy, zdewastowana przestrzeń publiczna oraz występujące patologie społeczne skłoniły do podjęcia działań rewitalizacyjnych w obrębie zróżnicowanej w Gdańsku tkanki miejskiej. Zdecydowano o tym już w roku 2004, tworząc „Program Rewitalizacji Obszarów Zdegradowanych w Gdańsku - Lokalny Program Rewitalizacji”, który został zatwierdzony Uchwałą Nr XXIII/689/04 Rady Miasta Gdańska z dnia 29 kwietnia 2004 roku (zaktualizowany w 2010 r.). Już wówczas Dolne Miasto wskazane zostało jako jeden z obszarów problemowych, które wymagają interwencji w pierwszej kolejności. Założono konieczność podjęcia prac o różnym charakterze, z zakresu planowania przestrzennego, budownictwa, ekonomii i polityki społecznej.

Stawiając za cel aktywizację społeczną i gospodarczą zdegradowanych obszarów miejskich oraz podnoszenie ich atrakcyjności, realizowane są liczne projekty. Ich koordynacją zajmuje się Referat Rewitalizacji utworzony w roku 2008 w Wydziale Urbanistyki, Architektury i Ochrony Zabytków Urzędu Miejskiego w Gdańsku.

¹ Stan ludności w gminach w dniu 31.12.2011 r. - wyniki spisu ludności i mieszkań 2011 r. - bilans opracowany w oparciu o wyniki NSP'2011.

² Potwierdzeniem tego jest liczba zarejestrowanych w mieście przedsiębiorstw - ponad 60.000. W roku 2008 aktywnych zawodowo było 139 866 mieszkańców miasta, z czego w sektorze prywatnym zatrudnionych było 64 168 osób. W ostatnim dniu października 2009 r. bez pracy pozostawało 4,2% gdańszczan w wieku produkcyjnym.

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Dolne Miasto - wyjątkowa dzielnica Gdańska

Dolne Miasto, zamieszkiwane przez blisko 6 tysięcy osób¹, stanowi południowo-wschodnią część Śródmieścia Gdańska. Położone na terenie wyniesionym zaledwie od 1 do 3 metrów nad poziom morza, zajmuje powierzchnię niespełna 62 hektarów. W wyniku zaistniałych przemian społeczno-gospodarczych drugiej połowy XX wieku, znalazło się wśród zdecydowanie wolniej rozwijających się fragmentów miasta. Dzielnica ta, włączona w granice Gdańska w XVII wieku jeszcze przed wybuchem II wojny światowej tętniła życiem. Choć czas ten przetrwała bez większych zniszczeń, to późniejsze lata zaniedbań przyczyniły się do daleko posuniętej degradacji. Pomimo, iż jej wizerunek mocno ucierpiał, do dziś zachowała swój wyjątkowy charakter. Wciąż widoczne są ślady dawnej świetności, przypadającej na okres XIX i początek XX wieku. W tym właśnie czasie, pomiędzy ciągiem XVII-wiecznych bastionów a Nową Motławą, ukształtowała się struktura dzielnicy. Już wówczas był to obszar dość intensywnie zabudowany, charakteryzujący się obecnością okazałych kamienic mieszczańskich oraz obiektów o funkcji przemysłowej.

Istotne dla ukształtowania terenu Dolnego Miasta było przekopanie koryta rzeki Nowej Motławy w roku 1576. Ostateczny swój kształt dzielnica uzyskała natomiast w momencie zakończenia budowy fortyfikacji miejskich, co miało miejsce w roku 1638. Ważnym przedsięwzięciem w obrębie tego obszaru była realizacja układu kanałów, przeprowadzona w latach 1687-1700 na podstawie planów autorstwa Georga Telliora. Realizacja projektu sporządzonego w roku 1650, miała zapewnić osuszenie położonego nisko terenu poprzez wykopanie 4 kanałów poprzecznych i 3 równoległych do Nowej Motławy. Następnie, wraz z osuszaniem gruntów, kanały zaczęto sukcesywnie zasypywać. Uczyniono tak z większością do roku 1843, obsadzając je dwoma rzędami drzew. Proces ten zakończono ostatecznie w 1871 roku po uruchomieniu kanalizacji miejskiej. Układ dawnych kanałów przekształcono wówczas w siatkę ulic, zachowaną do chwili obecnej.

Zabudowę i zasiedlenie obszaru, począwszy od 1638 roku, realizowano etapami wyznaczanymi przez kolejne wojny. Na osuszonych terenach, chronionych za pomocą miejskich fortyfikacji, osiedlali się głównie mieszkańcy spalonych przedmieść. Wyjątkiem był kwartał ograniczony ulicami Kieturakisa, Łąkową, Reduta Miś i nieistniejącą już Rosen Gasse, który w XVIII wieku zajmowała letnia rezydencja rodziny Uphagenów. Do dziś zachował się z tych czasów, zbudowany około 1800 roku klasycystyczny dwór stojący przy skrzyżowaniu ulic Kietura-

¹ Według danych z roku 2008, dzielnicę zamieszkiwało wówczas 5.868 osób.

kisa i Łąkowej. Intensywny rozwój dzielnicy nastąpił jednak dopiero w drugiej połowie wieku XIX². Na przełomie XIX i XX wieku, przede wszystkim wzdłuż ulicy Łąkowej, wzniesiono okazałe kamienice o bogato zdobionych elewacjach. Ważnym obiektem w przestrzeni dzielnicy był powstały w połowie dziewiętnastego wieku przy ulicy Kieturakisa szpital katolicki. W roku 1857 wybudowano przy nim neogotycki kościół, który początkowo funkcjonował jako przyszpitalna kaplica³. W latach 1874-76, przy ulicy Dobrej zrealizowano pierwsze budynki mieszkalne Fundacji dr Abbega⁴. Następnie, w 1880 roku, uruchomiono tramwaj konny, a pięć lat później, przy ulicy Radnej, powstała zajezdnia. W latach 1895-96 linia tramwajowa została zelektryfikowana, a przez ulice Toruńską i Żabi Kruk, do Targu Rybnego poprowadzono kolejną trasę tramwaju. Przy ulicy Śluza, w roku 1901, u jej zbiegu z ulicą Jałmużniczą, powstał neoromański budynek gimnazjum. Z kolei u zbiegu z ulicą Jaskółczą, cztery lata później, w podobnym stylu architektonicznym, wybudowano łaźnię miejską. Siedziba gimnazjum pełni swoją funkcję do dziś, natomiast budynek dawnej łaźni został zaadaptowany na potrzeby Centrum Sztuki Współczesnej „Łaźnia”.

Należy podkreślić, iż czas intensywnego rozwoju Dolnego Miasta nadszedł wraz z pojawieniem się licznych zakładów przemysłowych. W przestrzeni dzielnicy usytuowano rafinerię cukru, olejarnię, odlewnię żeliwa, fabrykę tytoniu oraz warsztaty artyleryjskie - późniejszą Fabryka Opakowań Blaszanych. W momencie utworzenia fabryki karabinów, w roku 1856, dzielnicę zaczęto nazywać Miastem Fabryk (*niem. Fabrikstadt*).

Po upływie trudnego czasu wojny, II połowa XX wieku przyniosła realizację kilku punktowych budynków wielorodzinnych z wielkiej płyty, silnie kontrastujących z wcześniej wzniesioną zabudową. Z kolei, w latach 90. XX wieku zlikwidowano trasę tramwajową przebiegającą przez główny ciąg komunikacyjny dzielnicy - ulicę Łąkową⁵. Wraz z tą decyzją oraz z nadaniem nowego przebiegu drodze krajowej nr 7, związaną z budową Podwała Przedmiejskiego, dzielnica została odcięta od pozostałych części Śródmieścia. Mimo że od Głównego Miasta i ulicy Długiej dzieli ją niespełna kilometr, a zatem zaledwie odległość, którą można pokonać pieszo w czasie 15 minut, rzadko bywała celem odwiedzin turystów. Co więcej, trudną sytuację Dolnego Miasta pogłębiał przez lata szereg występujących równocześnie rozmaitych problemów.

Aktualnie jedną z ważnych kwestii problemowych jest zły stan infrastruktury drogowej. Sytuacja ta dotyczy wszystkich ulic dzielnicy i wpływa negatywnie na sprawność połączeń komunikacyjnych. Oprócz tego, znacznie obniża walory

² Gdańsk, jego dzieje i kultura, pod red. F. Mamuszki, Warszawa, Arkady, 1969, s. 138.

³ Obecnie kościół pełni funkcję kościoła parafialnego p.w. Niepokalanego Poczęcia NMP.

⁴ Pozostałość po założeniu stanowią budynki o cechach stylu charakterystycznego dla przedwojennego budownictwa społecznego, usytuowane przy ulicy Zielonej, Wierzbowej i Polnej oraz zabudowa kolonijna na bastionie Królik.

⁵ Tory tramwajowe w pasach drogowych pozostały, natomiast zajezdnia zlokalizowana w południowej części dzielnicy wykorzystywana jest obecnie jako parking.

estetyczne przestrzeni publicznych, decydując tym samym o poziomie jakości życia mieszkańców. Dotkliwy jest także zły stan infrastruktury wodociągowej, kanalizacji sanitarnej i deszczowej. Wszystko to powoduje poważne zagrożenia dla zabytkowej tkanki mieszkaniowej. Dodatkową uciążliwość przynoszą powtarzające się awarie tych sieci. O stanie dzielnicy decyduje również trudna sytuacja społeczno-ekonomiczna. Obserwować można stale pogarszające się wskaźniki dotyczące bezrobocia i poziomu ubóstwa społeczności lokalnej. Problemy te sprawiły, że Dolne Miasto uznano w konsekwencji za obszar o niskiej atrakcyjności inwestycyjnej i turystycznej. Ponadto, zaistniałe warunki dość długo nie zachęcały do wyboru tej dzielnicy na miejsce zamieszkania.

Przedsięwzięcia ostatnich dwóch dekad sprawiają jednak, że sytuacja Dolnego Miasta zaczyna się zmieniać. Już od 1992 roku, w budynku dawnej Łaźni odbywają się wydarzenia o charakterze artystycznym. W 1998 roku, w obiekcie tym utworzono Centrum Sztuki Współczesnej „Łaźnia”, które stało się miejscem organizacji licznych wystaw i warsztatów. W działalności tej instytucji niezwykle ważną rolę pełni lokalna społeczność. Dużym zainteresowaniem cieszą się warsztaty plastyczne, aktorskie czy zabawy plenerowe. Dla zwolenników aktywnego spędzania wolnego czasu w niewielkiej odległości od miejsca zamieszkania, doskonałym miejscem stał się obszar w rejonie Optywu Motławy - „Gdańskie Planty”. W 2003 roku zachowany fragment zabytkowych fortyfikacji ziemnowodnych poddano udanemu procesowi rewaloryzacji, uzyskując nową jakość zdewastowanej przestrzeni⁶. W ramach realizacji projektu odtworzono historyczną formę terenu, uzupełniono nasadzenia drzew i krzewów. Powstało 8 kilometrów alejek spacerowo-rowerowych, utworzono punkty widokowe oraz place wypoczynkowe. Za sprawą widoków panoramy miasta, roztaczających się z dawnych bastionów, spacer brzegiem Nowej Motławy dostarcza wyjątkowych wrażeń. W plenerach wystawiane są także spektakle teatralne, które odbywają się w ramach międzynarodowego letniego Festiwalu Szekspirowskiego.

Do niedawna zapomniane i zaniedbane Dolne Miasto, stało się jednym z obszarów Gdańska, które objęto działaniami rewitalizacyjnymi. Projekt ożywienia i poprawy wizerunku dzielnicy zakłada przeprowadzenie różnorodnych przedsięwzięć. Należy do nich przebudowa przestrzeni publicznych oraz infrastruktury podziemnej⁷. Zaplanowano wykonanie nowej nawierzchni ulic oraz stref postojowych. Do nowoprojektowanego zagospodarowania terenu dostosowane zostaną pasy jezdni i ciągów pieszych oraz torowisko tramwajowe na ulicy Łąkowej

⁶ W roku 2007 Towarzystwo Urbanistów Polskich przyznało projektowi pierwszą nagrodę w konkursie na najlepiej zagospodarowaną przestrzeń publiczną w Polsce w kategorii „przestrzeń zielona”.

⁷ Przebudowane zostaną ulice: Łąkowa (na długości ok. 550 m), Dolna (ok. 100 m), Wróbla (ok. 150 m), Kieturakisa (ok. 150 m), Śluza (ok. 190 m), odcinek Toruńskiej (ok. 200 m), Kurza (ok. 120 m), Radna (ok. 200 m).

i ulicy Wróblej⁸. Istotnym elementem projektu będzie modernizacja sieci wodociągowej i kanalizacyjnej oraz uregulowanie gospodarki wodnej. Przewiduje się także rewaloryzację zieleni i uzupełnienia istniejących szpalerów drzew. Obszar dzielnicy zostanie wzbogacony o urządzoną zielen, elementy małej architektury oraz o nowe oświetlenie uliczne.

Zgodnie z założeniem stworzenia atrakcyjnych przestrzeni publicznych, ulica Łąkowa zostanie przekształcona w reprezentacyjny ciąg komunikacyjny z wyraźnym wydzieleniem części dla pieszych. Stanie się ona miejscem przystosowanym do eksponowania dzieł i wystaw artystycznych proponowanych w ramach działalności CSW Łąźnia, jak np. działająca Galeria Zewnętrzna Miasta Gdańska. Przestrzeń ta zamknie i uzupełni istniejący ciąg spacerowy, którego początkiem jest Targ Węglowy, kontynuację stanowi ulica Długa, Długi Targ, Stągiewna - Długie Ogrody, a zakończenie - ulica Łąkowa.

Przygotowane inwestycje dotyczą również przebudowy elementów części budynków mieszkalnych, bezpośrednio przylegających do remontowanych przestrzeni publicznych. Zaplanowano też remonty i przebudowy budynków przeznaczonych na funkcje społeczne i kulturalne, zlokalizowanych przy ulicach: Dobrej 8A i 8B oraz Jaskółczej 1. Rozwiązania techniczne i technologiczne przyjęte w projekcie należą do powszechnie stosowanych i gwarantują wysoką jakość oraz trwałość otrzymanych rezultatów. Rozpoczęta realizacja programu rewitalizacji dzielnicy stworzy także szansę pojawienia się wyjątkowej w skali Gdańska zabudowy usługowo-mieszkańkowej⁹.

W ramach realizowania programu rewitalizacji, prowadzone mają być przedsięwzięcia, które pozwolą rozwiązać zidentyfikowane w obrębie dzielnicy problemy. Będą one obejmowały szereg działań o charakterze społecznym. Powstanie także niezbędna baza lokalowa. Zaproponowane zostaną programy pozwalające mieszkańcom zorganizować czas wolny i rozwijać zainteresowania. Planowane jest zaktywizowanie seniorów, prowadzenie działalności profilaktycznej, poradniczej, terapeutycznej i edukacyjnej. Co ważne, projekty rewitalizacyjne będą realizowane w sposób partnerski. Oczekuje się, iż rozpoczęty już proces przyniesie jak najlepsze rezultaty i pozwoli wprowadzić w przestrzeń dzielnicy nowe funkcje miejskie. Istotnym założeniem jest dążenie do zachowania dziedzictwa kulturowego oraz działanie służące ochronie środowiska. Jest nadzieja, że osiągnięty zostanie cel w postaci aktywizacji społecznej i gospodarczej zdegradowanej w tej chwili dzielnicy. W niedługim czasie spodziewane są efekty w postaci poprawy funkcjonalności i estetyki dzielnicy.

⁸ Realizując zapisy obowiązującego miejscowego planu zagospodarowania przestrzennego, na ulicach Łąkowej i Wróbla przewidziano likwidację torowiska w jezdni południowej oraz przebudowę istniejącego torowiska tramwajowego w jezdni północnej z dostosowaniem do nowej nawierzchni pasa pieszo-jezdno-rowerowego.

⁹ Na realizację nowej zabudowy wytypowano dziesięć obszarów stanowiących własność Gminy. Ich łączna powierzchnia wynosi 38.382 m². Parametry zabudowy, odrębne dla każdej z proponowanych lokalizacji określony został w miejscowym planie zagospodarowania przestrzennego.

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Program rewitalizacji Dolnego Miasta w Gdańsku „Dolne Miasto Otwarte” - tożsamość miejsca

Programy rewitalizacji miast w Polsce rzadko lub wcale nie są tworzone zgodnie ze współczesnymi trendami marketingowymi obejmującymi budowę wizerunku i świadomości marki. Tymczasem nasilająca się rywalizacja pomiędzy nie tylko regionami i miastami, ale coraz częściej dzielnicami, o zainteresowanie inwestorów, turystów i mieszkańców, wymaga zmian w dotychczasowej polityce samorządowej oraz wypracowania spójnej strategii tożsamościowej. Strategii, która zapewni odnawianemu obszarowi, w pewnej perspektywie czasowej, osiągnięcie przewagi konkurencyjnej¹.

Wizerunek, zarówno w przypadku efektywnych korporacji, jak i rozwijających się w sposób zrównoważony miast, stanowi podstawowe narzędzie osiągania ich nadrzędnej pozycji wobec konkurentów. Te z nich, które osiągają największe sukcesy, budują swoją markę w oparciu o klimat, nastrój oraz świadome i kreatywne zarządzanie wyznacznikami własnej tożsamości². Wynika to z faktu, że na swój wizerunek mogą starać się one wpływać, ale nie mogą o nim w pełni decydować tak jak to jest w przypadku tożsamości, a więc wszystkich tych elementów, które pozwalają na zidentyfikowanie i wyróżnienie produktu lub miejsca spośród innych.

W świadomości społecznej obraz dzielnicy takiej jak Dolne Miasto, która w wyniku wieloletnich przemian znalazła się w sytuacji kryzysowej, jest generalnie negatywny. Fakt ten sprawia, że rozwój tego obszaru jest bardzo utrudniony lub wręcz niemożliwy bez odbudowy i prezentacji jego tożsamości. Poddawane kompleksowym działaniom naprawczym Dolne Miasto potrzebuje przedstawienia siebie nie tylko innym, ale też paradoksalnie samemu sobie, aby nie utracić właściwości, które decydują o jego wewnętrznej integralności³. Istotą programu rewitalizacji Dolnego Miasta stało się więc otwarcie dzielnicy na historię, na siebie i innych oraz uchwycenie ducha miejsca, obejmujące rozpoznanie kluczowych wyznaczników lokalnej tożsamości i obudowanie ich wokół przyszłych możliwości zrównoważonego rozwoju. Koncept ten w sposób bezpośredni nawiązuje do założeń programu społecznego „Dolne Miasto Otwarte”⁴, którego nazwa została przeniesiona również na program inwestycyjny a w efekcie na cały program rewitalizacji dzielnicy.

¹ Barański, Chelstowska, Partnerski model rewitalizacji w oparciu o zarządzanie tożsamością na przykładzie Dolnego Miasta i Oruni w Gdańsku, 2012.

² Olins, O marce, 2004, s. 111-116.

³ Madurowicz, Miejska przestrzeń, 2008, s. 43-50.

⁴ Chelstowska et al., Społeczność lokalna, 2010.

Rewitalizacja Dolnego Miasta, oparta na zarządzaniu tożsamością miejsca i podkreślająca w sposób niedosłowny, ale jasny jego unikalne i jednocześnie pozytywne cechy, obejmuje szereg zróżnicowanych przedsięwzięć i projektów wpisanych w konsekwentny i spójny plan działań w sferach: przestrzennej, gospodarczej, ekonomicznej i społecznej⁵. Główne cele programu mają zostać osiągnięte poprzez:

- Ochronę i ekspozycję wartości kulturowych,
- Budowę i modernizację urządzeń, sieci i obiektów infrastruktury technicznej,
- Podniesienie wartości estetycznych i użytkowych budynków,
- Realizację nowych obiektów mieszkalnych, usługowych i użyteczności publicznej wpisujących się w krajobraz kulturowy dzielnicy,
- Ochronę środowiska przyrodniczego,
- Podniesienie jakości przestrzeni publicznych,
- Integrację obszaru Dolnego Miasta z pozostałą częścią Historycznego Śródmieścia Gdańska,
- Inwestycje w sferę społeczno-gospodarczą,
- Podniesienie kapitału społecznego dzielnicy.

Program „Dolne Miasto Otwarte” realizowany jest w sposób partnerski przez Gminę Miasta Gdańska oraz szerokie grono podmiotów gospodarczych i społecznych, w tym coraz bardziej aktywnych mieszkańców. Poznanie Dolnego Miasta, umożliwiające opracowanie wizji i właściwej strategii rewitalizacji, byłoby zadaniem niemożliwym, jeżeli zostałoby ono oderwane od społeczności lokalnej. Tożsamość nie stanowi bowiem wyłącznie zbioru miejsc, budynków i detali, ale powstaje i zmienia się w wyniku relacji, które zachodzą pomiędzy tymi elementami a ludźmi⁶. Partnersko realizowana strategia daje tym samym szansę przejścia od projektów odtworzeniowych do programów, które uruchamiając endogeniczne czynniki rozwoju lokalnego, wpisują się w powszechnie akceptowany w Europie paradygmat rewitalizacji⁷.

Program rewitalizacji Dolnego Miasta w Gdańsku ma na celu zwiększenie atrakcyjności i funkcjonalności Dolnego Miasta tak, aby stało się ono ciekawym i konkurencyjnym miejscem zamieszkania, pracy i wypoczynku nie tylko mieszkańców Gdańska i Pomorza, ale i turystów z Polski i zza granicy. Charakter i konstrukcja działań rewitalizacyjnych podporządkowane zostały logice konsekwentnej stymulacji zrównoważonego rozwoju społeczno-gospodarczego, trwałego wzrostu ładu przestrzennego oraz kształtowania wizerunku dzielnicy w oparciu o jej istniejące zasoby oraz potencjał przyrodniczo-kulturowy i artystyczny.

W efekcie zróżnicowanych analiz i konsultacji społecznych zdecydowano się na sformułowanie silnych, prostych i atrakcyjnych haseł przewodnich rewi-

⁵ Barański, Chelstowska, Dane statystyczne, 2010.

⁶ Kaczmarek, Miejsce, 2001, s. 73-81.

⁷ Bryx, Herbst, Jadach-Sepiolo, Założenia krajowej, 2008, s. 13.

talizacji, które określono słowami: HISTORIA, SZTUKA i REKREACJA. Podkreślono tym samym, w sposób jasny i spójny, charakterystyczne cechy i możliwości rozwojowe dzielnicy - zabytkowej jednostki śródmiejskiej położonej w obrębie Żuław Wiślanych oraz nasyconej sztuką. Tak sformułowany komunikat szybko spotkał się z odzewem wśród osób, organizacji i firm zainteresowanych działaniem na rzecz rewitalizacji Dolnego Miasta w Gdańsku i przyczynił się do zwiększenia efektywności działań podejmowanych w obrębie dzielnicy oraz dywersyfikacji źródeł ich finansowania.

Opisanych haseł rewitalizacji nie należy rozumieć dosłownie, gdyż wyznaczają one jedynie kierunek rozwoju Dolnego Miasta i pozwalają na pożądane uporządkowanie i uczynienie działań podejmowanych w obrębie dzielnicy.

Za słowem HISTORIA kryje się zarówno zabytkowy charakter dzielnicy z przedwojenną zabudową i siecią głównych ulic odzwierciedlających XVII wieczny układ kanałów melioracyjnych, jak i mocne osadzenie nazw bastionów i ulic Dolnego Miasta w środowisku przyrodniczym Żuław Wiślanych oraz „żywa pamięć” mieszkańców Dolnego Miasta o ważnych dla nich miejscach, budynkach i osobach.

Hasło SZTUKA to nie tylko bogaty detal architektoniczny eklektycznych kamienic, ale i przestrzeń realizacji wielu projektów o charakterze artystycznym takich jak chociażby Galeria Zewnętrzna Miasta Gdańska, Festiwal Narracje 2011, Festiwal Teatrów Plenerowych i Ulicznych FETA oraz spektakle Fundacji Theatrum Gedanense i otwarte pracownie artystyczne Kolonii Artystów.

Za słowem REKREACJA kryje się przede wszystkim ciek Nowej Motławy, aleja jarzabów szwedzkich w ciągu ul. Łąkowej i atrakcyjna przestrzeń nowożytnych fortyfikacji ziemno-wodnych zaadaptowana na teren zieleni miejskiej. To jednak także cykl lokalnych imprez i działań wpisujących się w atrakcyjną ofertę spędzania czasu wolnego.

Umiejętny wybór haseł przewodnich rewitalizacji osadzonych w lokalnej tożsamości stanowi podstawę stworzenia atrakcyjnej oferty współpracy sektora publicznego z organizacjami pozarządowymi i podmiotami biznesowymi, co ma bezpośredni wpływ na budowę marki miejsca oraz poprawę konkurencyjności oraz zdolności do długotrwałego i efektywnego jego rozwoju.

„Szansę na wygraną ma naprawdę tylko ten, kto jest potrzebny. Kto, choćby w minimalnym zakresie, jest inny i lepszy”. Parafrazując treść noty odredakcyjnej do polskiego wydania książki „O marce” Wally’ego Olinsa, Dolne Miasto rozwijające się to takie, które efektywnie zarządza swoją tożsamością oraz jest konkurencyjne. O takim Dolnym Mieście - otwartym na historię i sztukę oraz oferującym atrakcyjną przestrzeń rekreacji, mówi program rewitalizacji dzielnicy.

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Program rewitalizacji Dolnego Miasta w Gdańsku „Dolne Miasto Otwarte” - działania społeczne

Wstęp

Program Społeczny „Dolne Miasto Otwarte” jest programem sięgającym do tradycji ruchów społecznych i aktywności obywatelskiej Gdańska oraz jego zakorzenienia w historii i kulturze krajów europejskich. Czerpie on inspirację z wyjątkowości Gdańska, z jego dziedzictwa wolności i społeczeństwa obywatelskiego. Odwołując się do dorobku historycznego, kulturowego i społecznego Gdańska wprowadza życie do jego zamierającej dzielnicy, dzielnicy w której echem odbija się jego historia i wielokulturowość.

Tytułowe Dolne Miasto otwarte, to Dolne Miasto - „Starówka Gdańska”, dzielnica retro, dzielnica historyczna, atrakcja turystyczna, arena wydarzeń kulturalnych w Europejskiej Stolicy Kultury 2016 roku. Otwartość tej dzielnicy, to jej gotowość do podzielenia się historią, dziedzictwem architektury, dorobkiem minionych pokoleń, jak i gotowość do wychodzenia naprzeciw współczesności i jej osiągnięciom, wyzwaniom. Dolne Miasto otwarte, to także miejsce bez barier architektonicznych, komunikacyjnych i swoistych barier mentalnych społeczności lokalnej. Dolne Miasto 2020 roku to dzielnica dumna ze swojego znaczenia dla Gdańska, z miejsca w którym się znajduje, z ludzi, którzy tam mieszkają, pracują, ze swojej historii i tożsamości.

Program Społeczny „Dolne Miasto Otwarte” jest propozycją ‘standardu postępowania rewitalizacyjnego’. Rozwiązania w nim zaproponowane mogą stać się przedmiotem dyskusji dotyczącej realizacji polityki społecznej, sposobu myślenia o partnerstwie publiczno - społecznym czy instrumentów profilaktyki i interwencji w zdegradowanych dzielnicach miasta.

Program Społeczny „Dolne Miasto Otwarte” jest programem działań w sferze społecznej, które mają przygotować dzielnicę Dolne Miasto i jej społeczność do uczestnictwa w życiu Europejskiej Stolicy Kultury 2016. Program ten, jest także pierwszym etapem budowania partnerstwa samorządu lokalnego i organizacji pozarządowych na rzecz realizacji aktywnej polityki społecznej. Odwołuje się on do strategicznych dokumentów ukierunkowujących działania w zakresie rozwiązywania problemów społecznych i stanowi ich uszczegółowienie na poziomie dzielnicy miasta. W swojej diagnozie i planowanych działaniach odnosi się do Gdańskiej Strategii Rozwiązywania Problemów Społecznych do 2015 roku. Niżniejszy dokument stanowi plan realizacji w dzielnicy Dolne Miasto celów ogólnych zawartych w Strategii. Jest on projektem działań w zakresie reintegracji wszystkich grup zagrożonych wykluczeniem, kompleksowego wspierania rodziny, ograniczania skali problemów społecznych, wspierania różnorodnych form aktywności osób w wieku poprodukcyjnym, rozwoju profilaktyki.

Diagnoza

Główny problem dzielnicy Dolne Miasto można by nazwać dużym natężeniem problemów społecznych. Aktualna sytuacja społeczna tej dzielnicy wypełnia wszystkie znamiona tego sformułowania. Z przedstawionych powyżej danych wyłania się bardzo złożony obraz społeczny dzielnicy. Zdiagnozowane problemy nakładają się na siebie, wynikają z siebie, współwystępują ze sobą. Natężenie problemów społecznych jest duże. Wśród nich wymienić można:

- dużą liczbę osób pijących ryzykownie i duży odsetek młodzieży wśród tych osób,
- dużą szacowaną liczbę osób uzależnionych od narkotyków i zagrożonych narkomanią,
- przestępczość i zachowania ryzykowne wśród młodzieży,
- dużą ilość rodzin dysfunkcyjnych (nieprawidłowa opieka nad dziećmi, niewydolność wychowawcza, brak prawidłowych postaw rodzicielskich), przestępstwa popełniane przeciwko rodzinie,
- zbliżającą się falę kolejnego pokolenia dziedziczącego wzór braku aktywności zawodowej,
- brak aktywności zawodowej osób niepełnosprawnych,
- słabe osiągnięcia szkolne dzieci, przerywanie edukacji,
- brak aktywności społecznej seniorów.

Z przeprowadzonego wśród mieszkańców Dolnego Miasta badania ankietowego, którego celem było zidentyfikowanie problemów, z jakimi się borykają wynika, że w ocenie społeczności lokalnej dzielnica ta jest niebezpieczna. Mieszkańcy czują się zagrożeni, boją się o swoje bezpieczeństwo. W ich opinii jest to główny problem Dolnego Miasta.

Badanie ankietowe wśród mieszkańców Dolnego Miasta pokazało jeszcze jeden problem tamtejszej społeczności lokalnej. Społeczność Dolnego Miasta to społeczność bierna. Bardzo rzadko i w znikomym zakresie angażuje się w działania na rzecz dzielnicy, praktycznie nigdy nie inicjuje tych działań. Mieszkańcy Dolnego Miasta są zniechęceni wieloletnimi obietnicami bez pokrycia, przez co stali się już obojętni na sprawy dobra publicznego, a nawet na sprawy swojego najbliższego otoczenia.

Bardzo dużym problemem Dolnego Miasta, który można dostrzec nawet w czasie spaceru po dzielnicy i o którym mieszkańcy bardzo często wspominają, jest fatalny stan infrastruktury dzielnicy. Brakuje instalacji ciepłowniczej, a inne są przestarzałe i zaniedbane. Zniszczone są budynki (również zabytkowe), ulice, chodniki, mała architektura, zaniedbana jest zieleń. Wszędzie jest brudno i brzydko. Brakuje podjazdów i innych udogodnień architektonicznych dla osób niepełnosprawnych, czy rodziców z małymi dziećmi. Wszystko to składa się na mało estetyczny wygląd dzielnicy i utrudnia poruszanie się. Złe skomunikowanie dzielnicy z tak bliskim Głównym Miastem, odcięcie Dolnego Miasta od centrum dopełnia obrazu odizolowanej i zdegradowanej dzielnicy.

Podsumowując sytuację Dolnego Miasta wskazać należy główne grupy

problemów tej dzielnicy, do których należą:

- duże natężenie problemów społecznych,
- bierność, apatia, brak poczucia sprawczości i wpływu na swoje otoczenie wśród społeczności lokalnej,
- zdewastowana infrastruktura dzielnicy i jej izolacja komunikacyjna,
- bardzo ograniczone (praktycznie do administracyjnych) instrumenty i sposoby rozwiązywania istniejących problemów, bardzo mała ilość aktywnych organizacji pozarządowych działających na terenie dzielnicy,
- małe szanse na rozwój gospodarczy, inwestycje dużych przedsiębiorców ze względu na przestarzałą i zniszczoną infrastrukturę techniczną.

Liczne problemy społeczne, administracyjne instrumenty ich rozwiązywania, bierność społeczna i obywatelska społeczności lokalnej, niski potencjał rozwoju gospodarczego dzielnicy wskazują na bardzo niski kapitał społeczny, rozumiany jako ogół norm i sieci wzajemnego zaufania, lojalności, poziomych sieci zależności w danej grupie społecznej.

Niski wskaźnik kapitału społecznego oznacza brak umiejętności organizacji i współpracy mieszkańców Dolnego Miasta w celu realizacji własnych potrzeb. Kapitał społeczny, którego wartość opiera się na wzajemnych relacjach społecznych i zaufaniu jest niezbędnym elementem społeczeństwa obywatelskiego i pozaekonomicznym źródłem rozwoju gospodarczego dzielnicy. Jego niski poziom generuje liczne problemy natury społeczno - gospodarczej, które aktualnie obserwujemy.

Cel programu „Dolne Miasto Otwarte”

Kapitał społeczny to zjawisko, którego istnienie ma bardzo duży wpływ na jakość życia społeczności lokalnych. Z punktu widzenia całej społeczności, kapitał społeczny zwiększa ogólną efektywność działania, ułatwia koordynację i współpracę oraz zwiększa zaangażowanie mieszkańców w sprawy publiczne, wolontariat itp. Silny kapitał społeczny pozwala także na rozwój indywidualny poszczególnych członków społeczności. Zaangażowanym w sieć współpracy osobom umożliwia nabywanie nowych umiejętności i doświadczenia, ułatwia dostęp do nowych zasobów, pozwala realizować zadania, które indywidualnie byłby niemożliwe do zrealizowania. Ważnym efektem kapitału społecznego jest społeczne uwierzytelnienie dla inicjatyw, programów, akcji itp.

Kapitał społeczny powstaje w wyniku uczestnictwa ludzi w sieci wzajemnych relacji, zobowiązań, zaufania, współpracy. Doświadczenie pracy środowiskowej pokazuje, że najczęściej budowanie kapitału społecznego na poziomie lokalnym inicjowane jest przez organizacje pozarządowe. Do działań przez nie prowadzonych sukcesywnie włączają się kolejne podmioty powiększając sieć współpracy. Rozbudowa sieci wymaga zdefiniowania wspólnych celów i zaangażowania w ich realizację wielu podmiotów. Tworzenie kapitału społecznego często wymaga także poczynienia inwestycji.

Obserwowane w Dolnym Mieście problemy społeczne pozwalają przypusz-

czać, że poziom kapitału społecznego w tej dzielnicy jest bardzo niski. Słaba jest sieć współpracy i zaufania między członkami społeczności lokalnej, brakuje zaangażowania w działania na rzecz dobra ogólnego dzielnicy i rozwiązywania zdiagnozowanych w niej problemów. Aktywność mieszkańców Dolnego Miasta jest bardzo mała, niewiele organizacji pozarządowych działa na terenie dzielnicy. Brak współpracy, wspólnego celu, przepływu informacji między różnorodnymi podmiotami sieci współpracy powoduje zanik kapitału społecznego, który istnieje tylko wtedy, kiedy jest stale odtwarzany.

Program Społeczny „Dolne Miasto Otwarte” ma na celu rozbudowanie i wzmocnienie kapitału społecznego Dolnego Miasta przez:

- zmniejszenie natężenia i skali występujących problemów społecznych,
- zwiększenie liczby podmiotów trzeciego sektora działających w dzielnicy,
- poszerzenie oferty w zakresie kultury, rekreacji, terapii, profilaktyki itp., oraz zwiększenie dostępności do niej,
- zaktywizowanie mieszkańców dzielnicy wokół ważnych dla nich spraw i miejsc, jak i wokół dużych, europejskich wydarzeń w Gdańsku (EURO 2012, ESK 2016).

Kierunki działań

Program Społeczny „Dolne Miasto Otwarte” w kierunkach planowanych działań odnosi się do zdiagnozowanych w dzielnicy problemów społecznych. W odniesieniu do bardzo podkreślanych przez mieszkańców Dolnego Miasta problemów natury technicznej, wysuwa jedynie postulaty, gdyż kwestie inwestycji w infrastrukturę dzielnicy nie są bezpośrednim przedmiotem niniejszego dokumentu.

1. Zmniejszenie skali problemów społecznych:

- realizacja programów społecznych (profilaktyka, wychowanie, terapia, wspomaganie rozwoju, poradnictwo, aktywizacja, oferta konstruktywnego spędzania czasu wolnego itp.),
- zawiązanie partnerstw społecznych, nawiązanie współpracy między różnorodnymi podmiotami działającymi na terenie dzielnicy,
- ścisła współpraca z Policją i Strażą Miejską, Miejskim Ośrodkiem Pomocy Społecznej, kuratorami sądowymi i innymi instytucjami,
- utworzenie bazy lokalowej dla działań społecznych,
- przygotowanie wykwalifikowanej kadry realizującej program społeczny,
- zagospodarowanie przestrzeni i budynków pozostających bez opieki i nadzoru,
- oświetlenie i monitoring ulic.

2. Zaktywizowanie społeczności lokalnej:

- realizacja programów społecznych (poradnictwo, aktywizacja, organizacja różnego typu akcji, imprez, ważnych wydarzeń społecznych, oferta konstruktywnego spędzania czasu wolnego, odbudowywanie więzi sąsiedzkich, koleżeńskich itp.),
- kreowanie, wspieranie liderów społeczności lokalnej,

- uczynienie mieszkańców gospodarzami w swojej dzielnicy (szkoły, przestrzeń publiczną, dom sąsiedzki, dom młodzieży, świetlica, klub itp.),
 - zawiązanie nowych wspólnot mieszkaniowych,
 - powołanie rady osiedla,
 - przygotowanie bazy lokalowej, miejsc w których możliwe będą działania aktywizujące, spotkania, uroczystości itp.,
 - poprawa stanu technicznego infrastruktury (brak barier komunikacyjnych utrudniających poruszanie się).
3. Zwiększenie liczby organizacji pozarządowych działających w dzielnicy Dolne Miasto:
- zawiązywanie partnerstw społecznych,
 - przygotowanie miejsc, w których możliwa byłaby działalność różnorodnych organizacji pozarządowych,
 - promocja programu społecznego i poszukiwanie kolejnych podmiotów, które zaangażowałyby się w jego realizację,
 - łączenie inicjatyw różnych instytucji i organizacji,
 - wspieranie małych podmiotów, włączanie ich do realizowania programu społecznego dla Dolnego Miasta.
4. Poszerzenie oferty kulturalnej, profilaktycznej, turystycznej, rekreacyjnej itp.:
- realizacja programów kulturalnych, edukacyjnych, sportowo-rekreacyjnych,
 - przygotowanie zaplecza lokalowego dla działań realizowanych przez różnorodne organizacje pozarządowe,
 - powstanie nowych obiektów użyteczności publicznej,
 - promocja Dolnego Miasta, zachęcanie organizacji pozarządowych i instytucji do podejmowania nowych inicjatyw i realizowania różnorodnych projektów w tej dzielnicy.
5. Zdewastowana infrastruktura dzielnicy, niedostępność komunikacyjna Dolnego Miasta:
- remont ulic, chodników i infrastruktury podziemnej,
 - remont budynków, odnowienie zabudowy dzielnicy,
 - adaptacja budynków przemysłowych do nowych funkcji,
 - wprowadzenie nowej zabudowy mieszkaniowo - usługowej,
 - usprawnienie komunikacji miejskiej,
 - bezpośrednie połączenie z Głównym Miastem (tramwaj konny, tramwaj wodny),
 - uatrakcyjnienie turystyczne dzielnicy (deptak na ulicy Łąkowej, odnowienie zieleni i małej architektury, Galeria Zewnętrzna CSW Łaźnia),
 - wykreowanie nowych przestrzeni publicznych, nadanie istniejącej przestrzeni nowej jakości,
 - powstanie nowych lokali usługowych,
 - zróżnicowanie funkcjonalne,
 - promocja dzielnicy.

Partnerstwo

W proces budowania partnerstwa społecznego dla Dolnego Miasta zaangażowani zostali mieszkańcy dzielnicy. W pierwszym etapie prac nad programem społecznym uczestniczyli liderzy społeczności lokalnej, na co dzień zajmujący się problematyką społeczną i działający w różnych organizacjach pozarządowych. Wspólna praca nad programem „Dolne Miasto Otwarte” zaowocowała formalnym partnerstwem społecznym zawiązanym przez reprezentowane przez liderów organizacje.

Partnerstwo społeczne w dzielnicy Dolne Miasto zawiązane zostało przez:

- CARITAS Archidiecezji Gdańskiej,
- Towarzystwo Profilaktyki Środowiskowej MROWISKO,
- Stowarzyszenie Inicjatyw Lokalnych „Bliżej Centrum”.

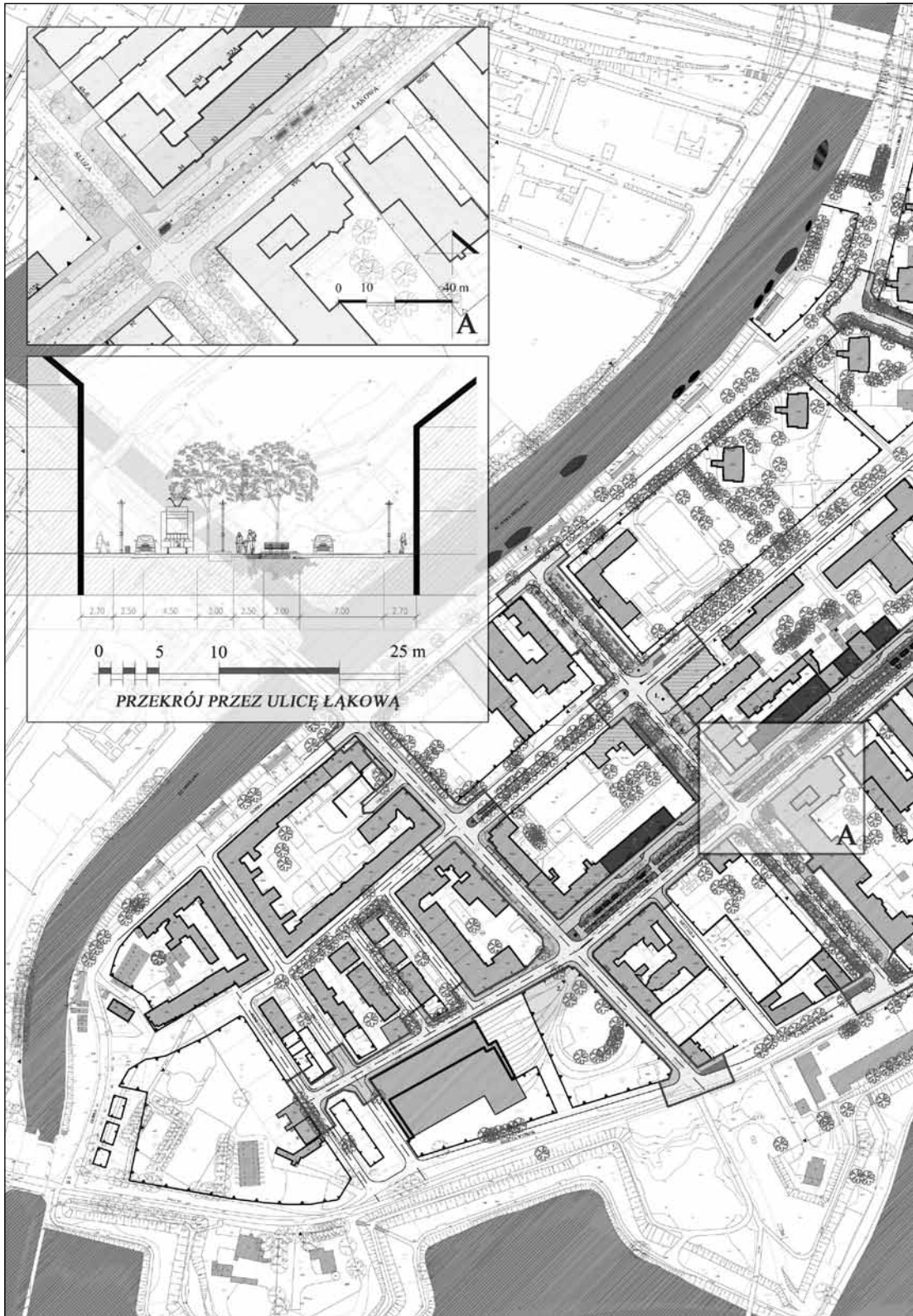
Partnerstwo to zaistniało przy aktywnym współudziale Referatu Rewitalizacji Urzędu Miejskiego w Gdańsku, który reprezentowany był przez Magdalenę Chelstowską. Celem partnerstwa jest zaktywizowanie mieszkańców i organizacji pozarządowych do uczestnictwa w procesie rewitalizacji Dolnego Miasta poprzez wspólne wypracowanie koncepcji programu społecznego w rewitalizacji, a następnie jego realizację. Partnerstwo ma również usprawnić współpracę z innymi podmiotami działającymi na terenie dzielnicy. Jak wskazuje praktyka współdziałanie jednostki samorządu terytorialnego i organizacji pozarządowych bardzo często pozwala na zdynamizowanie działań w zakresie realizacji programów społecznych i podniesienie ich skuteczności.

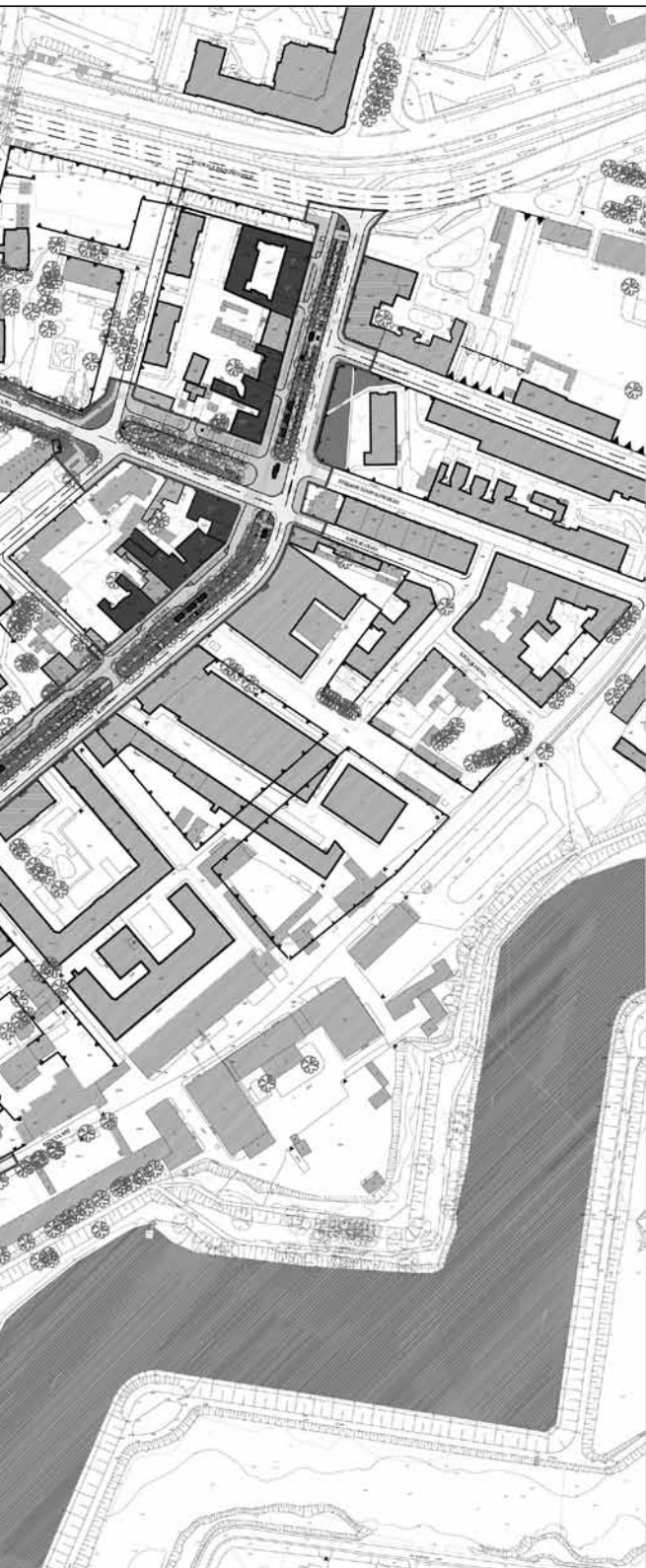
Partnerstwo Społeczne „Dolne Miasto Otwarte” realizując program społeczny na terenie Dolnego Miasta włącza się w główny nurt działań Gdańskiej Sieci Partnerstw Lokalnych, której celem nie jest realizowanie partykularnych interesów poszczególnych organizacji pozarządowych a działalność na rzecz budowy społeczeństwa obywatelskiego w Gdańsku i realizowanie przedsięwzięć przeciwdziałających dezintegracji społecznej.

Działające w chwili obecnej partnerstwo społeczne ma charakter otwarty i będzie poszerzane o nowe podmioty, które włączą się w realizację Programu Społecznego „Dolne Miasto Otwarte”. Szerokie partnerstwo organizacji działających w dzielnicy pozwoli na prowadzenie kompleksowej i pełnej pracy środowiskowej.

Podsumowanie

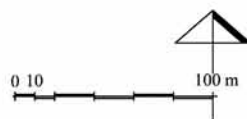
„Być miastem konkurencyjnym, to być miastem atrakcyjnym, przyciągającym, intrygującym poprzez kulturę, poprzez sport, poprzez wydarzenia społeczne” (Paweł Adamowicz). Interpretując słowa Prezydenta Gdańska w kontekście Dolnego Miasta, powiedzieć można, że dzielnica konkurencyjna, to dzielnica atrakcyjna, intrygująca, przyciągająca wydarzeniami społecznymi, kulturalnymi. O takim Dolnym Mieście mówi program „Dolne Miasto Otwarte”.





OZNACZENIA

-  GRANICE OPRACOWANIA
-  ZABUDOWA ISTNIEJĄCA
-  BUDYNKI MIESZKALNE WŁĄCZONE DO PROJEKTU ZARZĄDZANE PRZEZ GZNK (WŁASNOŚĆ GMG)
-  BUDYNKI MIESZKALNE WŁĄCZONE DO PROJEKTU ZARZĄDZANE PRZEZ WSPÓLNOTY MIESZKANIOWE
-  WŁĄCZONE DO PROJEKTU BUDYNKI MIESZKALNE Z FUNKCJAMI USŁUGOWYMI NA POZIOMIE PARTERU
-  OBIEKTY UŻYTECZNOŚCI PUBLICZNEJ
-  BUDYNKI PRZEZNACZONE DO ADAPTACJI NA PROWADZENIE DZIAŁALNOŚCI SPOŁECZNEJ
-  WODY POWIERZCHNIOWE
-  ISTNIEJĄCA ZIELEŃ WYSOKA
-  ZIELEŃ NISKA
-  PROJEKTOWANA ZIELEŃ WYSOKA
-  MODERNIZOWANE JEZDNIE
-  KOMUNIKACJA PIESZA
-  KOMUNIKACJA PIESZO - JEZDNA
-  ZACHOWANY ODCINEK TORU TRAMWAJOWEGO
-  ELEMENTY EKSPOZYCJI ZMIENNEJ
-  ELEMENTY NAWIAZUJĄCE DO DAWNEJ OBECNOŚCI WODY
-  ELEMENTY MAŁEJ ARCHITEKTURY
-  LINIE ZABUDOWY OKREŚLONE W MPZP NR 1124
-  MIEJSCA OBECNOŚCI SZTUKI W PRZESTRZENI PUBLICZNEJ WYMAGAJĄCE ODREBYNYCH OPRACOWAŃ KOORDYNOWANYCH PRZEZ CSW ŁAŹNIA
 1. MIEJSCA SYGNALIZOWANIA OBECNOŚCI INSTYTUCJI KULTURY W PRZESTRZENI PUBLICZNEJ
 2. KLUCZOWY WĘZEL W SYSTEMIE PRZESTRZENI PUBLICZNYCH DOLNEGO MIASTA
 3. OBSZAR WIĄZĄCY BUDYNEK CSW ŁAŹNIA ORAZ UKŁAD ULIC DOLNEGO MIASTA Z WODĄ - MIEJSCA ZACUMOWANIA GALERII PLYWĄJĄCEJ NA OSI ULICY ŚLUZA
 4. OBSZAR WIĄZĄCY UKŁAD ULIC DOLNEGO MIASTA Z WODĄ - MIEJSCA ZACUMOWANIA GALERII PLYWĄJĄCEJ NA OSI ULICY DOLNEJ



**URZĄD MIEJSKI W GDAŃSKU
WYDZIAŁ URBANISTYKI, ARCHITEKTURY
I OCHRONY ZABYTKÓW**

OPRACOWANIE: REFERAT REWITALIZACJI WRZESIEŃ 2008

mgr inż. arch. Grzegorz Sulikowski
Kierownik Referatu Rewitalizacji

mgr inż. arch. Izabela Burda

**REWITALIZACJA DOLNEGO MIASTA
MODERNIZACJA UKŁADU DROGOWEGO
KONCEPCJA ZAGOSPODAROWANIA TERENU**

PLANOWANE DZIAŁANIA SPOŁECZNE

OKIENKO PRZEDSZKOLNE

Opieka i edukacja poprzez zajęcia artystyczne, ruchowe, językowe, matematyczne oraz przyrodnicze.

ŚWIETLICA

Zabawa połączona z nauką, w tym zajęcia: plastyczno-techniczne, rekreacyjno-sportowe, muzyczno-taneczne, kulturalno-rozrywkowe.

KLUB MŁODZIEŻY

Miejsce aktywności młodzieży oferujące zajęcia: artystyczne (teatr, muzyka, plastyka), sportowe, rekreacyjno-turystyczne oraz edukacyjne.

PORADNIA DLA RODZICÓW

Wspólne spotkania i rozmowy, w tym: dzielenie się doświadczeniami oraz pomocy i porady w sytuacjach trudnych.

KLUB SENIORA

Spotkania integracyjne i okolicznościowe, w tym: zajęcia manualne (robotki ręczne, dekoratorstwo, majsterkowanie), gry towarzyskie oraz wyjścia kulturalno-rozrywkowe.

MŁODZIEŻOWA DRUŻYNA SMOCZYCH ŁODZI

Cykli zajęć sportowych, w tym: treningi na wodzie, zajęcia na siłowni i basenie, uczestnictwo w zawodach.

DOTYK SZTUKI

Cykli warsztatów artystycznych dla dzieci oraz młodzieży rozwijających ich kreatywność i zainteresowania, w tym: zajęcia z rzeźby, malarstwa i grafiki komputerowej.

PARTNERZY ZAANGAŻOWANI W REALIZACJĘ PROJEKTU

- **Gmina Miasta Gdańsk**, w tym:

Referat Rewitalizacji Wydziału Urbanistyki, Architektury i Ochrony Zabytków, Gdański Zarząd Nieruchomości Komunalnych, Zarząd Dróg i Zieleni, Dyrekcja Rozbudowy Miasta Gdańska, Centrum Sztuki Współczesnej Łaźnia,

- **Wspólnota Mieszkańcowa** Dolina 4, Łąkowa 5, Łąkowa 6, Łąkowa 10, Łąkowa 12, Łąkowa 16, Łąkowa 27, Łąkowa 29, Łąkowa 31, Łąkowa 34, Łąkowa 32/33, Wróbla 1/10A, Wróbla 1/10B-C, Wróbla 11/12.

- **CARITAS** Archidiecezji Gdańskiej,

- **Stowarzyszenie Kultury Fizycznej Klub Wodny "Gdańskie Lwy"**.



GDAŃSK
morze możliwości



Wartość Projektu: **42 210 026,02 PLN**

Projekt pn. "Rewitalizacja Dolnego Miasta w Gdańsku" jest dofinansowany przez Unię Europejską ze środków Europejskiego Funduszu Rozwoju Regionalnego w ramach Regionalnego Programu Operacyjnego Województwa Pomorskiego na lata 2007 - 2013.

KONTAKT

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Rewitalizacja Dolnego Miasta w Gdańsku

Dolne Miasto Otwarte



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PLANOWANE DZIAŁANIA INWESTYCYJNE

PRZEBUDOWA PRZESTRZENI PUBLICZNYCH I INFRASTRUKTURY w obrębie pasów drogowych ulic: Dolnej, prof. Z. Kieturakisa, Kurzej, Łąkowej, Radnej, Słuzy, Torunskiej i Wróblej:



Wizualizacja: EURO-ALJANS

- 1) reorganizacja ruchu kołowego i poprawa stanu technicznego ulic (m.in. wykonanie nowej nawierzchni jezdni i chodników, likwidacja torowiska w jezdni południowej ulic Łąkowej i Wróblej, stworzenie ciągu pieszo-jezdnego w części północnej pasa drogowego ulic Łąkowej i Wróblej),
- 2) modernizacja infrastruktury technicznej (przebudowa sieci wodociągowej i sanitarnej, modernizacja sieci kanalizacyjnej deszczowej),
- 3) uzupełnienie i rewitalizacja zieleni,
- 4) wprowadzenie malej architektury.

PRZEBUDOWA ELEMENTÓW BUDYNKÓW przy ulicach: Dolnej (3, 4, 10A), Łąkowej (5, 6, 7, 10, 12, 13, 14, 15, 16, 20, 27, 28, 29, 31, 32/33, 34, 35/38, 45, 50, 51), Torunskiej (23, 25) oraz Wróblej (1/10A, 1/10B-C, 11/12, 13/14, 15) od fundamentów do cokołów od strony przebudowywanych ulic:

- 1) wykonanie izolacji (przebudowa cokołów, wymiana okienek i szklek w piwnicznych wraz ze studzienkami, wykonanie drenazu oraz izolacji przeciwwilgociowej i termicznej),
- 2) przebudowa stref wejściowych,
- 3) wymiana lub remont przylączy.

REMONT I ADAPTACJA BUDYNKÓW przy ulicach Jaskółczej 1 (CSW Łaźnia) i Dobrej 8A/B na działania społeczne i kulturalne.

**ETAP I:
2013**

**ETAP II:
2014**

**ETAP III:
2015**

- ulice objęte pracami budowlano-remontowymi
- projektowane ciągi pieszo-jezdni
- budynki mieszkalne objęte pracami budowlanymi
- osiedla społeczno-kulturalne
- projektowane nasadzenia drzew

OPROJEKOWAŁ: UZAJE MIESZKANCI W GDAŃSKU, WIZUALIZACJA: ARCHITECTURA I OCHRONA ZABYTKÓW, REZERWA REWALIDACJA, KIEROWNIK REFERATU I GAZDOWCZĄ: BILKOWSKI, AUTOR RYSUNKU: MIKULSKI, BAHANSKI (STYCZEŃ 2011)

CZEŚĆ II

ENERGIA MIASTA W BADANIACH MŁODYCH ARCHITEKTÓW I URBANISTÓW

Urban Energy of New Cities. Case Study of Almere in the Netherlands
Urban energy nowych miast np. Almere (Holandia)

Streszczenie

Artykuł analizuje proces rozwoju Almere - nowego miasta powstającego w Holandii od 1976 roku. Punktem wyjścia nie jest tu fizyczny rozwój tanki urbanistycznej, lecz proces zmian w sposobie i intensywności użytkowania przestrzeni publicznych. Aby przestrzeń stała się częścią miasta, miejscem, niezbędna jest interakcja (energia miejska) pomiędzy poszczególnymi aktorami sfery publicznej. Almere, powstałe w 1976 roku jako odpowiedź na braki mieszkaniowe Amsterdamu, przez długi czas nie było w stanie wytworzyć energii miejskiej typowej dla miast. Sytuacja zaczęła ulegać zmianie na przełomie XX i XXI wieku wraz ze zmianą strategii rozwoju miasta zapoczątkowanego budową nowego centrum.

Introduction

New urban areas are often seen as lacking qualities and sense of being cities. Almere, one of the largest and fastest growing European “New Cities”, was not able to generate “urban energy” characteristic of cities. It was not until the late nineteen nineties when it evolved from a dormitory town into a city.

One needs to look at the initial meaning of the term city in order to fully understand this phenomenon. Derived from the Latin “civitas” (citizenship) which referred to the body of citizens (The Compact Edition of the Oxford English Dictionary, 1971, cited by Grönlund). Unlike the rural, or the countryside, that refer to the land and the process of its cultivation, the people and relations among them are the subject to the city. Consequently the interactions within the public space constitute the essence of the metropolis more than a physical form. From this perspective Almere will be looked at in this paper.

Although social issues were present in the discussion on Almere from the outset, it was not until the creation of the new city centre when urban energy emerged. The initial plans omitted two basic factors crucial for cities - density and heterogeneity (mix of use, diversity of users etc.) - that caused the open spaces of the city to be empty.

Almere on its Way to Becoming a City

Almere was established in 1976 in the reclaimed land of newly completed Flevopolder, as an answer to the housing shortages in Amsterdam. The location on the edge of the Randstad (the largest conurbation in the Netherlands) gave it a more predominant position over the capital of the province Lelystad.

The history of planning goes back to the early 1960s, when the ideas of Aldo van Eyck about the importance of the encounter, the human scale and the familiar were

forming the main opposition front to the post-war modernistic housing developments (Provoost et al., 2000). On this level, the city was believed to be a critique of the high-rise, anonymous developments like the Bijlmer in Amsterdam (modernistic housing estate for 100,000 inhabitants), and was supposed to facilitate social cohesion. In parallel, Almere was viewed as an offensive suburbanization - another emerging trend in the post-war times.

As a result, the basic scheme developed by the IJsselmeerpolders Development Authority (De Rijksdienst voor de IJsselmeerpolders - RIJP) in 1969 consisted of a number of separate cores divided with green belts: A poly-nuclear cluster of low-rise, homogenous nuclei, each standing with its own identity representing the different lifestyles of its inhabitants. The segregation of socially homogenous groups into separate districts - Almere Haven, Almere Stad, Almere Buiten and Almere Haut - aimed at creating ideal neighborhood communities. They were viewed as “positive ghettos where the shared way of life would guarantee mutual contacts and social interaction” (Provoost, et al., 2000).

The segregation of transport formed a part of the strategy facilitating contacts among the inhabitants. The pedestrian’s network, the cycling paths, the dedicated bus lanes and the car roads all formed separate systems that often followed completely different routes. This prioritized slow traffic and kept the car out of the districts’ common spaces. The users of different transportation modes neither followed the same routes, nor did they share one space or “image of the city” (Lynch, 1960). As a result, they did not have chance to interact with one another and generate “urban energy”.

In the early 1970s the above-mentioned principles started to be put in to practice in Almere Haven. They took the form of nostalgic gable houses designed by Dick Apon in the centre of low-rise terraced houses clustered around semi-pedestrian and pedestrian areas by Joop van Stigt and other architects. The road layout prioritized pedestrians and cyclists, restricting the car speed (meandering roads in van Stigt’s project) or eliminating it completely from view by putting it into the car park in the central part of Almere Haven.

The same principles took a different form in Almere Stad, which started developing in 1979. A grid layout was introduced instead of the meandering streets. The urban fabric was cut in two by a dedicated bus lane, and the car roads together with the multilevel car parks formed the perimeter of the centre.

The development of the last two cores - Almere Buiten and Almere Hout - took place in the 1980s and 1990s and was already influenced by the change of perception of Almere by the municipality and the idea of constructing a real city centre.

In the late 1980s, the municipality became aware of the fact that a transformation of the spreading polycentric structure into a coherent urban tissue with a multifunctional centre was needed. In 1990 Kor Buitendijk, engaged by the city as an external project manager, was supposed to give shape to the municipality’s vision of a city. At that time, Almere Stad was already playing a leading role among other nucleus, but it was still lacking a centre. The area foreseen for it was

situated between the railway station and the Weerwater Lake.

Buitendijk was very critical of Almere. In his opinion it lacked all the essential parameters of the city: high density, mix of uses, services, landmarks, as well as its negative aspects like red light district, junkies etc. His ideas of the city formed a brief for the 1994 city centre design competition won by OMA (Office for Metropolitan Architecture). The main principles of the winning entry were:

- Creation of an urban Identity by means of greater density and diversity;
- Re-integration of the car into the city fabric;
- Diminution of the fragmenting aspects of the dedicated bus lane;
- Creation of a distinctive identity of the city centre that would not only be based on shops;
- Introduction of large scale buildings and uses;
- Giving visibility to the centre throughout the city (Provoost et al., 2000).

The design comprised two independent parts: the business centre behind the railway station and the civic-commercial centre in the area between the town hall and the waterfront. Both parts rejected the grid structure of the centre with its horizontal division among different transportation modes, introducing a vertical layering of uses instead. The business centre was comprised of office towers situated on a raised platform containing a sunken bus lane and a two-storey car park. The heart of the city was formed by a “mega structure” consisting of four layers, 275 m by 275 m each. Traffic and car parks were located on the lowest level, covered with an inclined pedestrian area. Above, the shopping and the cultural programme were superimposed in the form of a grid distorted by a diagonal that connected two existing shopping streets. The housing programme was placed on top in the form of a continuous slab.

The competition design had to undergo several changes due to criticism from the municipality and the developers involved in the project. The main critique was related to the lack of connection among the layers. The car zone was seen as an underworld, with all negative aspects of subway stations and underground walkways, whereas the pedestrian area was discerned as covered in shadow from the dwelling slab above (Provoost et al., 2000). This resulted in further improvements in the plan, where the main ones included: introducing more connections between the pedestrian and the car level by means of sunken plazas, putting programme into the sunken plazas, abandoning the complete dwelling slab idea in favor of the stacking dwelling on top of the other functions. Numerous renowned architects were invited to participate in the project, that today is, for the most part finished.

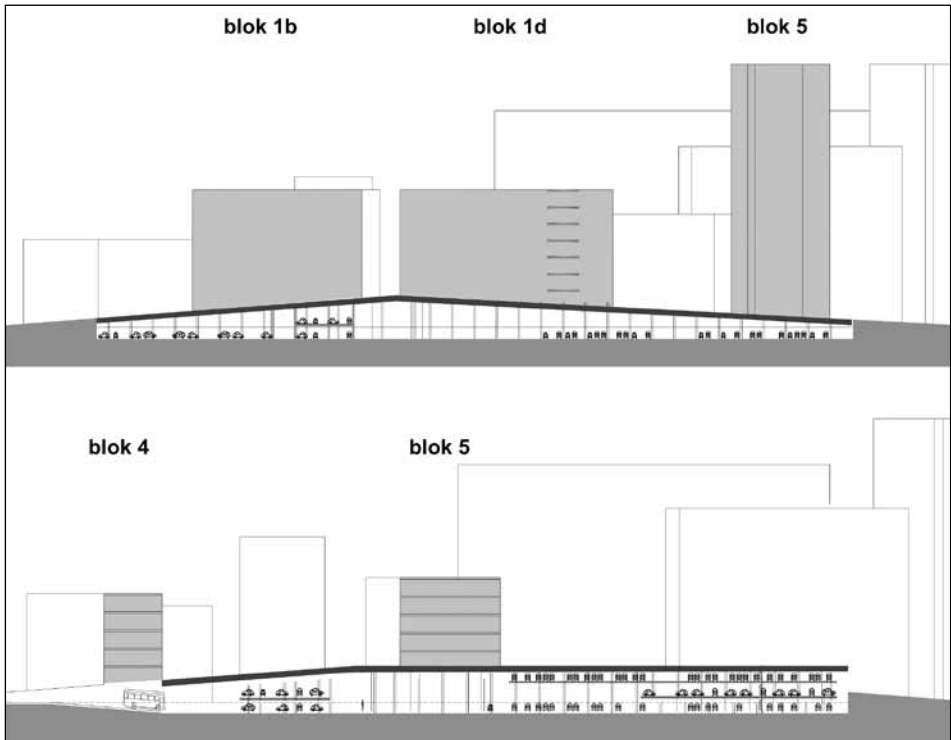


Fig. 1. Sections through the layers of the City Centre.
Image courtesy of OMA (Office for Metropolitan Architecture).

Summary

The initial design of Almere, although theoretically focused on social interaction, failed to create urban energy within the public space of the city. If we consider public space as being a part of, or as a materialization of public domain where there is friction among people of different backgrounds, needs, and purposes of being in a specific place at a specific time (Hajer and Reijndorp, 2001), surely it would be hard to think of the initial design of Almere in this way. One could argue then, that it was unsuccessful in creating public space. The main reason for this is the low density, uniformity and monofunctionality of the nucleus within the scheme. Individual nuclei gathered people of similar backgrounds, age and material status and did not provide them with places to work or to entertain. Although Almere refused the car as a concept it became car dependent, since the work and amusement spots for the inhabitants were located outside the city - in Amsterdam and Utrecht. The open spaces of the city remained empty, since hardly any people had reasons to be there.

The construction of the city centre marked a turning point in the development of Almere. Not only did it increase the residential density but also the density and variety of different uses. Almere evolved from a space that people inhabit



Fig. 2. Stacking of functions in the City Centre.
Source: Author's image.

into a place that people live in, with places to work, study and entertain. This multiplied the reasons for being in the city space and the amount of interactions within it. These interactions, the urban energy, make this space a public space, and this makes Almere a city.

The case of Almere shows that it is not only the built environment that constitutes the city, but far more it is the activity that takes place within it. It also proves that it is not possible to create a city here and now. The city is a complex phenomenon that needs time to evolve.

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Culture of Energy
- the Way to Regeneration and Repositioning of the City
Energia kultury - sposób na regenerację i wzmocnienie pozycji miasta

Streszczenie

W polskich miastach istnieje potrzeba przeprowadzenia gruntownych przemian w dziedzinie kultury. Władze miejskie winny traktować kulturę jako istotną gałąź i siłę napędową gospodarki, a zarazem czynnik rozwoju lokalnego i czynnik promujący miasta. Polskie miasta stoją przed wyzwaniem zdobycia tytułu Europejskiej Stolicy Kultury 2016. Przykład Liverpoolu, Europejskiej Stolicy Kultury 2008, wskazuje, iż wykorzystanie potencjału miasta oraz dążenie do osiągnięcia wizerunku miasta kreatywnego - miasta kultury, może być szansą na regenerację i wzmocnienie jego pozycji oraz stanowić może ścieżkę do osiągnięcia sukcesu nie tylko w wymiarze ekonomicznym. Artykuł zawiera ogólne założenia, które wdrażać winny miasta traktujące *energię kultury*, jako szansę i czynnik rozwoju miast.

Introduction

Culture Condition Report¹ shows that Polish cities need very deep changes in the field of culture. Politics must realize that culture is a very important part of the economy that can add greater value to GDP. Culture must be treated as a factor of local and regional development and should become one of the most important points in town promotional strategy. In 2016 the Polish cities: Białystok, Bydgoszcz, Gdańsk, Katowice, Lublin, Łódź, Poznań, Szczecin, Toruń, Warszawa and Wrocław will be given the chance to compete for the title of European Capital of Culture. Local authorities will be responsible for preparation of this big cultural event. This will be a great opportunity to make big changes not only to the city's cultural environment but also to the economy, tourism, infrastructure, architecture and society.

Culture of Energy

The idea of European Capital of Culture emerged in 1983 during a meeting of European Ministers of Culture. The idea of Melina Mercouri, the Greek Minister of Culture and originator of European Capital of Culture, spread among European cities very fast and soon it became a very prestigious title. European Capital of Culture is a city designated by the European Union for a period of one

¹ Wysocka O., Laskowski A., Dublińska N., 2009, Raport o stanie kultury. Od wymiany kulturalnej do nowej inteligentnej siły. Promocja Polski przez kulturę. Raport opracowany na zlecenie Ministerstwa Kultury i Dziedzictwa Narodowego, jako jeden z Raportów o Stanie Kultury, www.kongreskultury.pl

year when it is given the chance to showcase its cultural life and cultural development. The most important goal of ECoC is to reinforce cooperation between towns in the field of culture, to support inter-cultural dialogue, and to promote cities through their diversity and cultural heritage. The first ECoC title-holder was Athens in 1985. Each year till the year 2009, only one city was eligible to hold the title of European Capital of Culture (one exception was made in 2000 when 9 cities became ECoC). Since the European Union extended its borders there was an urgent need to upgrade the ECoC program. In 2009, the European Commission decided to have 2 European Capitals of Culture each year (1 city from the “old UE” and 1 city from the “new EU”). According to new improvements to ECoC program all candidate cities have to underline and pursue EU Culture policies. The goal of the European Union Culture policies is to enrich town cultural potential through cooperation between society and cultural institutions. Cooperation between those two factors gives added value to European culture, which in turn makes the whole continent more attractive for visitors (European Commission, 2009).

A very good example of a city that was re-born thanks to investments in culture is Liverpool - winner of European Capital of Culture 2008. Liverpool was one out of twelve British towns competing for the 2008 title. After 2008 Liverpool completely changed its image in a way similar to Glasgow (ECoC 1990), Rotterdam (ECoC 2001) and Lille (ECoC 2004). Nowadays, many towns use the Liverpool experience. European Union chairman José Manuel Barroso said that Liverpool has been the most successful ECoC program participant so far. (European Commission, 2009)

Liverpool is a post-industrial harbor city in the northwest part of England. 8% of the town population is both ethnically and culturally diverse. 100 years ago it was one of the biggest and richest towns in the world. The crisis of the late 1970s brought huge unemployment, which made the city suffer for many years. 2003 was the year of learning and official nomination for ECoC. In 2004, Liverpool - Maritime Mercantile City was inscribed on the UNESCO list. The same year Liverpool City Council set up Liverpool Culture Company to co-ordinate the bid for European Capital of Culture 2008 and subsequently to deliver the ECoC activity. In 2008 Liverpool received the European Capital of Culture title.

How did local authorities use the title of European Capital of Culture to change Liverpool? They invented a program called “Creative Communities”, which was the biggest artistic European social program to take place. Local people organized theatres, artistic events in forgotten parks, in public spaces of neglected districts to make those places vivid and to present their histories. Lots of companies were involved through the Business Connect program, which was a meeting platform for small business. Private and government investments consumed around 4 billion pounds to completely change the image of Liverpool. After one year of being ECoC, Liverpool skyrocketed from 16th place to 6th place in overseas tourist rankings. In the Condé Nast Traveler ranking, Liverpool

was in 3rd place behind London and Edinburgh.

Liverpool had the highest income of any European Capital of Culture. The program had a total income of £130 million over six years. In Liverpool in 2008 alone, there were 7,000 events, 10,000 artists, 15 million tourists taking part in random events, and 160,000 participants in the Creative Community program. The Liverpool ECoC attracted 9.7 million additional visits to Liverpool, constituting 35% of all visits to the city in 2008, 13 visits by royal families, and 120 international delegations. These visits generated an economic impact of £753.8 million (additional direct visitor expenditure) across Liverpool, Merseyside and the wider North West region. 2.6 million European and global visits were motivated by the Liverpool ECoC in 2008, 97% of these were first-time visits to the city. The ECoC generated an additional 1.14 million staying visitor nights in Liverpool hotels, 1.29 million in the rest of Merseyside and 1.7 million in the rest of the North West (Garcia et al., 2010).

Liverpool University made scientific research called *Impacts 08*. Scientists have been evaluating the social, cultural, economic and environmental effects of Liverpool hosting the European Capital of Culture title in 2008 (www.impacts08.net). Conclusions from the *Impacts 08* Report that should be implemented in Polish candidate cities:

- All actions should be concentrated on areas responsible for cultural development such as cultural institutions, infrastructure, heritage, cultural education, festivals, artists, promotion, information, cultural diversity and monitoring.
- The image of the city must be strengthened by culture - Charles Landry (2000) in his book “The Creative City: A Toolkit for Urban Innovators”, is convinced that future of cities belongs to *creative cities* - places where there exists an invisible atmosphere called *creative milieu*. *Creative milieu* is a place where people are inspired, where people have a lot of creative conceptions and ideas. It’s a place full of life with crowded streets, theaters, pubs, and galleries. The place where we can find random festivals and concerts as well as very quiet spots with uncommon atmosphere, where we can meet artists. It has to be that kind of city where we can be inspired, where we can meet interesting people, where we have all resources needed to be creative. Caring about city image will make a city more recognizable and more prestigious. Good town marketing plays an important role here as a tool which supports uniqueness and attractiveness of the city. A city with a better image becomes more attractive for investors, tourists and inhabitants. Greater attractiveness of the city helps in growth (Kłosowski, 2009).
- It’s important to attract *creative potential* - Richard Florida (2002) in his book “The Rise of the Creative Class” made a theory of the creative city. According to his theory, pace of city development depends on 3Ts: technology, talent and tolerance. Cities that have those 3 factors on a very high

level grow faster than others (e.g. Boston, Seattle, San Francisco). A creative class of people includes those from all professions.

- It's important to develop cultural tourism programs. To take advantage of cultural potential of the city to attract tourist with unique buildings, festivals, concerts, regional events. Cities need good and effective cultural strategy to coordinate promotion, advertising, regional, national and international communication with city branding.
- Local authorities must involve local communities to take a part in cultural life of the city. It's very important to educate people that culture can be creative and innovative, that culture might be very helpful in city growth. Scott Page (2007), in one of his books said that innovativeness depends more on idea and inspiration exchange than on high IQ, because as Albert Einstein said "imagination is more important than knowledge".
- Revitalizing abandoned parts of cities, especially public spaces, is one and only successful way to revive forgotten districts. It helps to create "creative milieu" followed by prestige and capital.

Summary

Polish cities are facing a challenge. ECoC is much more than a title, it is the chance for regeneration and repositioning of the city. If local authorities smartly take advantage of this chance, we will be able to renovate cities, raise their international profile, boost tourism and enhance city image in the eyes of their very own inhabitants. ECoC is a chance for fast city growth, a chance to bring new vitality to city cultural life, and a chance to highlight the richness and diversity of the cities.

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Urban Energy and Interactive Public Spaces *Urban Energy a publiczne przestrzenie interaktywne*

Streszczenie

Wszechobecne nowe technologie pozwalają na tworzenie różnorodnych instalacji interaktywnych, które coraz częściej spotkać można w przestrzeniach miejskich. Na przykładach takich interwencji, które zachęcają do udziału w interakcji poprzez wybrane bodźce zmysłowe i dynamicznie reagując na obecność, ruch lub inną aktywność użytkownika, podjęto próbę analizy ich oddziaływania. Zależnie od lokalizacji, a także wielu czynników społecznych i środowiskowych ich odbiór może się znacznie różnić, a ich funkcjonowanie jest ściśle związane z nieprzewidywalnością ludzkich zachowań. Wykazano iż przestrzenie interaktywne stymulują spontaniczne kontakty międzyludzkie, wpływają na związek ludzi z ich najbliższym otoczeniem. Inspirując do nawiązywania nowych relacji społecznych kryją w sobie ogromny potencjał ludzkiej energii a ich obecność może być impulsem do wzbogacenia odbioru zarówno architektury, przestrzeni publicznej jak i miasta.

Introduction

Nowadays, the awareness of the importance of public spaces and their role in social integration is constantly growing. Since last decade, a particular element in the design of attractive and users-friendly public spaces has been steadily emerging - interactive installations. Digital technologies are more and more ubiquitous in architecture and urban spaces, allowing people to experience architecture as adaptive and dynamic surface that can react to the environment (Briones et al., 2007). A number of artists and media designers have connected their work specifically with body - input interaction and responsive installations. They try to investigate the potential of digital and social encounters and new relations between people and technologically enhanced spaces. Basing on research, among others, the analysis of the chosen case studies and best practices illustrate, that implementing responsive systems into an architectural and urban space can provoke new ways of perceiving the city. It may enable new social encounters and interactions between people and between people and their surrounding (Briones et al., 2007).

Urban Energy and Interactive Public Spaces

Studio Roosegaarde is the home of artist Daan Roosegaarde and his team of designers & engineers. They create interactive artworks that explore the dynamic relation between technology, people and space. "Through the use of new media the sculptures trigger human senses to make a sensual engagement with their envi-

ronment". (Studio Roosengaarde - home page). Dune is an interactive landscape that responds to people's behaviour. It is composed of a large number of lighting fibers. The landscape is presenting several 'moods' - when it's dark and there is no impulse it's glowing softly, if someone starts passing by it starts to brighten with each move of the visitor. When a lot of noise is made, the light gets much more intense and the installation 'goes crazy'. Responsive urban installations, like Dune, encourage the personalization and adaptability of not only architecture, but also of the broader physical public context. They emphasize the architecture of social encounters that encourage people to instinctively participate and by this create new physical, urban and social experiences (Bullivant, 2007).

The Mexican-Canadian artist Rafael Lozano-Hemmer "is particularly interested in the relationships between people, places and artwork. He often makes large, spectacular outdoor light projections, where audience can participate in a creative way. Some 'interactive' new media artworks only allow for very simple choices by the users, but Lozano-Hemmer's artwork is often 'participatory' because the audience can make their own ideas visible" (Graham, 2003, p. 28).

Body Movies, one of the projects of the Relational Architecture series, transforms public space by using interactive façade projections. Thousands of portraits, previously taken in the streets of the host city, were shown on large façades but were only visible inside the silhouettes of the shadows of people passing by. Depending on the distance of the person from the powerful light sources, participants could match the size and shape of their shadows with the portrait by moving around the square. When all silhouettes matched the photograph, a computer triggered a new set of portraits (Lozano-Hemmer - home page). People responded differently, some of them cooperated to cover the portraits together, while others played with their shadows to create comical or theatrical results or to communicate. The relations among participants involved both strangers and friends and included a wide scale of engagement. In each of the locations, people managed to perform intuitively without any instructions (Graham, 2003).

Carolina Briones in her dissertation "LED's Urban Carpet: A portable interactive installation for urban environments" presented at The Bartlett School of Graduate Studies, UCL in 2006, investigates how the presence of new technologies in public spaces influences the relation between people and the urban and social environment.

LED's Urban Carpet is a digital surface that can be implemented into urban space. It detects the movement of pedestrians walking over it and in real time dynamically generates a pattern of lights. Field-testing of the prototype of the portable interactive installation of LED's Urban Carpet took place in three locations in the city of Bath (Briones-blog). The initial findings and conclusions from this research point to some emergent patterns of behavior that were observed. People passing by the LED's Urban Carpet presented various levels of awareness, from simply glancing at the installation, to stopping or gathering around it and asking questions in order to understand how it works. Before learning the rules of in-

teraction, in order to avoid awkwardness and public embarrassment, people preferred to watch the others who were already interacting with the installation. On the other hand, after trying to participate, some of them explained the interaction rules to people nearby, creating a kind of ‘socializing platform’. Depending on the relations between the participants, relation with the installation changed as well. Unlike the case where people were with friends, strangers tended to stay aside, wait for their turn and while interacting with the installation, they kept a distance from the area of the other users. Finally, the test demonstrated that location in the city as well as activities taking place nearby had a direct impact on the movement flow of people passing by. In an area where there was a fast walking pace, it wasn’t as easy to catch people’s attention as in locations with special characteristics that tended to decrease the speed flow (Briones et al., 2007).

The investigation suggests, “public interactive installations may provide a stage for emergent social interactions among various people. However, situating the digital installation in various locations, and depending on the context, might generate diverse and unpredicted social behaviors we, as designers, are unaware of” (A. Fatah gen. Schieck et al., 2007).

Although the observations seem to be similar among artists and researchers, the goals and expected outcomes of their work can be different. LED’s Urban Carpet prototype was created not only to enable social encounters but also to investigate the physical and sociological factors that can determine the result of implementing media installations into urban landscape. But actually “most electronic artists are looking for an out-of-control quality that will result in their work actually having outcomes that they did not anticipate. If the piece does not surprise the author in some way, then it is not truly successful” (Lozano-Hemmer, 2001, p. 243). Lozano-Hemmer seldom conceives an outcome. He prefers focusing on establishing some initial situation, a platform or vehicle where people are let to respond freely according to the ‘constraints and affordances’ of the artwork itself (Lozano-Hemmer, 2002).

At some scale, it seems possible to determine a few aspects responsible for the success or failure of the responsive artwork set in public space, but as far as people’s approach and reaction is concerned, their interaction with the piece is impulsive and can vary from the expectation. “It is the behavioural aspects - the unpredictable, ‘life’ quality of installations - that is compelling and with the active involvement of visitors ‘completes’ the identity of the work” (Bullivant, 2007, p. 9).

Summary

Developing effective interactive systems, and designing a reliable interface between the installation and the user, involves an awareness of various types of users, function, context and all the characteristics of social and environmental conditions (Bullivant, 2006).

Interactive public space installations develop possibilities for people to feel more connected and eventually more responsible for their surrounding (Dekker,

2008).

Responsive artworks can sustain the spatial configuration in which they are implemented and can be equally affected by their environment as well. “What about the city as a whole? Could digital technologies do for our cities what the park used to do and re-create a sense of shared place and a kind of belonging?” (Fatah gen. Schieck et al., 2007).

To generate an answer to these and other questions about the long-term consequences of the pervasive experience of design influencing our social and spatial encounters, further research would be needed. However the investigation suggests that the presence of interactive installations in public spaces can enrich the city experience, create new meaning of a place and encourage casual social interactions. As such, they contribute to the stimulation of social energy of the city.

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Toward Vital Cities: Decision Support Methods in Urban Development
Wybór kierunków rozwoju urbanistycznego i odnowy przestrzeni miejskiej

Streszczenie

Procesy rozwojowe determinowane globalizacją wskazują na silną potrzebę podjęcia problematyki możliwości rozwojowych miast. Jedną z głównych strategii tematycznych Unii Europejskiej na lata 2007-2013 jest Strategia Miejska. Na uwagę zasługuje obecność tej tematyki w polityce przestrzennej na świecie i w Polsce oraz waga, jaka przykładana jest do tematyki metodologii wariantowania rozwoju miast w poszukiwaniu najlepszych jego kierunków. Szczególne miejsce zajmuje problematyka odnowy miast.

W artykule wskazano na zależności pomiędzy uwarunkowaniami a mechanizmami wyboru wariantów rozwoju przestrzennego, jako podstawę podejmowania kierunku działań przestrzennych zapewniających rozwój społeczny, gospodarczy, ekologiczny i przestrzenny oraz ocenę możliwości zastosowania metod wspomaganie podejmowania decyzji przestrzennych, w tym analizy progowej i metody scenariuszowej, jako metod wyboru optymalnego wariantu rozwoju.

Na uwagę zasługują modele alokacyjno-transportowych (Xplorah, Orion, ILLUMASS), użyteczne dla planowania urbanistycznego. Do tej grupy należą metody alokacyjne powiązane prawie zawsze z komunikacją, jako kryterium ustalania lokalizacji nowych inwestycji czy przedsięwzięć w mieście.

Podejmowanie decyzji przestrzennych może być wspomagane przez wykorzystanie systemów geoinformacyjnych (GIS, DSS, AIS) oraz analiz typu „SWOT”. Ocena wariantowanych scenariuszy rozwoju może odbywać się z zastosowaniem tworzonych w tym celu programów komputerowych przez wyspecjalizowane w tej dziedzinie pracownie. Przykładem może być praca biura „WSP” ze Sztokholmu i współpraca przy określaniu najbardziej optymalnego scenariuszu rozwoju miasta i obszaru regionu („Regional Development Plan for Stockholm Region - RUF 2010”).

W procesie transformacji przestrzeni decyzje o wyborze najkorzystniejszych wariantów rozwoju miasta powinny być poprzedzone analizą możliwości rozwojowych. Dodatkowo istotne jest, że czynniki wpływające na rozwój przestrzenny miast poddają się systemowi wartościowania i kwantyfikacji.

Introduction

Contemporary cities are planned to be the engines of regional and national development depending on innovation, human capital and connectivity in advanced economies. Jane Jacobs (1969) in her book “The Economy of Cities” asked a classical question namely “why some cities grow and others stagnate and

decay”. According to her work, cities grow vital by their economies and because of the everyday acts and relations between its elements.

In the current environment of rapid global change, population growth, changing economies and social preferences, cities face enormous problems. The complexity of urban environment and the unpredictability of planning indicate the need to change traditional planning methods to keep up with profound changes in the culture and economy of cities. Possible alternatives are not so far away (Bracken, 2007).

Many cities are currently undergoing revitalisation. Planning for high mobility, cities can offer high quality environments and sustainable patterns of development. They try to provide social and cultural vitality increasing population diversity and fluidity. Yet many questions remain for urban policy and research.

The purpose of this paper is to underscore the increasing need for policy makers to understand that a relevant decision making process requires the support of proper methods of urban research and coordinated strategic actions. Introducing new methodological policies will keep policies “under review” and help them remain relevant to changing circumstances.



Fig. 1. Gdańsk, Long embankment, author: A. Kaczorowska-Fudala.

Towards Vital Cities - Decision Support Methods in Urban Development

Following Jane Jacobs’s words, a city can be vital because of everyday acts and relations between its elements: the people, streets, neighbourhoods, the government, and the economy that function like one body. A city’s network of connections and interactions is particular to its range of activities for a given population, location and land-use profile. This is also true for transport connections and mobility in the city.

Today urban mobility is a key concern in cities of both developed and developing nations and impacts the livability of cities. Planning process is essentially a matter of continuous implementation of policy and adaptation, place plans, policy documents and programmes in the role of “means” not “ends”. Day-to-day decision making often leads to longer term inefficiencies and conflicts. Understanding planning policies is to know the loss and benefits of implementing them.

Formulating policy packages requires the implications of different packages to be analyzed through simulation models. In practice, the simulation models can be used to support the formulation of policy packages and strategies for sustainable mobility.

Decision-making process is defined (Golledge and Stimson, 1997) as a *set of strategies that guide decision-making behaviors such that they appear to cover many possible scenarios*. In all problem-solving disciplines like spatial planning, more than one alternative approach can be used to achieve an answer or solution to a problem. Decision-making process on the macro level is more complex. A spatial analytical and decision making framework should be appropriate to investigate the city and to evaluate its potential evolution over time. SWOT analysis can be very useful.

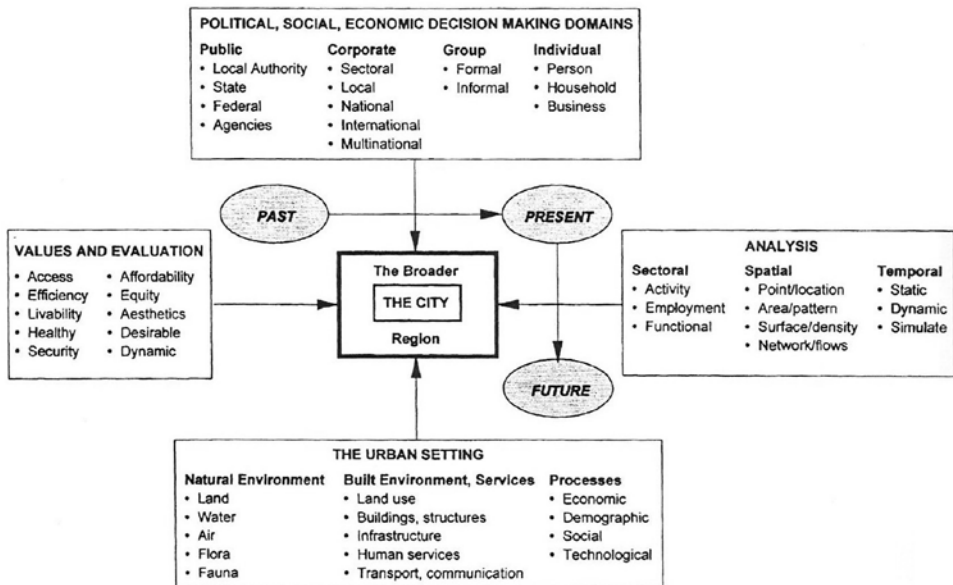


Fig. 2. A spatial-analytic framework for evolution and performance of a city. Source: Golledge and Stimson, 1997.

Methods of supporting spatial decision processes are based on complex and interdisciplinary analyses taking into consideration existing factors. Usually they consist of computer programs, individually designed algorithms and available data. Such tools generally consist of analytical frameworks, mathematical models and economic evaluation constructs. There are decision-simulation models (integrated models of urban land use, transport and economic factors), optimal location models (threshold analysis), and simulation models (scenarios, Decision Support Systems - DSS, AIS, GIS). Decision Support Systems (DSS, AIS, GIS) are designed to bring a knowledge base and data to solve specific problems.

Land use and transport are two essential ingredients of urban policy making and modeling. Any decision taken in one area directly impacts the other. These

two main components together with social, environmental and economic factors are combined in a planning and decision making process. Land use and transport with those interactions are often used as the first fundamental levels of planning, modeling the future city development as a consequence of implicit social, economic and environmental outputs. This is the easiest way to plan and measure the changes in the urban environment.

Xplorah is an example of a decision-simulation model designed for Puerto Rico, an analytical instrument supporting integrated spatial planning. Xplorah is based on a Decision Support System (DSS), developed for Public Policy Research Center of the Rafael Hernández Colón Foundation (RHCF) and Graduate School of Planning (GSP) by the Research Institute for Knowledge Systems-RIKS. Xplorah as an integrated tool makes use of quantitative models to describe physical, economic, social and environmental processes, but also makes the feedback loops linking them. The primary goal of the system is to explore the effects of (alternative) policy options on the quality of the socio-economic and physical environment.

ORION is a decision-simulation model popularized in the city of Wrocław, Poland. The ORION model (Optative Repartition in an Opportunities Network) was created by Tadeusz Zipser and developed by his research group. Orion is an operational model derived from the paradigm of spatial decisions. Observed spatial patterns of urban development confirm that structural solutions are generated by a complex system. It is assumed that the urban system consists of two subsystems: territorial and human activities. The model is based on elements of the subsystems allowing a simultaneous allocation of the various activities in the city or region.

Among other methods supporting the spatial decision process, defined as decision-simulation models is ILUMASS (2002-2006) funded by the German Federal Ministry of Science and Education. The objective of ILUMASS was to implement a fully microscopic model of urban land use, transport, and environment, developing and testing individual microscopic models and the interfaces between them.

Threshold analyses developed by Boleslaw Malisz in the 1960s in Poland are simple methods of optimal allocations activities in the city that considers rational use of all options, natural and man-made. Discussed first are the spatial limitations that arise during the process of development of city structures. Malisz's method helps select the best solutions that limit barriers and impede the process of planning with the lowest threshold costs.

Summary

Current work on desirable vital cities suggests a need for new management and planning tools to define appropriate measures and policies. Such tools generally consist of analytical frameworks, mathematical models and economic evaluation constructs. In many instances, the resulting transport and land use policies

that have been implemented at the local level have not helped to improve conditions.

Urban planning reflects the diversity of spatial development. There is a debate about its relevance and application within the rapidly changing and increasingly complex environment. A permanently wide gap exists between the conceptual models of spatial behavior and the practical planning tools which have succeeded in developing theoretical advances. With the new theoretical backgrounds there should be much more attention paid to translate the very latest theoretical notions into practical tools. A number of developments in travel behavior analysis have introduced many new concepts and models.

Traditional planning methods need to change to keep up with profound changes in the culture and economy of cities. There are many parallel and analogous developments in urban planning that reveal interesting methodologies, mixed land use, travel patterns, demand estimation and forecasting (Bracken, 2007). Traditional models continue to struggle with capturing how particular environments will react.

Spatial decision support methods are very useful in the process of urban planning, they can bring a knowledge base and data, describe physical, economic, social and environmental processes, and support the formulation of policy packages and strategies. A relevant decision making process requires the support of proper methods of urban research and coordinated strategic actions to find suitable answers when there is scientific or technical complexity. Processes of spatial changes, fuelled by economic and demographic developments of supply and demand both in terms of quality and quantity, can be represented in models. Planning tools can better define appropriate measures and policies on urban sustainability and climate change. There is no model or method that can replace the human decision process and there is no single universal tool that can be applied to a variety of places. Complexity of environment requires a change in traditional planning methods. Using various methods and models can provide better urban research and coordinated strategic actions.

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The Influence of Transformation of Degraded Areas on Spatial-Functional Structure of the City (Downtown Gdańsk)

Wpływ przekształceń terenów zdegradowanych na strukturę przestrzenno-funkcjonalną miasta (Dolne Miasto w Gdańsku)

Streszczenie

Przedmiotem pracy są tereny poprzemysłowe, które występują w strukturze przestrzennej Śródmieścia Gdańska. Jest to miasto gdzie od zawsze współistniały funkcje produkcyjne i mieszkaniowe. Dlatego nie ma w nim konkretnie wyodrębnionych monofunkcyjnych dzielnic przemysłowych. Istnieją jednak takie, gdzie funkcja ta jest znacząca, m.in. Śródmieście. Dzielnicą ma położenie przywodne, co stanowi o specyfice przemysłu (portowego, stoczniowego uzupełnionego innymi działalnościami przemysłowymi o zróżnicowanym profilu) oraz potencjale przekształceń terenów poprzemysłowych. W powstających lukach po zamkniętych zakładach produkcyjnych wprowadza się funkcje mieszkaniowe i usługowe. Są to bowiem atrakcyjnie zlokalizowane tereny, które mogą współtworzyć rozwój funkcji metropolitalnych w kształtującej się metropolii trójmiejskiej. Stanowią one element miejskiej energii.

Introduction

In this article, transformation is a process, which as a result gives something different, a new quality of space and generally new function. So, it influences the spatial-functional structure of the city.

Transformation of post-industrial areas has taken place at different times and tempos in post-socialist countries and where a free-market economy had functioned earlier. It was in the 1970s and 1980s, as a result of developing motorization and social interest in environmental protection, "eastern" countries relocated bothersome activities outside city centres, mostly in the vicinity of the main arterial road. In socialist countries at that time, there had been an intensive use of industrial areas taking place. After the system changed in 1989, post-industrial areas began to appear in cities. Free areas in the centre and their possibility of changing are potential urban energy.

Transformation of Post-Industrial Areas

Downtown Gdańsk is situated in the centre of Gdańsk. The Motława River flows through this part of the city. The historical city centre covers 5.5 square kilometres and has about 32 thousand inhabitants. It has a population density of 5.7 thousand people per square kilometre. Based on historical conditions and function, downtown Gdańsk has been divided into 10 parts: Main City, Old City

(with Osiek and Zamczysko), Lower City, Olowianka Island, Granary Island, Old Suburb, Long Gardens, New Gardens, Episcopal Hill and Young City. Old Motława is a natural border between the old, traditional tenement housing and the more industrial part of the “inner city”. There were many plants formerly located east of Main City (e.g. Fish Plant, Meat Plant, Renovation Plant of energetic (ZRE), Ship device Plant “Hydroster”, Tin package plant “Blaszanka”, and Herb Plant “Herbapol”) all of which have been closed, and now “are awaiting new life”.

In downtown Gdańsk there are four categories of degraded areas connected with industrial infrastructure as selected by Lorens (2005). They are post-industrial areas (e.g. post-shipyard), post-port areas (especially warehouses, granaries), post-military areas and post-transport areas. For simplification, writing about general tendencies in transformation the author uses the phrase “post-industrial areas” (like in the maps) or “post” areas.

Irrespective of time of occurrence and transformations of the spatial-functional structure of downtown, 38% of areas have a post-industrial character. While 100% of areas are “post”- 68.1% are post-industrial (with post-port), 25.5% - post-military, and 6.4% - post-transport. The table presents the examples.

Tab. 1. Examples of Post-industrial Areas in Downtown Gdańsk

Transformation done	During transformation	Planned transformation
Post-industrial areas		
Former thermal power plant on Olowianka Island - Polish Baltic Philharmonic, Lastadia - fence housing and service complex	Technical buildings from former thermal power plant on Olowianka Island which co-create Gdańsk Musical-Congress Centre, plot of land after Food Processing Plant Dagoma - Szafarnia - fence housing and service complex	Meat plant; Fish plant; Tin package plant „Blaszanka”; Elmor (Plant of Naval Device Electronic and Automatic) and Gdańsk shipyard; Renovation plant of energetic (ZRE); Ship device Plant „Hydroster”
Post-port areas		
Complex of three granaries on Olowianka Island - The Polish Maritime Museum, marina (along Szafarnia Street); granary on Olowianka Island - Royal Hotel, granaries on Granary Island - Qubus Hotel, Centre of archaeological Education “Blue Lion”	Lack	North headland of Granary Island; Elmor (Plant of Naval Device Electronic and Automatic) and Gdańsk shipyard

Post-military areas		
Prussian barracks in Łąkowa Street - Music Academy, Prussian Fortifications -Episcopal Hill - Gdańsk Humanist private higher education institution	Fort Grodzisko - Hewelianum Centre	Prussian barracks in Sadowa Street
Post-transport areas		
Lack	Lack	Old railway station “Lower Gate”; old tramway depot

Source: Site surveys.

In the spatial-functional structure of the historical city centre of Gdańsk, there are significant differences in the size of post-industrial areas. (Fig.1). Old and Main City have transformed areas. They have a post-military (gates, towers, arsenal) and post-industrial (mill) character.

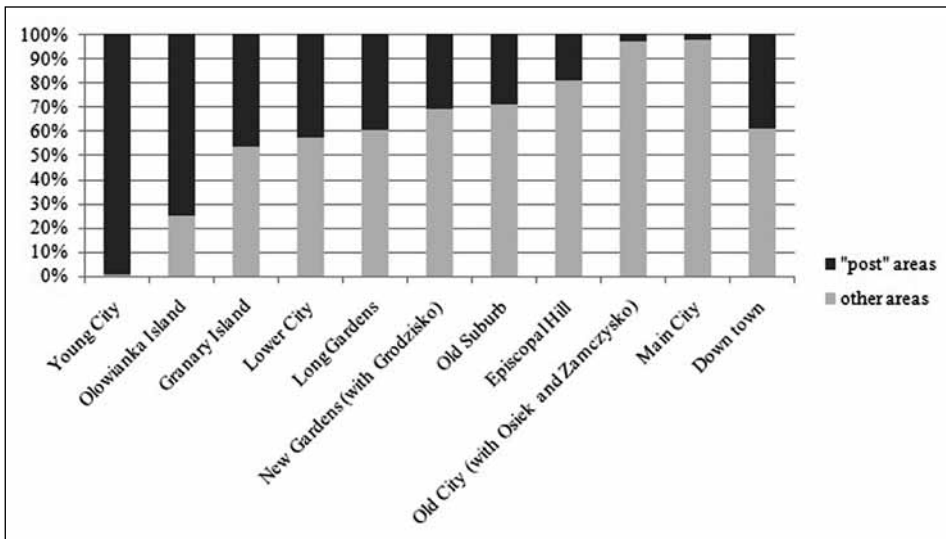


Fig. 1. “Post” areas in parts of downtown Gdańsk which can create urban energy. Source: Own studies.

Young City is the part of downtown where most “post” areas are located. It shows that self-government politics that want to create new urban space in Gdańsk Shipyard is a good direction for transformation. Those areas are the biggest and most attractive reserves in the nearby neighbourhood of the historical city centre. In Young City there are valuable buildings included in restoration protection (e.g. BHP room, shipyard gate, production halls in Imperial Shipyard). Those places are connected with the phenomenon of *Solidarity* and deserve special attention. For this reason, there is a concept to build the European Solidarity

Centre there. Young City will be a continuation of service activities with metropolitan functions, and will play a very important role in the urban structure of the entire city as it attracts both tourists and citizens of the tri-city metropolis of Gdańsk, Sopot and Gdynia. It is hoped that Young City will be able to create a catalyst for urban energy.

Another part of the centre where transformation is taking place is Olowianka Island. In what was a former thermal power plant there is now located the Polish Baltic Philharmonic. In the Royal Granary there is a hotel. Those buildings together with technical buildings from the thermal power plant have co-created the Gdańsk Musical-Congress Centre. This example of the transformation of a degraded area shows that culture creates the moving force for renewal processes (Zuziak, 1998, p. 70, za Booth P., 1993 p. 21).

The next example of transformation of a degraded area is Hewelianum Centre. Situated in Grodzisko, northwest of downtown, it is an urban fortification from the XIX century. Fort Grodzisko is administered by Urban Fortification Cultural Park "Twierdza Gdańsk" and is a municipal unit. The Centre links recreation, education and also popularization of natural sciences. By this function, this forgettable place was included as active "urban tissue" in the awareness of both inhabitants and tourists. There are also well-planned green areas in the city centre - like in Motława Flow Round (Old Suburb and Lower City).

Summary

In this article, urban energy is interpreted as potential in urban spaces and what is more important, potential of transformation. As a result of transformation of degraded areas in the city centre, investors can be brought back to these areas. They create new urban structure - in gaps after closed works they localize new functions. Especially, they build a gated apartment complex. On the ground floor they locate services. In several cases, where areas are property of local government different solutions can be seen. Among other things, they create public and cultural spaces.

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Cittaslow - Alternative Idea of Urban Development of Small Cities *Cittaslow - alternatywna koncepcja rozwoju małych miast*

Streszczenie

Stowarzyszenie Slow Cities (CittaSlow) jest organizacją non-profit, której celem jest rozpowszechnianie kultury dobrego życia i ma swój początek w ruchu Slow Food promującym zdrową żywność. Główne założenie Slow Cities to stworzenie zdrowych, przyjaznych warunków życia z wykorzystaniem zasobów regionu, poprzez wytworzenie więzi emocjonalnej mieszkańców z danym miejscem, której przejawem jest ich aktywność na rzecz jego rozwoju. Działania, przez które realizowana jest idea Slow Cities, mają na celu wzmacnianie świadomości historycznej i pielęgnowanie tożsamości regionalnej mieszkańców oraz podnoszenie atrakcyjności turystycznej i inwestycyjnej miast. Ta powstała 1999 r. we Włoszech idea, pięć lat później dotarła do Polski, gdy Reszel zgłosił akces do stowarzyszenia. Warmińsko-mazurskie początki ruchu Slow Cities w Polsce, to dobra odpowiedź na postępującą globalizację, aby w jej zgiełku nie ucichło to, co stanowi o unikatowości naszych regionów.

Introduction

“Cittaslow” is the short name of “Cittaslow - The International Network of Cities of the Good Life”. Its mission is to improve the living conditions of inhabitants. According to its statute, named “Cittaslow Internazionale Statut”, the association is a non-profit organization and its aim is the promotion and dissemination of culture of the good life through research, experimentation, and application of solutions for the organization of towns. Cittaslow has been linked to four Italian cities and Slow Food association. According to the statute of the association, the “Cittaslow” name is not translated into other languages, although names like “Slow Cities”, “Slow Towns” or “Citta lente” have appeared as its synonyms.

Currently, in 2011 there are 140 Cittaslow or “Slow cities” in 23 countries, including 6 cities from Poland.

Origins and Requirements of Cittaslow Movement

Cittaslow movement has its origins in the Slow Food movement. “The Slow Food movement was founded in 1986 by an Italian food writer who was alarmed by the opening of a McDonald’s restaurant next to the Piazza di Spagna in the heart of Rome. The movement’s goal is to protect the “right to taste” by preserving almost-extinct traditional food products, raising awareness of the pleasures of eating (including the social aspects of sharing a meal), taste education, and paying attention to traditional agricultural methods and techniques among other initia-

tives” (Mayer and Knox, 2006, p. 326). Cittaslow movement started in Italy in 1999 with the idea of Paolo Saturnini, the mayor of Greve di Chianti (Tuscany) and the mayors of other small towns like Orvieto (Umbria), Bra (Piedmont) and Positano (Campania). They believed that the idea of food is not enough and extended the philosophy of Slow Food to the local communities, their lifestyle and the management of the city. Cittaslow is associated with Slow Food, which shares a common philosophy under an agreement signed in Plueba in November 2007.

Cittaslow was tied for an indefinite period and has its own trademark as the “orange snail carrying a crown of modern and historical buildings” (Fig.1). The integral part of the trademark is the phrase “Cittaslow - International Network of Cities of the Good Life”, whose use is regulated.



Fig. 1. Trademark of Cittaslow. Source: Annex D to the Cittaslow Internazionale Statut.

Cittaslow brings together cities from all over the world on five continents. The most are in Europe: Italy (68), Germany (10), Great Britain (9), Spain (6), Belgium (4), Austria (3), Denmark (1), France (1), Holland (3), Hungary (1), Norway (3), Poland (6), Portugal (4), Sweden (1), Switzerland (1); in Asia: South Korea (8), Turkey (1), China (1); in North America: United States (3), Canada (2); in Africa: South Africa (1) and in Australia: Australia (2), New Zealand (1).

Under the Cooperation Agreement concluded on 12 July 2004 between the local government of Warmińsko-Mazurskie Voivodeship, Reszel Municipality and the Cultural Association “The Castle” in Reszel, parties of the agreement committed themselves to joint efforts in order to join the town of Reszel to Cittaslow, thus providing the foundation for the emergence of a national Polish network of Cittaslow. The resolutions on 29 July 2005 of municipal councils of Reszel, Biskupiec, Bisztynek and Lidzbark Warmiński expressing the wish to join The International Network of Cities of the Good Life were the next step in the process of creating a national network of Cittaslow. In 2010, the fifth and sixth cities respectively from the Warmińsko-Mazurskie Voivodeship - Nowe Miasto Lubawskie and from Wielkopolskie Vovoidship - Murowana Goślina joined the Polish Cittaslow network.



Fig. 2. The old market in Reszel. Author: Kopeć K., 2007.

Over 50 conditions are required to obtain the status of Cittaslow. Some of the general requirements are the following: the number of inhabitants must be under 50.000, the streets of the city centre must be closed to motorized traffic, supermarkets and fast food restaurants are prohibited (Woźniczko-Czeczott, 2007).

Cittaslow movement also has a lot of specific requirements for improvement, which are categorized and described in Annex C to the Cittaslow Internazionale Statut. The 6 categories for improvement are: Environmental Policy, Infrastructure Policy, Technologies and equipment for the Quality of City, Local Products, Hospitality and Knowledge.

Requirements for improvement in the category of Environmental Policy are e.g.:

- control system of air quality and public consultation of air quality conditions,
- urban energy saving program, with an emphasis on alternative energy (renewable energy sources, hydrogen, small hydro) and the use of municipal waste combustion and biomass for energy production,
- programs for the promotion and dissemination of waste segregation,
- promotion of industrial and home composting,
- not recommending the use of agricultural genetically modified organisms (GMO),
- programs for governing placement of posters and advertisements,
- electromagnetic and light pollution control system.

Requirements for improvement in the category of Infrastructure Policy are e.g.:

- intervention programs for the renovation of historic centers and works of cultural value and history,
- city traffic safety programs,
- bicycle paths leading to schools and public buildings,
- existence of high quality landscaping in accordance with the minimum of equipment provided to the Ministerial Decree of 1444/'68 and infrastructure conducive to leisure space (lawns, playgrounds, etc.),
- repurposing unsightly urban areas and projects for re-use.

Requirements for improvement in the category of Technologies and equipment for the Quality of City are e.g.:

- aesthetically integrated trash bins in the city structure with set hours of draining,
- programs and awards for promotion of plants in public places, especially local plants having a positive impact on the environment, and according to the criteria of green architecture,
- programs to reduce noise in noisy areas of the city,
- programs for the use of colors.

Requirements for improvement in the category of Local Products are e.g.:

- programs for development of organic farming,
- programs to protect products and handicrafts, including artistic, endangered,
- use of natural products and local traditions and to maintain food traditions,
- programs on taste and nutrition education for primary and secondary schools in collaboration with Slow Food,
- inventory and promotion of local traditional products,
- inventory of trees in the city and the valorization of large trees and “trees of historical value”,
- support, preservation and promotion of local cultural events.

Requirements for improvement in the category of Hospitality are e.g.:

- programs for training and good tourist information,
- programs to place signs in the marking of international tourist centers and historical tourist routes,
- promotion of “slow” routes in the city (brochures, websites, etc.).

Requirements for improvement in the category of Knowledge are e.g.:

- information campaign among the inhabitants about the goals and methods of functioning of Cittaslow,
- programs for the involvement of inhabitants in the adoption of the philosophy of “slow” and Cittaslow projects, in particular: gardens and gardening education promotion and protection of books,
- programs for dissemination of activities in Slow Food and Cittaslow movements.

Cittaslow is a new model of urban development that is an alternative to globalization, or corporate-centered development. Table 1 shows the main characteristics of the two systems: corporate-centered and alternative.

Tab. 1. Comparing Corporate-Centered to Alternative Urban Development Agendas

Agendas	Corporate-centered/mainstream	Alternative
Characteristics	Homogenized Single imperative Inequitable Industrial Standardized Corporate Unsustainable Copied Low quality Replicable Insensitive to local history, culture Fast	Idiosyncratic/asset specific Multiple imperatives Equitable Craft Customized Grassroots Sustainable Authentic High quality Asset specific Sensitive to local history, culture Slow
Examples	Urban mega projects Smokestack chasing Industrial food systems	Community economic development Slow City Slow Food

Source: Mayer H., Knox P. L. 2006, pp. 325.

In Cittaslow movements, the traditional values that represent the uniqueness of the city are preferred. Cittaslow “aims to protect and enhance urban livability and quality of life. Slow Cities are places where citizens and local leaders pay attention to local history and utilize the distinct local context to develop in better and more sustainable ways” (Mayer and Knox, 2006, p. 322). Authenticity, high quality and sensitivity to local history and culture are the remarkable determinants of this new model of urban development of small cities.

Summary

“Cittaslow - The International Network of Cities of the Good Life” is an alternative idea of urban development of small cities. It is a new system for the management of city through Environmental Policy, Infrastructure Policy, Technologies and Equipment for the Quality of City, Local Products, Hospitality and Knowledge. The mental results of Cittaslow are the maintenance of local traditions (food, craft, customs etc.) and creation of relationship between inhabitants and the place where they live.

The visible results are noticeable in public spaces as: less accidental advertising and unwanted graffiti, less destroyed or bad building conditions, more high quality public green areas and coherent color scheme of buildings and other structural elements of the city. All these results make Cittaslow, or our Cities a better place to live.

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www.cittaslowpolska.pl

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Interdependent Systems of Space and the Public *Współzależne struktury przestrzeni i społeczności*

Streszczenie

Struktura miasta odwzorowuje strukturę społeczeństwa, które je zamieszkuje. Z drugiej strony, relacje pomiędzy członkami społeczeństwa zachodzą w przestrzeni, która do pewnego stopnia te relacje kształtuje.

Idąc dalej tym tropem, można stwierdzić, że translacja pomiędzy przestrzenią a społeczeństwem dokonuje się za pomocą kultury, na którą składa się, między innymi: język, tradycja, system rządzenia i produkcji.

Aby sprawdzić, jak zachodzi ta translacja, należy zbadać zależności pomiędzy elementami kultury a przestrzenią. Obszarem tego badania może być kultura władzy, hierarchia rodziny, albo język. Struktura języka poddaje się bowiem przetworzeniu na strukturę przestrzenną, tak samo jak inne kody i zasoby danych. Jeśli język wpływa na percepcję i na funkcjonowanie w przestrzeni, (Sapir-Whorf), a przestrzeń wpływa na percepcję i funkcjonowanie w społeczeństwie, to poznanie tych współzależności powinno pomóc w wygenerowaniu właściwego typu przestrzeni. Takiego, który zaspokoi zapotrzebowanie społeczeństwa epoki cyfrowej, która z założenia bazuje na systemach przetwarzania danych. Zmiany społeczne, jakie zachodzą obecnie, mogą wpłynąć na zmiany przestrzenne, a dotyczą m. in. takich zagadnień, jak interakcje społeczne, zatrudnienie na odległość czy transport.

Introduction

Although it is accepted, that one of the most important qualities of modernity is “connectedness”, the fact is that the digital mode of living frees individuals from the necessity of physical contact, hence leading to potential spatial separation. The approximation of reality created by the mind to navigate in the world used to be based on the experience in the physical world. This Existential Space (Norberg-Schulz, 1971) is now shaped equally by the virtual - the immediate connection to the opposite side of the planet, interaction between people drawn together by common interests rather than common localization. Finally, experiences in worlds that have never existed physically, but that the brain treats as such and records together with those made in the physical world alter the initial meaning of “connection” as such.

All this changes the way modern people see the space around them, and the way they use it, as it alters and expands the sense of closeness and distance. Consequently, it also changes the space that is being built, or potentially, the space that should be built to fulfil the needs of modern societies.

Space and Culture

According to works by linguists and anthropologists Edward Sapir and Benjamin Whorf, varying cultural concepts and categories inherent in different languages affect the cognitive classification of the experienced world in such a way that speakers of different languages think and behave differently because of it. This is called the Linguistic Relativity Principle. In the words of Edward T. Hall (1990, p.2): “People from different cultures not only speak different languages, and what is possibly more important, they *inhabit different sensory worlds*”.

This hypothesis is said to work not only with natural languages, but also with programming codes. It has been speculated that specializing in a programming language can influence methods of solving problems beyond the information technology world. Programmers accustomed to writing code in a specific programming language, use similar methods in approaching, comprehending and completing complex tasks in areas other than computer programming. One can wonder to what extent this hypothesis can be useful in other fields, connecting education, culture, and the structure of intellectual activity.

Similarly to language, colour can also have meanings, and these meanings are not universal (McCandless, 2009, *The Visual Miscellaneum*, Collins Design). Each culture develops its own colour code. Therefore the same colour can induce opposite emotional states in people from different cultural backgrounds. According to E. T. Hall (op. cit.), the same stimulus can induce different reaction, depending on cultural conditioning. If we were to apply this analogy to urban studies, it would mean that while space can be decoded, only those acquainted with cultural tradition of the people that have created it, will be able to decode the surrounding clues correctly. This is not to say that people are able to decode their surroundings in their entirety - there is individual education and awareness to consider.

In colour therefore we find the first connection between code and physical space. Language itself can also be visualised, and this can take place on different levels. Its inner structure can be shown in the form of a graph. Connections between words forming sentences can be shown in visual representation. This means that Language Space (Lefebvre, 1974) can have form. One such representation has been prepared by Benjamin Fry of MIT. He has written Valence, a programme in processing open source programming language that translates any text into orbital construction of lines and nodes.

One step further, data itself can take on form. Visualisations can represent an indefinite number of things, from traffic map of a website, or of a part of the World Wide Web (Anemone web graph by Benjamin Fry, MIT), to the correlation between time of year and political crises.

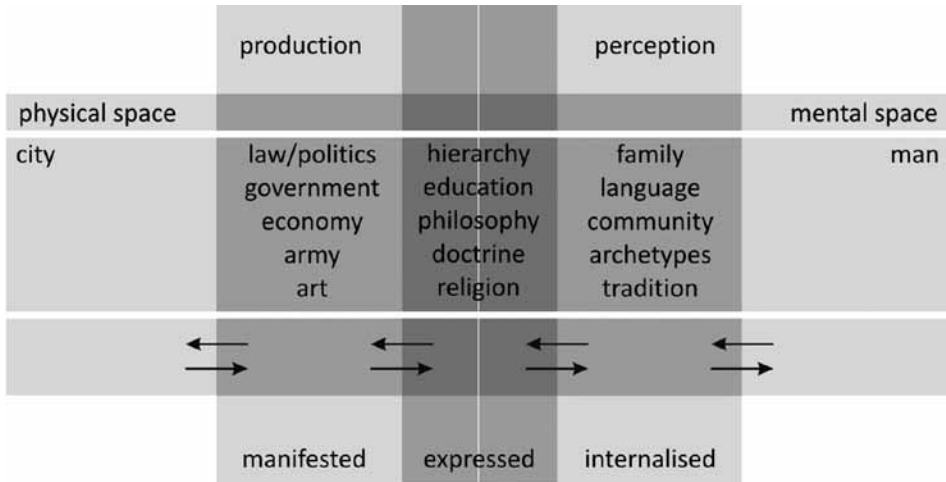


Fig. 2. Simplified translation between physical and mental spaces.

Above is a diagram showing a simplified translation between physical and mental spaces. To the right are parts of culture/civilisation that are internalised to the point of being unconsciously perceived as correct. In the middle, there are parts that are being expressed, and consciously analysed and worked upon. To the left, there are those parts of culture that have been formalized and influence the everyday life of the people of that culture.

Summary

People influence space and that influence can be decoded from the language of patterns and forms that the urban space takes on. The *mode of production* (Lefebvre, 1974) determines the result.

On the other side, space influences people, by moulding itself it moulds at the same time the ways it is used. This is less visible than the opposite, as people themselves would have to be studied, in groups or as individuals, to gather sufficient information to draw such conclusions. Only then could it be said, that a specific type of space of habitation, has shaped its inhabitants in some definitive way.

Density - closeness or separation, complexity, and/or regularity can all be translated into the structure of society. The way space is organized influences social models. For example, Chinese Hu-tongs, courtyard houses built in a labyrinthine manner, teach people to depend on each other - even if in some cases it might be solely for access to their homes. Yet as a system this spatial labyrinth translates into a close-knit society, where individuals know and accept their place in the whole.

A spatial code is not simply a means of reading or interpreting space: rather it is a means of living in that space, of understanding it, and of producing it (Lefebvre, 1974, p. 47) A similar conclusion should be drawn for future directions of urban planning, namely: if city planning is to answer the modern reality

of simultaneous closeness and separation of the inhabitants of mega-cities, there is a deep need for immediate implementation of adequate urban structures and connections.

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Bottom-up Design in Architecture *Projektowanie bottom-up w architekturze a urban energy*

Streszczenie

W ostatnich latach wzrosło zainteresowanie zaawansowanymi technikami komputerowymi w projektowaniu architektonicznym. Warto bliżej przyjrzeć się temu zagadnieniu, gdyż zdecydowana większość ze stosowanych metod służy wyłącznie uzyskaniu interesującej formy budowli. Aby w pełni wykorzystać możliwości komputera w projektowaniu należy odwrócić proces projektowy i przeprowadzić wirtualną ewolucję budynku. Dzięki tej rewolucyjnej metodzie architekt będzie mógł podejmować decyzje dotyczące efektywności budynku już na wstępnym etapie projektowania. Na potrzeby konferencji „Urban Energy” przeprowadziłem eksperyment dotyczący przepływu energii pomiędzy budynkami, wiązało się to z napisaniem programu komputerowego. Przedstawia on schemat macierzy dziesięć na dziesięć elementów reprezentujących budynki, które wymieniają się swoimi nadwyżkami energetycznymi wzorując swój sposób postępowania na zachowaniu np. ławicy ryb.

Introduction

John Holland invented genetic algorithms in the 1960s at the University of Michigan. He studied phenomenon of adaptation as it occurs in nature, and that was the original use of genetic algorithms. Later it was discovered that they could be used in problem solving and optimization (Mitchell, 1998).

Genetic algorithm derives its structure from the observation of nature. The simplest genetic algorithm contains three kinds of operations: selection (selects genes for reproduction), mutation (randomly flips bits of data) and crossover (randomly exchanges sub sequences of genes between organisms) (Mitchell, 1998). The main idea is that good solutions tend to be made out of good building blocks. Genetic algorithms are widely used in a variety of disciplines, such as: optimization, machine learning, automatic programming, economics, ecology, social systems, etc.

From Evolution to Bottom-up

In order to use genetic algorithms in architectural design one must consider some philosophical ideas, which can be traced to the work of Gilles Deleuze. Three ways of thinking present in Deleuze's works and described by Manuel DeLanda (2001) in reference to architectural design are: population thinking, intensive thinking and topological thinking.

Population thinking refers to a phenomenon observed in nature where a population is a matrix enabling natural selection to occur, and as a consequence enabling

organisms to improve. Without creating a virtual building population it is impossible to choose the fittest and cross them over in order to receive the next population with more effective representatives.

Intensive thinking is derived from thermodynamics. It refers to intensive quantities - magnitudes that spatially cannot be divided (i.e. temperature, pressure or speed). In architectural design we deal with extensive quantities like lengths, areas or volumes. Differences between those quantities are productive, as they are main factors in processes of natural form-creation.

Topological thinking is a term connected to topology - one of the most important areas of mathematics. It is a way of describing buildings as a set of parameters and relations between them, so that we don't get a final form, just the necessary rules for creating it.

It is vital to create a 'body plan' of a building in order not to limit algorithm's capabilities. The reason for a 'body plan' is cumulative selection. In the process of cumulative selection a given population always starts with the outcome of the previous population selection (Dawkins, 1994).

One of the most important tasks to perform, during the process of genetic algorithm-aided design is extracting building genes. The next population will always have better fitness than the previous one. After a finite number of populations it is probable that one will receive an optimal outcome - in this particular case an optimal building.

Bottom-up design is a process where individual base elements of the system are first specified in great detail, linked together, sometimes in many additional subsystem levels to give rise to grander systems. It is opposite to a top-down approach that is used in traditional architectural design. Using a bottom-up approach in architectural design would require genetic algorithm involvement. Thanks to that the designer could be sure that the project is energetically self-sufficient, has perfect insulation for a given set of conditions or has perfect (or close to perfect) function. Once logic has been written into a script, the results are already optimized (Leach, n.d.).

Regarding the worsening state of our planet there is a growing need for efficiency. Ecological solutions in architectural design are becoming inevitable. Bottom-up methods can change architecture and architect's role in the future.

One of the most interesting uses of genetic algorithms is cellular automaton. It is a system in which emergent computation between small elements, with limited information takes place, and leads to coordinated global information processing. Examples are insect colonies, immune system, brain, etc.

I performed an experiment regarding cellular automaton. I created an urban grid model representing one hundred buildings - a ten-by-ten matrix of elements. To make it less complicated the grid is made of parallel and perpendicular lines (like a checkerboard). Every element or building has eight neighbours. Few assumptions were made at the beginning of the experiment. One assumption was that all buildings are using and producing energy (for example electric energy).

All buildings are designed using the bottom-up method, so it is possible they are energy efficient. To make the experiment more probable the energy used is given a random number between one and ten (let us call it ‘a’) and the energy produced is a number between 0.8 a and 1.2 a. The first step can be seen Fig. 1. Every element performs a few operations. At first it recognizes its own state. If it lacks energy it doesn’t do anything. If it has surplus of energy it performs another step, which is to check how many of its neighbours lack energy. Then it takes its own surplus and divides it into the number of neighbours ‘in need’ and transfers it to them (every neighbour gets the same amount of energy). It happens simultaneously for every element.

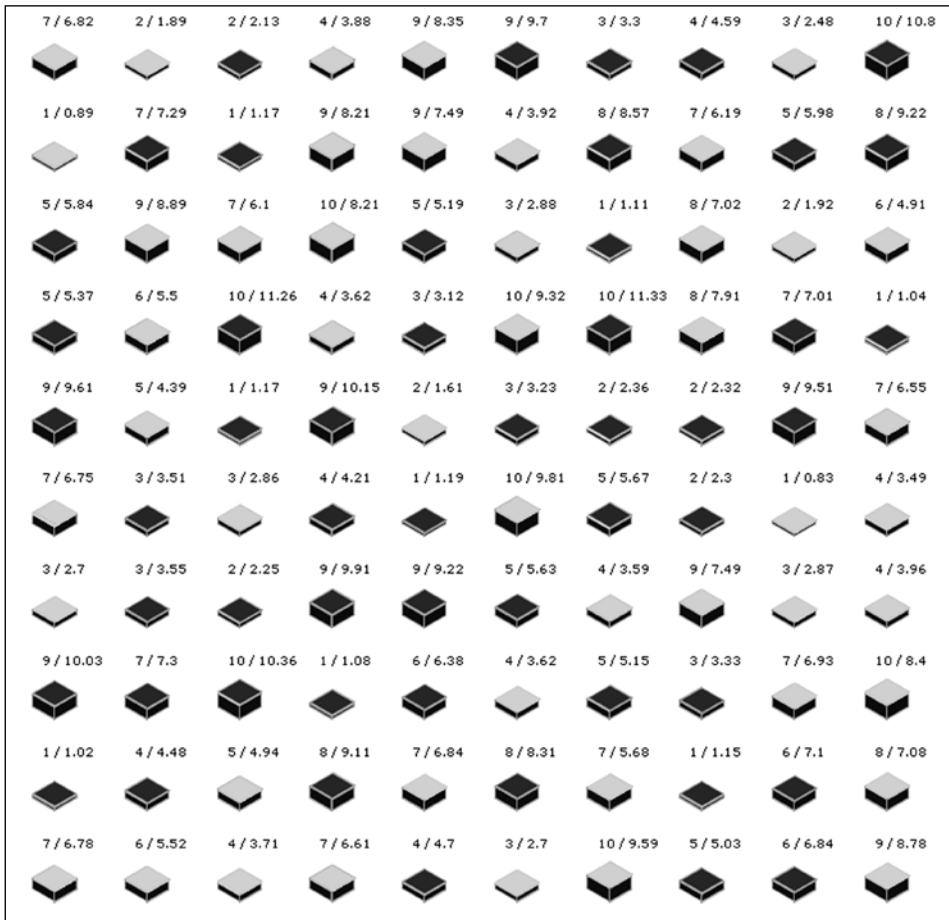


Fig. 1. The grid of one hundred elements representing buildings. Each one of them has two numbers above - one is the amount of energy used, and the other one is the energy produced. Colour represents surplus of energy (dark grey) or lack of it (light grey).

In order to perform this experiment I had to create a computer program. Every time it behaves differently. For the situation seen in Fig. 1 it took forty-seven steps to end the process. The result can be seen in Fig. 2. Only six buildings

lack energy and these are small numbers. The reason for that is randomization at the beginning. The total amount of energy produced is not equal to the total amount of energy consumed.

It becomes obvious that the larger the system the more stable it is. This model proves that without a central energy management system it is possible to distribute energy effectively. With such a connection between buildings, power plants are no longer needed, as we can pay our electricity bills to our neighbours.

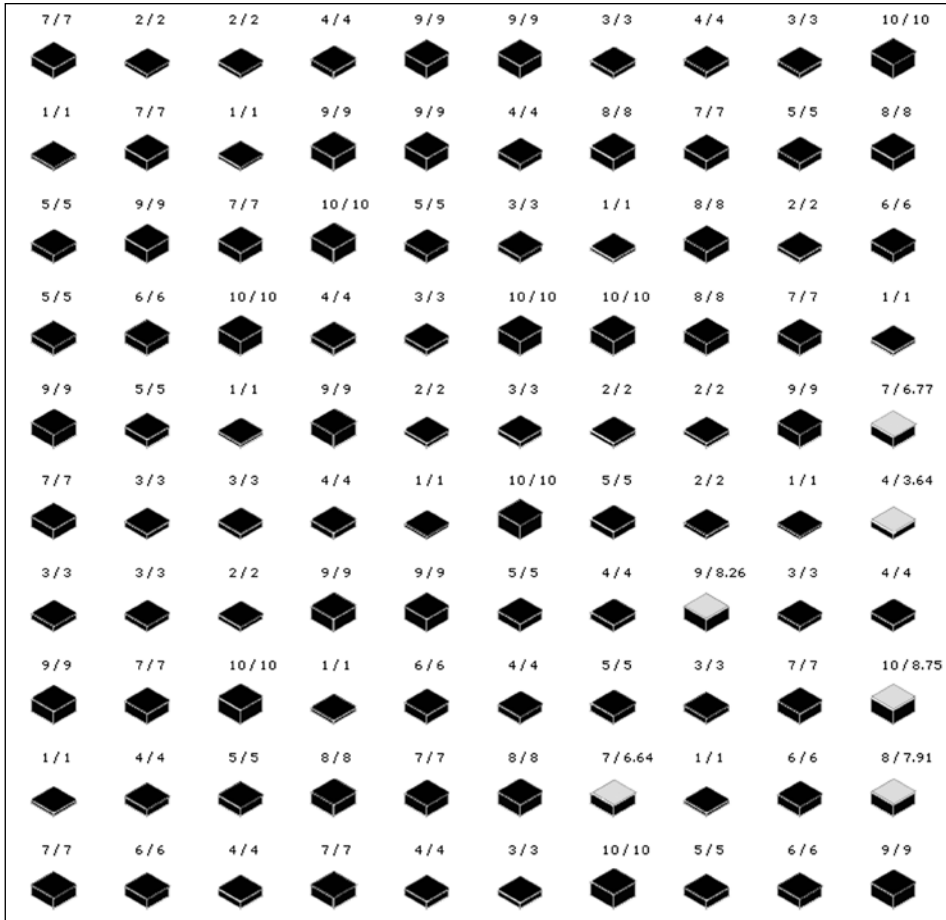


Fig. 2. Colour represents buildings having sufficient amount of energy (black) or lacking some energy (light grey).

Summary

The bottom-up approach in architectural design can bring a lot of important gains regarding energy efficiency. It has been proved that the systems observed in nature can be adopted for human needs. The amount of problems waiting to be solved in this way is enormous, but it is definitely worth the effort as it can change the whole discipline of architecture and the architect's role.

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**Power to the People - Role of New Channels of Social Communications
in Polish Planning Practice**

***Power to the People - rola nowych kanałów komunikacji społecznej
w praktyce planistycznej w Polsce***

Streszczenie

Rozpatrywanie kwestii partycypacji społecznej w planowaniu wyłącznie przez pryzmat działań instytucjonalnych - konsultacji czy działań informacyjnych - nie zawsze gwarantuje zapewnienie wpływu obywateli na ostatecznie decyzje planistów. Budowanie ram instytucjonalnych dla partycypacji tworzy nowe możliwości wyrażania własnych opinii przez obywateli oraz wywierania wpływu na decydentów. Analiza prac naukowców takich jak Flyvberg pozwala na nowe spojrzenie na relację między władzą, partycypacją a planowaniem. W tej interpretacji partycypacja deliberacyjna jako metoda neutralnej dyskusji, pozbawionej wpływu władzy na podejmowane decyzje, nie jest wystarczająca. Zaakceptowanie alternatywy polegającej na spojrzeniu na planowanie jako formę polityki, niepozbawionej elementów rywalizacji oraz gry o władzę, pozwala na ocenę nowych metod komunikacji społecznej wprowadzanych w Warszawie. W tym kontekście ich rola tworzy pole „kreatywnego konfliktu” między obywatelami a decydentami, pozwalając skuteczniej wywierać wpływ na podejmowane decyzje. Według tej perspektywy oceny procesów partycypacji urbanista nie jest jedynie racjonalistą podejmującym decyzje na podstawie chłodnej oceny faktów. Jego pozycja wymaga większego zaangażowania politycznego i społecznego.

Introduction

In the contemporary debate on town planning participation is considered as an integral part of the decision making process. In the Western societies a radical critique of post-war planning in the sixties, examining the negative effects of planning methods based solely on the judgements of professionals, helped to change the attitude towards a more cooperative approach. The new paradigm however requires increasing the role of more direct and deliberative forms of democracy that can in turn demand a profound change in a local political culture. Even when requirement for direct participation does not raise any doubts amongst the planners, the efficiency of the process is still a matter of open debate. It is not only an institutional matter but also more of a fundamental question of whether the deliberative methods of planning give individual a real chance to become a partner in a planning process. Examination of this problem is particularly interesting in a Polish context, where institutions and mechanisms of deliberative democracy are at the early stage of development. One of the most advanced examples of such mechanisms exists in Warsaw.

Participation - Creative Conflict or Institutionalised Dialogue?

Participation was not always a form of peaceful deliberation. A tradition of confrontation lies at the roots of the debate on participation. The earliest forms of involvement of the citizen in modern planning occurred as protests against the arbitrary decision of the planners. In the United States and Western Europe the tradition of protest was established by the upheavals of the Sixties and the rise of the strong political and intellectual counterculture. In the forthcoming years the tradition of contestation made way to more established and cooperative forms of participatory dialogue. The forms of this dialogue raised the question of its efficiency. In one of the canonical texts "A ladder of citizens participation" Sherry Arnstein (1969) considered activities such as placation or compensation and public consultations as tokenism. The idea of tokenism as a political practice based on the premise of illusionary inclusion and pretended involvement of the authorities.

According to Arnstein (1969), the assumption of necessity of direct involvement poses a question of efficiency of a consultative process without real political power. Yet, the closer examination of the urban politics reveals that participation rarely exists in isolation from other forms of mechanisms of influence, affecting the planning decisions. American politologists Savitch and Kantoor in their theoretical model of urban development considered political participation as a 'steering mechanism' of urban growth. What is of particular importance, in their view the process included both the forms of citizens' activity and participation in representative democracy. This point of view enables to place participation mechanisms alongside with a broad gamut of other relationships between citizens and their elected members, ranging from passive elections through direct clientism. Planning in this concept is considered as an integral part of local politics. In a Polish context this point of view was recently introduced to theoretical discourse by Krzysztof Nawratek (2008), who called a city a political project, calling for creation of new form of citizens self-governance.

Having considered the fundamental nature of participation it is also worth examining the development of the new channels of communication in Polish practice. In theory, both the Constitution and the current Planning Act safeguard involvement of the public in the planning process. The planning system requires public consultation procedures for almost all planning documents before they are submitted for voting by the elected members. Nonetheless, these institutional mechanisms alone seldom guarantee full citizens involvement. In comparison to Arnstein's model these mechanisms have a limited participatory potential.

The newest attempts to change this paradigm were implemented by the Municipal Office of the Capital City of Warsaw. New mechanisms aiming at strengthening both the non-government organizations (NGO) sector and its involvement in city politics were part of the Social Strategy for Warsaw 2009-2020. Two programmes were specifically prepared to support the idea of greater citizens' participation: the operational programme "Development of Social Dialogue

and Communication” and pilot programme “Strengthening of the Mechanisms of Social Participation”. The overall character of these initiatives is different - the operational programme is part of a larger ongoing effort to support the growth of third sector organizations in the city. As a part of this initiative the City Office continued to support the various NGOs with legal, financial and administrative know-how. These activities aimed at coordinating the actions of the city and third sector culminating with the creation of Centre for Social Communication.

In terms of planning involvement, one of the more interesting initiatives was creation of the two channels of communication with local NGOs - Forum for Social Dialogue and Commissions for Social Dialogue¹. The latter functions as a theme-focused advisory board embedded within the corresponding departments of the City Hall. The scope of both channels’ work is wide but at least one of these boards is directly committed to issues of architecture and planning. Initially, the Commissions were established to support the Authorities in making decisions on grant competitions for NGOs. In time, they grew to become advisory bodies for the City officials, chaired by the members of the city NGOs. The new status of the Commissions was formally recognized in 2009.

The concept of the Commissions has its limitations as these bodies do not have any legal competencies. They can be considered as a more direct channel of communication between the City Hall officials and NGOs. The biggest benefit of the Commission is the opportunity to disseminate the knowledge on the plans and proposals of both parties. The access to information may allow the citizens to coordinate their actions accordingly. The exchange of information on the plans of both parties, submission of proposals and initiatives as well as negotiating the common educational and participatory initiatives remains the primary role of these semi-official bodies.

The other significant initiative was a pilot programme for “Strengthening of the Mechanisms of Social Participation”, led by the Centre for Social Communication and funded by the Norwegian Financial Mechanism. The programme was intended to provide more immediate results and was aimed at education of the City officials in public negotiations and citizens’ participation. The initiative was prepared in response to the necessity to minimize the potential social conflicts anticipated by the planned public works projects.

Another reason, based on both anecdotal evidence and field studies², is the prevailing reluctance of Polish planning officials to get involved in extensive participatory processes with the members of the public. The participation is considered as an unwanted element that adds unnecessary complication to the administrative and planning processes. Therefore the programme was aimed at changing this mindset by providing extensive training in social communica-

¹ Polish: Forum Dialogu Społecznego (FDS), Komisja Dialogu Społecznego (KDS).

² One of the prominent countrywide studies include series of recent reports on public consultation procedures for the Euro 2012 Football Championships prepared by the non-profit watchdog organization Projekt Społeczny 2012 (www.ps2012.pl).

tion. The City Office also trained a number of negotiators that can provide help in the future by mitigating the potential conflicts.

Summary

The concepts summarized above could be both considered as institutional solutions functioning as a part of habermasian deliberative tradition. According to this intellectual tradition planning can be considered as a communicative action based on the rational exchange of opinions where elements of power play are largely absent (Richardson and Conelly, 2005). Habermasian tradition was hugely influential in Western planning world resulting in the concept of the “communicative planning” (Healey, 1992; Forrester, 1993). This idea situated a town planner in a position of a facilitator, enabling communication between the parties, resigning from taking the position of power and primarily acting as a problem-solver for the parties engaged. To achieve this certain “communicative ethics” must be upheld by the discussing parties including elements such as mutual respect, use of clearly understandable language, sincerity. That is why Warsaw programme for training the municipal officials or establishing the institutional “frame” can be considered as a hugely important step in Polish context. Nevertheless, Warsaw’s Commissions as a neutral communicative channel miss the element of true citizen empowerment.

Institutional support does not solve the problem of existence of power relations. Instead it provides opportunity to convey messages to the City officials thus reducing the distance between the general public and the decision makers. The intellectuals examining the issue of power relations in planning consider the neutral and rational discussion as difficult to achieve in reality. The process of rationalization of ones choices and element of personal judgment is one of the main reasons why the concept of “pure” deliberation may be flawed (Flyvberg, 1998). Concepts of Flyvberg warn that there is a discrepancy between the utopian situation of an unspoilt neutral communication and the real world, by its nature affected by conflict of interests and various power plays. Conflict in this context can be considered as inherent element of planning process. The new mechanisms of participation therefore are becoming new opportunities to both yield pressure and present particular concepts or opinions by particular social groups of influence.

The acceptance of “planning as politics” will situate planner in a difficult position. One of the chances will be to become the “servant of many masters”-constrained by both legal limitations, professional knowledge and by demands of the various stakeholders. Participatory mechanisms allow various groups of conflicting interests including developers, local citizens and a plethora of local NGOs to be involved in the process. This position can be frustrating, considering a traditional role of a planner as a technocratic professional, basing his or her judgements on purely rational values. In Poland the paradigm of social engagement in planning is changing. Without a creative conflict, which is inherent to any forms of social participation, the whole planning process becomes an empty ritual.

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**Creative Workplace and Space of City Creation.
Urban Energy Strategy for the Post-Industrial City**

***Kreatywne miejsca pracy a przestrzeń kreacji miasta.
Strategie przywracania vitalności miastu post-industrialnemu***

Streszczenie

Myśląc o możliwych przemianach miasta postindustrialnego nasuwa się pytanie, w jaki sposób przywrócić vitalność przestrzeniom wcześniej użytkowanym przez przemysł. Gdzie poszukiwać impulsów rozwojowych do odnowy przestrzeni miejskiej? Czy globalne wyzwania wpływając na lokalne potencjały przestrzenne, gospodarcze i społeczne mogą wyzwolić energię miejską?

Odpowiedzią jest znalezienie narzędzi rozwoju społeczno-gospodarczego miasta postindustrialnego, tak by wyzwolić społeczną energię współpracy, aktywności, innowacyjności i kreatywności.

Jedną z koncepcji ewolucyjnej przemiany modelu miasta industrialnego jest koncepcja miasta kreatywnego. W oparciu o zasadę 3xT realizowane są modele przekształceń przestrzennych, pobudzających rozwój gospodarczy w oparciu o wiedzę i nowe technologie. W artykule opisano jeden ze sposobów tworzenia parku biznesu - park kreatywny. Powstające tam miejsca pracy skupiają tzw. klasę kreatywną, której materialne i niematerialne wytwory stają się generatorem rozwoju miasta.

Introduction

Indispensable changes in traditional work environments are entailed by requirements of knowledge society and sustainable development. The necessity of rethinking workplace in the present-day city is a consequence of social and economic change: City management and development are both influenced by processes caused by the new economy. Thinking about the possible transformation of post-industrial cities raises the question of how to restore the vitality of post-industrial spaces.

Where are we to look for development impulses for the renewal of urban space according to workspace creation? Can the global challenges affecting the local potentials of spatial, economic and social conditions trigger social energy cooperation, participation, innovation and creativity?

The hypothesis of this article is to show that urban energy potential and city development can be achieved by a well-organized workplace.

Considering employment and workplace in the context of a knowledge-based economy and sustainable development, three scientific questions highlight the most important problems that make the framework of the research:

- Key features of the information and knowledge society.

- City development and globalization versus local potential. Polarization of lifestyles.
- Creation of place in urban structure by relationship of functional and spatial scale of the city.

Firstly, we have to find an appropriate model for space redevelopment. As R. Buckminster Fuller said: “You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete”. To achieve higher profits the space should help generations to cooperate at work and create a suitable model for polarized lifestyles caused by the evolution of ways of working: from blue-collar to white-collar, to green-collar or furthermore to no-collar (Florida, 2002).

The Socially Inclusive Creative Workplace, Case Study of Creative Parks in Shanghai

One concept of evolutionary transformation of the industrial city model is the concept of creative cities. It is based on the principle 3xT implemented models of spatial transformations, stimulating economic development based on knowledge and new technologies.

Considering methods of the space model for a knowledge society, we should select the main features and market requirements for creativeness: mobility, flexibility, interactive way of thinking, individuality, high demands, social moving spirit and social marketing, global technologies together with its local implementation strategies. Those characteristics are based on predictions for future workplace such as: constant need for face to face interaction, excluding the place of work from the space of work, increasing the number of green jobs and IT jobs, globalization strategies implied in this case as a need of constant meeting. Successful investments reorganize processes and make new values, have long-term positive effects, and build strong innovative potential.

Tab. 1. Creative Park Potential. Author: D. Wiśniewska.

Aims	Creative park solution
Long-term investment	More efficient use of space suitable for polarized lifestyles
Increase the quality and productivity at work	Business incubators, Co-working, Conference Centers for creative industry
Transferring responsibility for the creation of space to individual or group	Each creative industry firm develops its own space in a very individual manner
Socio-economic development of post-industrial city	Renewal of urban space suitable for city center areas as well as for central districts of polycentric cities, flexibility of space creation for different social and new economy needs

Post-industrial areas have high potential because of easy transport connections, storage area that can be quickly transformed into green public spaces, and buildings mainly with an open floor plan. Abandoned brown fields in important

districts of the city - such as city centers - they do not support city economy, social needs and city image. Revitalization of those abandoned areas for the purpose of creative class workplace was one of the Shanghai city projects. “The Creative City balances a dynamic and occasionally tense equilibrium since when the old and new come together there is a creative rub” (Landry, 2008, p. 27).

The idea of a new era moving from conformity to creativity causes problems connecting different needs and expectations of various groups of people. The model creative park can be an answer for the creative class workplace. The main point is to achieve a socially inclusive strategy for creative individuals to organize creative clusters.



Fig. 1. Devastated part of post-industrial space for “Creative Garden”, Shanghai. Source: photo by D. Wiśniewska.



Fig. 2. Renewal of post-industrial space for “Creative Garden”, Shanghai. Source: photo by D. Wiśniewska.

Tab. 2. Models of work in creative parks, Source: Author: D. Wiśniewska

Model of work	Advantages	Disadvantages	Socially inclusive strategy
Art galleries	The spirit of the district, good solution for revitalization of district near open public spaces especially near river e.g., high bohemian index	Low income, hard to exist without external support	Common art, meetings with artists
New technologies companies (such as ecology industry, IT, R&D)	High income in longer perspective	Closed spaces, mainly for Yuppie and n-generation, rather closed for citizens	Young specialists work together except for staying at home, Incubator of start-ups
Shared, free or group address office	High space occupancy factor, "hotspot" for meetings	Noisy and rather space of flows, space of rush	Opportunity to meet different people in a workspace with high occupancy factor
Fashion and design companies	The energy of the district, color, new stylistics, space full of creative people	If there is no space for integrated exhibitions, can stay closed for citizens	Design workshops organized in one place have easy access for potential customers, makes a brand of a district
Education and public facilities	Integration through generations	Needs special safety solutions	Creation of space for youth care together with a space for parents to meet each other

The case study is a good example for workspace appropriate for the creative profiled in detail in Richard Florida's research. "The possibility of faster change and new directions of development is conjugate with people's ideas and talents. Cities are cauldrons of creativity. They have long been the vehicles for mobilizing, concentrating and channeling human energy. They turn that energy into technical and artistic innovations, new forms of commerce and new industries and evolving paradigms of community and civilization. (...) A growing stream of research suggests that amenities, entertainment and lifestyle considerations are important elements of the ability of cities to attract (...)" (Florida, 2005).

Summary

System components of sustainable development based on the triple bottom line framework: People\Planet\Profit together with 3xT Talent\Technology\Tolerance (Florida, 2002, p. 249) are connected together in the idea of creation resources rather than consumer resources. Creation of the good city offer is based on a better understanding of potentials, resources and peoples' needs. The main resources available in a city like the cooperation of personal and social capital, infrastructure, equipment and new technology market, channels of information distribution, and brand of the city are the base of creative industry clusters.

Achieving sustainable strategies like infill development, socially inclusive, effective space usage, easy communication systems inside and from outside, variety of possibilities to use space, easy connection to recreation and main services, as well as energy efficient building solutions can all be implemented in postindustrial areas by developing creative parks.

Creative impact on the structure of the city with the strategy of balancing development can take place through the kind of workspaces in cities that have led to active integration of the local community with other visitors or tourists. Creative parks are places to allow for a broad debate on the cultural and the ability of its effect. Having opportunity to meet and work in an innovative way can create a modern *genius urbis*.

Emerging jobs focused on the tangible and intangible productivity of the creative class can become a generator of urban development.

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**Urban Energy in the Affective Bond between Place
and its Youngest Inhabitants**

***Energia miasta w emocjonalnej więzi pomiędzy miejscem
a jego mieszkańcami, zwłaszcza najmłodszymi***

Streszczenie

Przywiązanie do miejsca, tak jak i do osoby, powstaje we wczesnym dzieciństwie. Poprzez przywiązanie do miejsca, dzieci kształtują swoją osobistą tożsamość oraz tożsamość społeczną, która prowadzi do odczuwania wspólnoty z innymi. Jednak, aby tak się stało, miasto musi dać możliwość dzieciom do wykształcenia powyższych cech. Osoby odpowiedzialne za kształtowanie miast rzadko biorą pod uwagę potrzeby dzieci jako przedmiot szczególnej uwagi. Podczas projektowania miejsc zamieszkania przepisy narzucają wymagania odnośnie utworzenia miejsc dla dzieci. Najczęściej ogranicza się to do wyodrębnienia fragmentu przestrzeni i ustawienia na nim kilku huśtawek i piaskownicy. Miejsca dla dzieci powinny natomiast być postrzegane bardziej psychologicznie niż fizycznie, w kontekście znaczenia co mogą one dzieciom zaoferować, jak dzieci je postrzegają i jak mogą wykorzystać jego możliwości. Miejsca te powinny naśladować „prawdziwe” życie, dawać możliwość pełnej ekspresji, wzbudzać wiele skojarzeń, a także pozwalać na chwile wyciszenia i samotności.

Introduction

People living and acting in the city render it alive. The affective bond that people develop with their environments has gained much scientific interest in recent years. Within humanistic geography this phenomenon is described as a sense of place that includes meanings, attachment, and satisfaction. B. Jorgensen and R. Stedman (2001) consider sense of place as a multi-dimensional concept which includes cognitive, affective, and behavioural components, respectively identified as place identity (Proshansky, 1978), place attachment (Altman and Low, 1992), and place dependence (Stokols and Shumaker, 1981).

Place identity refers to beliefs, preferences, values, and meanings that concern the human-environment relationship and how the place contributes to individual identity. Place attachment refers to the affective bond and emotions that occur between individuals and their meaningful environments. Place dependence refers to source functionality, or the ability of place to fulfill people's needs as compared to other places that are available. Within environmental psychology, all three of these components usually appear as separate notions and the conception of their mutual relationship is varied. Some authors have considered them different concepts altogether, or to the contrary, as different definitions of the same concept. Others have regarded place attachment as a component of identity or as its

predictor, while still others have focused solely on one component and neglected the effect of others. Nevertheless, we can observe that a tripartite framework has arisen. Place attachment includes here (Scanell and Gifford, 2010) the person dimension, the process (affective, cognitive, and behavioural) dimension, and the place dimension, and also reminds structure of attitudes.

Urban Environment Needed for Healthy Development of Children

Most research has considered the described issues among adolescent inhabitants or users of some places in their contemporary life. However, place attachment can form itself since early childhood as well as human attachment that arises between a child and its mother (or main caregiver). According to the attachment theory of J. Bowlby (1969), the attachment relationship develops from positively affected day-to-day interactions with the figure of attachment, though motivation to this act is located wholly in the child and the role of physical environment is neglected. Although some authors attribute developmental significance to children's places as opportunities for play and exploration, it is still unclear how the place attachment is obtained.

P. Morgan (2010) tried to integrate the model of human attachment with the idea of place attachment. He proposed a similar process to the developmental model in which the attachment relationship arises from repetitive positively affected interactions with an attachment figure. In his *exploration-assertion motivational system* appeared place arousal like fascination, excitement, etc., afterwards place behaviour (exploration, play, etc.) and "the day-to-day pattern of a child's positively affected exploration/play/mastery and sensory interactions with her environment is internalized into an unconscious internal working model of that relationship. The long-term affective bond known as place attachment is the conscious subjective manifestation of that internal working model" (p. 15).

As described above, place attachment may have three components: cognitive, affective, and behavioural. P. Morgan (2010) explained the affective and behavioural components in a model of developmental theory of place attachment. Is there a physical environment significant for the development of human identity? Place identity, according to C. Twigger-Rose, M. Bonaiuto, and G. Breakwell, is probably part of one's self-identity (2003).

E. Erikson's (1980) model of psychosocial development of identity is one of the most prominent, comprehensive theories describing human development through a progression of eight stages that occur throughout the lifespan. Each stage has tasks and crises and needs to be solved positively to accomplish the growth process. The goal is to successfully resolve the pertinent task at each stage in order to transition to the next stage. No stage is skipped, and although there may be some regression to a previous stage, the stages must be completed in order. The fifth stage is *identity versus identity confusion* and includes adolescent ages. The first four belong to childhood ages and lead to the acquisition the identity.

According to the psychosocial development of identity theory, environment plays a significant role and supports successful completion of each stage. The first (0-1 year) psychosocial stage is *trust versus mistrust*. Trust/mistrust is the result of relationship with others and is an attitude toward self and the world. The second stage (2-3 years) is *autonomy versus shame and doubt*. E. Erikson (1980) observed that children may either feel comfortable in trying new things or may be reluctant to engage in new tasks. If a secure environment allows for a child's independent decision-making the result is confidence and self-esteem. If the environment offers no opportunities to perform new tasks, doubt arises. The next stage (3-5 years) *initiative versus guilt* provides greater opportunity to carry out activities. The goal is to move beyond minimal expectations to create new learning opportunities. Events provided by the environment develop a sense of independence and enable a child to explore new activities and roles. The fourth stage (6-12 years) is *industry versus inferiority*. It emphasizes skills, tasks and production. Competence, self-awareness, and sense of pleasure emerge at this stage, and intellectual growth increases.

The physical environment should support children as they struggle to develop and apply skills and knowledge. They must have the possibility to engage in purposeful behaviour and actively meet the challenges. Nonetheless, the majority of children's places within a residential environment in towns and cities do not fulfill these requirements. An average playground includes a slide, a swing, a seesaw, a sandpit, and sometimes a rope ladder. Playgrounds in towns are very similar and... quite boring, mostly. Generic equipment provides no possibilities to explore freely, simulate acting, stimulate senses, generate opportunities for seclusion and quiet, and finally develop the affective bond with place.

What kind of environment is needed for children and their healthy development and feeling a sense of place? The drive to interact with the environment is an intrinsic attribute of all children, but the level of quality of such interaction depends on the possibility that the environment provides. R. Wilson (1997) proposed factors significant for creating places for children:

- Natural areas - are very important for urban children as they have fewer and fewer opportunities to manipulate earth-made features, i.e. log-brushwood pile, sand, stones, water, etc. Playing in dirt or puddles is also very valuable in creating sensitivity and responsiveness to environment;
- Seclusion and quiet - many children want to spend some time alone and to feel intimate. Enclosed and hidden places must exist to balance the exciting and dangerous places. Children also use such places to act out dramas or stories;
- Active exploration - children want to use places actively, to explore and manipulate. Children will think: "what can I do with this" instead of "what is here" like adults. Variety of opportunities is the core concept;
- Change - children need to modify, change and influence their environment. Places for children should provide opportunities to create and recreate their own settings;

- Diversity and complexity - environment should stimulate the senses and rhythmic pattern of movement to help maintain optimal level of response and alertness. Places for children must not be dull, repressive or inadequate in meeting children's needs;
- Immersion and encounter with the natural environment - children need exposure to a variety of plants, animals, and other natural elements that provide opportunities to develop the senses of feeling, tasting, smelling, hearing and seeing. They also need direct exposure to sun, shade, water, sand, soil, etc.;
- Personalized space and place - help children feel "ownership" of a place and acquire the sense of affiliation.

Summary

Planning and designing of children's places in the city is very important. Such places are not just places for fun and spending little time apart from other activities. We should remember that playing is child's work. Children learn and develop while playing but this is only possible when the games are various and interesting. The place can and should provide variety and interest. When places for children have been created with knowledge and respect for the needs of children, we will have much more young and fresh energy in our towns.

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**Urban Heritage as Design Factor in Post-German Towns.
The Case Study of Koszalin**

***Kulturowe konsekwencje w miastach pomieckich.
Rola projektowania urbanistycznego. Przykład: Koszalin***

Streszczenie

Wyzwaniem postawionym przez organizatorów „Young Planners Debate on Urban Energy” było dostarczenie możliwie szerokiego spektrum widzenia tematu miejskiej energii. Odpowiedzią autora na tak postawione zaproszenie było zestawienie miejskiej energii z miejskim dziedzictwem, które jest głównym polem jego badań (doktorat 2010-2013). Na potrzeby tego artykułu, we wprowadzeniu, oba terminy (energia i dziedzictwo) zostają zawężone dla uniknięcia rozproszenia w ich szerokim znaczeniowym tle.

W części głównej zostaje wprowadzony termin projektowania miejskiego (urban design) jako możliwego mitochondrium przetwarzającego dziedzictwo miejskie, w rozumieniu jego kulturowej przydatności, w miejską energię. Artykuł zakończy propozycja eksperymentalnych narzędzi badawczych, które mogłyby pozwolić traktować niemieckie dziedzictwo urbanistyczne jako źródło miejskiej energii.

Introduction

According to Juhani Pallasmaa (2007, p.17), without delay, “we need to understand the unity of the physical and psychological worlds. During the processes of creation of physical spaces, essential mental structures and realities are being simultaneously created”. What happens if these structures are interrupted and realities destroyed?

This study will use urban space as a possible “observation matrix” as coined by Sandl (2009, p. 162). The same author claims that in the context of historical studies space gives more possibilities to the development of explanation models than time (history) does.

The example of post-German towns quite remarkably shows how the role of urban heritage becomes particularly apparent in the moments of transition from one country, and political system to another. In this context, urban heritage will be understood as a signifier of cultural consciousness derived from the organization of space.

Urban energy on the other hand, will be understood here as a purposeful engagement of inhabitants into the public discourse. Only through action may people’s energy be released and consumed for more complex social needs (quality). In some aspects and in some German towns, urban heritage is already used as a tool

for urban mobilization (i.e. see *International Building Exhibition (IBA) Urban Redevelopment Saxony-Anhalt 2010*). How to enlighten a similar mobilization in towns comparable in scale but cut off away from their social continuity, just as western Polish towns were cut off in 1945? What needs to happen to enable post-German heritage to become a source of urban energy?

A British scholar, Charles Landry, in his work on urban innovation emphasizes the need for appreciation of the expression of values and identity as crucial for the possibility of reacting to the challenges of civilization (2000, p.111). The claim of this work is that a more massive exploitation of urban heritage (identity and memory) is substantial for a more efficient and qualitative growth of our towns. The values of heritage need to be named and translated back into the contemporary public discourse in order to feed a multi-sectorial negotiation process with the aim of a more qualitative transformation of space. How is urban heritage created and what does it need urban energy for? How is urban energy created and what does it need urban heritage for?

Urban Design and the Representation of Values

Urban design will be a key element of the renaissance of cities, to break down the isolation between parts of the city and to achieve retention and continuity of character, in the face of the impersonal trends of homogenization. [...] the revival of urban design to protect and enhance streets, squares, footpaths and other thoroughfares as key linkages in the urban framework; [...] measures to facilitate personal contacts and opportunities for leisure and recreation, measures to ensure the collective and individual feeling of security; efforts to create memorable urban environments derived from specific genius loci [...] (Conseil Europe'en des Urbanistes, 2003). The challenge revealed in this quotation is to approach urban design above its utilitarian values, as it could be understood in the era of "urban renaissance". The Tools of Visual Impact (*Narzędzia Oddziaływania Wizualnego* - NOW) classified by Oskar Hansen (2005) provide useful linkages between urban design and the semantic and forming values that it transmits.

An outstanding example of a culturally sensitive project was carried out by Metis (Mark Dorrian, Adrian Hawker, Victoria Clare Bernie) for the *Northern City* exhibition in Edinburgh, 2005, where one of the most important objects of Edinburgh's urban heritage (a memorial to David Hume) was dismantled through a deep literary analysis, only to be reassembled into a multimedia installation. This is one of the possible translations of the past for the use of contemporary issues (Carter, 2006). The subtle interventions count most.

The work of Metis reveals the issue of selection of some elements of the past and their translation into contemporary language. The selection, however intentional or indifferent, is an inevitable feature of urban heritage. As such it was one of the discussed topics during *The First Dissertation Workshop for Urban Heritage PhD Students* at Bauhaus University in Weimar in May 2010. The discussion was followed by a performance entitled "Sanitation" carried out in the main

square of Weimar, where the participants symbolically “sanitized” the statue of Schiller and Goethe in order to point at the need of re-reflecting upon the proportions of certain values allocated in the space of our towns (see Fig. 1).



Fig. 1. The main square of Weimar, where the participants symbolically “sanitized” the statue of Schiller and Goethe, photo by Wing Man Liza Kam.

Koszalin in Middle-Pomerania, an eight-century-old town inhabited by a barely 65-year-old community will serve as an exemplary laboratory for further study in the field of urban cultural consciousness (urban heritage). The public discourse, pushed back by the pressure of post-war modernization, and later, of free-market modernization, needs once again to be concentrated on cultural values inherent in space. “Clearly the whole idea of modernization raises, either latently or overtly, the issue of what to keep” (Koolhaas, 2004).

Raising the question of the selectiveness of values in space, Koolhaas not only refers to the past but boldly points to the question of what shall we want to preserve from our future. In this way the notion of urban heritage is confronted with conservatist and historicist tendencies in urbanism, which in some post-German towns (Sopot, Elblag, Koszalin) resulted in rather uninspiring urban core developments.

Summary

In order to become an active part of urban redevelopment policies, urban heritage needs to enter the public discourse. The possible doors are innumerable. A recent event from Koszalin’s urban space may serve as an example, however undeserving copying. A forgotten sculpture from the 1970s (see Fig. 2) placed near the street’s axis was painted pink. This guerilla action, run under cover of night,

unexpectedly prompted public reflection not only on the relevance of urban art, but also on the contemporary aptness of the urban context - a XIX century park avenue. The classical layout of the park avenue has been brought out to the front by the sudden appearance of the sculpture which once was set there, unmistakably, close to the avenue's axis for better exposure.



Fig. 2. A forgotten sculpture from the 1970s, photo by Gall Podlaszewski.

In this and many other ways, urban heritage may reemerge into the public discourse. However simple it may be in form, the example above shows the dialectic potential inherent in physical interventions in space. Such an attitude may further develop into pro-active research tools such as:

- Site-specific studies. How may contemporary Urban Art and Design relate itself to German urban heritage? Portfolio of spatial manifestations.
- Installations carried out in public space in order to explore ways of contextualizing German heritage within the contemporary culture (i.e. visualization of borders of the layers of heritage for better visibility of the heritage).
- Interactions with heritage. How do students relate their design methods to heritage among other design factors? When is it relevant and when is it indifferent to them?

Only then will urban heritage provide sufficient urban energy, when it provides sufficient food for public discourse. The role of architects and designers as the professionals dealing with space, and so with the values, memories, and identities inscribed in it, should not be depreciated in that process.

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**Energy of the City in High Quality Public Spaces in the Presence of Water
- The Role of Water in Contemporary Public Spaces in Paris**
Energia miasta w wysokiej jakości przestrzeni publicznych

Streszczenie

Energia miasta może przejawiać się na wiele sposobów, między innymi, także w jakości przestrzeni publicznych. To one tworzą niepowtarzalną atmosferę miast, decydują o ich charakterze i wyjątkowości. Podejmując działania związane z poprawą stanu przestrzeni miejskiej, niejednokrotnie wykorzystuje się w tym celu estetyczne i funkcjonalne walory wody. Właśnie woda jest elementem, który przyciąga, jest niewątpliwą atrakcją, sprzyjającą różnorodnym aktywnościom użytkowników przestrzeni. Inspiruje do działania i kontaktów międzyludzkich, kreuje pozytywne zachowania społeczne, pozwalając obcować mieszkańcom miast z przyrodą.

Szczególną rolę wody w kształtowaniu przestrzeni publicznych wysokiej jakości potwierdzają przypadki transformacji obszarów przemysłowych. Liczne przykłady realizacji przekształceń terenów uwolnionych z funkcji przemysłowej, w których istotną rolę odgrywa obecność wody, można odnaleźć w wielu miastach. Odpowiednie wykorzystanie nadwodnego położenia, bądź wprowadzenie elementów z obecnością wody, pozwoliło stworzyć najbardziej atrakcyjne i niepowtarzalne miejsca, między innymi w Paryżu.

Introduction

Urban energy can be considered from different points of view. As well as within the context of technical, ecological and social issues, it may be perceived in the quality of public space. Reflecting on spatial conditions of the city, special attention should be devoted to the presence of water elements in urban structures. It can be noticed that a significant role may be played by watercourses like rivers, brooks, canals and lakes, as well as by one landmark, such as a fountain. Any presence of water deserves detailed attention. It is worth emphasizing that as a landscape element, water has an essential role in urban revitalisation and reconversion. Furthermore, designing and building using water features seems to be one of the most important factors in order to achieve a high quality urban environment. Excellent examples of applying water in the creation of public spaces can be observed in France. Cases from the metropolitan area of Paris in particular deserve a special mention.

Public Spaces with the Presence of Water in Paris

Following the thought of Victor Hugo: “all that can be found anywhere, can be found in Paris” (1862), it may be said that this claim is still current. Nowadays

this is a statement that is relevant especially when we do research on contemporary public spaces. Particularly within former industrial sites, there can be found newly designed places, which have exceptional nature owing to the utilisation of water's special features. In many cases, water is a characteristic element and becomes an inherent part of industrial heritage. As Rinio Bruttomesso has noticed, reusing this heritage means rediscovering the importance and worth of the presence of water (1999). Among other architects, he emphasises how important relationships are between recovered inner-city industrial areas and their surroundings, including watercourses. Such a way of shaping space in Paris can be regarded as a continuation of the urban design tradition. Due to its co-existence with the river Seine, the role of water in land development is significant there. From the tenth century on, riverbanks were arranged to enable people to reach the water. Their form was slightly inclined, providing access towards the river. Over time, additional elements with the presence of water, like fountains, were located in diverse parts of public spaces. During the industrial revolution, riverbanks were developed mostly by industries, as the rivers then were being used mainly as transport infrastructure. As a consequence, in the middle of the 20th century, those banks were seen primarily as leftover spaces. Only since 1965 have architects started to embellish public spaces by reintroducing water in the urban landscape. Reinvestment began in industrial sites, which were arranged in relation to the river. Also the bank roads were organized to return them to pedestrians. Many transformations were being done according to the tendency to individualize places. Making use of water heritage helped to ensure a high quality environment, giving at the same time a distinctive "mark" to the city space. Nowadays the quays of Paris constitute "a remarkable example of urban riverside architecture, where the layers of history are harmoniously superimposed" (1991).

One of such examples is the redevelopment of more than 250 hectares on both banks of the Seine in the east part of Paris. The plan to revitalize rundown city space was prepared by the Atelier Parisien d'Urbanisme. Designing the concept of site regeneration architects wanted to preserve vestiges of history, create connection with the modern city and establish links between the two banks of the Seine. Fluidity was the main factor there. The potential of a territory mainly occupied by tracks, warehouses and industrial wasteland was used very well. Part of the scheme, was realized for Bercy, which is situated on the right bank of the Seine. The aim of the project was to save the traces of the past and to add a new layer without destroying them. A park was organised parallel to the Seine, with a housing district and a business and leisure activities centre. Abandoned areas and buildings were being adapted for new functions. While highlighting the identity of the site and using water elements, it was possible to achieve a lot of high quality places for spending free time. As the main part of Bercy project, a park covering 12.5 hectares was designed. A large grass area was formed at the base of the sports centre and nine square-shaped areas make up the Jardin de la Memoire, where a romantic-style garden is organised around a canal and

an island. The influence of the park's qualities was spread throughout the urban fabric. Buildings, designed to take advantage of the view, were stretched down to the park, opening the neighbourhood out to the green area. In such a way architect Jean-Pierre Buffi clearly demonstrated how urban forms could be shaped by architecture (2002). Two banks of the river were linked by a footbridge at the level of a waterfront terrace planted with greenery. The park frontage spans 700 metres, with views of the Seine and the Bibliotheque de France as characteristic elements of the site reconversion.

For the 130 hectares of former industrial wasteland on the left bank of the river Seine, a project named Paris Rive Gauche was created. The site, just two kilometres from Notre-Dame cathedral, locked between the railway and the river, was left neglected for many years. Now this is a new district where the latent qualities of the site have been turned into assets. The solutions chosen for the landscaping, road network and transport system have resulted in a sustainable urban design. One of the aims of the redevelopment scheme was to rebuild the city's relation with river. Shaping the urban pattern, architects designed pedestrian generators and movement networks providing continuation of existing public spaces. The covered railway land had established continuity between the river and the 13th district. Buildings of diverse styles and some fine civil engineering structures were created. Around the Bibliotheque, the Tolbiac district was developed with gardens organising modern blocks of flats, containing a careful play on views, forms and colours. The slope of the site allowed the creation of space overlooking the Seine waters. The differences in levels made it possible to alternate open and closed spaces and to multiply the scales of perception. The pedestrianized riverbanks were arranged to be home to barges, leisure facilities and concert venues. In such a way, the city restored its relationship with river.

Another example of successful transformation work is Park Citroen in the southwest part of the city. The land formerly occupied by the Citroen factories and cut off from its surroundings, became a place where neighbourhood functions were effectively extended. The new district, known as Andre Citroen, reflects the strategy of creating small structures meshed with the pre-existing urban framework. Main components of the site were a 14-hectare park consisting of a vast space opened on to the Seine and numerous thematic gardens incorporated into the residential areas, formed as a continuation of new buildings. Large grasslands sloping down to the pools and to the river were designed. Due to green areas based on the theme of movement and metamorphosis, the composition focused on natural flows was merged with its natural surroundings. Owing to the link with the river's edge that was created by footbridges accessing the banks, the importance of the presence of the Seine was emphasized.

Another successful reconversion project was prepared for Plaine Saint-Denis, which stretches over more than 700 hectares along the outskirts of Paris. In the 19th century it was given over to industry and from the 1960s on it lay derelict. Since the late 1980s, the site has become the object of the project. Establish-

ing the prerequisites for transformation, architects wanted to highlight the site's pre-existing qualities and generate an arrangement befitting greenery and a mix of uses. Flexible and sustainable design constructing a new district between the stadium and the canal was the key element of the scheme. The strong features of the site were its visual links with surroundings, including the canal Saint Denis. The banks of the canal have been converted into promenades. The former rail tracks and railway embankments were planted with greenery. New buildings linked together by covered streets and a number of public spaces opened onto the canal. As an important ecological aspect, rainwater was collected right next to the buildings and designed to take care of the street's greenery. The presence of water determines the site beautifully. A canal-side garden with many lawns, game areas and community facilities invites people to take a leisurely stroll. Numerous cafes and restaurants along the canal completed the project.

Summary

Regarding the cases presented above it can be concluded that water plays a significant role in city development. There are a vast number of fascinating places, where the extraordinary power of water can be seen and experienced. It is particularly important in the revitalisation and restoration of post-industrial areas. Utilisation of water aims at establishing continuity in public space and giving individual sites an increase in value and potential. It helps to achieve better connections with surrounding areas and to blur the borders between brown fields and the neighbourhood. Awareness of features of water allows the creation of exceptional and captivating places. Parts of former industries, which are unique to the site, water, art and special materials, all provide local distinctiveness and help to feel the identity of the site. Therefore, it is essential to enable the application of existing and newly designed water elements in public space networks if the aim is to achieve high quality places. Waterfront promenades and streets that lead to them, offer opportunities to enhance the experience of contact with water. The special character of such sites that offer a rich mix of cultural and commercial uses is favorable for communal gathering and events.

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Urban Energy - Iconic Buildings

Urban energy - budynki ikony

Streszczenie

Artykuł opisuje upadek znaczenia budynku użyteczności publicznej w kontekście przemian kulturowo-społecznych epoki poprzemysłowej. Silny dawniej związek między budynkiem użyteczności publicznej a miastem i jego mieszkańcami został zatarty we współczesnym świecie, gdzie coraz częściej powstają budynki-ikony, nie zawsze związane z lokalnym kontekstem. Obecnie architekci często projektują zwracające uwagę obiekty o ekspresyjnych formach, które mieszczą muzea, siedziby firmy lub centra handlowe. Budynki-ikony, gdy są rezultatem przemyślanych decyzji projektowych, mogą generować pozytywną energię w mieście. Natomiast będąc jedynie wynikiem chęci zysku inwestora często powodują chaos przestrzenny i wywołują energię negatywną.

Introduction

This article discusses the lost meaning of monumental buildings in the context of social and cultural changes. Not only was there a strong relationship between the society and their monumental buildings but also between the buildings and the urban composition of their neighborhoods. The birth of architectural icons has revolutionized the traditional meaning of monumental building. We have been bombarded with new expressive architecture that can house a museum as well as a shopping centre. On one hand, this architectural icon can help revitalize an area when acting as a catalyst, but on the other hand, there is a danger of overdosing of icons that can lead to urban chaos and result in meaningless buildings for the local society.

Urban Catalysts - Urban Inhibitor

Monuments are the expression of man's highest cultural needs (...) The most vital ones are those which express the way of thinking and feelings of the people (Sert et al. 1944, p. 29). Before modern times planners and designers reserved key locations in the urban fabric for theaters, cathedrals and city halls. Gothic cathedrals played an important role in forming medieval cities. A similar design principle was applied to cultural buildings in nineteenth century Europe. When analyzing, for instance, the urban setting of Garnier's Opera House from 1875, we notice that it occupied a strategic location in the Baron Haussmann plan. Moreover, we can also learn that it played an important role in people's life. Not only was the opera building significant but also the whole surrounding. Coffeehouses located next to theaters gathered a great number of people eager to discuss Parisian life, performances and everyday issues. They were places where people

spent an enormous amount of time (Sennett, 2002). Monumental buildings used to give identity to places and blended with the city life.

The popularity of iconic architecture has significantly increased worldwide since the great success of The Guggenheim Museum designed by Frank Gehry for Bilbao. From that moment *driven by social factors, the demand for instant fame and economic growth, the expressive landmarks have changed the previous tradition of the architectural monument (...) the new global icon can be a museum that proclaims itself as a new cathedral of the age* (Jenks, 2005, pp. 7-8). The museum has put the city on a contemporary map of tourist destinations. The proof is that there were over two million visitors more in Bilbao during the first two years after the opening in 1997, than in previous years. Although there is no reference to the history or tradition of the Basque in Gehry's building, it has got enough power in its architectonic expression to serve as a flagship project for the development of the area. The museum helped rebirth the city and transform it from a shipbuilding industry to a cultural centre. The fact that the project was part of a huge transformation process, including development of a public transportation system, creation of new public spaces, cleaning of the river and the urban development of a former industrial area, cannot be ignored since all these factors have influenced the change of the image of the city. The museum was the first of its kind and therefore has attracted many tourists and is still very likely to do so. Undoubtedly, the museum has generated positive energy for the city on international level. However, it is dubious whether the building and its surrounding generate enough positive magnetic energy at a local level to keep people coming back. Consequently, it is puzzling if it evolves into a popular place to spend time, or rather remains just a piece of art associated with the urban transformation.



Fig. 1. Guggenheim Museum in Bilbao. Public space visited by tourists. Photo: author.

Presently, the economics drive the icon in architecture (Gehry, 2005, p.12). Municipalities with the help of architects compete with other cities for more tourists, companies and new citizens, trying to achieve the Bilbao success in order to improve the economy of their cities. It is important to understand that negative urban energy can also be produced in cities despite great investments in cultural buildings. There is a high probability of this happening when places with no identity, moderation and hierarchy are created. When analyzing icons, we notice that the same architects are usually asked to design worldwide and their icons look staggeringly similar regardless of their location and function. The common feature of those buildings is in the majority of cases a high budget and the investor's goal to fulfill a great demand for image to draw public attention and foreign money. Consequently, Gehry's Walt Disney Concert Hall in Los Angeles does not differ much from the Bilbao Museum. The Santa Cruz Opera House designed by Calatrava is similar in its architectonic expression to his Valencia Opera House. As a result, those buildings do not help create places with identity. Another issue is an excessive number of icons in one neighbourhood. The problem can be observed for instance in Calatrava's City of Art and Sciences in Valencia. It is a group of iconic buildings where everyone wants to call public attention and as a result overshoots the others and leads to urban chaos. The final issue is the hierarchy of public buildings. Presently, not only a museum but also a company headquarters or even a shopping mall can play the role of former monumental buildings in urban fabric. Selfridge stores in Birmingham designed by Future System has taken a dominating position of a church and other civil monuments, overwhelming the neighbours. The shop manifests its existence with a unique form and a façade covered with aluminium discs. This time the investor also focuses on the economic aspect, claiming that the shiny building will work as an advertisement and will bring more costumers. Unfortunately, when economy is the key driver and there are hardly any set designs and planning principles, then the negative urban energy is often being produced as discussed in the Valencia and Selfridge cases.

Some analyses on contemporary society are necessary in order to understand the iconic building phenomenon. Nowadays, architects have hardly any credible public conventions to build for. Christian values have lost their meaning in our liberal and consumptive society. Architects are being urged by investors to invent new eye-catching architecture that would guarantee wide publicity and as a consequence of economic success. Another issue is the way our cities have been developed and how it has influenced our lifestyle. Rapid development of metropolis, computerization and motorization of life have caused a reduction in contacts between city dwellers. Presently, we live in a capsular civilization. We move from gated communities, created as a result of fear of poorer people, to our alienated office complexes. We spend our free time in commercial centres and enjoy having a biscuit at one of their indoor cafeterias. Everyone lives his life in his capsule and is only connected to the rest by other capsules, by cars. (De Caeter, 2004).

In such a society an iconic building is nothing more than just an expensively dressed capsule. It is questionable whether we enjoy this kind of life. Presently, we can observe ongoing processes in our society that result in our concern about the quality of living environment. We notice the problem of alienation and disconnection of our cities. In the developed world of Europe and the United States of America the leading jobs are specialist services and those related to culture, finances, consumption and tourism. While our western society is getting older and wealthier, it demands a high quality of life and attractive cultural facilities. Cities of the developed world compete with each other for more investments and tourists, tempting us with a friendly living environment. From the industrial époque and postindustrial to the information époque, we are approaching a conceptual époque. Human abilities that cannot be replaced by a computer are important now (Pink, 2005).

Finally, the current economic crisis has forced us to reflect on our architectural goals. We have a chance to rebirth from the crisis design proposals that would strengthen local communities and economies. We have an opportunity to construct new iconic buildings that will generate positive urban energy while serving local communities. The fact that Oslo Opera House was given the Mies van der Rohe Award last year is undoubtedly proof of changing attitudes to iconic architecture. The building occupies a prime setting in the city at the water's edge and forms a part of a bigger transformation process of the waterfront area. The characteristic roof stepping down to the water constitutes an unusual public space loved by everyday passersby. There is a strong likelihood, the building that has blended with the context will both act as a catalytic project and will be seen as an asset by the local community in the future. Consequently, it will enhance the city image and generate everyday commercial and leisure activities in the area.



Fig. 2. Oslo Opera House. Attractive public space. Photo: Christopher Hagelund (courtesy of Oslo Opera House).

Summary

The new genre: iconic architecture is likely to generate either positive or negative urban energy in the city. A wisely planned icon can catalyze the development of an area, give it a modern spirit and consequently improve the quality of life. However, a strikingly expressive image given to an unimportant building mostly for an economic profit with hardly any understanding of the local context is very likely to introduce urban chaos. The goal should be to provide contemporary city dwellers of the approaching conceptual époque (Pink, 2005) with a high quality of urban environment that has hierarchy, coherence and attractive public spaces. Both the social and urban context ought to be understood when designing new iconic architecture in order to create outside and inside places with identity, instead of chaotic no-places.

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**Color as a Source of Energy of Urban Area
and a Tool for its Directioning**

***Kolor jako źródło energii przestrzeni
urbanistycznej i narzędzie jej ukierunkowywania***

Streszczenie

Kolor jako narzędzie budowania przestrzeni urbanistycznej wprowadza w nią energię potrzebną do prawidłowego funkcjonowania. Jest jednym z elementów wskazujących na indywidualność danego miejsca a jednocześnie jego użytkowników.

Ponieważ jesteśmy wyposażeni w ciekawość poznawczą, nasz rozwój stymulują bodźce zewnętrzne mobilizujące nas do działania, możemy wykazać bezpośrednią zależność pomiędzy poczuciem naszej własnej atrakcyjności po przez „naszą barwność” a sposobem aktywizowania przestrzeni w jakiej żyjemy. Po przez liczne przykłady gry kolorem i badania nad anatomią barwy pozyskujemy bardzo ważną wiedzę pozwalającą na funkcjonowanie w ciekawszej i piękniejszej rzeczywistości. Należy jednak pamiętać o drugiej stronie zagadnienia i zagrożeniach związanych z ignorancją nauki o barwie.

Introduction

Space is determined by objects, which possess their own shapes and proportions, and are dependent on our location. It should be remembered that each block possesses one more crucial, constituent element - color. Its dependency on the scientific world should not be questionable as it is not only a subjective element shaping the space but also a tool for creating space that evokes emotions and sensual sensitivity.

Energy of Color

Observations of nature shall present the scheme of impact of color. Color determines detailed principles in animal life and behavior. Color is the information carrier, signals of temptation, modesty and threat. Looking at the role of color in everyday life, at present and in the past, it is very hard to understand a long lasting dual division of the space into the measurable things and the things which can be felt in the space which is being perceived by us.

Only the knowledge of the anatomy of color gives us a possibility to create the space consciously and organize our surrounding. Color is the essence of energy. The skill to create includes a responsibility for our actions. While entering into the space of functioning of a given community we change the temperature, the geometry and the emotional state of their surroundings. The energy coming out of color can become a source of fear and stimulate to positive activities.

While making a division of the space due to the function it fulfills we shall notice that it is connected with a specific type of activity. Jan Gehl in the book entitled: “Życie między budynkami” (“Life Among Buildings”) specified three types of the space:

- obligatory activities (fulfilled in all conditions),
- optional activities (taking place only in proper conditions),
- social behaviour (which depends on the presence of other people).

It is very important to keep balance among specific activities. The lack of activity among buildings can be observed which results in the disappearance of indirect social behavior. If we stop living among people, we can only exist alone. This border becomes more visible due to the segregation of function that takes place in a city. Just like in a private house the city is divided into a bedroom, a dining room and a working area. The speed at which we are living and the lack of time for engagement in relationship with other people keeps us alone. The attempts to improve the attractiveness of the public space with the use of architecture shall not be enough. In order to stimulate our activities we need energy that is carried by color. The research done in 1978 in Sydney, Melbourne and Adelaide show a connection between the quality of streets and using them by people - there is no activity without proper conditions. Only a possibility to identify with the place shall guarantee a ground for “social and optional behavior”. A model city is the city in which “obligatory activities” take place in attractive conditions.

William H. Whyte in his book entitled: “The Social Life of Small Urban Spaces” explains that even small physical changes of the space improve its quality.

The micro and macro principle of Color Design can show us a scheme of connections of the space in which we live. Relationship between the private, public, intimate and open. Our activities are governed by emotions. Color shall be the carrier of emotions. Despite the rapid development of technology, consciously and unconditionally, states in which we stay are presented by color and clothes. Private space is a reflection or a response to our emotional state. Semi-private space which is a result of individuals living in is a connection of public space, districts and cities. An example of such a situation can be the building in Rotterdam which reflects personality of its inhabitants and infiltrates into the communal space. The blue mini village created by Dutch architects from the MVRDV company shall be a bright point of the district.

On the other side the Sankt Gallen City Longue designed by Pipilotti Rist and Carlos Martinez changed into a saloon, the place of integration of the “domestic” and urban things. In this case it is not only the color that is important , not only the color unity of the space but also the symbolism of color. Red as creativity, a stage for the most worth noticing - a symbolic theatrical carpet.

A graphical presentation of the connection of the space shall be a pattern with its own specific gravity, an accent. The use of color shall allow to create a harmonious picture. The more we come outside our private space the grater amount of emotions overlap and the greater variety appears. We are equipped with

a cognitive curiosity, our development is being stimulated by external incentives which mobilize us to act. "Social optional behavior" shall be the consequence of introducing energy into the urban space by the use of color. Universal knowledge of color can lead to serious scientific progress and development in various domains.

Works of Newton and Goethe constitute a development of knowledge about color from physical dispersion to the characteristics of color and specification of groups of colors (warm and cold, active and passive). Due to the use of color differences between the surfaces in the same forms appear. Theo Van Doesburg (the founder of the De Stijl group) used color at the beginning of 20th century as energy presenting space in two and three dimensions.

The research done at the end of the 19th and at the beginning of the 20th centuries proved that reactions to color can be free from associations, can be abstract and subconscious. Feelings evoked by colors among examined persons were an effect of direct reception made by the senses. One of a very crucial feature of color shall be its psychical impact which functions as a medical term - chromotherapy. A great number of domains in which color is a tool for acting shows how strong manipulator it is. Are we able to recognize it as a marketing element? Are we aware of the moment at which it controls us? As the urban space is never monochromatic it should be remembered that in case it is shaped in a wrong way it still has an impact on us.

While shaping the space by color we participate in interaction. One of its aspect shall be an optical illusion showing relativity and instability of color. Work with color makes us aware of relations of colors from forms and forms from colors. Relations of color, its amount and saturation shall be of a great importance. The border separating the neighbouring spots of color elicits a phenomenon which is color. The aim of the color designer is to become a virtuoso of his domain while the great number of factors influencing the composition creates new challenges all the time.

While shaping the urban space with color, despite its function it has to fulfill, the geographical factor of place of existence appears. Colors are assigned to the epoch and the color cycle. Due to various limitations short-lasting spectacles shall be an interesting solution.

In the middle of April 2010 the Rosenthaler Platz in Berlin became a place of color happening. The split paint at the crossroads of two busy streets in four various colors: red, blue, yellow and lilac was spread by the wheels of cars, cyclists and pedestrians. In the result of the above mentioned one unique and transitory picture of street rush was created. In winter 2008 the city named Herleen in the Netherlands was flooded with rich colors due to luminous projections. Temporary exhibitions are also an element of energy in the city.

Summary

The space organized like one sheet of paper in a topography means a recipe for its functioning, however this is color which is the movement in the space, the force to act and which controls our senses. Moreover, it helps to introduce harmony and makes the speed in which we live not being an obstacle for functioning in the urban space. Relationships among people with a “lack of time” do not become only an obligation but also pleasure. The surrounding places shall be the extension of our private space and a response to our interests.

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Art in City Spaces as a Method of Making Places Accustomed

Działania artystyczne w przestrzeniach miejskich jako metoda osvajania miejsc

Streszczenie

Artykuł przedstawia kwestię sztuki w przestrzeni publicznej jako narzędzia służącego nadaniu nowego pozytywnego wizerunku zdegradowanym lub pozbawionym tożsamości fragmentom miasta. Tzw. „sztuka ulicy” kojarzy się z działaniami oddolnymi i amatorskim, jednak coraz częściej staje się elementem programów i strategii przyjmowanych przez lokalne władze. Tego typu działania mogą mieć różną formę, cel i docelową grupę odbiorców. W tekście przytoczono opisy trzech gdańskich przestrzeni, w kształtowaniu wizerunku których istotną rolę odgrywają działania artystyczne: osiedla Zaspą, terenów Stoczni Gdańskiej i dzielnicy Dolne Miasto. Przedstawiona jest również kwestia dużych wydarzeń kulturalnych jako narzędzia podnoszenia konkurencyjności miasta. Tu strategia Gdańska ubiegającego się o tytuł Europejskiej Stolicy Kultury 2016 oraz Tczewa starającego się utrzymać festiwal kulturalny o znaczeniu międzynarodowym zestawiona jest z podsumowaniem efektów ESK 08 w Liverpoolu.

Introduction

Space is being associated with freedom. Once it is closed and humanised - it becomes a place (Tuan, 1977). In this context it may seem surprising that street art in its different forms has become a popular tool for creating an identity of anonymous city spaces and for changing the negative opinion about particular neighbourhoods.

Street art can be perceived as a set of spontaneous and even anarchist bottom-up initiatives, but often those single concepts are incorporated into broader programmes aimed at improving the quality of urban space. Municipalities willingly use existing projects or invite artists to create new concepts that fit into the established framework.

Such actions may be divided into groups - according to the essential objectives of which they serve. The first group is focused on solving social problems in so-called “deprived neighbourhoods”. Artistic activities used in revitalization programmes may help solve local social problems and to eradicate negative odium of the place. The second group of actions is oriented towards attracting the attention of potential new users of the space - open-air events are a very important element of territorial marketing. This division also applies to the potential audience. In the case of street art used in revitalization programmes the audience is primarily local community. When it comes to the efforts focusing on increasing

the competitiveness of the city the target is a supra-local group of art consumers.

Undertaken artistic actions can also vary because of their persistence in the urban space. Some part of activities leave a lasting impression in public spaces - e.g. sculptures. Others, like street performances, are physically ephemeral but leave a mark on public consciousness.

This paper describes the cases of artistic activities undertaken to accustom the public to different types of spaces in the areas of Gdańsk. As a point of reference are mentioned cases from the cities of Tczew and Liverpool.

Making Places Customary - Cases

If the city of Gdańsk has its own world-known brand, it is the struggle for freedom, or more precisely the heritage of “Solidarity” - a nation-wide democratic movement that started in the city in 1980. Nowadays, to avoid any political emotions, this heritage is being promoted as “the culture of freedom”. One of the first noticeable artistic activities in the city space, which referred to the heritage of “Solidarity” is the large-scale painting “Lech Walesa and John Paul II” created by Rafał Roskowiński on the wall of a prefabricated building in the district of Zaspka. This particular painting recalls a demonstration of support for “Solidarity”, which took place among buildings of Zaspka during the Pope’s visit in 1987. Since Roskowiński’s work was completed, each year new buildings are being covered with paintings dedicated to universal as well as individual themes (Wróblewska, 2010). Thanks to this artistic concept, the rather anonymous space of Zaspka has become a place with distinguished identity.

New economic circumstances appeared to be cruel to the cradle of “Solidarity” - in the area of Gdańsk shipyards where a significant part of the manufacturing space has turned into wasteland. Although this area is located in the heart of the city, so far it has been gated and closed. According to the new plan, it is to be transformed into new mixed-use development and incorporated in the city structure. The first stage involves using the unique features of this post-industrial space to form a creative milieu, which according to Landry (2008) provides the necessary precondition for generation of new ideas and inventions.. The new owners have invited alternative artists and offered them a space for work as “a colony of artists”. Their role is to identify and expose the unique features of this area.

Another good example of using art as a tool for changing the image of deprived public space or neighbourhoods is a set of projects run by the Centre for Contemporary Arts, “Łaźnia”. This institution - apart from projects addressed to connoisseurs of contemporary art - provides programmes aimed at changing the perception of the Dolne Miasto (Lower City) district as well as changing the mentality of its inhabitants. The most significant project dedicated to public spaces of this area is “The Outdoor Gallery of the City of Gdańsk”. The artistic objective of the project is to build a permanent collection of works in the open air, which will emphasize the local identity and change the perception of the space

(Charzyńska, 2007).

The next stage of work is the use of culture in urban space to build a global brand. This brand is expected to be the title of European Capital of Culture 2016. The city is applying for the title using the ideals of Solidarity as a basis for creating the strategy of the project. The theme "Freedom of culture - Culture of freedom" proposes contemporary interpretation of this legacy. This idea is being promoted by a variety of open-air events prepared for local societies as well as for international audiences. Such a strategy meets the assumptions of the European Capital of Culture, due to which provided cultural events should improve the metropolitan position of the capital and also be inclusive.

Another strategy has been applied in Tczew - a city of 60 thousand residents located at the main railroad corridor. Due to the transfer of services to new areas and the outskirts, the historic centre lost its splendour (Programme Revitalization). In the mid-90s local authorities took steps to improve the physical state as well as increase the attractiveness of the centre. An important element of this set of actions has been the International Festival of Theatre and Visual Arts "ZDARZENIA", organized in the space of the Old Town since 1999. The event attracts connoisseurs from throughout Europe. However, the budget required to maintain a good artistic level is relatively high for a medium-sized municipality. This situation raises controversy among city councillors, many of whom believe that this budget should be spent on less sophisticated activities directed to the local community.

A good comparison to Gdańsk may be Liverpool - a city of similar magnitude and specificity. It had to struggle with serious problems after shrinkage of the port industry. There are also similarities from the European Capital of Culture programme. Liverpool had this title in 2008. Undertaken outdoor actions were aimed at the local community as well as for international audiences. Effectiveness of the measures was verified by a report (2010) prepared by the University of Liverpool, Liverpool John Moores University and Liverpool City Council. It has confirmed that the selection of actions allowed progress to be made both in its social and economic activity. In 2008 Liverpool, as European Capital of Culture attracted 9.7 million additional visits to Liverpool, constituting 35% of all visits to the city in 2008 - one third of the audience was local, one sixth from beyond the region, and nearly 5% international. The programme also proved to be inclusive as the audience socio-economic profile largely matched the statistic profile of the city.

Summary

Street art - in a broad sense - can be a "soft" tool useful for achieving the assumed scenarios of spatial development. In such cases, an important issue is the adequacy of the adopted solutions relative to the diagnosed problems and established goals. Artistic activities under the revitalization programmes may appear to be a too hermetic form of communication, incomprehensible for the resi-

dents of deprived neighbourhoods. Considering marketing-oriented development goals, the attraction of huge open-air cultural events organized to raise the prestige of the city and cause a supra-local interest turns out to be too weak to fulfil the assumed role. Success requires precise analysis of existing needs and responsible choice of actions. An important element of development projects related to culture should also be the evaluation of their effectiveness to enable further improvements.

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Le Corbusier and Urban Energy - Sun, Verdure, Space Corbusierowskie „urban energy” - światło, zieleń, powietrze

Streszczenie

Myśląc o twórczości Le Corbusiera nasuwa nam się jedno skojarzenie - kontrast. Kontrast w stosunku do otoczenia, krajobrazu, sąsiedztwa; czysta, kanciasta forma, nieskazitelnie białe ściany, surowy beton, monumentalne obiekty. Jednak to tylko pierwsze skojarzenie. W tym krótkim artykule chciałabym ukazać twórczość Le Corbusiera z trochę innej perspektywy, gdyż najczęściej i moim zdaniem nie do końca słusznie przedstawia się tego architekta jako ojca blokowisk. Analizując jego obiekty i projekty stwierdzić można, że to w krajobrazie Corbusier widział spokój i źródło kontemplacji. Corbusiera szacunek do krajobrazu zauważyć też można oglądając szkicowniki z podróży lub wstępne szkice pomagające w pracy nad projektem. Jednak twórczość Le Corbusiera jest również dowodem na to, że nie zawsze szczytne idee da się wprowadzić w życie. Mimo to Corbusierowskie „urban energy” - światło, zieleń, powietrze - czyli prawo człowieka do dobrego nasłonecznienia pomieszczeń, do pięknego widoku i świeżego powietrza niech będą nadal aktualne.

Introduction

When we think about Le Corbusier's output, especially in the context of landscape, it usually evokes one strong association - that of contrast. Contrast in relation to surroundings, landscape, and neighbourhood; clear, angular form, white spotless walls, severe concrete and monumental structures. However, that is only the first association. In this short article, I would like to present Le Corbusier's work from a slightly different perspective, as very often this architect is presented as 'the father of concrete blocks', which in my opinion is not exactly right. Analysing Le Corbusier's work in a more in-depth manner, one can realise that he is one of those who thought about nature in an almost metaphysical way. It is in landscape that Corbusier saw a source of contemplation and meditation, peacefulness and beauty. These aspects were always reflected, more or less successfully, in his architecture. He used to say that modern buildings constitute balance between the landscape, climate and tradition (Boesinger and Girsberger, 1967).

Le Corbusier and Urban Energy

Le Corbusier's respect for landscape can be seen in the sketches from his journeys or in the initial sketches that helped him in his design work. He believed that only those things that are registered by hand can really be remembered and encoded in one's mind, and only then can man transform it and create a composition (Jencks, 1982). And that is what his education was based on. It was educa-

tion through observation and research on the relation between a building and its surroundings.

The first significant period of Le Corbusier's work was Modernism attributable to the twenties of the 20th century. Among realisations from this period, one deserves special attention: the inconspicuous La Petite Maison, called "Le Lac" from 1923. The house was designed and built on a hill by Lake Geneva in Switzerland for Le Corbusier's parents. That little house with a terrace and lake view is a clear and functional machine for living. According to Tim Benton, "for many Modernists, the quintessential domestic pleasure was that of contemplating a fine view in pleasant surroundings" (Benton, 2006, p.30).

The leading example of Modernism is Savoye villa, the puristic sculpture-house with its clear geometrical form contrasts with the surroundings. It does contrast indeed, but it is not aggressive towards the surroundings, as it maintains the right scale and harmonizes with the landscape. The building is detached from the ground but the exterior breaks into the house through a ramp. A traveller-spectator is led through the building and finds himself in the inside part at one point, and outside at the next one. The green roof, which overlooks a vast plain, constitutes a main point of the journey (Corbusian architectural promenade).

As we remember, in the 1940s and 1950s, Le Corbusier turned towards Brutality in architecture, that is, towards bold monumental forms, cylindrical shapes, and naked concrete with visible boarding. For can we not see wrinkles and other imperfections on women's and men's bodies? - he used to say (Jencks, 1982).

The so-called "housing block" realised in 1952 in Marseille (Unite d'Habitation) was Le Corbusier's answer to residential problems in post-war France.

Corbusian postulates "light, verdure, space" were engraved on the concrete elevations. They mean the human right to good lighting of rooms, to beautiful views and fresh air.

Residential unit is part of the unrealised project Ville Radieuse - the city of tomorrow, in which the connection between man and nature was re-discovered (Boesinger and Girsberger, 1967).

According to Dominique Lyon, "the Cite Radieuse is a shower, a modern form of hygiene. It introduced an alternative culture and made a connection with a new vocabulary and imagination: the green city, constant sun, open space dwellings lengthened by loggias, light facades (...)" (Lyon, 2001, pp. 102-103).

Although the Ville Radieuse project is utopian, this is how Le Corbusier explains the connection with landscape, "if landscape is an essential element of architecture, it penetrates under the pillars or through the windows, like a spectacle, while the building itself gives to its location and to natural architecture a superior value and order" (Choay, 1960, p. 21). Therefore, not only does landscape improve a building but according to Corbusier, a building can "improve" landscape just as well, and can give it a different quality.

Caroline Constant (1988, pp. 79-93), in turn, writes that "for Le Corbusier, the source of man's alienation from human nature and from nature itself was

the city. By bringing nature into the city, he hoped to relieve the ills of traditional urbanism without sacrificing its cultural possibilities. His utopian urban proposals dissolve the polarity of city and country, merging the density of the former with the soleil, espace, and verdure of the latter”.

One of the best examples of perfect integration of buildings and landscape in the history of architecture is the chapel in Ronchamp from 1954. Relatively small, but expressive in its form, the pilgrim church was built in the place where a different church had been destroyed during World War II. This is how Le Corbusier writes about Ronchamp, “(chapel) commands the plain of the Saone to the west, the chain of the Vosges to the east, and two small valleys to the south and north. These landscapes of the four horizons are a presence; they are the hosts” (Le Corbusier and Petit, 1965/1997, p. 28).

That poetic description of landscape as a host made by Le Corbusier, brings to mind the thought of another realisation - La Tourette monastery from 1960. The monastery is situated on a hill, surrounded by forests, which makes it an ideal place for contemplation; this function is mainly fulfilled by the landscape. Observation of changing seasons from the monastic cell together with living in severe interiors - all this reminds us that we come to live in this world only for a brief moment. Also here, just like in the case of Savoye, architecture contrasts with landscape. But if we take a deeper look - at the covered walls and green terraces, we will see that with years the building “has sunk into” the landscape. It is not an intruder any more.

Urban planning is something more than just planning and separation of its four basic functions according to the demands of the Athens Charter. In that respect, Le Corbusier’s designs seem to be naïve and monumental. Chandigarh, the capital of Punjab province in India (the Capitol Hill buildings realised in 1952-65), is such an example. As much as the early sketches of Capitol Hill show the direction of inspiration - landscape and Indian cattle (Frampton and Schezen, 2002), the realisations of buildings themselves on the other hand, are enormous and evoke anxiety. Even the aesthetics of concrete does not compose well with the Himalayas in the background... Too much walking distance, vast concrete areas, monumental structures which are supposed to be the showcase of a modern capital city. In the case of Chandigarh, the balance between the landscape, climate and tradition has been upset.

Summary

I say nature - I think harmony. I say landscape (in the broad sense: composed of natural background, engineering work, buildings, residential districts, cities and the countryside) and depending on individual impressions and associations encoded in my mind, I also want to think about harmony. However, that is not always the case. When looking at landscapes and Le Corbusier’s architecture, I let everyone have their own individual impressions and associations. Le Corbusier’s work proves that lofty ideas cannot always be implemented in everyday life.

However, one needs to realize how big an effort was made by this man: the way he lived, the way he analysed places, where he took his inspirations from - this knowledge may help Le Corbusier to avoid being categorized in the following associational string: modernism-contrast-concrete-greyness. Let the Corbusian urban energy - light, verdure, space - always be current.

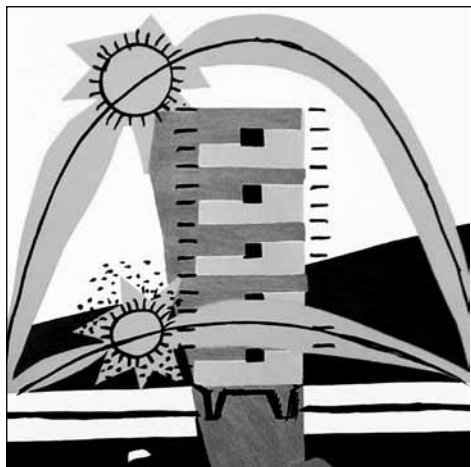


Fig. 1. Light, verdure, space - Corbusian urban energy, www.fondationlecorbusier.fr



Fig. 2. Unite d'Habitation in Berlín.
Photo: A.Szymanska.

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Nightscape in the E-city - Lighting Public Space in the 21st Century

Streszczenie

Artykuł porusza kwestię oświetlenia sztucznego w przestrzeniach publicznych współczesnego miasta. Temat ten zaprezentowany został na tle obecnych tendencji kształtowania wizerunku przestrzeni publicznych oraz poparty krótkim rysem historycznym. Aspekt podzielony jest na dwie kategorie - pierwszą, w której oświetlenie bazuje na zmiennych sceneriach przestrzeni z wykorzystaniem głównie ekranów medialnych, oraz drugą, w której mamy do czynienia z interakcją pomiędzy użytkownikami przestrzeni publicznej a jej oświetleniem.

Artykuł stara się przybliżyć problematykę tego zagadnienia i naświetlić najkorzystniejsze dla współczesnej przestrzeni publicznej działania wykorzystujące to niezwykle tworzywo jakim jest oświetlenie sztuczne. Tekst zilustrowany jest trzema studiami przypadków - przykład rewitalizacji Fremont Street w Las Vegas w USA, działania artysty Rafaela Lozano-Hemmera oraz przykład oddziaływania obiektu muzeum Kunsthau w Grazu w Austrii.

Introduction

Light has long been a symbol of knowledge and life. Since the beginning of lighting technologies, a lit environment has been seen as a symbol of modernity and prosperity. The gas lamps of Parisian boulevards changed the attitude to the night and are said to have created the night life (W. Schivelbusch, 1995). Great events like the World Exhibition at the turn of nineteenth century were enhanced by spectacular lightshows. Cityscape built by strong illumination was said to be the future space. Car lights and skyscrapers' illumination of New York were the icons of progress. Lighting of the city still is the icon of its progress and modernity. New lighting technologies are developing towards more flexibility regarding user features and energy efficiency. They often use IT to cooperate and build up a safe, enjoyable environment.

Designing the public space to fulfill all the contemporary needs is a great challenge. The space has to be not only useful but also attractive. Designers and artists use lighting technologies to create public space because the light is an extremely powerful and strong medium attracting public interest. In contemporary urban design projects, the nightscape plays an extremely important role. First of all light phenomena provide emotions and second, they can establish a link between the virtual and the real world in public space.

The tendency of using lighting technology in public space can be divided into two categories, first introducing media changeable sceneries in the public space, and second category - real interaction between users and the lighting of public space.

Nightscape in the E-city

The most popular and commonly identified IT-technology in the public space is the media screen. All of such screens are made of small light sources. Probably the first media screen was the EPOK system introduced in the 1930s, composed of incandescent lamps laid out in the pattern of photo-cells. This was usually used for the commercial purpose and so it is till today. Nowadays, the lighting technology has developed new sources - LEDs, but the main purpose of using the media screen has not changed and it is still advertising. The nightscape of Times Square in New York and Piccadilly Circus in London are the most distinct examples.

However the media screen serves yet another function in the public space, it makes the public spaces more attractive. New pictures amuse the user. The form of the space is enhanced and the new quality is given.

The excellent example of this kind is the renewal of Fremont Street in Las Vegas. Because of its function and aesthetics, this city is probably one of the most controversial. But there is no doubt that this is the “city of lights”.

The original downtown with Fremont street was created in the 1920s and 1930s. In the 1950s the city experienced the growth of Las Vegas Boulevard (Strip) and since the mid 1980s the progress and new developments around the Strip has been ongoing. This situation caused the decay of the original historic downtown.

In 1985 the city authorities introduced “Redevelopment Plan of the Downtown Las Vegas Redevelopment Area” in which the Fremont Street was the main public space. In 1992 architect Jon Jerde designed the renewal plan for the area called “Fremont Street Experience”. In this new public space all the entertainment based on the typical character of the city should be presented. Among the neon museum, shops, restaurants, casinos and performance scenes the most spectacular and the most impressive intervention in this space is the six blocks long and about 30 m high canopy.

In 2004 the whole surface of this spectacular roof was covered with 173,000 LED modules that form the “biggest TV screen in the world” called the Viva Vision. Its main purpose is to play light shows that attract visitors. To make the show more spectacular and unique the artists were asked to create the projections. There is a variety of subjects for young and older spectators which present the history of the city or country, the culture or customs. Each show is enriched by music. This medium gives extreme and flexible possibilities to create the atmosphere and the picture of Fremont Street. This public space got a new quality that was able to rival with the casinos on the Strip. It is through IT technologies and lighting that the Fremont street Experience is an extraordinary phenomenon which attracts modern society.

There are many examples of using media screens to build the façade of a building but not many of them goes beyond the function of advertising. This is still so probably because of the costs of panels. According to some aspects of Stephen Perella’s hypersurface theory, this medium could bring new possibilities for

the architecture. It could for example project different pictures of the architecture or could easily change the image of the space.

Probably the best known artist who uses the light and IT-technology in public space is Rafael Lozano-Hemmer. There are many of his installations which are based on IT and lighting technology. The most spectacular is his “relational architecture” series, where the artist uses technology in the real public space. Some earlier installations show this attitude, like the “displaced emperors”, which used an “architact” interface to transform the Habsburg Castle in Linz, Austria. The second was “re:positioning fear”, a large scale installation on the Landeszeughaus arsenal. The shadow projection of passers-by was interfaced by “teleabsence”. But the most spectacular and the one that involved the global virtual society is the “vectorial elevation” project.



Fig. 1. Fremont Street Experience, The Show.

For the first time the “Vectorial elevation” was presented in 2000 in Mexico City’s Zócalo Square. This was a spectacle specially designed for the celebration of the year 2000. Around the square on the roofs of the buildings eighteen robotic searchlights were placed. Each of them was connected to a digital system which allowed the computer to navigate any of the searchlight beams. The secret of the success of this light installation was hidden in the opportunity for the internet user to control the light. “The website www.alzado.net allowed anyone to design immense light sculptures over the historic centre of the city, using an online 3D interface. A personalized web page was made for every participant with comments, stats and virtual and real images of their design from three perspectives”.¹ This experimental light installation, connecting the virtual and real worlds, involved over 800,000 internet participants from 89 countries. For the main public space of the city of Mexico this was a spectacular show that enhanced the image of the city. The light beam projected different structures onto the sky which could be seen in the vicinity of 15 km radius.

¹ <http://www.fundacion.telefonica.com/at/rlh/eproyecto.html>

Followed by this success other cities like Victoria, Dublin and Lyon asked the artist to repeat this light show. Although there were not as many participants as before, the installation brought new understanding of public space and the virtual public sphere which were here connected by light.

The architecture which creates the walls of public spaces is also extremely essential for building the image of public spaces. The reaction on these surfaces of the action in the street creates an interaction that builds the new city.

The avant-garde architecture of Kunsthaus in Graz in Austria presents the media façade which interacts with the use of the space. The “friendly alien” designed by Peter Cook and Colin Fournier is well known among architects because of its unusual shape. The blob architecture with the famous “horns” is all covered with glass. Through the function of the building and its extraordinary form, this building creates a bridge between the past and the future. Night image introduced here is one of the elements that keep this idea alive.

Under the glass cover the BIX system on the surface of 900 m² was installed. It contains 930 circular fluorescent lamps, each of them works like a pixel controlled by a central computer. The main goal of the media facade designers (group realities:united) was the creation of the interactive environment between the media, architecture and the function of the building. The BIX façade works like a membrane between the museum and the public space. It works like an urban screen which presents the art and the content of the building.

From 2003 till 2005 four various shows were exhibited on the facade of the building. The shows contained different aspects. *Plot:Bach* was an interpretation of the music of John Sebastian Bach, *m.arch cubica* presented the abstraction of the cube. But the most interesting projections were presented when the façade reacted on the surrounding environment. In 2004 the show *Lia int.5_27/G.S.I.L.XXX* was presented. The installation projected the generated mathematical forms which responded to the noises of the public space by changing its form. In 2005 the interaction went a bit deeper. The artist John de Korn introduced the show - *Realities: united fest. +43-316/8017 92 42*. The cell phone users and the internauts could influence the look of the night facade. The sensors transformed the recorded voice message from the phones into pictures on the media façade. The second possibility for the user was to enter the BIX website² and draw their own pictures to appear on the BIX. The main goal of this art installation was instant communication and interaction between the building, space and the user. Probably the next shows on the BIX facade of the Kunsthaus in Graz would follow this direction. The façade of a building works like a medium of communication, it's the platform between the art and the user, between technology and space. Its night image underlines this connection. Through avant-garde architecture and its media installation the building becomes the new icon of the city.

² <http://www.bix.at>

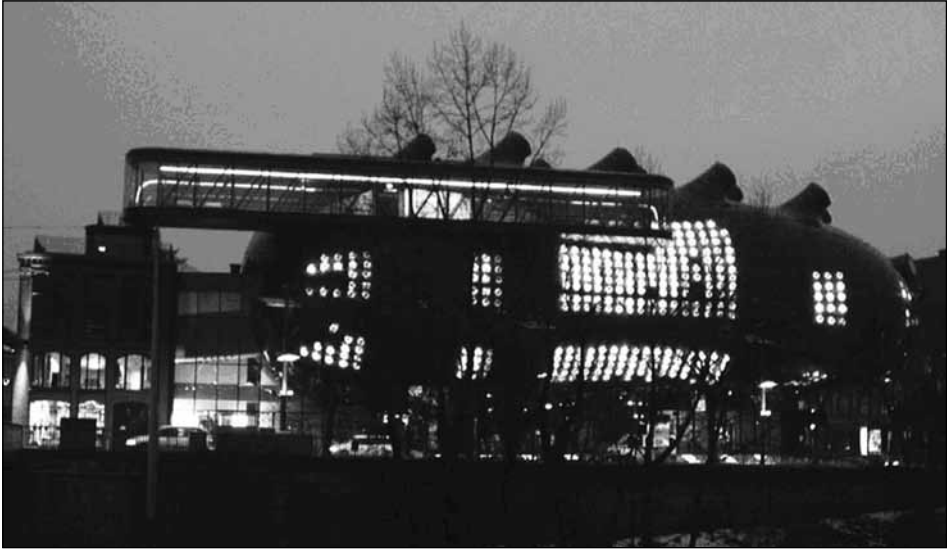


Fig. 2. Kunsthaus Graz, BIX show, 2004.

Summary

The article describes two tendencies of using lighting technology in the public space. First tendency uses lighting as a mean of creating changeable sceneries that interpret the space. Fremont Street for example incorporated a new media screen into the new structure and created an exceptional attraction for the public.

Second tendency is more focused on the user and his involvement into the lighting process. “Vectorial elevation” and the BIX in Kunsthaus could not have worked without the users of the IT-technology. This was more the play of light or art of light that was “placeless” when talking about the user and “real place” related to specific public space.

The introduced examples present only a small number of actions going on worldwide. Many cities which want to get a better status or mark often introduce lighting in public space as an attractor. However not many of them use this technology as the element of interaction, but rather only as a tool for “painting with light”.

The important thing is to remember that lighting technology gives the city a new sensation conjointly with IT technology. The public space is enriched by new media that are flexible in use, can interact with the user and produce spectacular images. Introduction of these elements often results in more visits in these places after dusk. Conscious use of both elements as a tool of creation can enrich the interaction and attractiveness of the public space, instead of the latter being just another “advertising screen”, so overpopular in the contemporary city.

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Urban Planning and Design Facing Global Climate Changes: Towards Low Carbon Cities¹

Planowanie przestrzenne i urbanistyka w kontekście globalnych zmian klimatycznych: w kierunku Low Carbon Cities²

Streszczenie

Artykuł porusza problemy planowania przestrzennego i projektowania w kontekście obecnych zmian klimatycznych. Szybko postępująca urbanizacja (obecnie ponad 50% światowej populacji mieszka w miastach, a za 30 lat będzie to ok. 70%), przyczynia się bowiem do lawinowego wzrostu zapotrzebowania na energię, której tradycyjne wytwarzanie wiąże się z kolei z emisją gazów cieplarnianych. Te zaś wywołują globalne zmiany klimatyczne, których efekty uderzają w osiedla ludzkie. Odpowiedzią urbanistyki na powyższe problemy jest formuła planowania zintegrowanego, obejmującego zarówno zagospodarowanie terenów, transport, kwestie środowiskowe jak i planowanie energetyczne oraz gospodarkę odpadami. Służy ona równoważeniu rozwoju poprzez właściwą gospodarkę energią i zasobami środowiska na poziomie miast, a także składających się na nie dzielnic, zespołów zabudowy czy pojedynczych budynków. Najważniejszą nowością jest planowanie energetyczne i monitoring zużycia energii na każdym poziomie (regionalnym, miejskim, lokalnym), oraz trend zmierzający do dywersyfikacji wykorzystywanych źródeł energii (odnawialnych, nieodnawialnych, oraz śmieci jako surowca), i decentralizacji jej produkcji, w oparciu o system zasilany ze źródeł lokalnych, pozwalający na optymalizację wykorzystania infrastruktury i zmniejszenie strat przesyłowych sięgających obecnie rzędu 30%.

Introduction

While the urban population exceeded 50% of global population in 2008, the tempo of urban growth has become much faster than demographical growth. Nowadays, cities occupy just 2% of the world's surface, but they emit 76% of the world's energy-related CO₂ (Uhel and Georgi, 2009). Projections for the future show, that the global urbanization rate is going to reach about 70% in the next 30 years. Growing cities also means growing energy demand - for households, transportation and other fields of economy.

¹ The paper is based on the Final Statement of Low Carbon Cities - 45th World Congress, Porto, Portugal 18-22 October 2009: Spatial Planning for Low Carbon Cities.

² Low carbon cities - miasta o niskim zużyciu węgla, korzystające z odnawialnych źródeł energii. Niniejszy artykuł opracowano na podstawie materiałów z 45 światowego kongresu ISO-CARP pod tym samym tytułem (Porto, 2009); jest on dostępny w języku polskim w serwisie internetowym TUP (www.tup.org.pl).

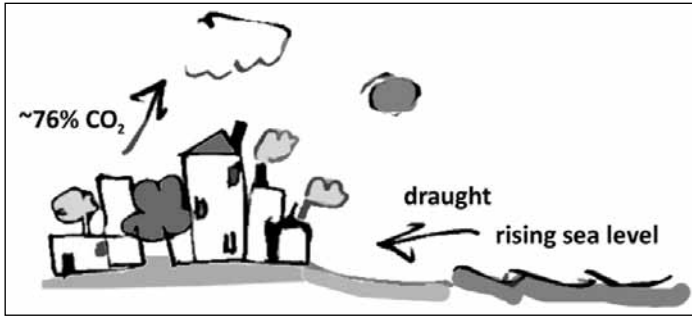


Fig. 1. Urban emissions - a loop of reasons and results.

Energy has become a factor joining two domains - urban planning and climate. It is hidden in all kinds of urban activity, at every level of planning and design, and influences the environment at a global scale. The above figure shows the importance of energy and related greenhouse gas (GHG) emissions, and their management at a city level, as well as at the level of specific districts, neighbourhoods and buildings.

Reducing the usage of fossil fuels, which cause the greatest emissions, has both an environmental and economic meaning - especially at the time of financial crisis. Another important issue is independence from the external energy sources that are used in Europe on a large scale.

Having that in mind, how should we plan and design our cities, how to manage their development, to make them less and less dependent on non-renewable energy sources? It is high time to consider possible planning responses to the growing demand for urbanization and, at the same time, quality-of-life - as well as the growing impact of urbanized areas on the environment, related to the use of energy and materials ('ecological footprint').

Integrated Planning - an Answer to Upcoming Changes

Integrated, inclusive planning means "spatial planning policies that integrate land use, transport, energy and waste planning" (ISOCARP, 2009). It includes understanding of environmental conditions, species conservation and effective water management. Additionally, it should refer to all three aspects of sustainable development: the social, the environmental and the economic. Such inclusive planning brings several changes at every level of the planning process. A quite new issue is energy master planning at each level (regional, city, and local), which requires an interdisciplinary coordination and integrated management.

At the regional level, policies should "extend from the City to embrace the rural hinterland" (ISOCARP, 2009) and the context of the wider region. Genuine reductions in greenhouse gas emissions should be secured by efficient energy planning. Management of all kinds of available resources should include renewable, non-renewable, and waste as a resource of energy and materials.

At the city level, it is extremely important to emphasize energy effective, compact urban planning and provide carbon conscious design. Dense, human

scale (3-5 floors) neighbourhoods should be designed as mixed-use developments, where services are available within walking distance. Well connected with carefully designed public space, where pedestrians and bicycles are given priority, a compact city should reduce dependence on the car and, at the same time, diminish urban sprawl.

At the same time, the city should be green, with a clearly defined system of open space, landscaping, and opportunities for food growing fully integrated with the built environment (ISOCARP, 2009) and linked to the surrounding landscape. That means planning of land use based on environmental conditions. Such green infrastructure should help to define urban edge to prevent sprawl, reduce the city's ecological footprint and last but not least, provide recreational opportunities for the inhabitants.

It is also important for rainwater retention, flood protection, and creating a microclimate of the city with no heat islands, and biodiversity conservation.

City structure should also embed efficient, integrated public transport. Developing rail connections ('light rail' or 'regiotram') will help to reduce the dependence upon the car and avoid traffic jams, and linking public transportation with public space and greenery will improve the aesthetics and safety of the city. The aim is to create places that are well connected and accessible, as appropriate by public transport, by bicycle and on foot.

Energy and waste use planning at the local level is a new emphasis on energy planning at the city and neighbourhood scale, and part of a move away from wasteful, centralized energy generation that causes about 30% waste. Monitoring of energy use by different sectors (heating, transportation, industry, households, etc.) and identification of possible savings is the first step. Then, management of all available resources (renewable, non-renewable, waste as a source of energy and materials) and infrastructure, as well as decentralization of energy production are needed to move on towards community-based systems, energy-saving and energy-generating buildings. The result should be energy efficient, resource conscious cities, neighbourhoods and individual buildings of the future. In fact, this future has already become reality in places like Malmö³, BedZED⁴ in London, Parque das Nações

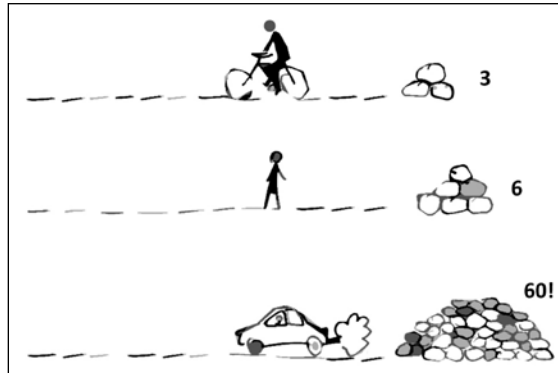


Fig. 2. Energy equivalence of biking, walking and driving the same distance counted in potatoes. Based on Gehl J., 2010, *Life between buildings*, unpublished lecture.

³ Graham T., 2009, *Malmö, Sweden - Towards the Sustainable City*, ISOCARP Review 05: Low Carbon Cities, ISOCARP.

⁴ Beddington Zero Energy Design, more at: Ryser J., 2009, *Low Carbon Cities: Examples from United Kingdom* [in:] ISOCARP Review 05: Low Carbon Cities, ISOCARP.

in Lisbon, or Ecocity Sarriguren⁵ in the Navarra region of Spain. Malmo - a new northern European development moves towards energy generation as a district that that can export low carbon power to other local areas. Parque das Nacoes features advanced climatic design, and Ecocity Sarriguren won an award from the EU and UN for it's sustainable development.

Summary

The general rule for cities to achieve low carbon levels can be summed up in three points, called Trias Energetica:

- Reduce the demand for energy;
- Use renewable resources;
- Use fossil fuels as efficiently as possible.

We need to remember, that reducing usage of fossil fuels requires an INTEGRATED PLANNING APPROACH, which is the way to achieve sustainable urbanization. This also means that the urban pattern learns, where appropriate, from regional and local traditions and history, traditional architecture and focuses on making use of trees in public spaces; the role and meaning of greenery for the city climate and quality-of-life cannot be diminished any longer. The result of such an approach should be growth that is zero carbon.

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Energy of Change in Commercial, Innovative and Intelligent Spaces ***Urban Energy, a innowacyjność inteligentnych przestrzeni komercyjnych***

Streszczenie

W artykule miasto zostanie zakwalifikowane do przestrzeni komercyjnych, które charakteryzuje ciągle dążenie do atrakcyjności. Napędza to wykorzystywanie rozwiązań innowacyjnych w zakresie kształtowania przestrzeni, będących nowym źródłem miejskiej energii. W artykule uwaga skupi się na innowacyjności przestrzeni, wynikającej z udziału technologii informacyjnych, które na styku z architekturą i sztuką czynią tą przestrzeń inteligentną. Taka przestrzeń ulega ciągłym przeobrażeniom, stąd generowana w jej obszarze energia zostanie zdefiniowana jako energia zmiany. Na konkretnych przykładach inteligentnych przestrzeni komercyjnych przebadane zostanie zagadnienie energii potencjalnej oraz kinetycznej. Przeprowadzona zostanie systematyka przypadków z uwagi na treść i formę przekazu informacji w przestrzeni. Omówiona zostanie także kwestia percepcji przestrzeni inteligentnej oraz możliwość interakcji z przestrzenią, w celu jej modyfikacji.

Introduction

People living in urban space, by the movement of every-day life and by all of the changes in the city - from its image, to the way it functions create urban energy. What is important to stress; the city is not only useful space, but also commercial space that allows for development, profits and publicity. Such characteristics of the space make it open to all kinds of innovation in order to keep its competitiveness, and increase its attractiveness. For these reasons, in urban space nowadays, we observe the influence of information technology (IT). Solutions that combine IT, architecture and art, lead to the creation of a new type of space - that is intelligent space. The intelligence of the space we can understand in two ways - in a traditional way - at the level of administration of an intelligent building (by optimization of a building's life, safety and security) and in an innovative way - at the level of communication with the space (transmission of information, influence on human perception, and the possibility of interaction with the space). Traditional intelligence releases the hidden energy of all installations and software. Opposite, the energy of innovative, intelligent spaces we can describe as the visible energy of changes in our environments, and it is the subject that will be discussed in this article.

Energy of Change

Energy of change that we can notice in innovative, intelligent spaces has many images and many kinds of sources, but we can describe it using three types

of levels. It is the information level, perception level and interaction level. According to these levels, we can distinguish two types of energy - potential energy and kinetic energy. Potential energy is the energy caused by the transmission of information and its impact on human perception. This energy makes the space dynamic. However, the relation between the user and the space does not allow a person to transform the environment. The reason is that all of the changes of the image of the space are programmed before. That is why in the scope of potential energy, we can specify the perception level and information level.

By contrast, what diversifies the kinetic energy from the potential is the level of interaction. In this case, the user is involved in the process of transforming intelligent space. The level of kinetic energy depends on the frequency of interaction between the user and the space, and their activity in the action and reaction process. Independently of these two kinds of energy generation, we can deal with two types of emissions of information in commercial space. We can distinguish commercial transmissions and non-commercial transmissions, both aiming to increase the attractiveness of space.

Starting with potential energy and non-commercial transmissions, it is worth mentioning *Traveling Sand*, the realization of Giny Vos in Apeldoorn, the Netherlands (2008). It is a huge horizontal screen - 100 m long and 4 m high that is located at the closure of the railway station square as a wall including the entrances to the platforms. Not only does it protect against noise, and hides the trains from sight, but it also adds dynamic to the space due to dunes of light that are still in motion. It impacts human perception because of more than a million LED.

Another example of digital art in the city is *Crown Fountain* in Chicago (2004) designed by Jaume Plensa. This realization consists of two 15 m high glass towers embedded with LEDs, situated at the end of a 70 m long, and very shallow, reflecting pool, where people are walking (see Fig. 1). These two LED video screens transmit changing faces of different Chicagoans, who look, smile and spout the water into the pool from their mouths. It influences the users' perception of this place surrounded by historic skyscrapers; it generates potential energy and provokes a game with the water and digital faces. It works to make people more familiar with this space, and change the architectural scale.

The transmissions of information can be used in many ways, from activating urban space with non-commercial essence, as described above, to advertising the attractions of the city using commercial transmissions. An example of the application of the second type of transmission was a temporary event in Warsaw (May-June 2010), called *Action Glasses* that took place at Hoover Square. In the center of the capital, huge sunglasses were used as a display for publicity of the Baltic Region. People sitting in front of them, on the loungers, could find out some information about the attractions in specific seaside towns, and feel the atmosphere of the holidays through virtual images. It was part of a campaign, *Time for Baltic*, and the task of the potential energy of this place was to awaken the desire to spend time and money by the sea.

Commercial transmissions in urban space can also be integrated in the architectural structure in a more permanent way, as is characteristic of all media facades. They bring publicity at a new level of billboards. The interesting example of this is Bayer's seat, which was redesigned by ag4 in Leverkusen, Germany (2009). The building, after embedding 5.6 million LEDs into its old structure, started to be a real media sculpture that changes color and represents many graphic elements, including a logo. Surely the level of transmitting information here influences the level of human perception, and it does not let the user of the surrounding space remain indifferent towards the building.



Fig. 1. Crown Fountain, Chicago; http://everythingchicago.files.wordpress.com/2009/02/millennium_park_crown_fountain.jpg



Fig. 2. Dobpler Interactive Led System Lighting, Milan; http://nullohm.com/wp-content/uploads/2009/05/d_milano_1.jpg

After describing the aspects of potential energy in intelligent spaces, it is time to develop the issue of kinetic energy. As mentioned before, the kinetic energy appears where there is an interaction between the user and the space. Let's start with a simple interaction that provokes a change in the space. An example is the design of Chopin's bench. 14 pieces designed by "Towarzystwo Projektowe" are situated in different parts of Warsaw (2009). All benches can be used simply for sitting, but they also play a part in a sightseeing tour. There is some information written on the benches, which describes the connection of the place with the composer's life. However, what makes them generators of kinetic energy is a small button. After pressing it, we hear Chopin's music, so the space is transformed by the sound.

As a source of kinetic energy, we can also distinguish an interactive shopping window that attracts clients' attention through publicity via interaction. An example of such a solution is the Apple Store Interactive Window of Media Zest in Berlin. People passing along the shop's facade provoke the movement of virtual dancers represented in the window display. This technical novelty lets them play with the space, and activate change in their surroundings.

Another way to generate kinetic energy is proposed by Electroland, who is the author of *EnterActive Carpet* in Met Lofts in Los Angeles (2006). Here, a grid of light panels embedded into the floor of the lobby is illuminated when somebody treads on them. Automatically, the pattern appearing in the floor is transmitted into the equivalent composition of light panels on the facade. The facade changes,

according to people's behavior in the lobby, and keeps the image of the building still in motion. The next example of an innovative solution for transforming space is *Dobpler Interactive Led System Lighting*, the work of Skjelvik Design. It was applied as *Strømmer* in the pedestrian subway in Sandnes in Norway, for Snøhetta Architects in cooperation with Prototyper AS and Rasmus Hildonen (2008). It was also used at the exhibition in Milan for the Well-Tech Award during Design-week (2009). The interaction uses body movement and light effects. The LED display represents the silhouettes of people moving in front of it by the luminous dynamically changing shadows on its surface (see Fig. 2).

Summary

Summing up, intelligent spaces generate urban energy, and have a huge influence on the appearance of the city and behavior of people. No matter if we take into consideration potential energy or kinetic, the participation of information technology in commercial space invigorates it, leads to the personalization of space and increases its attractiveness. Moreover, different levels of energy impact the degree of user perception and the possibility of interaction. The role of media facades in the process of creating urban energy is different than the role of small interactive architectural objects or temporary events. Nevertheless, it is very important to look for suitable solutions for each kind of space, remembering also the need to find a balance between the energy level and human acceptance of a space.

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Green Trends in the Design of Skyscrapers in Urban Development
*Proekologiczne trendy w projektowaniu wieżowców
w kontekście rozwoju miast*

Streszczenie

Gwałtowny rozwój miast w kontekście rosnącej liczby ludności w ujęciu globalnym jak i lokalnym (zwiększenie liczby mieszkańców miast) stanowi istotny problem dla profesjonalistów zajmujących się gospodarką przestrzenną, polityką miejską, planistów jak i dla samych mieszkańców.

Współczesne trendy w budownictwie, w tym w zakresie budynków wysokościowych skupiają się na obiektach wykorzystujących proekologiczne rozwiązania takie jak efektywne wykorzystanie przestrzeni, stosowanie nowoczesnych technologii materiałowych. Budynki wysokie propagujące proekologiczne trendy w budownictwie mogą stanowić element dla podnoszenia jakości życia w miastach zwłaszcza w obszarach najintensywniej zamieszkałych.

Introduction

A few aspects of my research (studies) on high-rise buildings and their role in urban development will be presented. In this short article I will focus on the future of that kind of construction in the context of energy savings.

The background of the problem is expansion of cities and rapid growth in the number of people who will reside in urban centers. The second value is especially important - because of the of ratio producers to consumers of food. According to the United Nations forecast in the year 2050, 75-80% of the world's human population will live in cities and every third truck will be used for food transportation to cities. Other related issues of urban development are: energy consumption (over-consumption), transport, pollution, overcrowding and social problems. We know this, we can read this in almost every paper but the question is: what (as a young planners) are we doing with this knowledge - as professionals we are obliged to do something.

Green Trends: Past, Present and Future

What is the future role of high-rise building in the city? How can we use types of high-rise buildings in the process of creating a new shape of the city? One basic assumption is the conclusion that tall buildings are an anachronical form of construction in the view of the conventional freestanding, air-conditioned, artificially lit tower that guzzles vast amounts of energy and is built for short-term profit out of high-embodied-energy materials. The quickness of their construction minimizes building and interest costs but ignores long-term running costs, including those of energy consumption.

Urban arguments for green towers are constructed around their intensive use of the dwindling resources of land. High-rise buildings themselves could contain a mix of uses and for their intensity can help in creating more compact cities - hence - make cities more energy efficient (Buchanan, 2004).

Aversion to such buildings, especially in European countries have led to alternatives - there are some clusters realized like mid-high in vertically and used whole area instead of one glazed high-rise surrounded with a desert of concrete, i.e. parking. One example of that kind of realization is the Hermann Hertzberger Corporate office complex in Apeldoorn, the Netherlands built between 1967 and 1972. Although it did not eliminate all problems, it significantly reduces through location, adaptable plan. Notice that it was built during the age of modern architecture - glass skyscrapers located with no local context with rather no easy adaptable interiors. During this time in the USA, the Sears Tower was built.

According to Hertzberger, "Constant changes occur within the organization, thereby requiring frequent adjustments to the size of the different departments. The building must be capable of accommodating these internal forces, while the building as a whole must continue to function in every respect and at all times" (2005, p. 133).

The best-known European ecologically friendly building is Commerzbank, designed by Foster and Partners and built in Frankfurt in 1997. The Tower was built with the use of innovative and environmentally friendly building technology. A key element in the Commerzbank tower's environmental friendliness is its huge central atrium. The atrium reaches from the ground floor to the top of the building. The atrium's inner ring includes nine "sky gardens", each standing four stories tall. Naturally ventilated and lit through most of the year, but with backup ventilation and heating systems for summer and winter extremes, it was designed to cut energy consumption by what was cautiously predicted to be 30% but is proving to be 50% that of a conventional building.

Now - step forward - a concept project made by Mark Lovell Design Engineers Skyzed (Zero Energy Development) - A Carbon Negative Tower named Flower-Tower. A revolutionary concept to produce a carbon negative, live-work building. By using a combination of wind and photovoltaic cells to meet the towers electricity demand, a modest woodchip boiler supplies the tower with heat.

This multi-storey tower is also structurally designed to have a minimum of embodied energy and to reuse large amounts of recycled materials.

Yet though the Flower-Tower suits its problematic site ringed by constant traffic, it is usually difficult to marry wind-focusing schemes with a socially satisfactory urban grain.

Analogical technical solutions have been applied in many of later projects and urban researches. But looking for next step forward and progress of idea of eco-solution is - well known project of EDITT tower in Singapore Ecological Design in The Tropics designed by Malaysian architecture office TR Hamzah&Yeang with an eye toward sustainability, adaptability, and ecological improvement. It will employ photovoltaic panels to harness solar energy as well as a plant to convert

sewage into biogas and fertilizer. Like many urban areas, Singapore's ecosystem is an ecologically devastated site cleared of vegetation. The plant life on the ED-ITT Tower will improve the region's biodiversity and bring the populace in daily contact with a variety of plant life.

The latest idea is "vertical farm" developed at Columbia University by Dickson Despommier who believes a new model of agriculture is vital to avoid an impending catastrophe. Vertical farming is a proposed agricultural technique involving large-scale agriculture in urban high-rises or "farmscrapers". Using recycled resources and greenhouse methods such as hydroponics, these buildings would produce fruit, vegetables year-round. Their proponents argue that, by allowing traditional outdoor farms to revert to a natural state and reducing the energy costs needed to transport foods to consumers. Critics have noted that the costs of the additional energy needed for artificial lighting, heating and other vertical farming operations might outweigh the benefit of the buildings.

The next big step forward will be towers that generate all their own operational energy (such energy autonomy is already being achieved in some residential buildings). Designed by Studied Impact, the 10 MW Skyscraper has been proposed for Dubai. The tower has been designed to generate 10 times more energy than it needs. The tower is equipped with a 5 MW wind turbine that sits on top of the building harnessing the wind, a 3 MW concentrating solar system and an additional 2 MW is to be generated with a solar updraft system.

Polish architecture firm Mode: Lina Architektura & Consulting proposed the Gesterbine skyscraper for the eVolo Skyscraper Competition that has been designed to maximize energy generation using a series of wind turbines, human kinetics and water. The self-sufficient tower is being envisioned for Greater Poland, an area characterized by a small amount of precipitation.

Summary

Clearly then, despite the fact that towers have been synonymous with and symbolic of waste, inequality, and unfriendly working conditions, they can be energy-efficient - even self-sufficient - and convivial places for living and working.

Says Peter Buchanan - The future of towers depends not on whether they can be green but rather on what kind of city and urban lifestyle will be required and desired in the future. In a globalized world, cities as much as countries compete for skills and investment, and do so in both available facilities and quality of life, to which the historic character of a city contributes much.

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Digital Media Experiment in Architectural Education

Streszczenie

Artykuł przedstawia aspekt e-learningu w edukacji architektonicznej na przykładzie kursu dydaktycznego o nazwie „TRANS_FORM. (R)ewolucja form we współczesnej architekturze”¹, prowadzonego na Wydziale Architektury Politechniki Gdańskiej w semestrze letnim 2005. Treść przedmiotu dotyczyła metodologii projektowania i skupiała się szczególnie wokół podejścia topologicznego w projektowaniu z ekstensywnym wykorzystaniem mediów cyfrowych w procesie projektowym. Kurs był swego rodzaju eksperymentem w wykorzystaniu cyfrowego, „bezpapierowego” sposobu prowadzenia zajęć z projektowania architektonicznego.

Zajęcia były prowadzone przy wykorzystaniu platformy e-learningowej „Moodle” i było to jedno z pierwszych wykorzystania takiej metody na polu edukacji architektonicznej w Polsce.

Introduction

Among many obligatory courses at the Faculty of Architecture at GUT there is a small margin in the programme for so called “elective subjects”, which are meant to widen the students’ perspective. They deal with some features and aspects not considered in the obligatory courses². This is the place, where an experiment can happen.

Digital Media Experiment in Architectural Education

The “TRANS_FORM. (R)evolution of form in contemporary architecture” course³ can be considered as such an experiment in two fields. First is the subject of the course itself, and second are the methods used in leading the course.

The subject of the course was some of the newest trends in digital architecture - in particular the “topological architecture” which focuses on treating architecture as an ongoing process of transformation. This approach concerned mainly the generative processes of form-finding during the concept phase of the design.

¹ The course was led for the students of the 6th semester and lasted one semester (12 classes). The course content is available online at <http://www.moodle.pg.gda.pl/course/view.php?id=11> (January 2006).

² These „elective subjects” are usually limited to groups of maximum 30 people. Usually it is around 20. In comparison, the standard group in a class of obligatory courses can reach up to 40 people. However, the interest in the TRANS_FORM course was so great, that the tutors were forced to form two groups, 30 people each.

³ This was one of the “elective subjects” for the students of the 6th semester of Faculty of Architecture, Gdańsk University of Technology.

This subject, although nowadays not new anymore, for many students was still something fresh and compared to many of the traditional obligatory subjects can be seen as “new” and “non-standard”.

The main “experimental” feature of the course was an introduction of one of the e-learning platforms⁴ - the Moodle environment. It is one of few open-source e-learning platforms available for wide use⁵ and is the most popular LMS in Poland⁶. It is based on a modular architecture, which means that various features can be added and removed freely according to administrator’s and users’ needs. The user interface of the platform is very friendly, most of the entries can be done using a simple embedded WYSIWYG⁷ HTML editor.

From the educator’s point of view, Moodle *promotes a social constructionist pedagogy (which includes collaboration, activity-based learning, critical reflection, etc)*⁸. Moodle at the GUT is mainly used as a supplement in traditional face-to-face teaching method, but it allows using it as a tool for teaching 100% online classes. The platform offers many different modules to use, among others very helpful ones, such as: the assignment module, the forum module and the resource module. The assignment module allows the teacher to give out tasks for students and evaluate the results, all done online. The freely configurable forum module allows the users to communicate in various areas. The resource module is a crucial one, because with its help the teacher is able to upload various learning material on the Moodle site and share it with students.

Use of the Moodle platform during the course was meant to be the main resource base for the topic. The course, as an elective subject, had a very limited class time. The platform was a very helpful tool in this case and the possibilities offered by this environment were used extensively.

The discussion forum was meant to host open discussions on various general subjects, not necessarily associated with the subject of the course. The design forum focused on a discussion on particular design features of the students’ works.

Each week’s particular subject was followed by a list of resource materials, which were available online from the resource section of the Moodle site. The students

⁴ There are about a dozen or so recognized Learning Management Systems (LMS) available worldwide. Accordingly, there are many solutions developed by various institutions and used internally as their e-learning environments, such as the Stellar Course Management System developed and used at Massachusetts Institute of Technology (<http://stellar.mit.edu>).

⁵ Moodle is used in over 8300 institutions in 144 countries (<http://moodle.org/sites/>, January 2006). Other open-source platforms available based on the rules of the GNU General Public License include for example the ATutor Learning Content Management System (www.atutor.ca) and the Metacoocn - an Adaptable eLearning and eWork Environment (<http://www.campussource.de/org/software/metacoocn>).

⁶ Moodle platform is officially used in nearly 200 institutions in Poland (<http://moodle.org/sites/>, January 2006).

⁷ WYSIWYG stands for *What You See Is What You Get*, and is used to describe a system in which content during editing appears very similar to the final product (e.g. word processors).

⁸ <http://moodle.org/mod/resource/view.php?id=2322> (January 2006).

could broaden their knowledge and extent interest any time during the course and afterwards. The available materials included literature associated with the subject of the course as well as some other resources⁹.

There were two assignments during the course. First focused on examining various transformation processes. Second one was a design task, in which the students had to develop a skin for an “Urban Mutant” - a building in a particular urban environment based upon their investigation of transformation processes and the knowledge studied during the course.

Both assignments were presented online on the course website. Work of every student was followed up by an open discussion.

This new, interactive way of designing and presenting their own work encouraged the students to discuss not only various aspects of this particular course, but architecture and education in general.

The assignments did not have very strict rules. The technique of realization was free to choose for everyone. The only restriction was such that the result had to be a file, which could be uploaded on the Moodle platform. This fact was an additional task aimed for making students more familiar with managing their work in terms of computer files and to familiarize them with the e-learning environment.

Second assignment was more challenging, but gave many students much satisfaction upon completing. They had the opportunity to freely experiment with form-finding, supported by digital media including various CAAD and graphic software¹⁰.

Many projects presented by student for the “Urban Mutant” task represented a very high level, both conceptual and practical. The projects were possible to classify. There were many designs representing formal approach, focusing on the final form only. There were also many works going beyond that. These projects presented sophisticated thinking about design process, treating architecture as an interactive, ongoing process created and controlled by the architect in the digital realm. Most of the projects were done using modelling software supported by graphic programs. Some of the works however were prepared using traditional manual methods such as model making and drawing. Most valuable were these, which tried to combine many techniques in achieving the goal.

This example can show that using digital technology and LMS environments in particular can enhance design education processes. Students present their thoughts more open and willingly in an Internet forum. By observing and discussing topics, the students become more. This is a crucial aspect and it shows that using an LMS environment enhances the social engagement of the participants of the class.

⁹ For example software for experimenting with fractals, etc.

¹⁰ CAAD stands for Computer Aided Architectural Design. The software included for example Rhinoceros 3D modelling application, Autodesk’s 3Dstudio Max and AutoCAD software, and for example Adobe Photoshop or CorelDraw graphical applications.

Particularly, the presented “mixed-reality” method helped to encourage the students to be more active in the subject. At the same time, taking advantage of the forum discussions, some students became more creative than before. In some cases this process was very clearly to be seen - in the second project for the “Urban Mutant” some students improved and developed in comparison to the first task.

However, some of the participants were not able to use these new digital tools. The reasons included: not enough skills in using digital design tools and no Internet access. For this few particular cases there was a possibility of preparing and presenting the work in a traditional way, e.g. digital or physical models or drawings presented during the class to the tutors. In such cases the open discussion possibilities were very limited.

None of the students had known the platform before. Many of them managed to learn all the basic features by themselves which proves Moodle to be really user-friendly. Others had to be instructed before they were able to use the platform features properly.

During the course some drawbacks and problems emerged. The Moodle system itself had some default administrative settings, which were not suitable for the use in architectural design. This included mainly the filesize of the uploaded content on the course site. This problem however was possible to overcome.

Second problem was more serious - because of the internal error all the data of the course were lost. This problem was impossible to overcome. Only the final presentations of the projects were possible to rebuild. Unfortunately, all the valuable discussions on the forums were lost.

Despite of the problems encountered, students and teachers leading the class found the course very interesting and consider it as a successful pioneering event in improving the quality of studying at the Faculty of Architecture at GUT. Firstly, the use of an e-learning tool ideally supported the essential content of the course. Secondly, this experiment showed, that the students do need subjects that deal with some newest trends in architecture and they do need a new, improved, interactive and open method of learning. It shows, that majority of students (over 80%¹¹) finds no difficulty in using digital tools and experimenting with them. Third aspect is, that the method of interaction with students enhanced by e-learning environment is a great help for users in terms of time efficiency. Without the use of Moodle platform it would be impossible to discuss so many issues with the group in such a limited amount of time. It is also a great help for teachers in terms of managing the class and handing out learning materials. There is no more need to copy all the paper material for every student. Using LMS, all content is available online at any time.

What is more, managing all the deadlines and dates becomes very easy. Every user gets notified by e-mail about every message being posted on the course web-

¹¹ At the end of the course, special questionnaire prepared by the tutors was distributed among the students to collect data about their evaluation of the course.

site as well as about all the appointed dates regarding the specific course.

Although Moodle platform is meant to serve as a distance learning tool, it is being used at Faculty of Architecture at GUT mainly as a support for traditional teaching methods¹². This appears to be mainly because architecture is a very specific subject of education. It involves many manual activities as well as many conceptual discussions, which best takes place in the real physical space and in a face-to-face contact. The experiment with TRANS_FORM course introduced using the LMS platform very extensively, but there still was personal contact between teachers and students. Many users also emphasised the fact, that they would like to have the opportunity to spend more time consulting their ideas in a direct talk with the tutor. Considering the problem this way, the use of e-learning platform remains only a supplemental feature. Very helpful and important, but still supplemental.

Recently, the Internet forums¹³ have become a very powerful and popular medium of communication within many virtual communities. In the cases of forums having regular registered users, they serve as an enhancement in supporting the activity within the group. Online activity however does not replace the face-to-face contact - they still meet in the real life.

The web-based forums and Internet newsgroups are the most popular forms of ICTs used in enhancing social activities. Although LMSs are mainly designed for the education environment, they are being used in different fields as well. The *social constructivist pedagogy* describing Moodle philosophy provides us with some issues and ideas, how this tool is starting to be used. This philosophy bases on collaborative and activity-based learning. Moreover, it looks deeper into behaviour models of online discussion participants. Bringing separate behaviour and connected behaviour models together, Moodle introduces something called constructed behaviour. *Constructed behaviour is when a person is sensitive to both of these approaches and is able to choose either of them as appropriate to the current situation*¹⁴.

These approaches illustrate the specific atmosphere of a virtual learning community. One person can act both as a teacher and as a learner in the dynamic process, and take more advantage from this approach as one would from the traditional role of either being a teacher or a learner.

There are some examples showing the use of Moodle platform in situations other than academic education. Among others, these include various communities

¹² As for January 2006, there are only 7 courses at the Faculty of Architecture at GUT, which take advantage of Moodle platform. The whole program of studies at the Faculty consists of about a dozen courses each semester, which gives a number of nearly a hundred courses during the whole 10 semester studies in general.

¹³ Internet forum can be referred to as an online discussion board focused on a certain subject (e.g. particular computer game or a sport) or relate to a certain group (e.g. politics, local communities). One of the recently popular forum formats is the phpBB technology.

¹⁴ *ibid.*

such as business groups¹⁵ or regional societies¹⁶, community education¹⁷ or church communities¹⁸.

LMS solutions can provide some new possibilities, which could enhance, for example, city administration. The imaginable benefits of such approach include, among others, greater time and resources efficiency. This approach brings us closer to the working idea of e-city, e-governance or e-administration.

Summary

In the educational field, adequacy of LMS tools can strongly depend on the subject of the course. Going beyond education, in general, there are many benefits of using LMS, such as time and resources efficiency, open access to all users, limitless availability and others. But one has to be aware of the possible problems and malfunctions that can happen during the use of such tools. It is also important to remember, that in the architectural education, as well as in many other fields of social life, there is still a great need of a face-to-face meeting and discussion. It seems that these features can not be completely replaced by e-learning methods and virtual environments, but they can certainly be augmented by them.



Fig. 1. One of the students' works for the "Urban Mutant" design task, author: A. Duranowska. Source: <http://www.moodle.pg.gda.pl/course/view.php?id=11>

¹⁵ For example Virtual Business Owners Training Program, USA (<http://vsscyberoffice.com/vcourses/login/index.php>) (January 2006).

¹⁶ For example the Society for Development of the Mielec Region Countryside <http://www.powiat.mielec.pl/ziemiamielecka> (January 2006).

¹⁷ For example Cupertino Sunnyvale Adult and Community Education, USA (<http://ace.fuhsd.org/moodle>) (January 2006).

¹⁸ For example The Community at Bethlehem Lutheran Church, USA, <http://community-beth-luth.net> (January 2006).



Fig. 2. Main layout of the TRANS_FORM course Moodle site.
Source: <http://www.moodle.pg.gda.pl/course/view.php?id=11>

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Renewable Energy Usage and Sustainability in İzmir - Turkey

Introduction

Turkey can be deemed as a very important country with its unique geopolitical, geostrategic and geographical location. For that reason, Turkey plays a key role in the field of energy among the European Union (EU) and the Eurasian countries. Its strategic location emanates from the fact that it is one of the crossing states for those countries which export energy. Turkey has been spending its efforts to promote energy efficiency on national scale and to foster rapid development of alternative energy sources. It has substantial amount of renewable energy sources. High priority is given to these sources in order to reduce the energy supply and to foster greenhouse gas abatement. Especially in terms of solar energy, wind energy, geothermal energy and hydro-energy resources, it encompasses a very high proportion of potentials. Thus, utilization of clean energy sources like wind, solar, geothermal and hydro-energy are also promoted by the Turkish energy authorities, which have been mainly targeted at protecting the environment.

Izmir is a remarkable city with the most important renewable energy sources in Turkey. Particularly the solar, wind, geothermal and hydro-energy resources display a considerably high potential. Although Izmir holds biomass energy and hydroenergy potentials, the related field lacks sufficient amount of studies on biomass and hydroenergy or hydroelectric power plants. Yet, there exist some ongoing studies related with such renewable energies. Renewable energy sources are important for urban development and planning as well. Geothermal energy, in particular, is used for house-heating. This means that air pollution caused mainly by other heating systems (e.g. coal, oil) can be prevented. Buildings that use the solar energy and geothermal energy should be built so that energy consumption can be reduced, on the one hand, and heating and cooling via isolation in buildings can be provided, on the other.

General Characteristics of Turkey and Energy Politics and Renewable Energy Resources

Turkish Republic is a Eurasian country that stretches across the Anatolian peninsula in Western Asia and Thrace in the Balkan region of southeastern Europe. The Mediterranean Sea and Cyprus are to the south; the Aegean Sea to the west; and the Black Sea is to the north. Turkey also contains the Sea of Marmara in the northwest (Wikipedia; Oct. 2010).

The territory of Turkey is more than 1,600 kilometers long and 800 km wide, with a roughly rectangular shape. Turkey is the world's 37th largest country in terms

of area. The population of Turkey stood at 72.5 million with a growth rate of 1.45% per annum, based on the 2009 census. It has an average population density of 92 persons per km². The proportion of the population residing in urban areas is 75.5 % (Wikipedia; Oct.2010).

Demiray (2010) states that Turkey’s national energy policy is based on three elements: First one is energy diversity. Turkey tries to consume and generate several kinds of energy such as hydroelectrical, geothermal, coal, wind, sun, but mainly oil and natural gas in order to ensure that it is not absolutely dependent on any other country for 35-40% of its total energy requirement. Second is reliability which is to ensure sustainable, high quality and cheap energy supply. And the third is to function as a bridge of energy by utilizing the geopolitical features of the country. The objective of this policy is to establish mutual cooperation and thus, to contribute to stability, sustainable development and prosperity of the region. Turkey is an energy importing country where more than half of the energy requirement has been supplied by imports. However, renewable energy usage is inefficient. Turkey has been spending its efforts to promote energy efficiency on national scale and to foster rapid development of alternative energy sources. It has substantial amount of renewable energy sources. High priority is given to these sources in order to reduce the energy supply and to foster greenhouse gas abatement (Demiray; 2010).

A separate law was enacted in 2005 to encourage the renewables based on electricity generation within the competitive electricity market structure. The Energy Efficiency Law, which aims to increase the energy efficiency awareness and training and to promote the energy services activities in the energy market, was put into force in May 2007. As regards the renewable energy sources, a Law on the use of Reusable Energy Sources in Electricity Generation was adopted in May 2005, which drew the necessary framework for the promotion of renewable energy. Utilization of clean energy sources like wind, sun, geothermal energy are also being promoted by the Turkish energy authorities with the aim to protect the environment, mostly (Demiray; 2010).

Table 1. Total Final Energy Production and Consumption in Turkey in 2010

Energy Sources (2010)	Coal and lignite	Oil	Gas	Com. Renewables and wastes*	Nuclear	Hydro-power	Geothermal	Solar/wind/other	Total
Production	26.15	1.13	0.17	4.42	-	5.34	0.98	1.05	39.22
Consumption	39.7	51.2	49.6	4.42	-	5.34	0.97	1.05	152

* Comprises solid biomass, biogas, industrial waste and municipal waste. Reference: A. Koyun, (2007).

Turkey’s renewable energy sources are so plentiful and extensive that they represent the second-largest domestic energy source after coal. Primary renewable energy resources in Turkey are hydro, biomass, wind, biogas, geothermal and solar.

Table 2. Turkey's renewable energy potential

Energy Type	Usage Purpose	Natural Capacity	Technical	Economic	
Solar Energy	Electric (billion kWh)	977,000	6,105	305	
	Thermal (mtoe)	80,000	500	25	
Hydro power	Electric (billion kWh)	430	215	124.5	
Wind	Direct Energy (land)	Electric (billion kWh)	400	110	50
	Direct Energy (offshore)	Electric (billion kWh)	-	180	-
	Wave energy	(billion kWh)	150	18	-
Geothermal Energy	Electric (10%kWh)	-	-	1.4	
	Thermal (mtoe)	31,500	7,500	2,843	
Biomass Energy	Total (mtoe)	120	50	32	

Resource: A. Koyun, (2007)

Hydroelectric Energy: Turkey's abundant hydropower potential is among the highest in Europe. In Europe, Turkey takes the second place after Norway. The annual average precipitation in Turkey is estimated at 643 mm, corresponding to a volume of 500 km³. There are many rivers in Turkey, and most water resources are in the Southeast and Eastern Black Sea region. Turkey's gross theoretical hydroelectric energy potential is 433TW h/year. Turkey has about 1% of the total world hydroelectric potential. Some of Turkey's hydropower potential can be achieved by small hydroelectric plants having individual capacities of 10 MW or less (Oğulata; 2007).

So far 510 large dams and 125 hydroelectric power plants have been completed in Turkey. They have an annual electricity generating capacity of about 42.2 GW h/year Presently 227 dams and 36 hydroelectric power plants are under construction. New hydroelectric power plants will be added by 2020, to account for 17,400 MW of additional capacity. Thus, hydroelectric power generation will increase to 103.7 TW h in 2002 (Oğulata; 2007).

Solar Energy: Turkey is suitable for the utilization of solar energy. The solar energy potential of Turkey is the equivalent of 1.3 billion tons of oil per year. The total solar potential of Turkey is 8.8 Mtoe/year for electric and 26.4 Mtoe/year heat applications. Solar thermal capacity is approximately 2,640 h/a per year and annual solar intensity is 3.6 kW h/m² day. This is sufficient to provide adequate energy for solar thermal applications. The average solar radiation is 12.96 MJ/m² day and the average sunshine duration is 7.2 h/day. The Southeastern Anatolia and Mediterranean regions are very suitable for solar energy usage. The projection of solar energy consumption will reach 355 ktoe by 2010 and 706 ktoe by 2020. (Oğulata; 2007) Solar energy is used especially as a thermal energy in Turkey. 400,000 Toe solar heating produced by 11 million m² collectors is ranked as second in the world. Annual production capacity is 1 million m². Total installed photovoltaic capacity is approximately 1000 kW (Çağlar; 2007).

Geothermal Energy: Turkey lies on the active Alpine-Himalayan Orogenic Belt. Thus, it is located within an important geothermal area and has great geothermal potential. In fact, Turkey is the seventh richest country in the world in geothermal potential. Especially Aegean and Marmara regions of western Turkey are rich in geothermal energy potential. Turkey's considerable geothermal potential is estimated as 4,500 MW for electricity production by 12% and 31,100 MW for thermal applications by 88%. Turkey has only one geothermal power plant in Kızıldere-Denizli. The installed capacity of the power is 20.4 MW. In addition to this field, other fields in Turkey which have high enthalpy resources suitable for electricity generations are; Aydın-Germencik, Çanakkale-Tuzla, İzmir-Seferihisar, Bitlis-Nemrut-Zilan-Suphan-Tendürek, Nevşehir-Acıgöl, Aydın-Salavatlı, Kütahya-Simav and Izmir-Dikili-Bergama.

Today in Turkey, approximately 170 geothermal fields can be useful at the economic scale and about 1,000 hot and mineral water resources which have temperatures ranging from 20 to 242°C have been determined. The projection for 2010 has been 3,500 MWt for heating 500,000 residences equivalent, and 895 MWt for spas and by 2020, 8,300 MWt (1.25 million residences equivalent) of heating, and 2,300 MWt of spas will be completed (Lund; 2000).

Wind Energy: Europe's wind energy capacity has the biggest share of 72% in global wind energy capacity, while Turkey's installed capacity has a share of 0.11% in Europe's installed capacity for 2001. The capacity is likely to grow rapidly, as plans have been submitted for just under a further 600 MW of independent facilities. The majority of wind energy projects are concentrated in the Aegean and Mediterranean regions. The installed capacity of wind energy is estimated to reach 600 MW by 2010 and 1,000 MW by 2020 (Oğulata; 2007).

Turkey theoretically has 160 TW h/year wind potential, which is about twice as much the current electricity consumption of Turkey. The annual average wind speeds range from a low of 2.1 m/s in the East Anatolia region to a high of 3.3 m/s in the Marmara region. (Oğulata; 2007) The most attractive regions for wind energy applications are the Marmara, the Southeast Anatolian, and the Aegean regions. These regions are highly suitable for wind power generation, as the wind speed exceeds 3 m/s in most of these areas.

Biomass Energy: Turkey currently uses substantial amounts of biomass in the form of wood and animal and plant wastes particularly dung. These are burned for heating and cooking purposes in rural areas. The largest biomass consumption is taken up by thermal applications, mainly for household heating. The most production in biomass energy is in Aegean, Mediterranean, East Black Sea and Southeast Anatolia Regions (more than 200 tons). The total production of biomass energy wood and dung in 2001 was 22,053 kt and 6,211 ktoe, accounting for approximately 23% of the total indigenous energy production (Oğulata; 2007). Today, the biomass energy has a very important role in Turkey's total primary energy production. On the other hand, the biomass share of the total energy consumption of Turkey has been calculated as 8% in 2001. Turkey's projections

of biomass energy production will reach 925 ktoe amounting to 5.6% of the total by 2020.

General Characteristics of Izmir and Potential and Usage of Renewable Energy Resources

Izmir, historically Smyrna, is Turkey's third most populous city and the country's second largest port city after Istanbul. It is located along the outlying waters of the Gulf of Izmir, by the Aegean Sea. It is the seat of the Izmir Province, which has an area of 7,350 km². The total population of the province was 3,795,978 by the end of 2008. The central area of the city consisting of metropolitan districts has a total area of 855 km², and a population of 2,606,294. Izmir's economy is divided in value between various types of activity as follows: 30.5% for industry, 22.9% for trade and related services, 13.5% for transportation and communication and 7.8% for agriculture (Wikipedia; Sep.2010). Izmir holds an important renewable energy potential. Especially, geothermal energy, wind energy and solar energy are being used in Izmir.

Hydroelectric Energy: There are not any hydroelectric power plants in Izmir, but there exist potential studies related with wind energy.

Solar Energy: In Turkey, annual solar energy dispersion is 1,100-1,600 kWh/m²year and bright and sunny weather conditions amount to 1,400-1,450 kWh/m²year in Izmir. In Izmir, the annual total of solar energy potential is 1,680 kWh/m²year and 2,816 hours of sunshine annually. The workings related with solar energy usage for Izmir is only at project stage. No comprehensive works on potential exist. However, in Izmir, solar energy is higher than in Turkey average. Besides in Izmir, the annual average is 300 days of bright and sunny weather conditions (İZKA; 2008).

Geothermal Energy: Izmir is one of the richest cities of Turkey in terms of the number and characteristics of geothermal energy sources. There exist numerous geothermal sources in 11 centers, namely, Seferihisar, Balçova-Narlidere, Dikili, Bergama, Çeşme, Aliğa, Çiğli-Menemen, Urla, Bayındır, Menderes and Kemalpaşa. The first bore in Turkey was drilled in Balçova by MTA in 1963. Izmir has pioneered in utilization of sources, uttering of problems and solution offering. At the same time, Izmir has been depicted as a model for other regions. Approximately, the heat of geothermal areas in Izmir is around 60-100°C in Aliğa, 100-145°C in Balçova, 30-50°C in Bayındır, 30-60°C in Çeşme, less than 130°C in Dikili, 40-70°C in Bergama, less than 153°C in Seferihisar, and 80-100°C in Urla (İZKA; 2008). The geothermal heat is used for spa treatment in thermal tourism and health tourism. Besides, the resources are used for greenhouse heating and urban heating.

House-Heating Projects: Today, the amount of overall heated site has risen to 21000 HE house-equivalent unit in Balçova-Narlidere. The geothermal system has a capacity of 100 MWt (megawatt thermal), which makes it take place among the few biggest heating systems. There are approximately 200 house-heat-

ing projects in Dikili and Bergama with 10 MWt in capacity.

Utilization for Health: For modern health, geothermal energy is used in thermal hotels of Balçova and around. Traditional thermal facilities are located at Dikili, Seferihisar, Bayındır, Bergama and Çeşme. Thermal spring in Çeşme is used for partial-heating of 18 hotels and its cure centers.

Greenhouse-Heating: In Turkey total 1,500,000 square meters (sm) of greenhouse areas are heated with geothermal energy. Total heating capacity is 165 MWt. The biggest geothermal-heating greenhouses are clustered at Izmir and its environs. In Dikili, tomatoes and peppers are cultivated in 459,000 sm areas. In Balçova, today, flower greenhouses which cover an area of 100,000 sm. are being heated with thermal energy (Aksoy; 2009). Determination of source potential constitutes the most important stage in geothermal energy investments. Projects of regional heating that are concerned with life standards and the comfort of thousands of people have to be more careful about the “potential”. Projects should be designed as suitable for modular expansion and avail for further improvement. Future needs should be taken into account during the phases of growth and operation, which in turn require determination of the amount and location of support wells that shall aid in sustainability of the capacity to be reached.

In Balçova-Narlıdere Area: The resource should be kept far from any political pressure. The Balçova spring was subject to excessive consumption and possible bore areas were zoned for housing, actually leading to their destroy. As for the reservoirs, additional studies and operations have to be held for the future. Related studies and operations should be duely observed and managed. The main problems of heating are corrosion and water leakages that emerge because of irregular planning. As the incomes do not compensate costs, they are covered by the municipality and governorship sources. Projects should first be planned as availing for suitable solutions and feasibility studies should follow afterwards. If there occurs any need for support, the statement of time and amount in the projects shall be announced to public.

Çeşme Geothermal Areas: Via the 44 km. of pipeline that belongs to Izmir governorship, thermal-water is being transported to many hotels. Within the distribution line, the plan has involved the transportation of thermal-water to hotels of Alaçatı (5km) and Çiftlik (8 km.) where 18 hotels draw water from this line. At present, this line holds a hot water capacity for 60 hotels. The aim of the project in Çeşme where the bed capacity is more than 20,000 is to expand the tourism activities throughout the year, and not be confined to one season (Aksoy; 2009). The main theme of the project is to establish a collective cure center and attract the visitors to these cures centers from hotels. However, the cure center has not been established yet.

Dikili Geothermal Areas: In Kaynarca and Çamurca spa facilities, 459,000 sm of greenhouses are heated. House-heating project has begun in 2008. There are some studies for electricity production. 15 licensed bores are being drilled all under responsibility and ownership of Dikili municipality and Izmir governor-

ship and the greenhouse enterprises (Aksoy; 2009). Today, this area has become a charm center for greenhouses, because the project has commercial success. The greenhouse contributes to being a solution for the employment problem and social life. 500 people are employed in the greenhouse, 80% of which consist of women. The greenhouses are in need of a new operation system. For this reason, these areas will first be allocated to determined uses and under possible conditions of capacity increases, a new model of operation is required to prevent from any damages of enterprises. The other area in Dikili has less heat and potential. In order to initiate the processes, there should be geological, geophysical and drilling studies and operations duely held.

Bergama Geothermal Areas: The low-heated (62°C) area has dug wells. Concerning the house-heating, the project has been initiated by Bergama Municipality in 2003. Yet, there exist some problems. Sufficient amounts of thermal water could not be found. At present, 200 houses are heated with thermal water. Allioani and Pergamon archaic city are under the water. Therefore, the projects related with the geothermal potential in Bergama should be considered holistically with historical heritage.

Seferihisar Geothermal Areas: It is the biggest and the most important geothermal area in Izmir. Karakoç, Doğanbey, Cumalı and Tuzla areas can be named among the main parts of Seferihisar geothermal spring. In 1971, 20 gradient wells and 10 wells for production have been dug and 153°C of heat was discovered. The area is suitable for electricity production, greenhouse and thermal tourism.

Çiğli-Menemen-Ulukent Areas: Actually, between Karşıyaka and Çiğli-Menemen, within the Çiğli industrial zone, wells have been dug for cold water. However, thermal water has been found (33-35°C) in some wells. Between Çiğli and Menemen, around Ulukent and its environs, there exists a well (with 800 m of depth) that has 56°C of heat, but geochemical data show that it could be 75°C. For that reason, there should be more studies and operations held for these areas. Yet, there is no spring that is suitable for utilization.

Aliağa Geothermal Areas: In this area, geothermal potential exists as spread to a wider area. These areas consist of Samurlu-Güzelhisar-Biçer, Helvacı-Türkelli, and Ilıcaburnu. Some studies have been held by MTA and the obtained data show that the highest heat takes place in Samurlu-Güzelhisar (89-93°C).

Urla (Gülbahçe) Areas: In İYTE (Izmir Institute of High Technology) Campus area, 4 wells have been dug and the water with 33°C of heat has been found. At present, construction of a thermal pool has been initiated in this area (Aksoy; 2009).

Bayındır, Menderes-İlikpınar and Kemalpaşa-Torbali Areas: There is not any sufficient level of studies and operations held for these areas. New wells have to be dug. There are water springs with 62°C of heat.

Geothermal springs are mostly financed by public. For that reason, these projects should be explained, discussed and managed from the beginning, and all results should be published. Sources should be operated to support the geo-

thermal foundations. Collective projects should be supported and encouraged for geothermal foundations (e.g. MTA and universities).

Wind Energy: Izmir is the third city in Turkey with wind potential. 30% of areas that produce electricity by wind energy take place in the Aegean Zone. As seen in the figure, green and blue areas indicate the “low wind speed” zones, which are rather few in Izmir. Especially coastal areas of Izmir have a wind speed of 7m/s and over. There exist 4 wind tribunes in Izmir; three of them in Çeşme and the other in Aliğa. The dates of production vary between 1998-2008 with installed powers ranging between 1.5 and 42.5. Tribune items vary between 3-49, with capacities of 500, 600, 800 and 2,500kW. The wind electricity power plants in Izmir are: Ares (Alaçatı) -7.20 MW, Aero (Alaçatı) - 39.2 MW, Delta (Izmir) - 1.5 MW. The total power produced amounts to 47.9 MW (Özdem; 2009).

The highest investment demand for wind power stations is in Izmir. There are 113 investment demands (Özdem; 2009). These areas are Çeşme, Karaburun, Aliğa, and Bergama. Izmir is the most important city carrying the potential to become a candidate for wind energy production center of Turkey. There are many domestic and foreign companies that produce devices related with wind energy in Gaziemir Free Zone and Atatürk Organized Industrial Zone. The produced wind energy power reaches the level of 146 MW. In 2008, the total power was estimated as 249.15 MW in Turkey. 90.4 MW (36%) of the power has taken place in Izmir. Izmir city holds a theoretic capacity of 11,815 MW. With a potential as such, production of total energy will amount to 31 milliard kWh/year. This amount in Izmir is more than that of the Aegean Zone. There exists 4,720 MW of wind energy potential in Izmir. For Izmir, 240.11 watts of energy has been given license. The first wind power plants were established in Alaçatı (Boztepe; 2009).

Biomass Energy: There exists sufficient amount of poultry farms and fattening stables for biomass energy production in Izmir. Between 1982-1985, the studies have been held by the District Office of Rural Services for Tire-Karateke, Menemen, Torbalı-Oğlanağası to obtain biomass energy. There are not any studies and operations held for obtaining biogas in the city, but the city has potential to obtain biogas energy. Izmir holds the suitable climate conditions for soil production from oily seed. Many numbers of academicians work for this field in R&D, R&D centers and application centers.

Besides, the projects are seen to have improved in relation to utilization of micro algae as raw material and the studies are carried out in cooperation with the whole world. The utilization of algae as raw material will be beneficial in terms of both productivity and field necessity. Thus, not only the lands, but also the seas can be used as fields in this process.

Conclusion

On basis of various technological and economical circumstances of Turkey, renewable energy resources appear to lack wider applications. Yet, renewable energy use should be encouraged to increase annually by the government and private companies, since Turkey is an energy importing country where domestic fossil fuels are limited and the economical condition of the country is not good. There exists an important potential to use renewable energy in Turkey. Especially hydropower, biomass, geothermal, solar and wind energy appear as the most interesting domestic and clean energy sources.

The main objective of energy policy including renewable shall be to meet the demand using domestic energy resources in highest priority. In the medium and long term, this is to occur through a mixture of public, private and foreign capitals. Another objective shall be to develop the existing sources while the discovery of new and renewable sources is accelerated. In addition, energy sources should be diversified. Private sector investments should be encouraged and capacity building and privatization should as well be promoted with regard to the power industry. Preparations should be made for the introduction of nuclear power. At the same time, the reliability of electricity supply through upgrades should be improved for power transmission and distribution grid. Another important point to be made is to improve energy efficiency, through either reduction of losses in energy production or transmission and consumption. In order to protect the environment and public health, the above-mentioned objectives shall be regarded as crucial in energy politics.

Some other points for the renewable energy resources can be listed as in the following: the restructuring of renewable energy legislation can be enabled by an integrated general framework law and the related plans shall be prepared with participation of universities, professional organizations, expert foundations and industrial institutions, taking market failures into consideration. Strategy documents and secondary legislation that covers incentives for each investment type such as hydraulic, thermal, wind, solar and geothermal should be separately prepared and in the years ahead, targets should be identified for each resource.

Incentives should especially target R&D and local production. The productivity standards of each resource should be determined in order to prevent importing unproductive technologies. Inventories concerning the locations of future plants should be prepared in advance, making sure that these locations do not overlap with land uses such as agriculture and urban development. Development of local industries and employment in renewable energy sector should be supported in planning. At the same time, the renewable energy sources should be taken into consideration in all city plans. Potential areas in a city-like residential, industrial, agricultural and tourism etc.- should be planned with renewable energy sources. The standards for the regions, which have renewable energy potential, should be determined in city and urban planning. A production-consumption plan that minimizes transport and distribution losses should be prepared. If transport/distribu-

tion of the produced energy is obligatory, relevant institutions should determine the existing limitations of infrastructure in advance. Therefore, infrastructure plans should be improved for the renewable energy sources. The revision plans for built areas should be prepared in the region with renewable energy sources. In order to raise awareness concerning the use of renewable energy resources, pilot projects should be implemented in all provinces/towns, with public guidance and contributions from professional organizations, universities, government institutions and local governments. Public enterprises should be strengthened. The main principle of energy production investments should be the minimization of environmental damage. Necessary revisions and capacity improvements in thermal plants should be finalized rapidly, idle capacities should be used and measures should be taken to reduce pollution. The existing capacity for electricity production from geothermal sources should be utilized; homes should be heated with geothermal water; and the prioritization of the use of geothermal resources for centrally heating at dense urban settlements should be obligatory. Especially in south axis of Izmir, geothermal capacity is high and for that reason the use of geothermal energy for heating should be encouraged and should even be obligated. Izmir has high solar energy potential, too. Therefore, a legal foundation for the utilization of the solar power potential should be established for Turkey in general, and secondary legislation should be put into effect according to this law. For Izmir and other cities which have solar energy potential, the determination of solar power production technology level, the scope of R&D activities, methods, pilot facilities, production facilities, manufacturing and assembly stages should all be planned. Decrees on norms, standards, minimum performance criteria and procedures for architectural design, heating/cooling needs and equipment, insulation needs and materials, electrical systems and lighting should be prepared. Implementations should be monitored.

On the other hand, some studies for urban planning and urban modeling related with the use of renewable energy sources should be prepared. For the sustainable urban model, some studies that are aimed at energy usage and urban planning in Izmir and other cities shall involve the following: the target is to reach the possible maximum level of benefit from renewable energy sources such as the wind energy, solar cells and biogas energy. Especially in Izmir, the use of solar energy, geothermal energy and wind energy will be more efficient in comparison to other energy sources. Solar energy should as well be used for not only existing buildings, but also for those to be built. By way of this, the energy amount required for heating and cooling with isolation will be reduced. Especially in Izmir, sunshine duration lasts for the whole year. For this reason, solar energy takes place among the most important energy sources for Izmir. Therefore, less energy consuming building projects should be given due priority. 20% of the city surface should be green areas and the roofs should be turned green. There exist a variety of different modes in transportation systems in Izmir, especially public transport, e.g. bus, train, ship, subway, trams). Therefore, public transportation should be improved,

pedestrian and bicycle usage should be encouraged so that vehicle emission shall be reduced. Within this scope, for instance, the roads shall be designed in such a manner that it becomes more difficult to use vehicles. Besides eco-friendly transportation should be adopted as an objective for the emissions to be reduced. The housing and working areas should be designed in proximity. In Izmir, especially in its central areas, such areas have been designed in proximity, availing for the easy and efficient utilization of renewable energy sources. Sustainable urban waste management and energy-gain from wastes should be provided. Adoption of such systems and devices that increase energy productivity should be become widespread in Izmir. At present, the use of renewable energy sources appears to be very low in Izmir, because the systems and devices for the utilization of such energy sources remain deficient.

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The Market and Fair as a Traditional Activity of the City

Targi, jarmarki, teatry uliczne, jako wciąż aktywujące elementy centrów miast

Streszczenie

Historia handlu rozpoczyna się w momencie zaistnienia potrzeby wymiany usługi, bądź produktu na coś, co było potrzebne jednostce osadniczej, a czego nie posiadali mieszkańcy lub czego nie byli w stanie wytworzyć samodzielnie. Pierwotnie na ten cel wystarczało jakiegokolwiek miejsce, natomiast z czasem rozwoju transakcji w osadach zaczynają pojawiać się przestrzenie koncentrujące powyższą, wspólną aktywność mieszkańców, posiadające różnorodną funkcję. Place te otrzymują różnego rodzaju nazwy - rynki, agory, fora lub place handlowe czy bazy. Na placach tych równolegle, gdy przekupki od wieków przekrzykują się zachwalając swój towar, przejezdni aktorzy przeganiają się w pomysłach swoich występów, a mieszkańcy gromadzą się, aby obserwować wymierzanie kar na złodziejach.

Natomiast współczesność wraz z rozwojem rozbudowanych form handlu, tradycyjny targ przeniosła na dalszy plan w przestrzeni miasta, jednak mimo, że nie przyciąga większości mieszkańców, wciąż jest miejscem bogatych interakcji społecznych.

Introduction

Contrary to the modern commercial center with its impersonal form, there still appear on squares and streets traditional markets and their annual versions - fairs, which similarly to historical commerce - gather different activities of the habitants.

The Market and Fair as a Traditional Activity of the City

The history of the market as a basic form of transactions had partially developed in human settlements - to finally create a special area only for this function. Firstly, it was an open-space square, which in the course of time became a built-up area surrounded by a church and houses. For example, as we can read in the monograph by Andrzej Czerner (2002), the market place appeared first as a simple construction for commerce with stalls, then it developed into brick and then stone buildings, which segregated different functions of the commerce, making it more comfortable. In the ancient agora of Athens or in the medieval Freiburg, this central foundation concentrated the main life of the city. The multi-function of the place was not only related to everyday trade full of specific noise, but it also became a tribune for philosophers, an altar for religious rituals and scene for outdoor theatre.

The market created in the history of Europe can be separated into two basic forms. Firstly - the market that supported daily needs, as served by local salesmen, which took place once or more often a week. Secondly, there was a special market organized annually that gathered an international range of products and especially merchants from different cities and countries. This kind of special market was called fair. Moreover it was a time and place not only for exchanging values but also ideas from other cities or even countries.

The way of selling goods changed in different ways. There appeared in the city: shops in separated locales, market halls, passages and finally enormous commercial centres that started to deactivate the natural city center. Although the traditional market became less popular, cities started to use the outdoor markets to invite local inhabitants and tourists to the public spaces.



Fig.1 The “Banacha” market in Warsaw. Photo by K.Krause, 2010.

The market nowadays has three main forms of localization - first of all, it is the market situated once or twice a week on the square. Secondly, it is a market formed by the location of stalls that fluidly occupy streets closed for this particular occasion. And finally, the form that is more popular in Polish cities - the market is located on a separate plot intended only for this function. These first two forms radically changed the set of the area, making the place more changeable - more active. Similarly, fairs in most cities take place over a couple of days and are assigned to streets and squares intended only for stands, which are often separated into different sections of functions.

Many cities use local markets and fairs as a tool to promote city culture. Parallel to the trade, many different attractions are organized (as in the past) that invite not only local people, but also tourists. A good example of the use of this tool for city promotion is the famous St. Dominic’s Fair in Gdańsk. While it attracted

1.5 million visitors in 2003, just six years later there were 8 million people who visited the fair¹. It is a different way of making better known the local culture.

There are some stereotypes about going to the market. Firstly, that it “is a shame”. In fact, sometimes it is a justified point of view because of the chaotic and made out of “anything” stalls that can deter visitors. Another problem is lack of parking places, which plays an important role in our modern day motorized way of life. It is also believed that market prices are lower than in shops (in reality it is often the opposite) and the goods offered are fresh. Moreover on the special annual market - visitors can find original products, like hand-made crafts, antique treasures etc.

Additionally, many of the markets and fairs have long traditions that have created the identity of a place and strengthened the relation of inhabitants to the city or district. Two good examples are St. Dominic’s Fair in Gdańsk, which has taken place annually since 1260, and the weekend market - Altonaer Fish market in Hamburg, which was founded in the 17th century.

As in the past, the fairs (sometimes everyday markets) organize enrich entertainment background that consists of various bars, restaurants, concerts, parades, street theatre performances, and many another attractions for adults and children.



Fig. 2. Fish market in Altona in Hamburg. Photo by K. Krause, 2010.

¹ Protokół nr 38-09/09 z posiedzenia Komisji Turystyki i Promocji Miasta, Rady Miasta Gdańska.

Summary

Nowadays, cities in the process of revitalization are trying to find tools that will attract local people or tourists to visit them. One factor can be the traditional daily market or annual fair, where the relations are stronger, not only between participants, but also between the real components of the city like the streets, squares or the center of the settlement, which recently has become a substitute for artificial urban solutions in modern commercial centers.

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Retrieving Urban Energy from Retail *Handel jako forma odzyskiwania energii miasta*

Streszczenie

Każde miasto posiada pewną szczególną właściwość, która powoduje, że jego cechy przestrzenne są zorganizowane w kierunku śródmieścia. Tę swoistą siłę grawitacji można określić mianem „energii miasta”. Jedną z form podtrzymywania i wzmacniania tego oddziaływania w sytuacji ciągłych przemian struktury miejskiej jest wprowadzanie nowych i przekształcanie istniejących struktur handlowych. W artykule przeanalizowano sześć różnych przykładów takich działań. Polegają one na: odnowie urbanistycznej (Victoria Square w Belfaście), tworzaniu tzw. „drobnego ziarna urbanistycznego” (Princesshay w Exeter), ponownym połączeniu tradycyjnej struktury handlowej (Marikenstraat w Nijmegen), uwzględnieniu aspektów ekologicznych i zrównoważonego rozwoju (Meydan Shopping Square w Istanbulu), drobnych interwencjach urbanistycznych (miasto Chelmsford) oraz ponownym wykorzystaniu obumarłego centrum handlowego (Jackson Medical Mall w Jackson). Każdy z tych projektów przyczynił się do odzyskania energii miasta w inny sposób.

Introduction

In a theoretical, homogeneous space the attributes of an area are equally dispersed. Those attributes may represent density of population and land use, pedestrian activity, land value, location of commercial places for exchange of goods, work places etc. Although in the case of a city, those qualities are spatially diverse and organised towards its centre. It is a form of gravity that brings together different elements and binds them. In this case, the force responsible for that phenomenon may be referred to as “Urban Energy”. Every city has a unique potential to arrange its attributes and create exceptional connections between them. However, due to some disturbances - like economic crisis, urban sprawl or industrial decline - the city changes its structure and a certain amount of this energy is lost. Additionally, each transformation in the structure of these components results in new tensions. In order to maintain the crucial balance between existing elements, certain actions should be undertaken to recover this energy and reuse it in a new manner. In these terms, restructuring a retail scheme contributes to retrieving Urban Energy, as long as a new quality is achieved.

The first example of successful energy retrieval is **Victoria Square in Belfast**, Northern Ireland. Victoria Square was opened in 2008, having been developed by Multi Development UK and designed by Building Design Partnership and T+T Design. The total area of the scheme is 75,000 sq m of retail and leisure space. 106 apartments and leisure facilities were built as well as other functions.

The centre also introduced to Belfast 39 new retailers. Architectonic qualities of the project are high, as it has been designed in the form of 17 different buildings, creating multi-level, pedestrian and open-air public streets. Not only a new urban neighbourhood has been built, but also new pedestrian links to adjoining streets were created. But the most interesting impact of this project was in the political and economic sphere. Such a large, privately financed investment has helped to restore investors' confidence in Belfast. Therefore this project is an exceptional example of urban regeneration not only in the terms of urban tissue, but also international perception of the city.

Another interesting project is **Princesshay in Exeter**, United Kingdom. It was opened in 2007, developed by Land Securities and designed by architects: Chapman Taylor, Panter Hudspith and Wilkinson Eyre. It is a project located within the medieval walls of Exeter on 44,000 sq m of land. The centre consists of 49,000 sq m of total floor space, including 36,000 sq m of retail. Apart from trade there are other uses, including 123 housing units. In terms of urban design it is an extraordinary example of how the UK aims to rebuild its cities with retail-led mixed-use schemes. Sustainability issues also played a major role in this project as 80% of pre-existing materials were recycled and reused in building Princesshay. Architecture of Princesshay resembles the complexity of the city centre form. In addition to preserving the existing high street connections, it was designed with respect to heritage and also harmonised with the Exeter Cathedral. As a result, a high quality urban grain streetscape was built - with regards to creation of environment within traditional scale of buildings, streets and pedestrian interiors.

Marikenstraat in Nijmegen, the Netherlands, is an example of a very admirable shopping street developed as a shopping centre. It was opened in 2000 and was built by a partnership between ING Real Estate and the city of Nijmegen based on the master plan created by Sjoerd Soeters. Three different architects were asked to design Marikenstraat in order to retain the diversity of the buildings' architecture. As a result, a relatively small shopping centre was built that consists of a curved street with two open-air shopping levels. It includes 15,000 sq m of retail in 48 units. Above those shops there are 74 apartments and additional public functions. Marikenstraat has brought a new value to the downtown of Nijmegen and by forming a new passage it has closed pedestrian circulation on high streets by reconnecting them in a way that resembles traditional urban arcades. Moreover, it is a perfect example of how proper implementation of a small-scale project can strengthen the functioning of the whole district.

A very unique project with sustainability features that cannot be found in most shopping centres is **Meydan Shopping Square in Istanbul**, Turkey. The developer - METRO Group Asset Management - was seeking a prototype of a modern shopping centre. To find the best solutions they organised an architectural workshop with a competition that was won by Foreign Office Architects. Meydan was opened in 2007. It is a large scheme with 70,000 sq m of retail, but

with relatively few shops. There are only 51 units and that includes local Turkish traders. The most interesting architectural aspect of this centre is its roof. It has an enormous area of 30,000 sq m that is covered in meadows. It serves not only as a leisure feature for shoppers, but also as a natural storm water runoff. Apart from that Meydan has also geothermal cooling and heating. Therefore this project is very attractive in terms of ecology and sustainability. The centre has received ULI Europe “Award for Excellence“ for innovation for being environmentally friendly.

The city of **Chelmsford, United Kingdom** is an interesting case of how the existing retail structure should be redeveloped as a whole system. It consists of the traditional High Street and two shopping centres - High Chelmer and The Meadows. With the development of the Essex region an increase in retail competition has been noted. As a result Chelmsford town centre needed strengthening. Currently the total retail space of the main street system is 100,000 sq m, although there is an estimated additional capacity for it to grow by 40,000-86,000 sq m by 2016 and 70,000-100,000 sq m by 2021. The actions taken in this project included creation of new shopping space, modernisation and replacement of high street shops, extension of primary shopping area and some smaller interventions including new paving of High Street with the addition of refreshment and entertainment facilities. The empty waterfront facade of The Meadows Shopping Centre was filled with small shops, too. All of those small-scale interventions taken together resulted in building a stronger restructured retail circuit and reclaiming the regional market share of Chelmsford.

Jackson Medical Mall in Jackson, Mississippi, United States of America deals with a completely different problem. Initially it was opened in 1969 as a typical American regional mall with over 80,000 sq m of lease area. Although at the beginning the mall was very successful, it became desolate by the end of the 1980s. This was due to heavy competition from a newly built nearby mall, which turned Jackson Mall into a dead mall. It was reopened in 1995, but with an entirely new use - as a modern medical complex with healthcare, human services and only some retail. The developer responsible for this conversion was Mall Foundation working together with the University of Mississippi Medical Center. Jackson Medical Mall is a very interesting illustration of how to adapt former retail premises to new functions when the demand for shopping changes. In this case, there was both integrated healthcare and economic development. As a result of renewal and reuse of a dead mall, the whole district was enhanced. It helped to create a stable and desirable residential neighbourhood with a well-planned high quality community.

Summary

All of the above projects played a considerable role in retrieving Urban Energy. They reflect sustainability, protection of the environment, and low energy consumption issues, sustaining vitality and viability of the city by providing it

with a strong functional node. Most of those projects are open schemes that generate all-day pedestrian activity that is crucial to maintain the continuity of public spaces. The more public spaces are, the better the social and informal interactions between people are. As a result, the city also benefits from new connections that are created within the existing retail systems. In that sense retail-led redevelopment helps to counter fragmentation of space. Mixed-use function is also essential when these projects are designed. Every project needs diversity of uses, forms and sometimes even architectural articulation. A right balance between all elements should be retained and such projects also need to respect tradition. Moreover, the above solutions would not solve all the problems of contemporary cities, as each project must suit certain local needs, situations and context. In those terms the described projects add a new value to the city, but most of all - they recycle the Urban Energy.

Illustrations

1. Victoria Square in Belfast, Northern Ireland, Copyright: David Barbour, Building Design Partnership (upper left).
2. Princesshay in Exeter, United Kingdom, Copyright: Chapman Taylor (upper right).
3. Marikenstraat in Nijmegen, the Netherlands, Copyright: Sławomir Ledwoń (bottom left).
4. Jackson Medical Mall in Jackson, Mississippi, United States of America, Copyright: Thomas Douglas, Jackson Medical Mall Foundation (bottom right).



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Urban Energy Infrastructure and Planning in Izmir - Turkey

Introduction

The needs and demands of people change and vary due to urbanization and ever-changing urban life and structure. This brings about emerging new urban needs or transforming present demands, restructuring and advancing current urban system and infrastructure. In this process, energy has gained considerable importance as a key component in urban infrastructure.

Today, energy is being considered as a part of urbanization and seen as a need to achieve sustainable urban living. Energy and its infrastructure have become one of major tools and products of consumption while providing proper conditions and costs in production process (Erdin, 2007). Considering its significant impact on both production and consumption, energy takes a leading role in structuring and shaping urban area. Since the energy consumption is relatively high in residential, industrial and transportation sectors and the influence of these sectors on urbanization is enormous, investigating the relationship between energy infrastructure and urban planning has become a focal point of this study.

This article intends to emphasize the relationship between urban planning and energy infrastructure as regards its effect on the cities and urbanization. Owing to that, it is possible to make spatial inferences regarding the energy parameters in urban planning. Initially, the article gives brief introduction of the current energy infrastructure in the city of Izmir and Turkey. Following, how to attain sustainable and energy efficient urban environment are described within three sectors where the energy consumption is high. In addition, this study presents energy efficiency in planning concerning those three sectors and gives some examples from the present and future interventions in Izmir. Ultimately, this article underlines the relationship between urban and sectorial planning which provides us some opportunities to understand energy infrastructure and to evaluate its impacts on sustainable and livable urban space.

Energy Infrastructure in Izmir and Turkey

Turkey is situated in a region where there are alternative energy resources and potentials. This causes different use of energy resources in Turkey. Until 1970s, major energy resources used in Turkey have been wood, plant and animal wastes, fuel oil and coal, in 1976 natural gas was started to be used. Besides, solar energy has been used since 1987 and wind energy has been used since 1998 as an energy resource (TSI, 2007).

Regarding the primary energy production in Turkey, it is seen that current potentials have not been realized very well. According to TSI data in 2007; lignite comes first among the others with the rate of 47.4% in primary energy production.

It is followed by wood and hydraulic with the rate of 14.1% and 11.8%. Other resources as fuel oil, natural gas, geothermal, solar, coal and so forth have almost equal portions in the remained rate 26.7%.

For electricity generation, electricity was generated by two power plant types; thermal power plants (81%) and hydraulic power plants¹ (19%) (TSI, 2009). Natural gas comes first with the rate of 49.6% among the energy resources used in electricity generation. Then, it is followed by lignite (20.0%), hydraulic (water) (18.7%) and coal (8%). The rest of proportion 4% of electricity generation was realized by fuel oil, diesel oil, geothermal, wind, wood wastes so forth (TSI, 2009).

According to data of Ministry of Energy in 2009; total energy consumption in Turkey was increased by 28.4% between the years 2003-2007. In terms of sectors, maximum rise has been seen in transportation sector (39.4%) due to the rising world petrol price. On the other hand, minimum rise has been observed in industry sector (16.8%) as a result of economic crisis in the world. Distribution of energy consumption by the sectors is residential sector by 22.8%, industry sector by 30.2%, transportation sector by 16%, agriculture by 3.7%, out of energy by 4.1% and cycle sector² by 23.2%. Energy consumption in transportation changes due to the developments in the sector. Road transportation is most preferential transportation system amongst others in Turkey. For passenger transport, roads are used by 60.4%, railway by 21.3% and airline by 18.3%. Furthermore, roads are used for freight transport. Energy consumed in transportation sector in 2004, has been used by road transport with the rate of 83.9%, airline transport with the rate of 11.75%, sea transport with the rate of 2.95% and railway with the rate of 1.36% (TSI, 2007).

Concerning electricity consumption, industry sector takes premier place. Consumption rate for this sector is 54.5%, while for residential and commercial sectors is 38.4%, governmental institution sector 4.5% and street lighting sector 2.6%. In the 2003-2007 period, electricity consumption was raised by 57% in residential and commercial, 52% in governmental institution, 32% in industry sector. On the contrary, electricity consumption in street lighting was decreased 18% (TSI, 2009). In terms of electricity consumption per gross national product, it is seen that energy usage in Turkey is twice inefficient comparing to OECD Country. Therefore, Turkey has potential energy efficiency around 25-30%.

As a case study of this research, Izmir is accounted for 10% of total electricity consumption in Turkey in 2007. Izmir is the second largest city in terms of total electricity consumption and residential sector after Istanbul. It has a wide range of renewable energy resources such as geothermal, wind, solar energy and so forth. For industry sector, Izmir consumes the biggest portion of electricity of Turkey. For commercial sector, it is the fourth city after Istanbul, Ankara and

¹ Electricity energy obtained from geothermal and wind is shown hydraulic.

² Cycle sector means electricity generation.

Antalya. Regarding the sectoral distribution of electricity consumption is for industry by 61.1%, residential by 19.1%, commercial by 9.9% and others (governmental institution, lighting, agricultural irrigation and the other) by 9.9%³.

Providing Energy Efficiency and Sustainability in Planning

In order to provide energy efficiency and sustainability in urban environment, planning as a method should be considered from two different perspectives which provides us variety and efficiency in energy resources in terms of their characteristics and production and helps us to monitor and direct consumer habits according to characteristics of energy consumption. This article concentrates on energy efficiency and sustainability with regard to different characteristics of energy consumption.

This kind of view requires improvement of sectorial planning. Sectorial planning should be classified in three sectors that are *transportation*, *residential (housing)* and *industrial*, since these sectors together constitute approximately 85% of world energy consumption. The rest of world energy consumption involves street lighting, public services and so forth.

Transportation Sector

Energy demand in transportation sector comprises petrol, electricity and natural gas. Energy consumption in this sector constitutes approximately 20% of world energy consumption. Distribution of energy consumption in this sector is as follows:

- 80-85% in road transportation,
- 10-14% in airline transportation,
- 2-4% in railway transportation,
- 1-3% in sea transportation.

What should be done to provide energy efficiency in transportation sector?

- Traffic and transportation planning should present and develop different alternatives to road transportation for passenger and freight transport in order to reduce CO₂ emission and provide energy efficiency.
- Logistic planning should be encouraged for transportation of freight especially in the larger industrial and port cities.
- Some important land-uses like residential and commercial should be planned together for reducing number of travel and passenger transferred in the city.
- Healthy and non-motorized transport options as pedestrian ways and bikes should be developed and encouraged to provide traffic calming in the cities.
- In order to reduce private motor car usage, public transportation systems should be encouraged through price regulations in parking lots, fare ticket and so.
- Park and ride facilities should be introduced in certain locations such as transportation nodes, stations and transshipment centers.

³ These analyses in this paragraph are performed by 2007 electricity consumption data of TSI published in 2009.

Residential (Housing) Sector

Residential sector comprises housing, commercial and public buildings. Energy consumption in this sector constitutes approximately 25-30% of world energy consumption.

What should be done to provide energy efficiency in residential sector

- New concepts in construction should be introduced to provide energy efficiency in planning, architecture and engineering.
- Central or even larger heating systems should be developed.
- Insulation should be considered in building design.
- Building size should be optimized to eliminate unnecessary energy consumption.
- Building design should be in accordance with the existing climatic conditions to enable equal sunlight access, solar energy at heating system and lighting.
- Old materials in the buildings causing heating leaks should be repaired and renovated.
- Natural vegetation should be provided around the housing units to reduce the effects of adverse weather conditions in the winter and summer seasons (such as openness around buildings).

Industrial Sector

Energy demand in industry sector comprises predominantly electricity, coal, petrol and natural gas. Energy consumption in this sector constitutes approximately 35% of world energy consumption. Iron, steel and chemical industries are constituted half of energy consumption in industry sector.

What should be done to provide energy efficiency in industrial sector?

- Industrial plants should be built near to the power plants to minimize the loss of energy.
- Geothermal energy resources should be applied to industry in order to increase productivity and provide energy efficiency.
- Industrial plants indicating renewable energy resources should be designed (e.g. use of solar energy at the heating and lighting systems).

The Role of Urban Planning in Energy Efficiency

Transportation, residential and industrial sectors which have key position in energy infrastructure appear as important parameters that modify cities and urbanization. Therefore, policies, projects and plans produced for a better urban space have an important role in providing energy efficiency and balancing energy supply and demand. Urban planning strategies, especially about transportation, residential and industrial, have a great effect on energy infrastructure. This brings significant responsibility to urban planning for providing energy efficiency and productivity. Thus, an approach focusing on the energy issues through policy, decision and planning process is needed in urban planning. Regarding, urban planning process generally brings some important points as in the following;

- For an alternative urban development scenario, energy demand and environmental effects should be assessed and urban sprawl and expansion should be limited.
- Urban development form, land use and distribution of density should be determined considering transportation scheme.
- The distance between the residential areas and business district should be closer.
- Locality and natural resources should be taken into account in planning process.
- Precautions should be taken to prevent “urban heat block” that causes an increase in energy demand due to local climate (green network, controlling density, permeable ground cover).
- Sustainable and locally integrated regional and city plans should be developed.
- Environmentally-conscious strategies and use of renewable energy should be integrated into planning process.
- Housing units should be designed in accordance with the sun path.
- Comfortable and safe pedestrian and bike paths should be presented in residential areas.
- Landscape planning as a tool providing proper heating and cooling opportunities for energy efficiency should be in accordance with urban planning.

Interventions for Providing Energy Efficiency in Izmir

It is possible to mention various potentials to provide energy efficiency related to present energy infrastructure in Izmir. Characteristics of Izmir and its metropolitan area as having a lot of geothermal energy resources, having positive effect of present climate to energy consumption, having enough sunny days for producing solar energy and having potential to produce electricity by wind energy bring some important opportunities. In this context, it's seen that dams and producing areas of wind energy have been determined in 1/25,000 Master Plan, geothermal energy has been become prevalent in urban use, usage of natural gas has been promoted, projects oriented to usage of renewable energy resources and energy savings have been supported. However, Turkey is depended on other countries energy resources and technologies to supply renewable energy. Furthermore, the costs of investment and administration for facilities are relatively high in the country. Thus, energy infrastructure is inadequate and also the usage of energy resources is limited in the industrial and residential areas.

Besides the projects dealing with energy production and energy infrastructure, urban projects and programs which provide efficiency through reducing energy consumption and altering energy consumption habits are necessary in Izmir. When transportation, residential and industrial sectors are taken into account, what the intervention and proposals should be for a better infrastructure providing energy efficiency in the city of Izmir is critically important. Dominant approaches

currently seen in Izmir within the three sectors are briefly discussed below⁴.

Transportation

Present and on-going projects serving for energy efficient transportation in Izmir are presented in subcategories:

- **Bus:** Today, buses transport 339 million passengers per year in Izmir. Average gasoline consumption of buses is 131,000 liter per day. Gasoline consumption per bus is 8,5 liter per day. 750 new environmentally-conscious buses which consume less gasoline have been bought in the last 5 years.
- **Railway-Metro:** Length of metro line is 11.5 km and the number of stations is 10 in Izmir. Today, metro transports 35 million passengers per year. Number of the passengers transported in a day is 100,000. Occupancy rate of metro is 46.1%. Energy consumption is 1,250,000 kwh per month and 0.417 kwh per passenger. Parking lots and bus stops are situated near to the main metro stations. There are four transshipment centers at the four main stations. There is a transit pass opportunity without additional fare payment between the bus, metro and ferry within 90 minutes. Besides, social and cultural activities such as concerts, exhibitions and fashion shows are organized in metro stations to promote metro transportation. Present and projected rail lines are intended to connect industrial and residential areas. Two metro lines and two suburban lines are currently under construction. The goals of new lines are transporting 550,000 passengers per day and 165 million per year, taking out 400 buses from urban traffic, reducing traffic jam and traffic accidents, decreasing private motor car usage and consumption of gasoline, eliminating air pollution and CO₂ emission especially in the city center.
- **Tram:** New tram lines planned at 5 routes in Izmir are expected to create alternative options to current transportation habits.
- **Ferry:** Today, ferries in Izmir transports 14 million passengers per year. There are 21 ferries serving to 8 different piers. For the last 8 years, number of passengers transported by ferries has been decreased approximately 10%.
- **Car Ferry:** Today, car ferry transports 310,000 cars a year in Izmir. For the last 8 years, number of cars transported by car ferries have been decreased approximately 30%.
- **Pedestrian Path:** Pedestrian paths are located by the coastal area. Additionally, some important roads located in the commercial axis and densely areas have been pedestrianised.
- **Bike Path:** Today, bike paths in Izmir are generally used not for transporting but only for recreational activities. A 100 km bike path connecting the north and south ends of Izmir gulf is under construction. In order to integrate the bike lines with railway and ferry, parking areas for bikes are being planned at the main stops.

⁴ The numeric data and photographs which are used in this section are quoted from reports announcing in official website of Izmir Metropolitan Area Municipalities (<http://www.izmir.bel.tr>).

Residential (Housing)

Renovation and revitalization incentives in the housing units of which some old parts causes the loss of heat provide energy efficiency. Similarly, geothermal energy can be used to the district and central heating systems. The capacity of these kinds of heating systems has been increased 113% for the last five years. Today, heating systems using geothermal energy serve up to 31,000 houses. Besides, solar energy is now used for the chlorination systems in water depots of 5 small towns and will be applied to 40 small towns. In the case of Izmir, solar energy is generally used only for water heating system, especially in the summer houses by the coastal areas.

Industrial

Geothermal energy is used in the green house industry through the production of flowers, vegetables and fruits. In addition, natural gas is utilized in the industrial zones.

Conclusion

Despite of the fact that there are not enough advance policy, plan, project and programs considering energy infrastructure in vision of the city of Izmir, we should emphasize various interventions in the matter of energy infrastructure and energy efficiency. Yet, these interventions are quite limited and inadequate, since there are neither advanced sectorial planning approach concerning energy infrastructure nor investigated relationship between sectorial planning and urban planning. Energy which is one of the main components of the cities has a significant position to provide livability and sustainability in urban space. Therefore, cities necessitate energy infrastructure and appropriate planning process to provide energy efficiency for sustaining their existence and competing with the other cities. At this point, urban planning approach focusing on transportation, residential and industrial sectors that have significant position in energy infrastructure in the cities has to be advanced. Urban planning has to develop and advance spatial strategies which will provide energy efficiency related to these 3 sectors. Consequently, this kind of urban planning approach concerning with the energy infrastructure and its investigations are significant in order to create healthy, equitable, livable and sustainable urban living and development.

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CZEŚĆ III

**MIĘDZYNARODOWE WARSZTATY STUDENCKIE
URBAN ENERGY BOX
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Uczestnicy

Studenci z uczelni architektonicznych z Unii Europejskiej i Turcji.

Wydział Architektury Politechniki Gdańskiej: Tomasz Kobiela, Beata Kuc, Agnieszka Kwiatkowska, Dagmara Ziemiańska, Magdalena Wiśniewska, Kacper Ludwiczak, Wiktor Magdziak, Daniel Furmańczyk, Joanna Szymczak, Anna Paluch, Szymon Sawicki, Anna Myszkiewicz, Anna Pach-Rudnicka, Marta Szadokierska, Piotr Paczkowski, Karolina Dziengo, Łukasz Pita, Katarzyna Ojrzyńska, Dawid Szczepański, Patrycja Brodziak, Barbara Piotrowska, Joanna Mieczkowska, Urszula Barczewska

Universidad Politécnica di Valencia: Miriam Merino Moreno

L'école nationale supérieure d'architecture Paris Val de Seine: Olivia Médot

Escuela Técnica Superior de Arquitectura de Granada: Guadalupe Romero Garnica

Universidad de las Palmas de Gran Canaria: Diego Diaz Bolaños

FH Koblenz University of Applied Sciences: Christine Boicekofski, Armin Panahi, Eva Isaksson, Jasmin Pipahl, Alexander Boschner

Dokuz Eylul University, Faculty of Architecture: Aysegül Mercan, Gökçe Cerit, Ceyda Sarica, Emin Kökeli, Nurullah Kaya, Melis Akinci, Ebru Güller, Duygu Eral, Necla Seval Erdem

Cel i temat

Od 5 lat co roku odbywają się warsztaty projektowo-seminaryjne wydziałów architektury uczelni współpracujących w ramach programu Erasmus. Każdy warsztat, niczym sztafeta, organizowany jest w innej uczelni. Spotkanie jest możliwością poznania gospodarza: miasta i uczelni oraz wymiany doświadczeń na temat studiowania za granicą.

Warsztat jest platformą dyskusji, tygodniowym „brain storming” nad nurtującym, aktualnym tematem architektoniczno-urbanistycznym i studiowaniem architektury. Ideą tegorocznego spotkania była Energia Miasta postrzegana z różnych perspektyw. Szeroki temat „zamieszkiwania i budowania” dyskutowany jest w ostatnich latach coraz częściej poprzez kwestie energetyczną.

Uczestnicy siedmiu grup projektowych zaprojektowali wspólnie serię małych pawilonów wystawowych, mieszczących ekspozycję na temat „Energii Europejskiego Miasta”, odpowiadając na pytania warsztatowe:

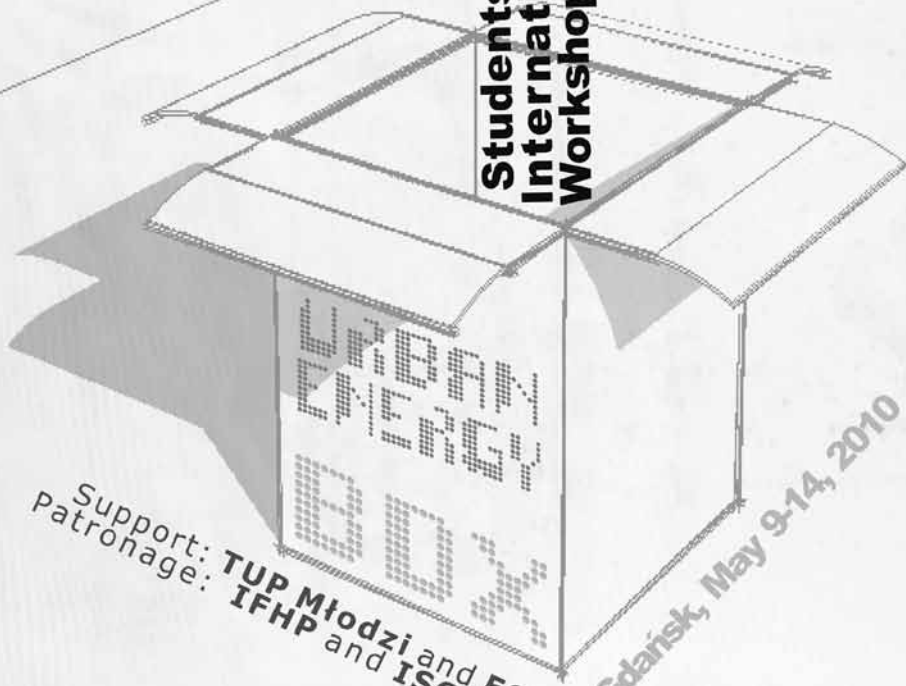
- Czym jest energia rozwojowa miast?
- Czy można postrzegać ją jedynie poprzez kwestie techniczne i organizacyjne?
- Jaką rolę pełni w tym zagadnieniu kultura i społeczeństwo?
- Czy jedyną odpowiedzią jest podniesiona efektywność i zdwojona wydajność technologii?
- Czym jest w szerokim bilansie energetycznym jeden obiekt architektoniczny?
- Co można zdziałać projektując „skrzynkę energii miasta”, a co ich całą kolekcję?
- Czy kolekcja „Urban Energy Box” ustawiona w realnej przestrzeni Gdańska zachęci do głębszej refleksji nad współczesnymi problemami polityki przestrzennej miasta?

Prezentacja prac studentów odbyła się w Centrum Sztuki Współczesnej CSW „Łaźnia”. Warsztatom towarzyszyło również seminarium naukowe pt: „Urban Energy”, prezentujące wypowiedzi słuchaczy studium doktoranckiego z Wydziału Architektury Politechniki Gdańskiej.

Office of Urban Revitalization in Department of Urban Planning,
Architecture and Preservation of Monuments, City Hall of Gdansk

Faculty of Architecture Gdansk
University of Technology with
Laznia Centre for Contemporary Art
invite you for

**Students
International
Workshop**



Support: TUP Młodzi and ESN
Patronage: IFHP and ISOCARP

Gdańsk, May 9-14, 2010



LAZNIA
CENTRE FOR CONTEMPORARY ART



Dear Guests!

Just on **Monday**
workshop place is
 Gdansk University of Technology
 11/12 Nardowicza Street
 room no.300, 3rd floor

Use the main entrance, go
 inside the main hall, round
 staircase will be in front of you,
 elevators on your right



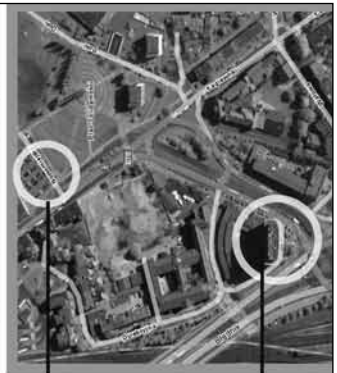
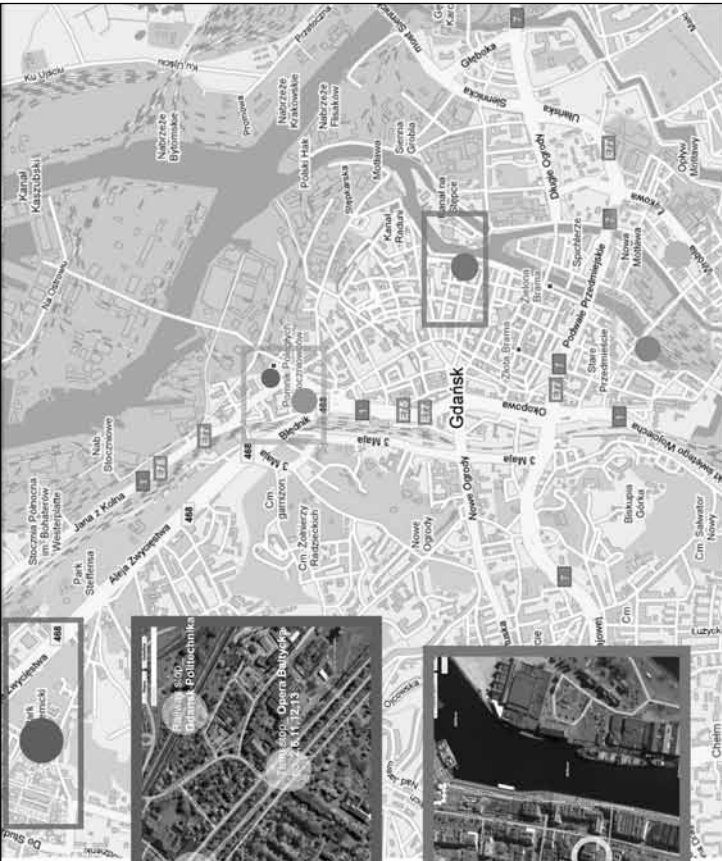
You live here
 at Dom Zachariasza Zappio
 49 Swietogonska Street
 +48 784 041 226

This is our **MEETING POINT**
 Sunday with Mrs. Hienbarz at 9:00
 Monday with Celina at 8:25
 Tuesday with Celina at 8:35
 Going out (time will talk)
 Please don't be late

From **Tuesday till Friday**
workshop takes place in
 Centre for Contemporary Art "Luzna"
 1 Jaskolca Street



Tuesday kayak
your & will party



Sunday bus tour
starts here
 at the parking behind this monument

Sunday lunch is here
 16th floor of Green Sky Scraper
 1 Waly Piastowskie Street



WORKSHOP 'URBAN ENERGY BOX' GDANSK 9-14 MAY 2010 DESIGN STUDIO TUTORS' BIOGRAMS- YOUNG POLISH ARCHITECTS

Lukasz Pancewicz MArch

Town planner and urban designer, independent consultant and PhD student of the Technical University of Gdansk. The main focus of his expertise is implementation of the urban design projects, sustainable development strategies and urban design. His professional experience includes a number of planning and urban design studies and projects in Ireland and Poland. Chartered member of the Polish Chamber of Town Planners (Izba Urbanistów).



Michał Jonca

Born in 1978. Designer and illustrator. He studied architecture at Warsaw Technical University and Technische Universiteit Eindhoven, from which he graduated in 2008. Currently he works for 590architekci and Architektura-Murator Magazine since 1998. Throughout his many achievements as an architect, urban planner and illustrator it is worth to mention winning project of Polish Souvenir- Szopieźwał in 2009, 2nd Prize for cover of Architektura-murator magazine in 2009, 1st Prize for urban and architectural conception for Marszałkowska and Aleje Jerozolimskie streets in Warsaw in 2004, 3rd Prize at Communication Booth Design Competition by Archinect Magazine (USA) in 2001 and 4 time (once as a tutor) participation in EASA Architecture Students Workshop, 1998-2001.



Michał Krenz

Born in 1980 in Gdansk, architect, urban planner, writer, painter. He debuted in Polish-German literature magazine WIR („Innenstadt/Sródmieście”, 1999), in 2010 his novels and photographs entitled „entropie” were published. His art exhibitions includes Gdansk, Berlin, Faro and Lisbon, installation Post-Altana at Zdarzenie 2009 Festival in Tczew. He has been interested in making short films and writing screenplays. He took part in „Pejzaż z Singerem” and was a member of ground and aerial fire brigade in White Waltham Airfield West London Aero Club.



Natalia Soliwoda

Born in 1984, Natalia Soliwoda studied at Architecture Faculty, Technical University of Gdańsk (2003-2008). For her diploma "Urban re-composition for Zaspła Towarowa roundhouse site- THE XXL TOYBLOCKS" she received 2008's The Annual SARP Prize. Postgraduate studies in Urban Planning. She used to work for Grupa 5, currently for fo-architekci. She organized Architecture Workshop City Glusk, Lublin 2008 and Polish Students' Summer Workshop OSSA 2008 in Lublin.



Joanna Zarucka

1984 architect, graduate of Technical University in Gdansk
Participant of numerous architectural workshops in Poland and abroad (OSSA, EASA, PAO). Initiator and co-organizer of an architectural workshop „Small interventions” in Gdansk with cooperation of Arvid Wolfel.
Professional experience taken in Germany (Lehmann Architekten) and in Poland.
Currently lives and works in Three-city.



Maciej Kaufman

Architect. Born in 1983, grew up in Gdansk, Poland, studied at the Gdansk University of Technology and at the University of Ljubljana, Slovenia. He took part in numerous competitions and workshops. In 2006 he co-organized the 10th annual Meeting of Polish Architecture Students (OSSA) in Gdynia, Poland. His graduation project, "The Last Long Garden", met press' interest and professional honours, including Polish Association of Urban Planners' "The Diploma Project of 2008". Maciej gained his professional experience in Gdansk and London. Currently he lives in Warsaw where he works for Bulanda, Mucha Architekci. He enjoys architecture, working in team, coffee.



Konrad Lewacki

PhD student at the Faculty of Architecture (Wrocław University of Science), where I teach (some experimental courses), organize workshops (www.urbanworkshop.eu) and study. At present I also collaborate with the architectural practice of Piotr Szarejko (BAPS) and the Contemporary Art Gallery in Wrocław (BWA). I gained my experience mostly during a cooperation with Odile Decq in Paris and Zvi Hecker in Berlin, where I was responsible for international competitions and project delivery.

**Gall Tadeusz Podlaszewski**

born in Koszalin (1984), 2009 graduated from the Faculty of Architecture, Warsaw University of Technology (MA Thesis under guidance of Professor Ewa Kuryłowicz: Space for Democracy: Redevelopment of the Main Square of Koszalin. Essay: Democracy, space and architecture.) 2009 was granted DAAD Scholarship, at Institut für Regional- und Stadtplanung, Technische Universität Berlin, and 2005-2006 was granted Erasmus Scholarship, at Facoltà di Architettura, Valle Giulia, Università degli Studi di Roma. Initiator and coordinator of the 11th PlaNet Congress Warsaw 2007 – TOP DOWN / BOTTOM UP – Social Participation in Formation of Urban Space. Currently visiting lecturer at the Institute of Design, Technical University of Koszalin.

**Tomasz Stanisławczyk**

graduated from Gdańsk University of Technology in 2008, graduation project was awarded by The North Council of Town Planners and The Society of Polish Town Planners. In 2007 he participated in Erasmus exchange programme at Technische Universiteit in Delft and had professional practice at Atelier Kempe Thill in Rotterdam. Since 2009 he works as architect/urbanist assistant at BPBK SA in Gdańsk.

**Przemysław Olszewski,**

born 14.06.1983 Bydgoszcz, Poland, architect, graduate of Delft University of Technology, the Netherlands (2008) and Gdansk University of Technology, Poland (graduate with honours 2009). Since 2008 registered as an architect at Stichting Bureau Architectenregister (SBA) in the Netherlands. Worked in offices in Gdansk, Gdynia and Stuttgart. Participated in numerous architectural workshops (including OSSA, IFHP). A holder of STIR Scholarship for a research stay in Stuttgart (2006-07). A member of Erasmus Student Network Gdansk and Urban-Architectural Brigade (BUA). At present, a PhD candidate at Gdansk University of Technology and a practising architect in Warsaw, Poland.

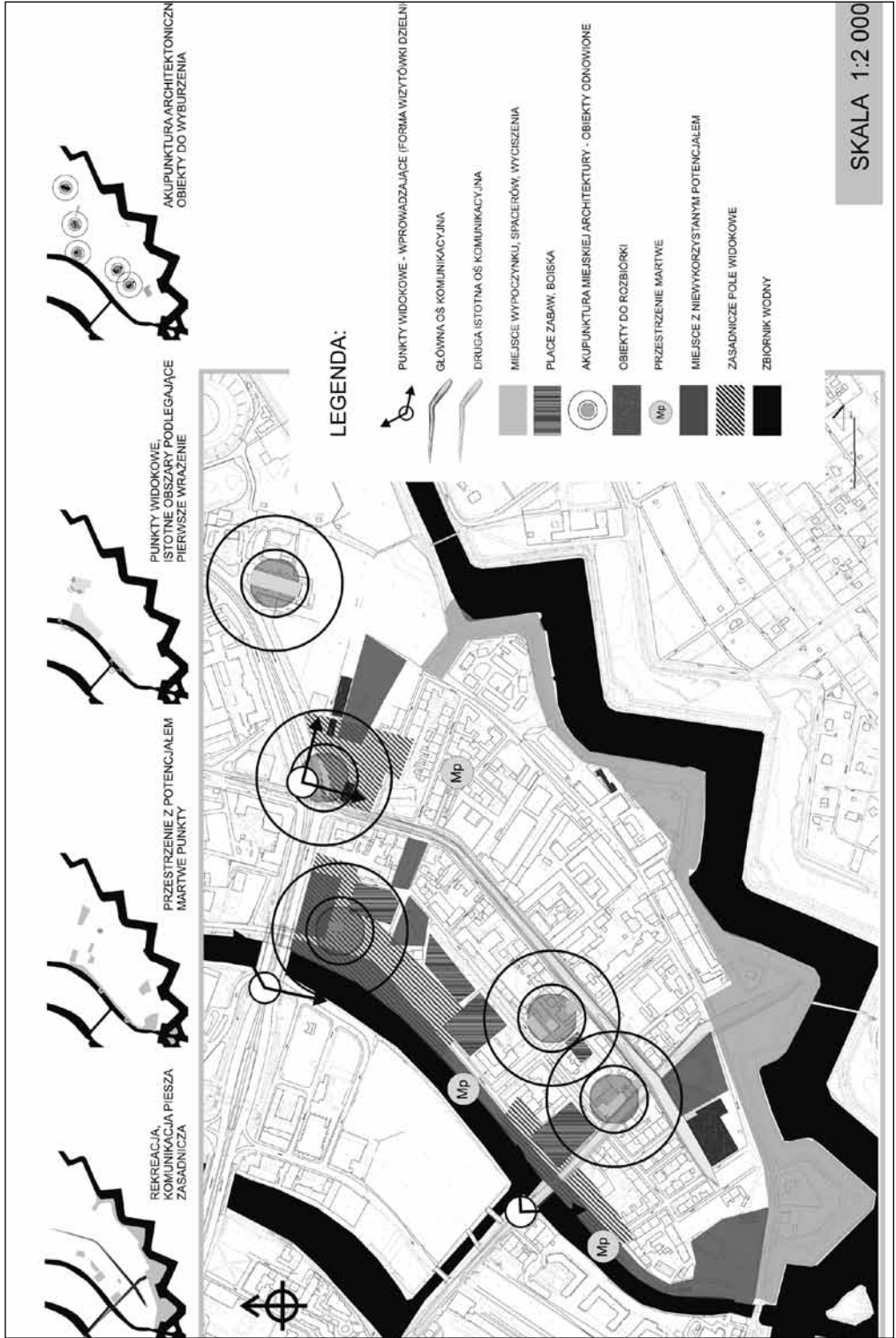
**Magdalena Stefanowicz**

Graduated architect from Gdansk University of Technology, Master in Urban Design. 2007-2008 studies in urban Design in City and Landscape Department at the Royal Danish Academy of Fine Arts, School of Architecture in Copenhagen. She had also professional practice in VELUX office in Copenhagen. Currently she studies Management and Economy at Gdansk University of Technology and works as an architect/urban planner in BBK office.

**Gawel Tyrata**

He graduated from Faculty of Architecture at Technical University of Wrocław (2007) and Institut d'arquitectura avancada de Catalunya, Barcelona, where he works as well. He was nominated for the Sarp Wrocław Diploma of the year 2007. He gained his architecture and urban planning experience at Vicente Guallarta's office in Barcelona and at Roman Rutkowski office in Wrocław. He has coordinated and organized workshops for Architecture Students of Poland OSSA in Wrocław, Gdynia and Gliwice. He was the initiator of Plenart workshops for architecture, arts and history of art students. Currently lives and work in Warsaw, inter alia as a correspondent for "Architecture & Business". He enjoys sport, photography, cycling and traveling.





LEGENDA

- A
- M
- R
- N
- L
- T

Grupa ART..

Grupa MOBILITY

Grupa RESOURCES

Grupa NATURE

Grupa PEOPLE&LIVIN

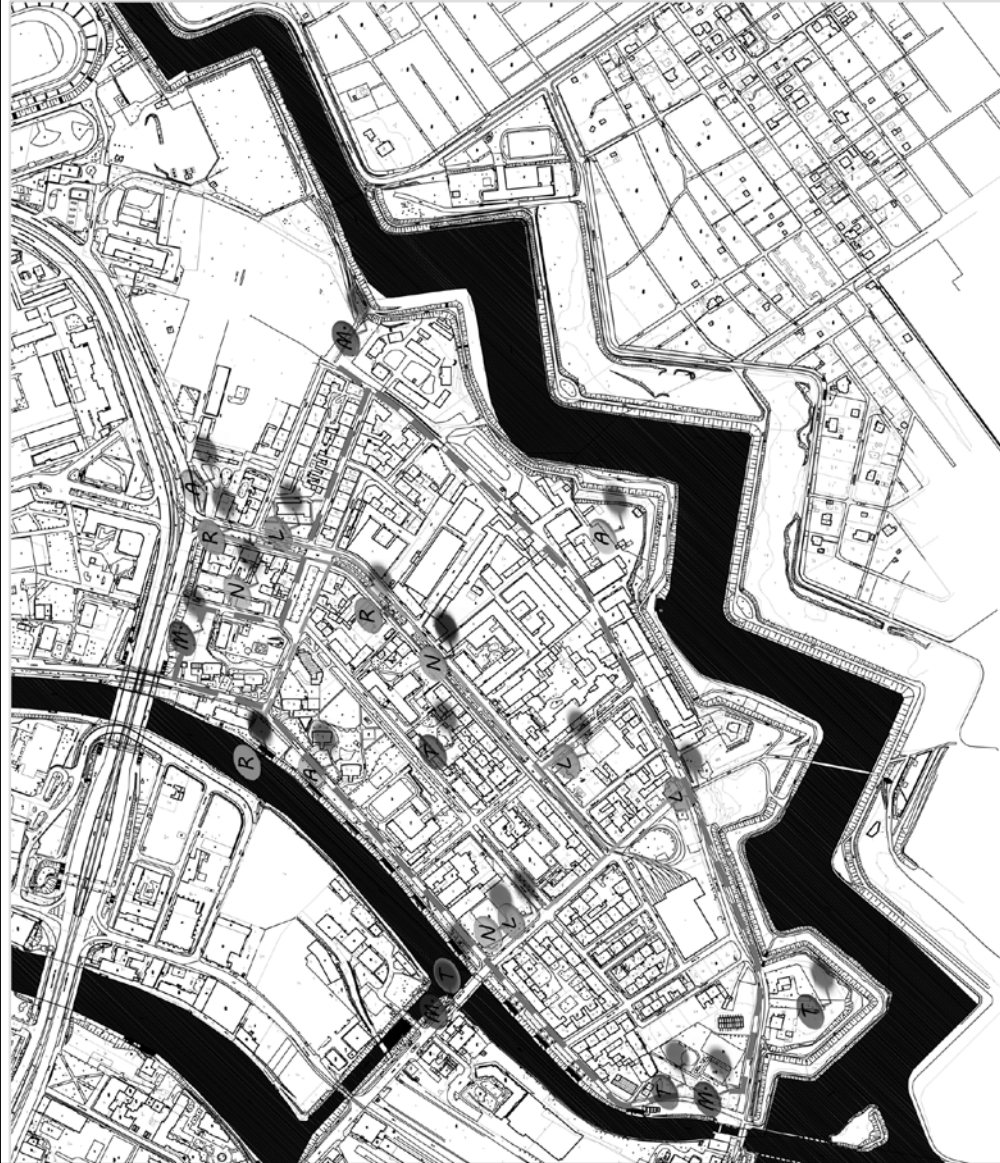
Grupa TECHNICS



Lokalizacja Urban Energy Boxów

Gdańsk - maj 2010

Całina Krzyżwicka
Iwona Mac



Urban Energy Box: ART

Przedmiotem warsztatów w grupie ART, była eksploracja fragmentu miasta pod kątem istniejących przejawów sztuki w przestrzeni Dolnego Miasta Gdańsk.

Na początku została zdefiniowana jako zespół zjawisk wywołujących emocje u stałych użytkowników miasta oraz jego gości, a następnie próba transferu tych zjawisk i ich oddziaływania w inne obszary miasta. To działanie roboczo nazywane zostało przez nas odszukiwaniem „ukrytych warstw miasta”.

Nie chodziło więc o przejawy sztuki zadekretowanej, wprowadzonej w przestrzeń miasta odgórnie przez władze, ale o sztukę postrzeganą w sposób subiektywny przez każdego uczestnika pod dowolną postacią - również tą nieplanowaną, przypadkową, tworzoną przez amatorów(mieszkańców), naturę itp.

Zamiast pomników, szukaliśmy więc przedmiotów, kompozycji, widoków czy działań, które sami uczestnicy uznali za wartościowe.

Terenem będącym przedmiotem zainteresowania grupy, był obszar Dolnego Miasta z przyległościami, który okazał się być idealnym polem pracy, ze względu na swój „nieuregulowany” charakter.

W celu jego jak najszerszego zbadania, uczestnicy warsztatów zostali podzieleni na trzy podgrupy, które wykonały pierwszego dnia dokumentację fotograficzną i filmową, która stała się surowcem do dalszej pracy.

W trakcie obchodu, uczestnicy dokonali obserwacji pod kątem istniejących przejawów sztuki, które następnie skonfrontowali pomiędzy sobą i sklasyfikowali, starając się zrozumieć istotę zarówno mechanizmu w jaki powstały jak i sposobu w jaki sposób one oddziałują.

Ostatni etap pracy polegał na stworzeniu mechanizmu transferu najciekawszych wyselekcjonowanych zjawisk w inne obszary miasta.

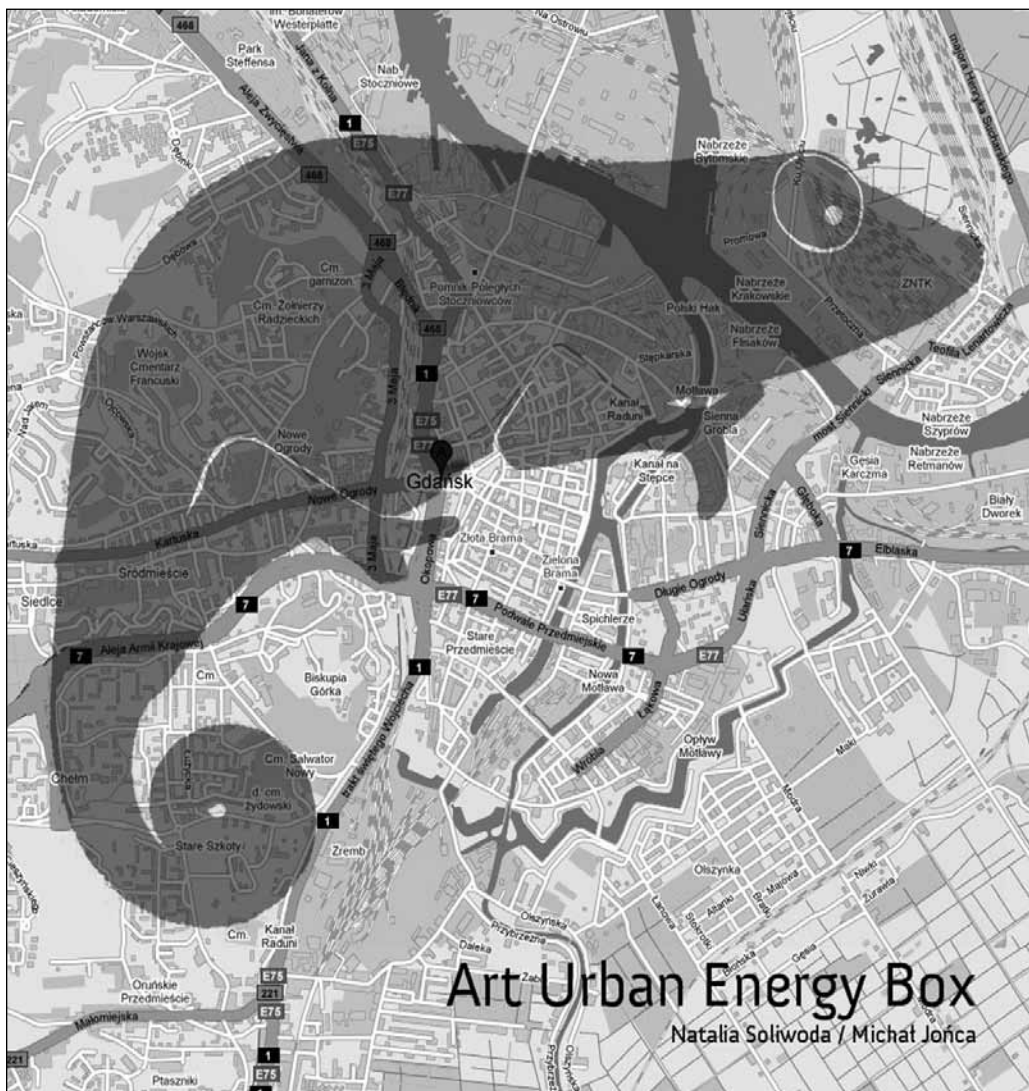
W tym celu opracowana została dokumentacja w formie folderu zawierającego ofertę sklepu budowlanego, z zestawem gotowych produktów, których cena odzwierciedlała jednocześnie emocjonalny stosunek projektantów do zaobserwowanych zjawisk.

Są to przedmioty, które z jednej strony wydawać się mogą absurdalne i dziwaczne, ale z drugiej strony ich prototypy istniejące w przestrzeni Dolnego Miasta w Gdańsku stanowią o atrakcyjności i klimacie tego miejsca, i które są przejawem aktywności jego mieszkańców i tamtejszej natury.

Z wielką przyjemnością mamy zaszczyt zaprezentować wyniki warsztatów.
UEB art

Uczestnicy: Patrycja Brodziak, Karolina Dziengo, Tomek Kobiela, Ebru Guller, Armin Panachi, Ceyda Sarica, Szymon Sawicki, Kamila Zielińska

Tutorzy: Michał Jońca, Natalia Soliwoda, Krzysztof Syruć



Urban Energy Box: PEOPLE & LIVING

Generowanie interakcji

Strategia

Patrząc na energię w kontekście życia w mieście, wybraliśmy najważniejsze dla naszego podejścia określenia: lokalność, powolność, gęstość, potencjał, interakcje. Naszym zdaniem, energia ludzi zamieszkujących przestrzenie miejskie, skupiona w miejscach o potencjale gromadzenia i interakcji, może zostać wykorzystana tak, aby wygenerować *miejsca* (places) z *nie-miejsc* (non-places) (M. Auge). Naszą intencją była fizyczna obecność w przestrzeni miejskiej, co miało nam dostarczyć realnych informacji o potencjale interakcji pomiędzy mieszkańcami i o tym jak jest on umiejscowiony w przestrzeni.

Rzeczywistość

Spacerując ulicami Dolnego Miasta dostrzeżliśmy piękno i ogromne możliwości tej przestrzeni, jednocześnie zauważając rażący brak miejsc przygotowanych na przyjęcie interakcji mieszkańców - miejsc gdzie można się spotkać, usiąść, spędzić razem czas. Brak podstawowych elementów małej architektury, takich jak ławki i stoliki, zmusza mieszkańców do adaptowania do tych celów ulicznych murków a nawet domowych mebli.

Wybór miejsca

Po wizji lokalnej przeszliśmy do wyboru najodpowiedniejszych przestrzeni dla naszej ingerencji. Dwie z nich wydały nam się najodpowiedniejsze - zaniebdany teren zielony często używany przez mieszkańców, oraz plac przy głównym skrzyżowaniu, pomiędzy kilkoma punktami handlowymi. Swoistym poligonem doświadczalnym, również z racji niesprzyjającej pogody, stał się korytarz szkoły podstawowej podczas „długiej przerwy” gdzie w krótkim czasie mogliśmy liczyć na dużą porcję energii i interakcji.

Wydarzenie - *Sitting Point to Meeting Point*

Biorąc pod uwagę teorię społecznej produkcji przestrzeni H. Levebvre'a, chcieliśmy dostarczyć mieszkańcom ruchomych obiektów zamiast sztywnego i niepoddającego się wpływowi ludzkiemu projektowi. Ograniczeni czasem trwania warsztatów zdecydowaliśmy się na opcję najprostszą: kartonowe sześciany (boxy), które pomalowaliśmy na różowo, aby wyróżnić je z szarego otoczenia. Opatrzyliśmy je dodatkowo napisami i symbolami sugerującymi sposób ich użytkowania. Następnie umieściliśmy wspomniane boxy w wybranych miejscach, aby zarejestrować jak taka interwencja będzie odbierana i interpretowana, oraz czy zostanie przyjęta. Podczas eksperymentu obraliśmy dwie strategie działania: najpierw obserwowaliśmy obiekty z ukrycia, aby nie wpływać na aktywności ludzi. Później sami zaczęliśmy interakcję z publiką i boxami stając się niejako modelami behawioralnymi.

Wnioski

Byliśmy zaskoczeni różnorodnością i mnogością zachowań wygenerowanych przez naszą prostą interwencję. Godnym uwagi jest silne zaangażowanie emocjonalne i entuzjazm dzieci, tak w szkole jak i w przestrzeni otwartej. Udało nam się również uzyskać dużo pozytywnych reakcji dorosłych mieszkańców dzielnicy, co wskazuje na potrzebę dalszego badania ludzkich potrzeb i zachowań w przestrzeni w kontekście planowanej na tym obszarze rewitalizacji.

Tutorzy: Joanna Szczepańska, Michał Krenz, Przemysław Olszewski

Urban Energy Box: PEOPLE & LIVING Generating Interaction

the Approach

We looked at urban energy from the point of living in the city, and designated the most important characteristics to work with. These were: Locality, Slowness, Density, Community, Interactions, Potential. In our view, the inherent energy of people living in urban areas can be focused in places with potential for gathering and interaction to create Places out of Non-Places (M. Auge) We also wanted to go out to the actual space that we were working on and interact, to gain practical knowledge of how and where interaction between urban space inhabitants takes place and how it can be shaped.

the Reality

Walking around the district, while being stricken by the beauty of surroundings and immense potential within the urban space itself, we did noticed a lack of places to interact - where people could meet, sit down, spend time in the open together. What it lacked was basic street furniture such as benches, not to mention chess-tables or other more advanced installations. On the other hand, the inhabitants showed need of such installations - putting their own chairs into the open or sitting on fences - even if they are retired pensioners.

Choosing the Spot

We have then proceeded to identify the places with most potential for interaction. Firstly, an open green area, secondly a place between a grocery shop, newsagents and clothing store off the busiest intersection in the district. Thirdly, as an enclosed space of incomparably higher interaction energy - a primary school during the long break.

the Event - Sitting Point to Meeting Point

Looking at social manufacturing of space (H. Levebvre) our idea was to supply moveable objects instead of a set design. Given the short time for design and manufacturing of our objects, we have opted for the simplest of means: several cardboard boxes, painted pink to stand out in the grey environment, with instructions written on them both in writing and drawing. We then placed the aforementioned boxes in the chosen places, to gather information on how this simple intervention would be perceived and interpreted, and eventually accepted or rejected. While the experiment was put into effect, we have used two different approaches: at first keeping our distance to prevent observation from influencing the activities of the public. Afterwards, we have started interacting with the public ourselves, to serve as a behavioural model.

Conclusion

We were amazed by the multitude of interactions generated by our simple actions. The enthusiasm and openness of children both in the school environment and in the open space were noteworthy. We have garnered a lot of positive responses from mature population in the district as well. This indicates the need for further study of the subject of revitalization through actions within the public realm.

Tutors: Joanna Szczepańska, Michał Krenz, Przemysław Olszewski



**people
&
living**

**michal krenz
przemyslaw olszewski**



URBAN ENERGY BOX - PEOPLE & LIVING

AYDIN, MERRIEM
EVA THORSON
KARIN CLAYTON
MARTA KLAMUTSKA
OLIVIA HEDDIF
MURILLIAM KATA
MICHAEL ARNOLD
FRANCOIS ELZEYHON



EXISTING SITUATIONS | LOT OF EMPTY SPACES & PONDUALS GATHERS MOSTLY ALONG THE MAIN STREET



EXAMPLES KNOWN ALL AROUND THE WORLD (PARKS, PLAYGROUND, BEACHES...)

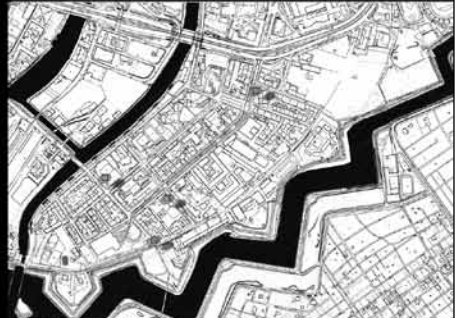
- BOX - PUBLIC PLACE
- MEETING POINT
- INTERACTION
- ADMISSION
- CONFRONTATION
- CONVERSATION
- CONNECTION
- SEPARATION
- VISIBILITY
- FREEDOM
- LIBERTY
- HAPPINESS
- RAIN
- GREENERY
- PLAY
- CHILDREN
- EDUCATION
- WATER
- RIVER
- SPORTS
- FREETIME
- RECREATION
- LIVING
- FACTORIES
- OPENNESS
- DISTRACTION
- REVITALISATION
- IMPROVEMENT
- DETERIORATION
- FUN
- DOGS
- KAROLINA
- PARTIES
- FRIENDSHIP
- SHOPS
- FAMILIES
- CHURCH
- RELIGION
- RECYCLING
- YOUTH
- MOVEMENT
- MOBILITY
- NATURE
- DESIGN
- GROCERIES
- BARB
- QUESTION
- MARK
- POVERTY
- DIVERSITY
- COLORS
- IDENTITY



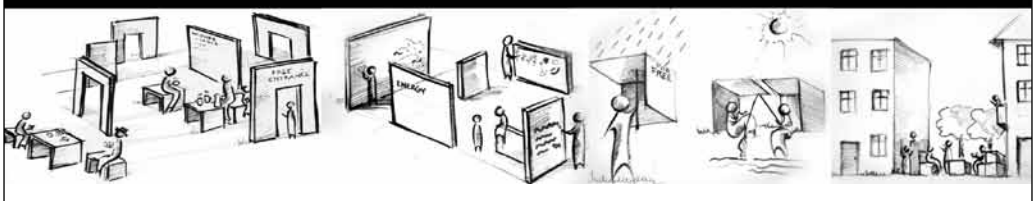
APPROPRIATION



MAIN AXIS IN THE AREA



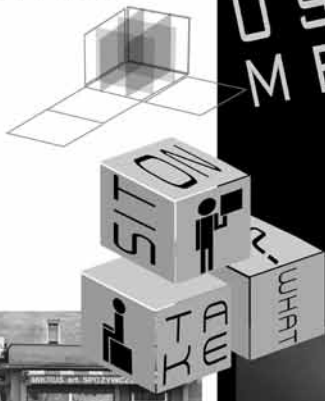
MAIN SPOTS IN THE AREA



MODEL

CONSTRUCTION

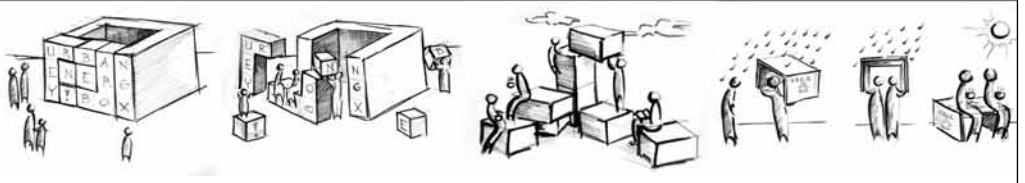
USE ME! FREE OK! THANKS



AYBOLU MEDIAN
EVA BERGMAN
KARLA HJERTSTROM
HARTY ZANDSBERGER
OLIVIA WEST
MURILAN KAYA
NOMIA KRUM
PETEREK OLESKOWSKI



THE LAKOWA ROAD



Urban Energy Box: MOBILITY

Metodologia pracy

We wstępnym założeniu warsztat został podzielony na 3 etapy, przekładające się na 3 dni pracy. Czwartego dnia miała miejsce prezentacja wyników. Czas był bardzo ograniczony, stąd efekt nie był do końca przewidywalny. Nacisk położono na podbudowę intelektualną, dlatego cieszymy się, że powstał spójny projekt. Warsztat i środki pracy były skromne i spontaniczne, dały jednak duże efekty. LKW Galery okazało się bardzo dobrym środowiskiem pracy, inspirującym do dyskusji - szczególnie w kontekście naszego tematu.

I Dzień - mobilność

Pierwsza część warsztatu miała na celu rozbudowanie podłoża teoretycznego problemu mobilności w mieście. Priorytetem było pobudzenie wielowątkowej dyskusji, która maksymalnie poszerzy zagadnienie, odkryje jego nowe aspekty i nada projektowi cechy interdyscyplinarności. Przemyslenie na nowo (*re-thinking*) pozornie oczywistego powiązania pojęć *miasto* i *mobilność* doprowadziło do wypracowania definicji mobilności w mieście - jako *zdolności do zmiany położenia w przestrzeni lub strukturze społecznej*.

II Dzień - energia miejska

Podczas drugiego dnia miała miejsce intensywna *burza mózgów* i ewaluacja pomysłów łączących mobilność i energię miejską. Powstały pierwsze mini-projekty pawilonów. Dążono do wyklarowania idei i formy projektu. Pojawiła się też cała gama pomysłów na wykorzystanie

i rodzaje aktywności jakie może pomieścić *box*.

III Dzień - the blox - mobilność przestrzenna dla mobilności społecznej

Próba odpowiedzi na pytanie czym jest mobilność w kontekście energii miasta przyniosła podział na mobilność przestrzenną (zmianę położenia w przestrzeni) i społeczną (zmianę położenia w strukturze społecznej). Idea projektu polega na stworzeniu mobilnego pawilonu wyzwającego społeczną mobilność mieszkańców Dolnego Miasta. Dualizm pojęć został przełożony na dualizm formy. Konkluzja rozważań w których kula (*ball*, *blob*) jest kwintesencją mobilności, futuryzmu i zabawy, a pawilon (*box*) jest utylitarny, funkcjonalny i łatwy w użyciu, wyłoniła nowe pojęcie i nową formę - *blox*. *Blox*, czyli skrzyżowanie *bloba* i *boxa*, inaczej *box* w ciele *bloba*.

Projekt warsztatowy

Wyobraź sobie zwykły poranek na początku tygodnia. Wstajesz z łóżka i jak co dzień podchodzisz do okna. Rozsuwasz zasłony. Spoglądasz na podwórze jeszcze zanim w łazience zobaczysz w lustrze swoją twarz. Spoglądasz jak zawsze - dlatego dziwny widok wytrąca cię z porannego odrętwienia: w miejscu doskonale

widocznym z okien, lśni wielka kula. Dookoła niej panuje niespotykany o tej porze ruch. Wokół kręcą się dzieciaki sąsiadów z klatki. Musiały przytoczyć ją w nocy.

Kiedy pół godziny później wychodzisz do pracy, ruch gęstnieje. Kilka osób otwiera kulę, jakby obierało wielką pomarańczę. Dzieciaki na wyścigi próbują dostać się do wnętrza - gdzie stoi spore szklane pudło. Po południu, w drodze do domu, widzisz, że kula jest całkowicie otwarta. W jej wnętrzu - szklanym kiosku - siedzi kilka osób. Rozpoznajesz sąsiadkę z oficyny. Przywołuje cię ręką. Podchodzisz i zaczynasz przysłuchiwać się rozmowie: jakiś facet mówi o pieniądzach na odnowienie podwórza. Następnego dnia o tej samej porze znów siedzicie w pawilonie. Z innym człowiekiem rozmawiacie o swoich pomysłach na remont dziedzińca i fasady kamienicy. Na ścianach wiszą rysunki dzieciaków - widać, że one taką rozmowę mają już za sobą. W ciągu kilku kolejnych dni, ty i twoi sąsiedzi wypracowujecie realistyczny plan zmian. Pierwsze prace mają zacząć się już za kilka dni. W sobotę po południu znów jesteś w pawilonie. Tym razem po prostu na kawie. Kolejny tydzień obfituje w wydarzenia: poza projektowaniem zmian na podwórzu, uczestniczysz w grze miejskiej, spotkaniu z planistami z urzędu miasta, a nawet małym koncercie córki sąsiadów, uczennicy szkoły muzycznej. Trzeci tydzień obecności kuli na twoim podwórku przynosi widoczne zmiany. Zaczynają się prace przy remoncie podwórza. Odmalowanie elewacji czy układanie nowego chodnika zostawiasz profesjonalistom, ale założenie nowego ogrodu to zadanie dla ciebie i twoich sąsiadów. Pracę zaczynacie codziennie po południu od narady w pawilonie, a co wieczór zamykacie w nim narzędzia.

Po kolejnym tygodniu wasz wysiłek dobiega końca. Macie z czego być dumni. W sobotę po oficjalnym otwarciu założonego przez was ogrodu, zamykacie pawilon. Kilka osób z okolicy ogląda wasz ogród z mieszkanką podziwu i zazdrości. Pojawiają się chętni do przejęcia kuli. Chcą mieć podobny ogród i miejsce dla kilku sąsiedzkich imprez. Wielka piłka rusza z miejsca. Asystujesz przy jej wytańczeniu z odnowionego podwórza. Na ulicy czekają już ludzie z zaułka nad rzeką. Po krótkiej wymianie uprzejmości, przejmują kulę i toczą ją po nieużywanym torowisku tramwajowym. Dopóki nie znikną za rogiem, stoisz przed kamienicą i patrzysz, jak sobie radzą.

Tutorzy: Tomek Stanisławczyk, Maciej Kaufman

Urban Energy Box: MOBILITY

Methodology of the workshop

The workshop was divided into 3 parts, relevant to 3 days of work. The fourth day was a final presentations day. The time was very limited, so the results were very unpredictable. We have focused on a theoretical background, that is why we are very pleased with the resultant project. The workshop and the resources were very humble and spontaneous, yet giving proper effects. LKW Gallery turn out to be very inspiring environment to work - especially in the context of our subject.

I Day - the mobility

The first part of the workshop was planned in order to extend theoretical background of the mobility issue. The prior was to let the discussion thrive and discover some new aspects and to get it up on an interdisciplinary level. Re-thinking again the most obvious relationship of terms: *the city* and *the mobility*, converge into a definition of an urban *mobility* as *an ability to change the position in the space or in the society structure*.

II Day - urban energy

During a second day, there took place an intensive brain storming and evaluation of the ideas integrating the mobility and urban energy. The group came up with mini-designs of the pavilions. The aim was to make the clear idea and form. There was also invented a variety of possible activities to fill up the box.

III Day - the blox - a spatial mobility for a social mobility

The attempt to find an answer to a question what is a mobility in context of urban energy, brought an division into a spatial mobility (ability to change the position in space) and a social mobility (ability to change the position within the society). The idea was to create a mobile pavilion which leads to a social mobility of Dolne Miasto's community. The duality of both terms was conveyed into the duality of the form. Consideration in which the ball (the blob) is an essence of the mobility, futurism and fun, and the box is utilitarian, functional and easy to use, converged into a new term and a new form - *the blox*. In other words, the hybrid of a box and a blob, or a box inside a ball.

The design

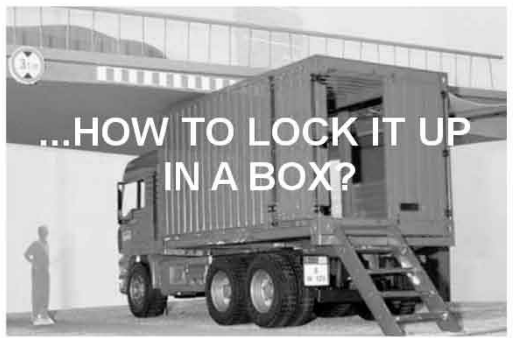
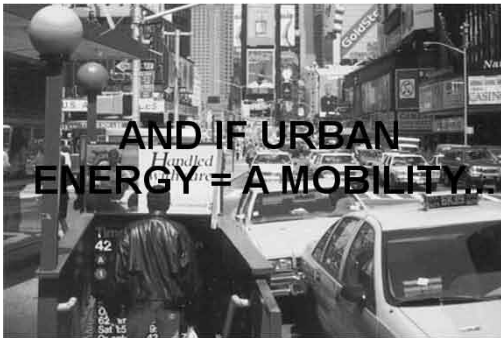
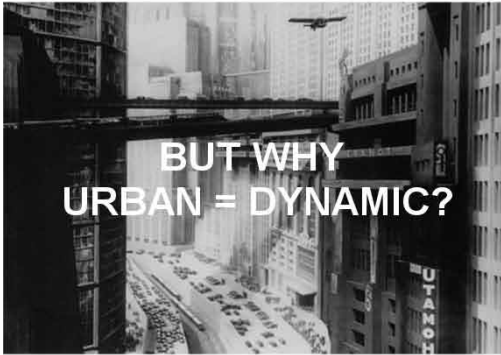
Imagine an ordinary morning at the beginning of the week. You get up as you do everyday and approach the window. Before you glance at your face in the bathroom mirror, you draw the curtains off and look at the courtyard. You don't expect to see anything new, that's why strange view throws you out of a morning numbness: in a most visible place, right in front of your window, there's a huge shining ball. It triggered off an unusual rush. Kids are playing around. They must have rolled it here at night.

When half hour later you go to work, rush is getting even heavier. Some of people are opening the sphere as if they were peeling an giant orange. Kids are racing to get inside, where a big glass box stands. Afternoon, on your way back home, you see the sphere fully open. There are some people sitting inside. Hey! There's your neighbour waving to you. You get closer and listen to conversations: some guy talking about money for courtyard renovation. The next day, same time, you are again inside the box. You talk with some other people about ideas for courtyard and façade refurbishment. There are children's drawings on the walls - it seems they've already worked out their own view on this subject. During a couple of days you invent a realistic agenda of transforming your nearest neighbourhood. The work's going to start within next few days. The Saturday afternoon you're inside the ball again. This time you've just popped in for a coffee. The next week is really busy: except redesigning your neighbourhood, you participate in an urban game, meet with town planners and even listen to a small concert of your neighbour's daughter. She's a music school's student. The third week of the sphere's presence brings some visible changes. Eventually, the restoration of the courtyard is being started. Painting the façade or sidewalk paving is definitely a job for professionals, but establishing a new garden seems to be a perfect occupation for you and your neighbours. From this day on, you start your work afternoons with meeting in the pavilion. Nightly, you lock up your tools there.

After a week, everything comes to the end. You are proud of yourself. On Saturday, after the garden's opening party, you close up the ball. There are few people watching your garden with jealousy and admiration. They are keen of taking the ball over to their place. They want to have similar garden as well as a place to meet. The big ball starts to move. You assist with getting it outside your brand new courtyard. There are some people waiting outside. The ball's being pushed on the unused tram lane. You stand in front of your house watching it disappearing slowly behind the street's corner.

Tutors: Tomek Stanisławczyk, Maciej Kaufman

URBAN ENERGY BOX: MOBILITY





SPACE

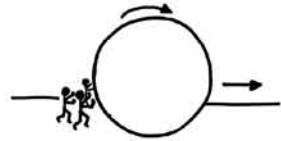
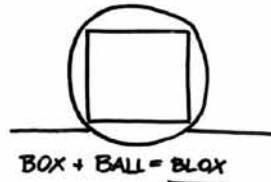
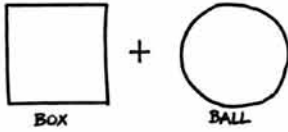
URBAN ENERGY BOX: MOBILITY

ALEX BOSCHNER GOKCE CERIT MACIEK KAUFMAN KACPER LUDWICZAK ASIA MIECZKOWSKA
ANIA PALLICH ŁUKASZ PITA GUADALUPE ROMERO GARNICA TOMEK STANISŁAWCZYK KASIA SZALEWSKA



THE BLOX

ABILITY OF CHANGING THE PLACE



EASY TO MOVE FUNNY MOVEMENT EXPRESS MOBILITY FUTURISTIC
SURPRISING INSIDE FORM FOLLOW FUNCTION CONTRAST TO LANDSCAPE

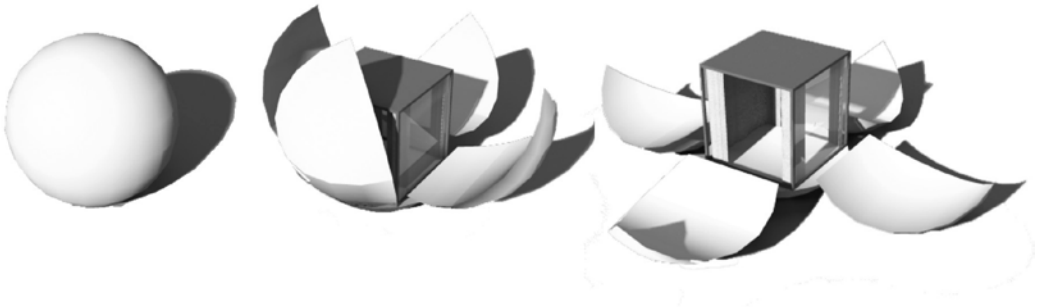




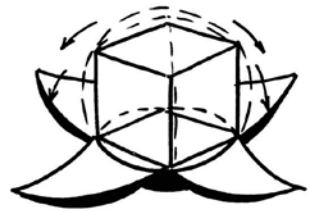
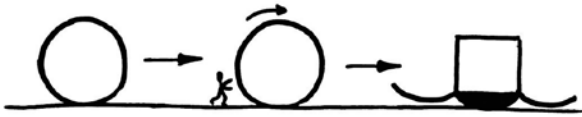
SOCIAL

URBAN ENERGY BOX: MOBILITY

ALEX BOSCHNER GOKCE CERIT MACIEK KAUFMAN KACPER LUDWICZAK ASIA MIECZKOWSKA
ANIA PALUCH LUKASZ PITA GUADALUPE ROMERO GARNICA TOMEK STANISLAWCZYK KASIA SZALEWSKA



ABILITY TO CHANGE THE PLACE WITHIN SOCIETY

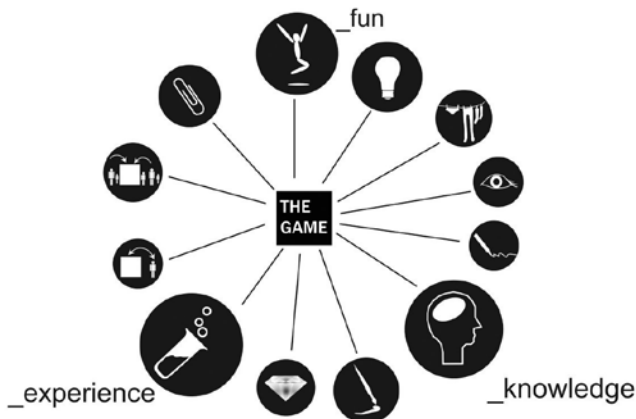


EASY TO USE

ACCEPTABLE FORM

EASY TO BUILT

EASY TO CONTROL



Grupa TECHNIQUES

Celem pracy grupy warsztatowej miało być zbudowanie prototypowych rozwiązań urządzeń gromadzących lub katalizujących szeroko pojętą energię (ciepło, prąd, energie kinetyczną) oraz funkcjonujących jako element infrastruktury. Zadaniem było stworzenie projektu mogącego dać się powielić oraz stworzyć element systemowy. Dzięki temu mógłby on pozwalać na ekologiczny miejski „retrofitting” pomagając w zasileniu mieszkańców w energię oraz jednocześnie tworzyć nowy miejski krajobraz. Stąd też hasło warsztatu INFRASCAPE jako kombinacja pojęć INFRAstructure+landSCAPE. Naszą ideą jako tutorów było potraktowanie Dolnego Miasta jako pretekstu dla bardziej abstrakcyjnych poszukiwań. Kontekst był istotny ze względu na tkankę miejską, lokalizację, problemy społeczne typowe dla wielu śródmiejskich dzielnic. Jako tutorom zależało nam jednak na myśleniu w kategoriach systemu lub problemu niż rozwiązywaniu projektu dla określonej działki bądź miejsca.

Jednym z pierwszych kroków była analiza uwarunkowań - identyfikacja możliwych miejsc interwencji. Pomocna okazała się praca jedynej urbanistki w zespole, Christiny, która zasugerowała dostosowanie interwencji do różnych skal - miasta, dzielnicy, kwartału. Pierwsze analizy i rozmowy z mieszkańcami wskazały na problem izolacji - zarówno w skali miejskiej (fizycznego oddzielenia od innych dzielnic), jak i tej w mikroskali (ubogie zagospodarowanie przestrzeni publicznych, wspólnych - brak miejsca dla społecznych interakcji i działania rodząca frustrację i agresję). Celem działania była więc przestrzenna integracja dzielnicy, próba wzmocnienia potencjału przestrzeni publicznych oraz wykorzystanie ludzkiej energii młodych mieszkańców.

W skali miejskiej propozycją połączenia była przebudowa mostu na Motławie - w symboliczny sposób łącząca nowe grodzone osiedle Lastadia z Dolnym Miastem. Most staje się także urządzeniem generującym energię dzięki spiętrzeniu wody oraz wykorzystaniu systemów piezoenergetycznych w formie tzw. „śpiących policjantów” (spowalniaczy ruchu) dla przejeżdżających po nim samochodów. Most uzupełniają zamocowane na Motławie „boksy” wykorzystujące przepływ wody lub słońce dla generowania energii. Uzyskana energia wykorzystywana byłaby dla oświetlenia ich w nocy tworząc szereg pływających „lampionów”, wizualnej i nietypowej wizytówki dzielnicy.

W skali dzielnicy odpowiedzią było zaprojektowanie systemu wymiany energii opartego o wzbogacenie przestrzeni publicznych mobilnym systemem pozwalającym na wykorzystanie energii ludzkiej do zasilenia przenośnych baterii - „energy box”. Teoretyczny system polegałby na zainstalowaniu urządzeń adresowanych do młodych ludzi - siłowni, placów zabaw w celu wykorzystania energii kinetycznej dla ładowania przenośnego akumulatora. Uzyskana energia zasilalaby urządzenia pozwalające na wspólną zabawę, np. małego kina plenerowego, dyskoteki, grilla. Pomysł zawierałby element edukacyjny - bardziej „energochłonna” rozrywka wymaga większej ilości pracy lub większej grupy pracują-

cych aby zasilić urządzenie. System teoretycznie mógłby wspierać dzielnicową integrację tworząc nieformalną ekonomię - lokalna grupa kibiców Lechii trenując mogłaby zasilić projektor dla kina dla ich młodszych kolegów itp.

Ostatnia grupa projektów zaproponowała interwencje na poziomie kamienicznego podwórka. Celem interwencji było wzbogacenie przestrzeni podwórka jako miejsca życia mieszkańców oraz wykorzystanie bądź odzyskanie naturalnej energii - np. dzięki zbieraniu wód opadowych. Grupa zajmująca się problemem rozpoczęła od poszukiwań różnych form systemów - od totalnych obejmujących zespół budynków do bardziej zindywidualizowanych, polegających na urządzeniach w skali domu lub indywidualnych mieszkań. Grupa opracowała dwie odpowiedzi projektowe. Projekt SPIRE jest formą centralnej iglicy, która dzięki zastosowaniu materiału odbijającego światło pozwalałaby doświetlenie wnętrza podwórka. Iglica stanowiłaby także system gromadzenia wody deszczowej oraz odgromnika akumulującego energię elektryczną. Gromadzenie wody umożliwiłoby zastosowanie mobilnego systemu łapacza przypominającego formą parasol lub żagiel. Drugie rozwiązanie jest formą modularnego systemu wykorzystującego pomysł zasilania w energię elektryczną dzięki zastosowaniu małej turbiny napędzanej wodą opadową. Pozwala to np. na zasilenie oświetlenia. System opiera się także o gromadzenie deszczówki w celu nawodnienia małych ogródków przydomowych, mogących także działać jako małe oczyszczalnie wody lub elementy retencyjne. Rozwiązanie przyjęło formę modularnego pudełka pozwalającą na dowolną aplikację w różnym kontekście przestrzennym.

Propozycję reprezentują bogactwo pomysłów, myślenie, którego rezultaty mogą wyglądać utopijnie, ale bazują na bardzo utylitarnych i pragmatycznych przesłankach. Projekty cechuje duża elastyczność oraz zastosowanie rozwiązań o wysokim potencjale systemowym, dzięki czemu istnieje możliwość swobodnego ich transferu między różnymi lokalizacjami. Ostatecznie wiele z nich nie jest jedynie elementem INFRASCAPE'u czy technologicznym gadżetem, ale katalizatorem społecznego działania.

Studenci: Diego Diaz Bolanos, Dawid Szczepański, Necla Seval Erdem, Christina Boicekofski, Wiktor Magdziak, Maja Wiśniewska, Piotr Paczkowski
Tutorzy: Łukasz Pancewicz, Gawel Tyrała

GAWEL TYRALA
LUKASZ PANCEWICZ

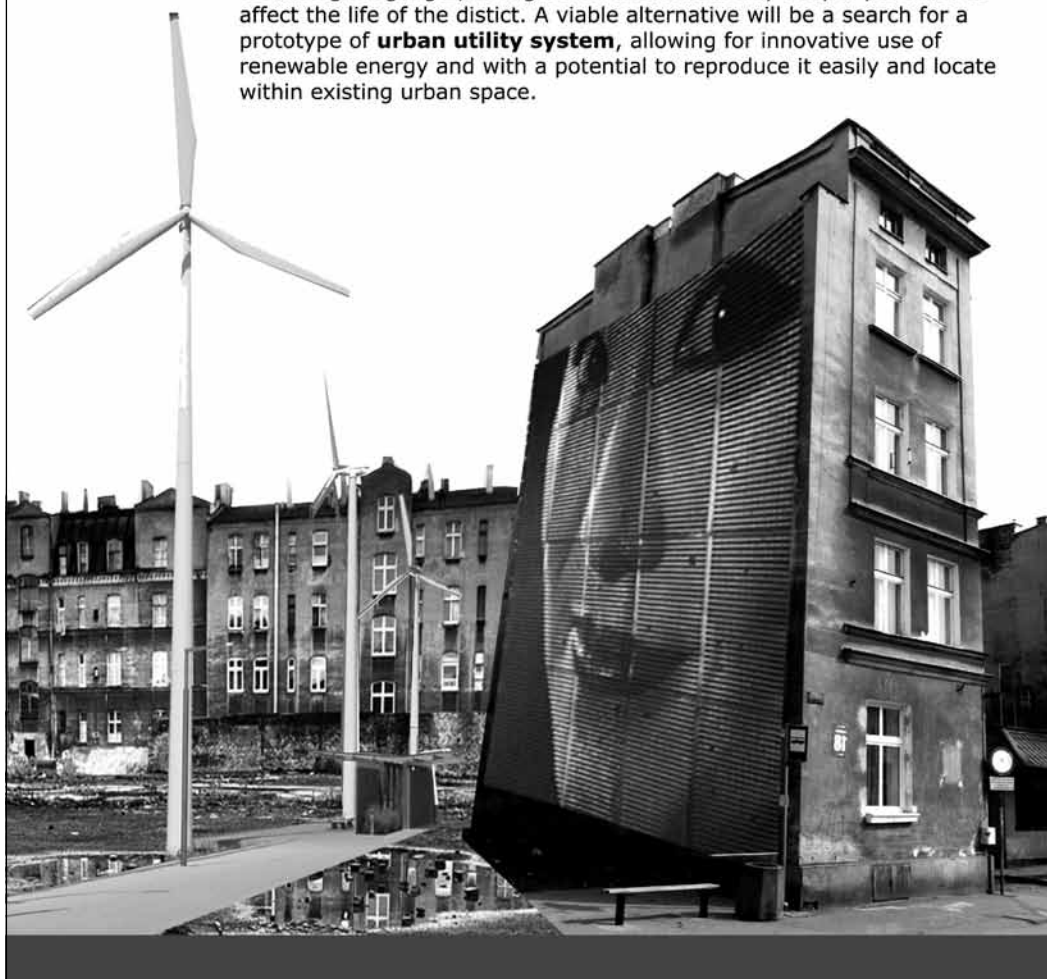
TECHNIQUES

Issue:

Contemporary city as a concentration of people, information and structures cannot function without its technological support. Will the emerging challenges of limiting the use of dwindling resources and search for the new sources of energy **result in creation of the new forms of urban infrastructure?** Will the new solution have more universal character or can be more site specific? Can **Dolne Miasto** become a proving ground for the new technology?

Task:

Urban pavillion as a kind of singular exhibit will always remain a technological gadget, a single artefact without any deeper potential to affect the life of the distict. A viable alternative will be a search for a prototype of **urban utility system**, allowing for innovative use of renewable energy and with a potential to reproduce it easily and locate within existing urban space.

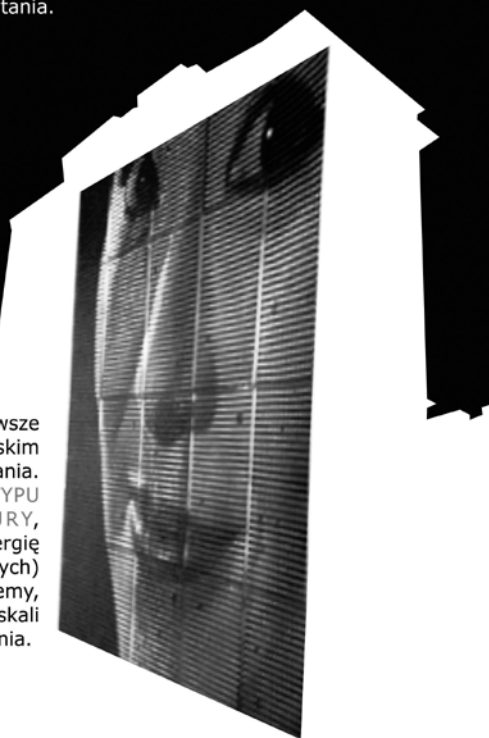


TECHNIQUES

in a search for **INFRASCAPE**

**DIEGO DIAZ BOLANOS (ESP), CHRISTINA BOICIEKOFKI (GER),
NECLA SEVAL ERDEM (TUR), WIKTOR MAGDZIAK (PL),
PIOTR PACZKOWSKI (PL), DAWID SZCZEPAŃSKI (PL),
MAJA WIŚNIEWSKA (PL)**

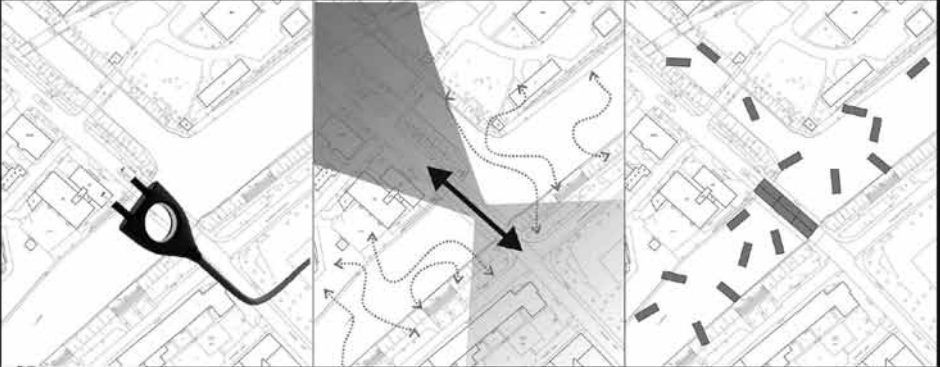
Współczesne miasto jako koncentracja ludzi i struktur nie może funkcjonować bez wsparcia technologicznego. Efekty urbanizacji i rozwoju gospodarczego – wyczerpywanie się zasobów oraz zmiany klimatyczne zmuszają do szukania alternatyw dla istniejących mechanizmów zasilania miasta w energię. Czy potrzeba pozyskiwania energii z nowych źródeł może znaleźć swój wyraz w nowych formach miejskiej infrastruktury otaczającej nas w przestrzeni publicznej? Czy nowe rozwiązanie musi być specyficzne dla Dolnego Miasta, czy też powinno się szukać odpowiedzi dla każdej śródmiejskiej dzielnicy, w celu możliwości łatwej replikacji? Poprosiliśmy naszych studentów o odpowiedź na te pytania.



Miejski pawilon jako obiekt wystawienniczy zawsze pozostanie rozwiązaniem jednostkowym, miejskim artefaktem o ograniczonej możliwości oddziaływania. Krokiem dalej jest poszukiwanie PROTOTYPU MIEJSKIEGO SYSTEMU INFRASTRUKTURY, wykorzystującego bądź magazynującego energię (generowaną przez człowieka, ze źródeł odnawialnych) oraz rozwiązującą istniejące miejskie problemy, pozwalającego na łatwą aplikację w różnej skali (dzielnicy, kwartału i ulicy) oraz możliwość powielania.

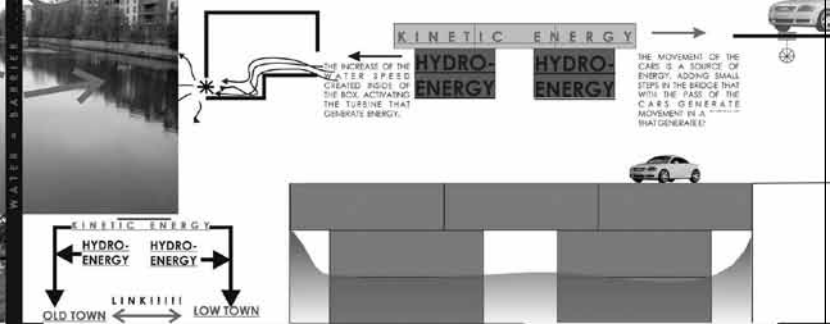
Ideą była zatem próba stworzenia
INFRA(strukturalnego)(land)SCAPE'U.

TUTORZY: Łukasz PANCEWICZ, Gaweł TYRAŁA

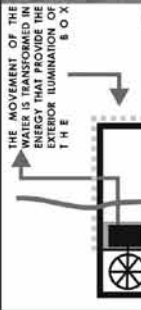


PHYSICAL + VISUAL CONNECTION

① PHYSICAL CONNECTION = BRIDGE OF ENERGY



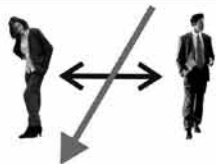
② VISUAL CONNECTION = GLOW ENERGY BOX



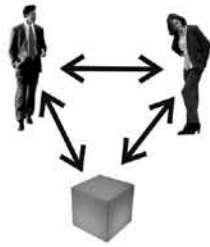
SMALL BRILLIANT BOXES THAT FLOAT IN THE WATER TRANSFORM THIS MEDIUM THAT BEFORE WAS SEPARATING IN ONE LINK. THIS FLOATING BOXES ARE ENERGY TERRACES THAT IN THE SURFACE CAN BE USED FOR FISHING, SUN TANNING, ETC AND IN THE UNDERWATER IS COLLECTING ENERGY. DURING THE NIGHT ALL THE ENERGY ACCUMULATED IS FEEDING THE LIGHTS THAT COVER THE BOX.



AREA II - HOW PLUG WITH THE PEOPLE?



UNPLUGGED!!!!!!
AGRESSION
BORING
SAD



PLUGGED!!
 INTERACTION
 PLEASURE



THE INTERACTION - TRANSFORM THE ENERGY

TO GET YOUR ENERGY BOX YOU NEED TO DO SOME ACTION



IT IS FUN AND KEEPS YOU FIT!!

FUNCTION | BATTERY | PEOPLE

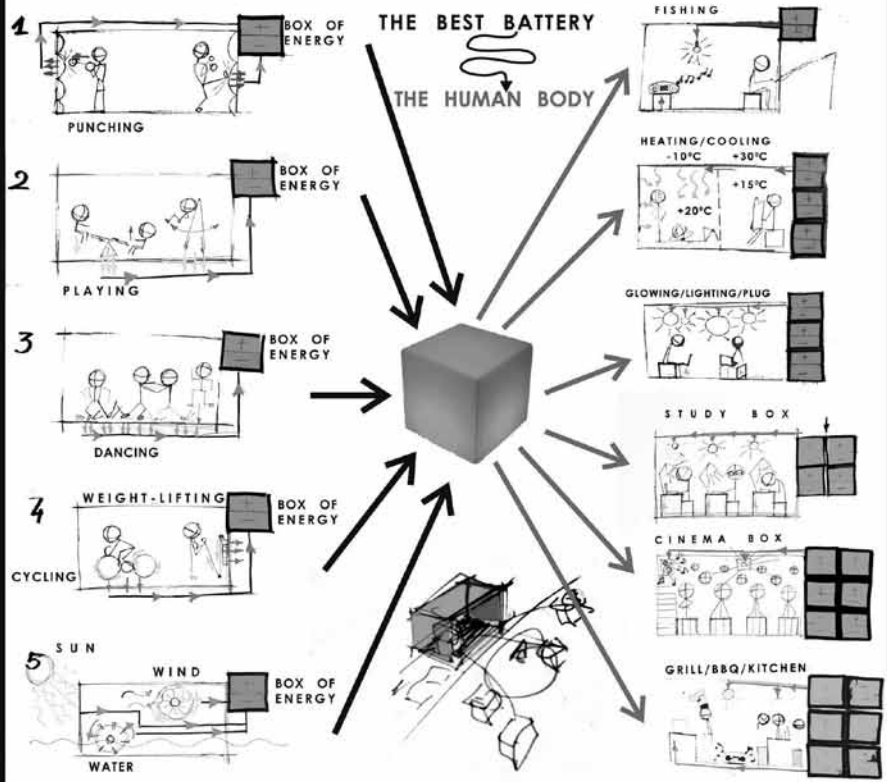
- FISHING BOX
- HEATING BOX
- GLOWING/LIGHTING BOX
- STUDY BOX
- CINEMA BOX
- SUN/COOLING/HEATING BOX



LATER UNITED YOUR COLLECTED ENERGY AND WATCH A MOVIE OR HAVE A GRILL OUTSIDE

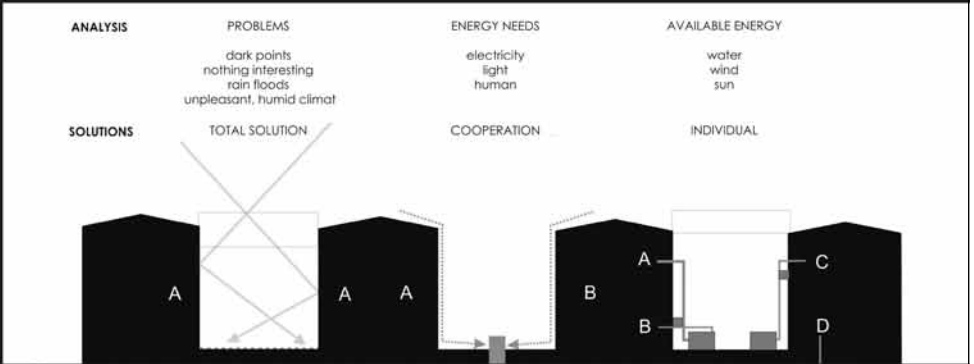


BOXES CONNECT YOU WITH OTHERS!

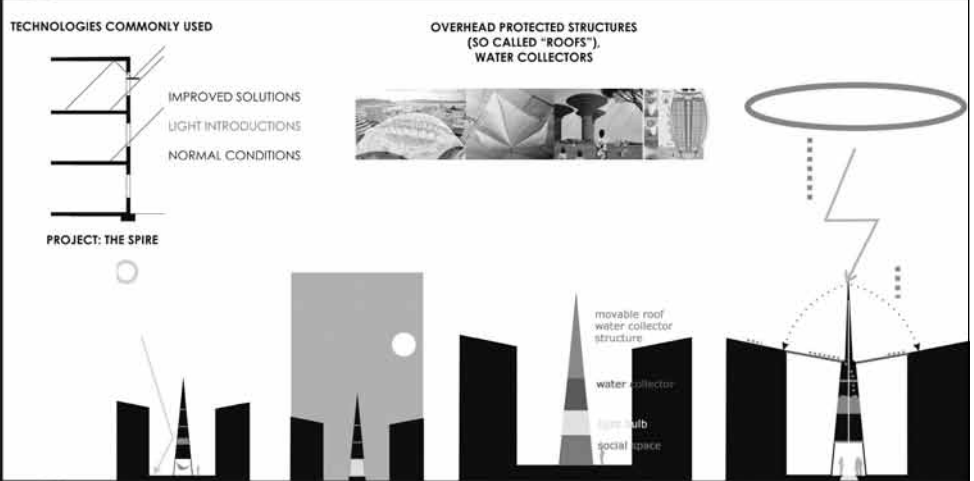


GET PLUGGED!!!!!!

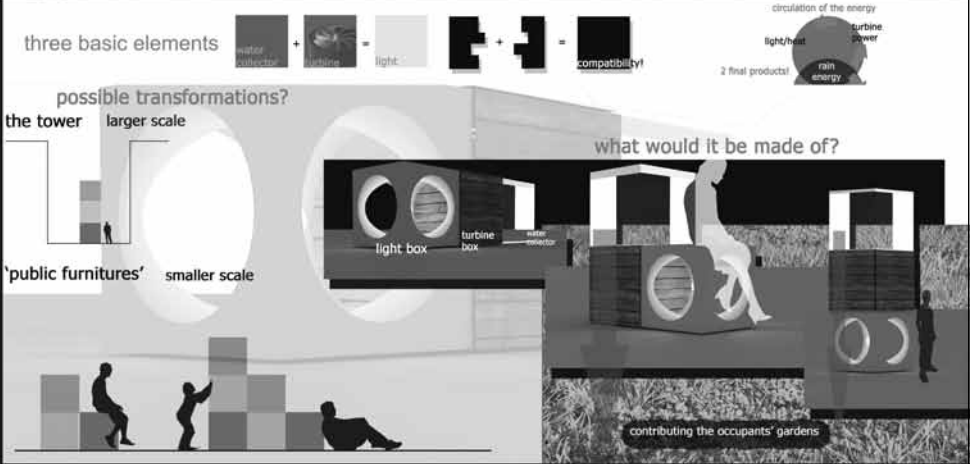
AREA III - HOW PLUG WITH THE INFRASTRUCTURE?



1 THE SPIRE = WATER COLLECTOR + LIGHT BULB + SOCIAL SPACE



2 MOVABLE BOXES - SECTION BOXES



Grupa NATURA

CZYŚCIEC

Analiza zagadnienia: Kluczowym wyzwaniem dla grupy Natura było podjęcie projektowego dialogu z tematem natury, bez bezpośrednich zapożyczeń z natury takich jak drzewo, krzew, czy zielona ściana. W tym celu każdy ze studentów podjął się analizy jednego z siedmiu wybranych odgórnie parametrów natury: niewidzialne, nieskończoność, dynamika, gęstość, cykle, światło, tekst, by następnie ze swoim parametrem „na nosie” udać się na wizję lokalną terenu Dolnego Miasta.

Projekcja analizy na teren i wybraną działkę: W następnym kroku, każdy z siedmiu parametrów został rozbity na trzy hasła łączące parametr z otaczającym terenem. Poprzez werbalizację własnych wyobrażeń we wspólnej dyskusji, następnie wizualizację haseł w postaci diagramów, studenci wypracowali narzędzie analizy przestrzeni pod kątem obecności natury. Miejsce o najsilniejszym nasyceniu parametrami zostało wybrane na lokalizację projektu. Brama dawnej Fabryki Karabinów Maszynowych, ul. Łąkowa 35.

Idea: Natura jest obecna w mieście w niewidoczny dla przechodnia sposób. Poprzez swoje cykle, dynamikę, gęstość, odnawiające się w sposób nieskończony w przeciwieństwie do tkanki miejskiej, natura zaznacza swoją obecność jedynie dzięki światłu oraz w postaci tekstów, historii, przesłań, które możemy odczytać jeśli poświęcimy im dość uwagi i szacunku. Człowiek, w swojej miejskiej masie, często wydaje się nie mieć możliwości, by pamiętać o bezkresie natury. Jego ekspansywny tryb życia zagłusza kierowany przez nią do nas przekaz.

Realizacja: Brama do upadłej fabryki (w dodatku fabryki karabinów maszynowych) jest miejscem mocno nasyconym fenomenologicznie, a także symbolicznie, jako przestrzenne wyobrażenie przejścia z jednego stanu do drugiego. Obietnicę czegoś intrygującego. Sufit przejścia tworzy instalacja reagująca na światło i wiatr - będąca wrażeniową esencją natury. Posadzka przejścia została skonstruowana tak, by znacząco utrudnić kontemplację reprezentowanej w ten sposób w mieście natury. Wejście na posadzkę wytwarza nieprzyjemny hałas. Ułożone pod posadzką plastikowe odpady trzeszczą niemiłosiernie pod ciężarem odwiedzających. Wydaje się, że jedynie poprzez zbiorowe zastygnięcie możemy ostatecznie docenić wszechobecność natury w naszym otoczeniu.

Studenci: Melis Akinci, Ula Barczewska, Duygu Eral, Beata Kuc, Barbara Piotrowska, Joanna Szymczak, Dagmara Ziemiańska

Tutorzy: Gall Podlaskowski, Magdalena Stefanowicz

Group NATURE

PURGATORIUM

Analysis of the topic: The key challenge for the group : Nature was to construct a design dialogue with the topic of nature, without the employment of such direct associations as the tree, bush or green wall. In order to achieve this, each of the students was asked to analyse one of seven preselected parameters of nature: invisible, infinity, dynamics, density, cycles, light, text. In the next step, with their parameter-lenses, the students moved on to site exploration of the Lower Town area.

Projection of the analysis onto the area and the specific site: Consequently, each of the seven parameters has been translated into three phrases relating the parameter to the surrounding area. Across verbalization of their own imaginations through dialogue, and through rendering of the phrases in diagrams, the students created an analytic tool for the analysis of space in terms of the presence of nature. The place which appeared to be saturated the most with the analysed parameters was picked as the location of the project. The gate to the former Machine Guns Factory, 35 Łąkowa Street.

The idea: A passer-by barely notices the presence of nature in the city. Through its ad infinitum renewing cycles, dynamics, density, on the contrary to the urban tissue, nature marks its presence only through light and by the means of texts, stories, messages, which we may only read if they were paid enough attention and respect. The man, in his urban multitude, often appears not to have any chance, to remember the infinity of nature. His expansive lifestyle often jams the message directed from nature to us.

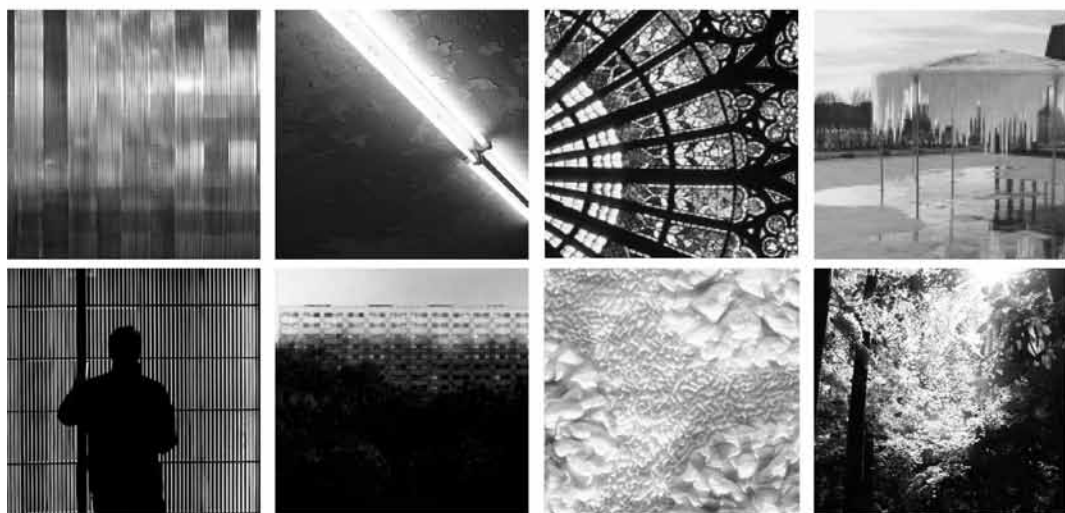
Realization: A gate to a former factory (additionally a machine gun factory) is a place highly saturated phenomenologically, as well as symbolically, as a spatial representation of passage between one state to another. A promise of something intriguing. A light- and wind-sensitive installation provides the ceiling of the passage. A glass-crystal patchwork suggests the essences of nature. A contemplation of the natural introduced to the urban in this way - is handicapped by the floor, which has been designed to destroy this artificial harmony. To enter the floor means to produce unpleasant noise. Plastic litter deposited under the floor squeak horribly under the pressure of the visitor/s. As it seems, the omnipresence of nature in our neighbourhood may be appreciated only through a simultaneous freezing of everybody's moves...

Students: Melis Akinci, Ula Barczewska, Duygu Eral, Beata Kuc, Barbara Piotrowska, Joanna Szymczak, Dagmara Ziemiańska

Tutors: Gall Podlaszewski, Magdalena Stefanowicz



Workshop for students of Architecture and Urban Design
Urban Energy Box No 5 - Nature



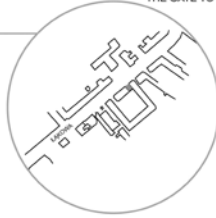
Daylight & Architecture, Magazine by VELUX; <http://da.velux.com>

European Urban Energy Box, Technical University of Gdańsk, May 9-14, 2010

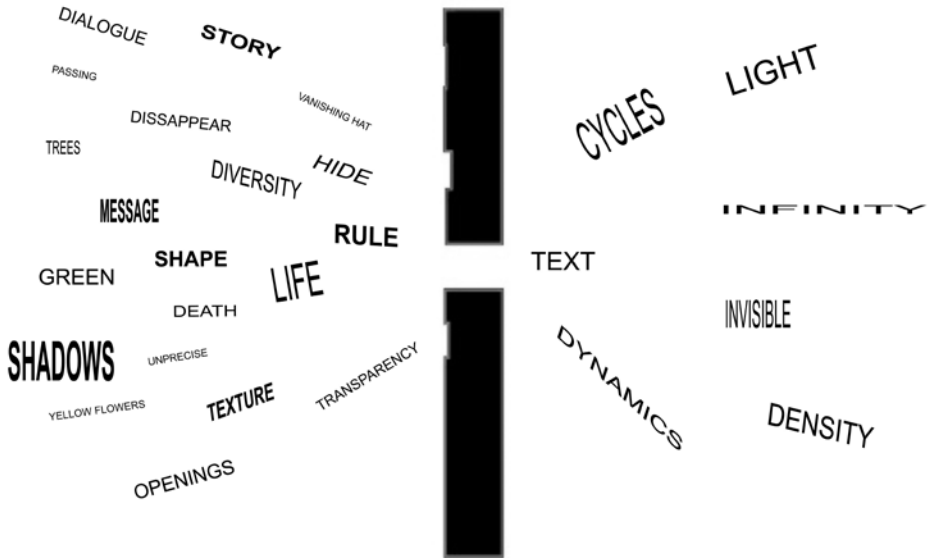
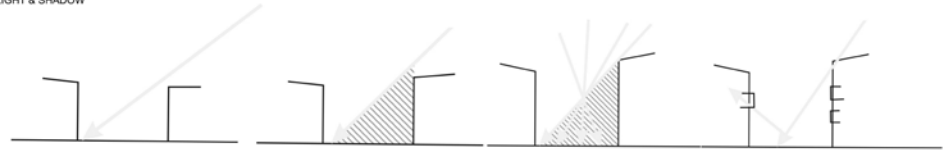
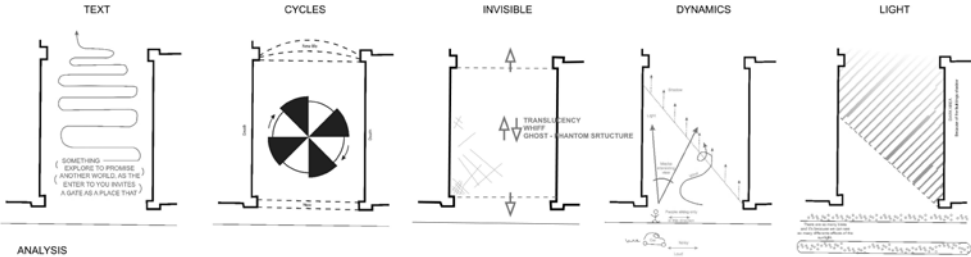


NATURE GROUP - PURGATORY CZYŚCIEC

THE GATE TO THE FORMER MACHINE GUN FACTORY BECOMES THE ESSENCE OF NATURE.
WHAT HAPPENS IF THE ESSENCE OF NATURE IS VISITED?



PART 1
Making the Essence of Nature



European Urban Energy Box, Technical University of Gdańsk, May 9-14, 2010
NATURE GROUP: TUTORS/ GALL PODLASZEWSKI, MAGDALENA STEFANOWICZ; STUDENTS/ MELIS AKINCI, ULA BARCZEWSKA, DUYOU ERAL, BEATA KUC, BARBARA PIOTROWSKA, JOANNA SZYMCAK, DAGMARA ZIEMIAŃSKA

NATURE GROUP - PURGATORY CZYŚCIEC



Trying to focus on sensuality of nature - light, wind, reflections, sounds, rain. Finding the place - THE GATE - saturated with natural forces. Strengthening the feelings - making them 'visible' for a man. Senses of natural processes are made the most in a kind of a glass and light crystals instalations. The box of sensual feelings named ESSENCE OF NATURE. Pure.

Suddenly, visitor comes. With his foot, good or bad. With his plans and intentions, good or bad.
From a distance he believes in ideal nature inside the gate. He is attracted. He gets closer.
His eyes are looking up glorifying the wind, the light... He made a step inside. A step with a great volume - sound that irritates himself.
The impact is not possible to avoid. The feeling of being guilty appears.



WIND MOVED INSTALATIONS
AND MAKE SOME NOISE AND
REFLECTIONS

MIRRORS MAKE COLOUR
REFLECTIONS



Sprawozdanie grupy projektowej RESOURCES

Grupy warsztatowa „RESOURCES” zajmowała się szeroką pojętą tematyką zasobów. Proces projektowy złożony był z dwóch faz:

1. Część analityczna

a) Diagnoza zasobów na obszarze Dolnego Miasta:

Studenci mieli za zadanie zapoznanie się z charakterem dzielnicy poprzez spacer oraz wykonanie ośmiu szybkich szkiców miejsc najbardziej dla nich charakterystycznych. Spotkanie studentów z dziećmi z szkoły podstawowej umożliwiło uzyskanie dodatkowych i specyficznych informacji o dzielnicy. Następnie studenci sprecyzowali najważniejsze zasoby w dzielnicy:

- zasoby ludzkie (społeczność lokalna, potencjał dzieci, działacze lokalni);
- zasoby naturalne (tereny zielone, których brakuje w starym mieście, a które nie są wykorzystywane przez mieszkańców);
- zasoby informacyjne (zła reputacja dzielnicy powodująca jej izolację);
- zasoby przestrzenne, budowlane (tkanka historyczna o dużym potencjale, brak definicji przestrzeni, bariery oddzielające od reszty miasta).

b) Charakterystyka zasobów:

Zasoby są niczym „żywe organizmy”, które posiadają własną energię: oddziałują między sobą, można je modyfikować.

c) Rozpoznanie potencjału zasobów:

Wykorzystując możliwości manipulowania zasobami studenci zaprezentowali różne warianty wykorzystania zasobów w celu uatrakcyjnienia dzielnicy dla mieszkańców dzielnicy i miasta. Efektem tych prac była propozycja wizja rozwoju Dolnego Miasta zorientowana na społeczność lokalną, ale równocześnie otwarta na ludzi z zewnątrz, których obecność przyspieszy proces zmian. Płynne przejście wewnątrz urbanistycznych i terenów zielonych od publicznych do prywatnych zarówno w skali miasta jak i dzielnicy.

2. Część projektowa

Cel projektowy: uaktywnienie zasobów naturalnych, przestrzennych oraz informacyjnych w celu podniesienia jakości życia, poprzez lokalizację na Dolnym Mieście „projektów inicjujących proces”, które miałyby na celu rozpoczęcie przemian w całej dzielnicy.

a) Projekt uaktywniający zasoby naturalne:

Pływająca zielona wyspa, która miałaby poruszać się po Motławie pomiędzy pasem fortyfikacji Dolnego Miasta a Starym Miastem. Obiekt funkcjonuje zarówno jako nowoczesny landmark dzielnicy jak i nowe zielone miejsce przeznaczone dla wypoczynku dla ludzi. Jego zadaniem byłoby wyeksponowanie istniejących terenów zielonych dla użytkowników centrum Gdańska oraz propagowanie korzystania z zieleni wśród społeczności Dolnego Miasta.

b) Projekt uaktywniający zasoby przestrzeń:

Głównym założeniem projektu jest wydzielenie przestrzeni publicznych, pół-publicznych i prywatnych, za pomocą czerwonego koloru, który pojawia się na ulicach, placach i małej architekturze. Duże zagęszczenie czerwonych elementów wyznacza centrum dzielnicy, a niskie miejsca kameralne. „Czerwony dywan” pokrywa główną ulicę, zatopione są w nim historyczne tramwaje, które kiedyś tutaj jeździły. Instalacja kieruje ludzi do najbardziej atrakcyjnych miejsc. Gdziekolwiek „dywan” zmienia swój kolor z czerwonego na zielony, kiedy prowadzi do miejsc wypoczynku.

c) Projekt uaktywniający zasoby informacyjne:

Punkt informacyjny w postaci box'u którego adresatami byli by zarówno mieszkańcy dzielnicy jak i turyści. Z boks wskazywał lokalizację interesujących miejsc w dzielnicy. Początkowo, razem z Eminem, zaczęliśmy się zastanawiać nad pytaniami, na które to odpowiedzi ułatwiłyby rozwiązanie naszego tematu. Co właściwie moglibyśmy zrobić by sprawić, że ludzie z zewnątrz i wewnątrz będą bliżej? W jaki sposób możemy zadziałać, żeby zmienić tak przecież złą reputację Dolnego miasta? Musimy dać mieszkańcom pewne narzędzia, które sprawią, że ludzie zaczną korzystać z potencjału swojej dzielnicy. To musi być informacyjna sieć, coś bardzo interaktywnego. Coś takiego, że mieszkańcy zaczną czerpać informacje, ale również dodawać swoje. Informacje dla turystów, dla dzieci- zdecydowanie dla wszystkich. Nasze komunikatywne boxy mają na celu ujawnić potencjał Dolnego Miasta. Taka praca przyniesie sporo korzyści zarówno dla mieszkańców jak i ludzi z zewnątrz.

Tutorzy: Joanna Zarucka, Konrad Lewacki

The Report of the Project Group RESOURCES

The Workshop Group “RESOURCES” has dealt with the subject of resources. The design process consisted of two phases:

1st. The analytical section

- a) The Diagnosis of the resources in the area of Lower City:
Students were asked to review the nature of the area by foot and the execution of eight high-speed sketches of places most characteristic in their opinion. A meeting of students with children from primary school made it possible to obtain additional and specific information about the district. Then the students have clarified the most important resources in the district:
 - Human resources (local communities, the potential of children, local activists).
 - Natural resources (green areas, which are missing in the old town, and which are not used by residents).
 - Information assets (bad reputation of the district causing its isolation).
 - Resource planning, construction (a historic factory has great potential, the lack of definition of space, the barriers separating from the rest of the city).
- b) Characteristics of resources:
Resources are like “living organisms” that have their own power: interact with one another, one can modify them.
- c) Identification of potential resources
Using possibilities to manipulate resources, students presented different variants of the use of resources in order to enhance the attractiveness of the district for residents of the district and the city. The result of this work was the proposal to develop a vision of Lower City-oriented community, but also open to people from outside, whose presence will speed up the process of change. Smooth transition of urban design and landscaping from public to private in both the scale of the city and district.

2nd. The design section

The project aim: activating natural, space and information resources to improve the quality of life, by locating in Lower Town “starting projects”, which could initiate this transformation process in the whole district.

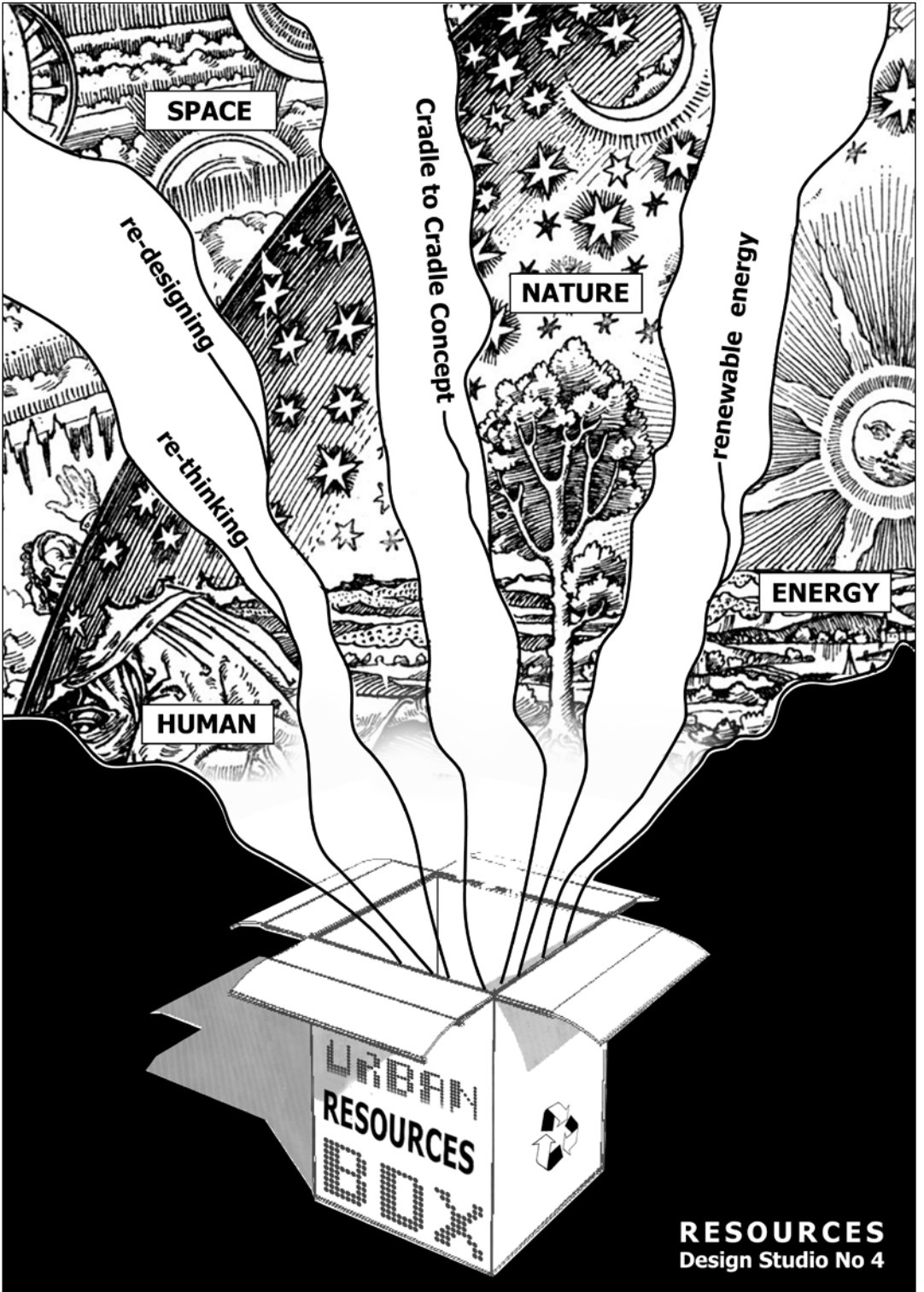
- a) Project activating natural resources:
Floating green island, which would move on Motława between the Old Town and the fortification belt of Lower Town. The installation, known as both: a modern landmark of the district and the new green space for recreation of inhabitants. Its task would be to highlight the existing green spaces of former fortifications for users of the center of Gdańsk and promote the use of green among the local community of the Lower Town.
- b) Project activating space resources:
In our project we wanted to create a type of unique public space. We decided

to define different kind of space (public, semi-public, semi-private, private) by using a red color on streets, squares, small architecture. Red color spills on district with different density, what tell us, where is the its heart and where are the calmer parts. Red “carpet” spills through the streets and covers for example historical tram, which once ran through the main street. Our installation direct people to the most attractive places. Sometimes “carpet” turns from red to green, when it leads to recreation areas.

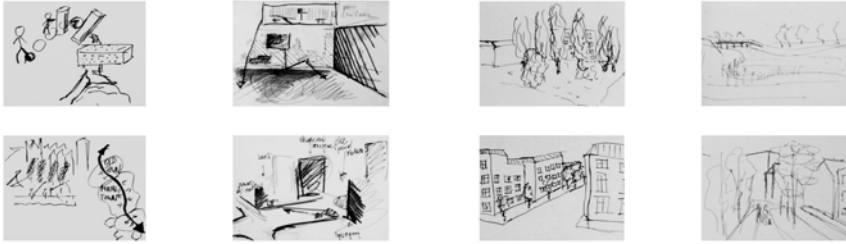
c) Project activating information resources:

Firstly, we started thinking, with my Turkish friend, about some questions. What can we do to make people closer from outside and inside? What can we do to change a bad reputation of this district? We have to give a tools, which makes that people start use this potential. And then we knew it! It have to be some kind of information network, something very interactive. Something, where residents could leave and get information about the district. For tourists, for kids - definitely for everyone. Our communication boxes will change the meaning of Lower Town. These kind of work brings a lot of benefits for everyone.

Tutors: Joanna Zarucka, Konrad Lewacki



1. Diagnosis of resources localized in Lower Town

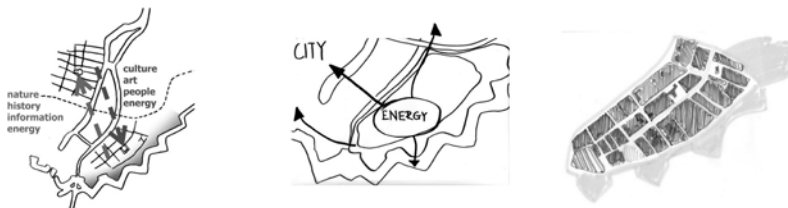


People – children - energy, relations, potential, alive community
 Space – abandon, no definition, not designed, historical character
 Nature – huge green areas, potential for the city - unique, but unknown
 Information – proud of inhabitants, bad reputation in the city

2. Energy circulation in (between) resources



3. Vision of Lower Town Development



Create a district orientated to inhabitants and open for newcomers

People – increase quality of life using available resources
 Space – sprawl of function (from public to privat)
 Nature – show the possibility of use to inhabitants, give access for people from outside
 Information – education, change of reputation, establishment of connections



