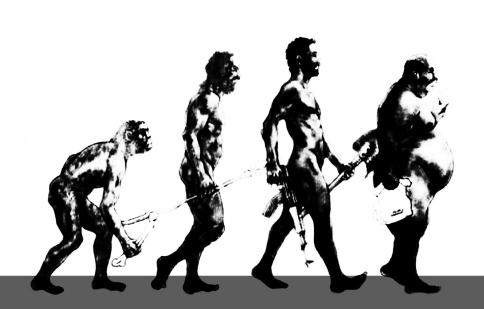
# HOW TO CREATE A HEALTHY COMMUNITY



### **ACKNOWLEDGEMENTS**

 $I^{\,\prime}\text{D}$  LIKE TO SAY THANKS TO MY MUM AND JESS,WHO HAVE SUPPORTED ME THROUGHOUT CREATING THIS BOOK.

### **PREFACE**

OVER THE LAST FEW DECADES THE HEALTH OF THE WORLD POPULATION HAS BECOME AN INCREASINGLY WORRYING PROBLEM. THE INVENTION OF FAST FOOD TIED IN WITH THE INVENTION OF COMPUTER GAMES HAS SLOWLY BUT SURELY CREATED A FAT SOCIETY WHERE THE UK SITS THIRD IN THE WORLD OBESITY CHART:

USA 30.6%

MEXICO 24.2%

U K 23.0%

THE RAPID INCREASE IN OBESITY CANNOT BE SOLELY PLACED ON THE FAST FOOD AND COMPUTER GAME INDUSTRIES. THE WAY IN WHICH A TOWN CENTRE, RESIDENTIAL AREA, AND LEISURE SPACE IS CREATED HAS A HUGE EFFECT ON SOCIETY, AND CAN POTENTIALLY BE THE REASON FOR SOMEONE BEING MOTIVATED OR DEPRESSED, WHICH WILL AFFECT THEIR DAILY LIVES.

THIS BOOK WILL HELP THE READER UNDERSTAND THE PROBLEMS THAT NEED TO BE RESOLVED AND OUTLINE STEPS TO TAKE, THAT, IF PUT IN TO PRACTICE, WILL HELP THE COMMUNITY LIVE A HEALTHIER MORE FULFILLING LIFESTYLE.

### **CONTENTS**

THE PROBLEM	01-04	P A R C O U R S E	23-24
MASTER PLANNING		E D U C A T I O N	25-2Ь
TOWN CENTRE DESIGN	07-10	BUILDING DESIGN	
S H A R E D S P A C E	11-14	S U N L I G H T	29-30
N A T U R E	18-16	GREENERY	31-32
T R E S	17-18	CEILING HEIGHT	3 3 - 3 4
E X E R C I S E	19-22	S O U R C E S	32-38

### THE PROBLEM

#### INTRODUCTION

FOR THE LATTER PART OF THE 20TH CENTURY THERE HAS BEEN A MASSIVE SHIFT IN HOW PEOPLE LIVE THEIR LIVES. DURING THE 50'S PEOPLE SUCH AS THE MACDONALD BROTHERS IN AMERICA INVENTED A WHOLE NEW KIND OF FOOD — 'FAST FOOD' — WHICH HAS BECOME HUGELY POPULAR THE WORLD OVER, BUT WITH THIS HAS COME CONSEQUENCES. FAST FOOD CHAINS PRODUCE FOOD AT RAPID SPEED, SO IT IS CONVENIENT FOR SOMEONE ON THE GO. HOWEVER, THIS COMES AT A PRICE. IF YOU WERE TO BUY A BIG MAC MEAL COCA-COLA CLASSIC, IN ONE SITTING YOU WOULD BE CONSUMING 1,130 CALORIES. A WOMAN'S DAILY INTAKE OF CALORIES IS 2000, SO IF A WOMAN WAS TO EAT ONLY TWO OF THESE A DAY, SLOWLY BUT SURELY HER HEALTH PROBLEMS WOULD BECOME AN ISSUE. FAST FOODS ALSO DON'T SUPPLY YOUR BODY WITH ALL THE VITAMINS NEEDED TO LEAD A HEALTHY LIFE STYLE, WITH FAT AND CARBOHYDRATES TOPPING THE LIST, IT IS A SURE WAY TO DEVELOP CARDIOVASCULAR ISSUES.

COINCIDING WITH THIS FAST FOOD TREND HAS BEEN THE DEVELOPMENT OF COMPUTER GAMING. IN 1972 THE FIRST ARCADE GAME TO BECOME POPULARISED BY THE PUBLIC WAS CREATED, 'PONG'. THROUGHOUT THE 70'S, 80'S AND 90'S VIDEO GAMES BECAME INCREASINGLY POPULAR, WITH GAMES CONSOLES BEGINNING TO BE RELEASED AS WELL SO PEOPLE COULD NOW PLAY GAMES WITHOUT NEEDING TO LEAVE THE COMFORT OF THEIR SETTEE. FOR A LOT OF THE POPULATION, STAYING IN, PLAYING VIDEO GAMES AND HAVING FAST FOOD DELIVERED TO THEIR HOMES HAS BECOME A WAY OF LIFE.

#### OBESITY

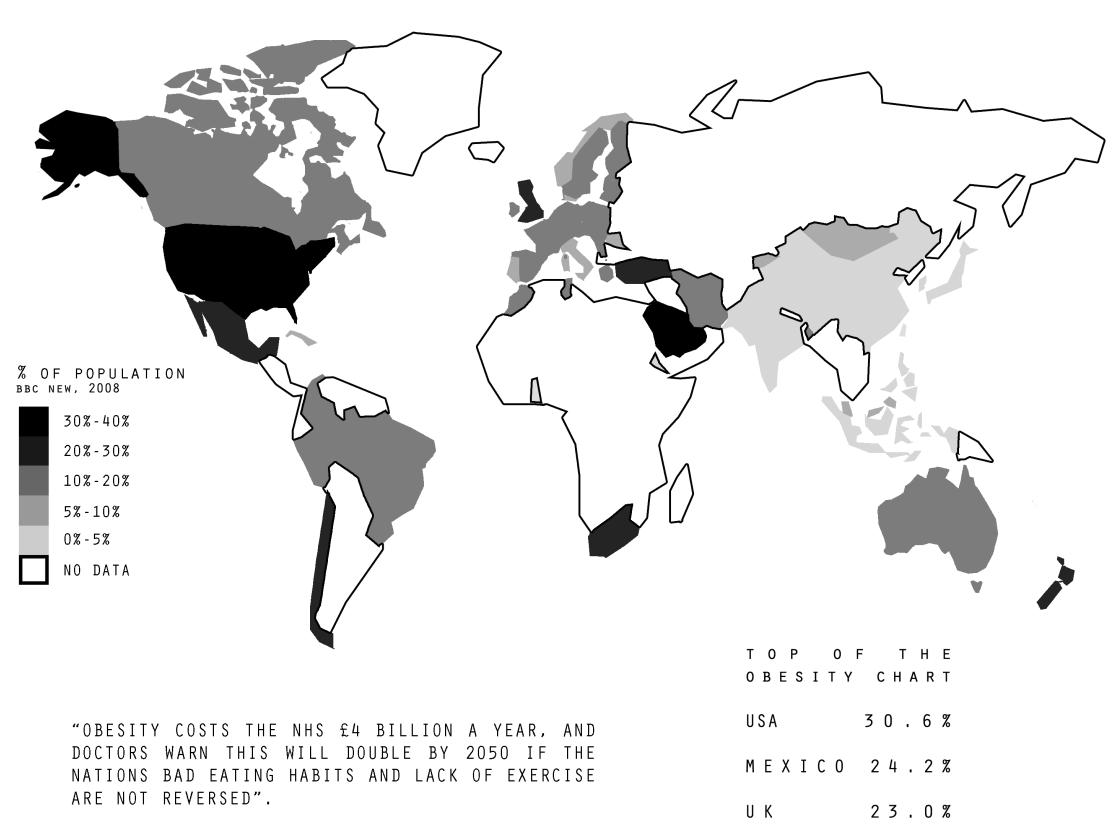
AS THIS NEW CULTURE OF STAYING INDOORS AND EATING FAST FOOD HAS BECOME INCREASINGLY POPULAR THE HEALTH PROBLEMS OF SOCIETY AS A WHOLE HAVE BECOME AN ISSUE OF DEBATE.

CURRENTLY, THE UK IS THE 3RD FATTEST COUNTRY IN THE WORLD WITH 15 MILLION PEOPLE BEING DIAGNOSED WITH THE CONDITION. THIS NUMBER WILL CONTINUE TO RISE UNLESS THE ATTITUDES IN HOW WE, AS A NATION, SEE HEALTHY FOOD AND EXERCISE. THE INDEPENDENT REPORTED THAT BY 2030 THERE WILL BE 26 MILLION PEOPLE IN THE UK WHO ARE OBESE. HOWEVER, THE RESEARCHER SAID THAT ALMOST HALF THE POPULATION WILL BE OVERWEIGHT IF NOTHING IS CHANGED IN THE WAY MOST PEOPLE LIVE THEIR LIVES. THIS WILL IN TURN COST THE NHS A FURTHER £2 BILLION PER ANNUM ON TOP OF THE £4.2 BILLION WHICH IS CURRENTLY BEING SPENT ON THE NHS FOR OBESITY RELATED PROBLEMS.

Past trends predict that by 2030 the prevalence of obesity would rise from 26% to 41-48% in Men, and from 26% to 35-43% in women.

OBESITY IS A CAUSE FOR MANY PROBLEMS WHICH ARE ONLY GOING TO KEEP RISING; 6 TO 8.5 MILLION CASES OF DIABETES, 5.7 TO 7.3 MILLION CASES OF HEART DISEASE AND STROKE, AND BETWEEN 492,000 AND 669,000 ADDITIONAL CASES OF CANCER. IN ADDITION, THE INCREASING PREVALENCE OF DEBILITATING DISORDERS SUCH AS OSTEOARTHRITIS WOULD AFFECT THE DURATION OF THE PERSON'S HEALTHY LIFESPAN.

#### A MAP OF OBESITY



DAILY MAIL ONLINE, 10TH FEBRUARY 2010

#### OBESITY IN BRITAIN

BRITAIN IS SLOWLY BECOMING THE FATTEST NATION IN THE WORLD WITH A QUARTER OF THE POPULATION ALREADY DIAGNOSED WITH OBESITY.

IN 2004, DATA ANALYSTS EXPERIAN LOOKED INTO HOW A QUARTER OF THE POPULATION HAVE BECOME OBESE, AND FURTHER WENT ON TO DEVISE AN OBESITY LIST, SHOWING WHICH CITIES WERE THE UNHEALTHIEST, AND WHICH WERE THE HEALTHIEST.

THEY DISCOVERED THAT FAMILIES THAT WERE SEEN TO HAVE HAD A POOR EDUCATION, WORKING CLASS AND WHITE WERE THE LEAST HEALTHY, WHEREAS, PEOPLE WHO LIVED IN THE LEANEST TOWNS WERE WEALTHIER, AND BETTER EDUCATED. SO THEY WERE MORE LIKELY TO EAT WELL.

Experian found that Kingston upon Hull was the city with the worst record of obesity in England. The number of cases of Type 2 diabetes was 46% worse than the average town. However, Kingston upon Thames, which is the leanest town, was 54% better than average.

#### North Verses South

EXPERIAN NOTICED AN INTERESTING TREND WITH THE HEALTH OF THE POPULATION, THE FURTHER NORTH ONE WENT, THE UNHEALTHIER THE CITY AS A WHOLE BECAME. THE MAJORITY OF THE WORST 10 AREAS WERE IN THE NORTH OF ENGLAND AND WALES, WHILE THE MAJORITY OF THE HEALTHIEST PLACES WERE IN THE SOUTH EAST.

DR MARC FARR ON WEALTHY PEOPLE SAID "THEY HAVE BETTER EDUCATION ABOUT HEALTH ISSUES. THEY WILL ALSO HAVE THE MONEY TO BUY LOWER-FAT OR ORGANIC FOODS." HE SAID CHEAPER HEALTHIER FOODS NEEDED TO BE MADE MORE WIDELY AVAILABLE TO THE LESS WELL-OFF.

THE TOWNS WITH THE POOREST HEALTH WERE FOUND TO BE WORKING-CLASS AREAS WHERE PEOPLE TENDED TO BE LESS WELL EDUCATED.

"IF THEY ARE GOING TO BUY A LOAF OF BREAD, THEY MAY WELL HAVE TO CHOOSE THE CHEAPEST - AND THAT IS LIKELY TO BE A LARGE WHITE LOAF, RATHER THAN A BROWN ORGANIC ONE."

Dr Marc Farr

HE ADDED: "THESE ARE WHITE WORKING CLASS PEOPLE LIVING IN AREAS OF COUNCIL FLATS WHERE DIET IS POOR AND EXERCISE ISN'T TAKEN REGULARLY."

"FINDINGS APPLY ACROSS THE AGE SCALE. YOU ARE TALKING ABOUT WHOLE FAMILIES WHO ARE OVERWEIGHT. THERE ARE LOW LEVELS OF EDUCATION ABOUT DIET."

"THEY ARE FAIRLY OLD-FASHIONED COMMUNITIES, WITH MORE CHIP SHOPS THAN THAI RESTAURANTS, FOR EXAMPLE." HOWEVER, THE COMMUNITIES THAT HAVE MONEY, SUCH AS KINGSTON UPON THAMES, WERE MORE EDUCATED AND READ DIFFERENT NEWSPAPERS WHICH USUALLY HAD ARTICLES IN WHICH ENCOURAGED DIFFERENT TYPES OF DIET AND EXERCISE.

AS OPPOSED TO POPULATIONS IN LESS WELL OFF TOWNS, THEY HAD MORE MONEY TO DISPOSE OF, SO THEY ARE MORE WILLING TO SPEND MONEY ON A GYM MEMBERSHIP. IN SOME CASES COMPANIES IN THE WEALTHIER AREAS WERE WILLING TO BUILD GYMS IN THE OFFICE FOR THE STAFF, LOOKING AFTER THEIR EMPLOYEES' HEALTH.

#### SUMMARY

If change is to happen within Britain, there needs to be a shift in how people are educated and how communities are designed. Exercise shouldn't be just for the 'few privileged', but for the 'masses'. Redesigning the fabric of how a community works is one step to take on the road to a healthier, happier society.

# MASTERPLAN

### TOWN CENTRE DESIGN

#### INTRODUCTION

AS SOCIETY HAS DEVELOPED, LESS AND LESS THOUGHT HAS BEEN PUT INTO THE DESIGN OF THE NEIGHBOURHOODS THAT SURROUND THE CITY CENTRE. DUE TO THE EVER INCREASING POPULATION THE MAIN THOUGHT WITH HOUSING HAS BEEN TO CREATE IT FAST AND CHEAP, WHICH HAS CREATED A PHENOMENON CALLED 'URBAN SPRAWL'. HOWEVER THIS CAN AND HAS HAD DETRIMENTAL CONSEQUENCES.

AS CITIES CONTINUE TO SPRAWL, NO NEW CENTRES ARE CREATED, WHICH HOUSE ALL THE DAY TO DAY FACILITIES THAT ARE NECESSARY TO LIVE SUCH AS; A PLACE TO EXERCISE, TO EDUCATE, TO RELAX AND TO SHOP.

Unfortunately, private transport has become an important role in many peoples' lives, this has made it much harder for the average 'Joe Bloggs' to exercise and unwind, limiting the possibility to live an active, healthy, de-stressed life.

NEIGHBOURHOOD FEATURES SUCH AS HIGH STREET CONNECTIVITY, RELATIVELY HIGH POPULATION DENSITY AND MIXED (RESIDENTIAL, COMMERCIAL, RETAIL) LAND USE HAVE BEEN LINKED TO INCREASED PHYSICAL ACTIVITY.

JOHNSON SA, MARKO J. DESIGNING HEALTHY PLACES: LAND USE PLANNING AND PUBLIC HEALTH. EDMONTON, ALBERTA: POPULATION HEALTH - CAPITAL HEALTH; 2007

"SPRAWL IMPACTS NEGATIVELY ON WELL-BEING BY ERODING SOCIAL CAPITAL, ROBBING PEOPLE OF ALL AGES OF THE OPPORTUNITY TO HAVE A BALANCED HEALTHY LIFESTYLE, DEGRADING THE SURROUNDING NATURAL ENVIRONMENT, AND INCREASING THE STRESS OF COMMUTING, WHICH NOT ONLY IMPACTS MENTAL HEALTH BUT ALSO PHYSICAL HEALTH."

ONTARIO COLLEGE OF FAMILY PHYSICIANS. THE HEALTH IMPACTS OF URBAN SPRAWL: SOCIAL AND MENTAL HEALTH, 2005

THEREFORE A TOWN CENTRE MUST BE ESTABLISHED TO ENABLE A COMMUNITY TO THRIVE.

A DESIGN METHOD TO CONSIDER HOW TO CREATE THE PERFECT TOWN CENTRE AND RESIDENTIAL AREA IS NEW URBANISM.

#### NEW URBANISM

THROUGHOUT THE 19TH AND 20TH CENTURIES LITTLE TIME WAS PUT IN TO CREATING COMMUNITY/VILLAGE CENTRES AND WHAT EFFECTS URBAN SPRAWL WOULD HAVE ON THE RESIDENTS PSYCHOLOGICALLY AND PHYSICALLY.

DURING THE INDUSTRIAL REVOLUTION THE POPULATION EXPANDED AT AN INCREASINGLY RAPID RATE. RESIDENTIAL ESTATES WERE GENERATED; HOWEVER THE IMPORTANCE OF TOWN CENTRES WAS NOT UNDERSTOOD SO THEY WERE NOT CREATED. MONEY WAS A DRIVING FORCE AND UNFORTUNATELY PARKS, PLACES TO EXERCISE, LEISURE AND CREATING A SENSE OF COMMUNITY WERE A SECONDARY THOUGHT, IF NOT TERTIARY THOUGHT.

AFTER THE INDUSTRIAL REVOLUTION THE POPULATION CONTINUED TO GROW SO COUNCIL ESTATES WERE CREATED, SUCH AS LONGHILL IN HULL. YET AGAIN, THE LIVELIHOODS OF THE RESIDENTS WERE STILL NOT CONSIDERED AS THERE IS NO SENSE OF SPACE, PARKS ARE ESSENTIALLY NONE EXISTENT, APART FROM A FEW PATCHES OF GRASS. THERE IS NO OUTLET FOR THE PUBLIC, WHICH CAN HAVE NEGATIVE EFFECTS ON A PERSON.

AS THE 21ST CENTURY HAS APPROACHED, PEOPLE HAVE BECOME MORE UNDERSTANDING OF THE AFFECTS THAT HAVING LOCAL PARK SPACE, TOWN CENTRES, EDUCATIONAL FACILITIES, LEISURE FACILITIES AND EXERCISE FACILITIES WITHIN WALKING DISTANCE WILL HAVE ON THEIR LIVES. RESEARCH STUDIES HAVE BEEN DEVISED TO FURTHER UNDERSTAND HOW FAR PEOPLE ARE WILLING TO WALK TO THE SHOPS, PARKS AND TRANSPORT, IN ORDER TO BE ABLE TO DESIGN A COMMUNITY THAT WILL FLOURISH.

FOR A COMMUNITY TO DO WELL IT IS ESSENTIAL THAT ALL THE AMENITIES ARE WITHIN WALKING DISTANCE. THIS CAN BE DUE TO FINANCIAL REASONS, AS MOST PEOPLE WHO LIVE WITHIN THESE AREAS EARN UNDER £20,000, AND THEREFORE MAY NOT HAVE SPARE MONEY TO SPEND ON TRANSPORT EVERY DAY.

NEW URBANISM IS A DESIGN THEORY THAT RELATES TO HOW COMMUNITIES WERE STRUCTURED PRIOR TO THE INDUSTRIAL REVOLUTION.

#### PRINCIPLES OF NEW URBANISM

1. WALKABILITY

THE TOWN CENTRE SHOULD BE WITHIN A 10-MINUTE WALK OF HOME AND THE STREETS SHOULD BE PEDESTRIANISED (BUILDINGS CLOSE TO STREETS; PORCHES, WINDOWS & DOORS; TREE-LINED STREETS; ON STREET PARKING; HIDDEN PARKING LOTS; GARAGES IN REAR LANES; NARROW, SLOW SPEED STREETS)-PEDESTRIANISED STREETS FREE OF CARS IN SPECIAL CASES.

2. CONNECTIVITY

INTERCONNECTED STREET GRID NETWORK DISPERSES TRAFFIC & EASES WALKING - A HIERARCHY OF NARROW STREETS, BOULEVARDS, AND ALLEYS - HIGH QUALITY PEDESTRIAN NETWORK AND PUBLIC REALM MAKES WALKING PLEASURABLE.

3. MIXED-USE & DIVERSITY

A MIX OF SHOPS, OFFICES AND HOMES ON ONE SITE. MIXED-USE WITHIN NEIGHBOURHOODS, WITHIN BLOCKS AND WITHIN BUILDINGS - DIVERSITY OF PEOPLE - OF AGES, INCOME LEVELS, CULTURES, AND RACES.

4. MIXED HOUSING

A RANGE OF TYPES, SIZES AND PRICES IN CLOSER PROXIMITY.

5. QUALITY ARCHITECTURE

& Urban Design An emphasis on beauty, aesthetics, human comfort, and creating a sense of place is needed. The civic uses and sites within the community should be delicately placed throughout. Human scale architecture and beautiful surroundings nourish the human spirit,

#### 6. Traditional Neighbourhood Structure

THERE SHOULD BE A PUBLIC SQUARE - IMPORTANCE OF QUALITY PUBLIC REALM IS NECESSARY TO ALLOW THE RESIDENTS TO FEEL PRIMARY. THERE SHOULD BE PUBLIC SPACES WITHIN A 10-MINUTE WALK. THE ARCHITECTURE AND NATURE THROUGHOUT THE SCHEME SHOULD BE EMBRACIVE OF ONE ANOTHER, MAKING THE BOUNDARIES FROM NATURAL TO MAN-MADE DISAPPEAR, ENABLING ENVIRONMENTALISTS TO ASSESS THE DESIGN OF THE HUMAN HABITAT AND THE URBANISTS TO SUPPORT THE VIABILITY OF NATURE. THIS URBAN-TO-RURAL TRANSECT HIERARCHY HAS APPROPRIATE BUILDING AND STREET TYPES FOR EACH AREA ALONG THE CONTINUUM.

#### 7. INCREASED DENSITY

MORE BUILDINGS, RESIDENCES, SHOPS, AND SERVICES CLOSER TOGETHER FOR EASE OF WALKING, TO ENABLE A MORE EFFICIENT USE OF SERVICES AND RESOURCES, AND TO CREATE A MORE CONVENIENT, ENJOYABLE PLACE TO LIVE. NEW URBANISM DESIGN PRINCIPLES ARE APPLIED AT THE FULL RANGE OF DENSITIES FROM SMALL TOWNS, TO LARGE CITIES.

#### 8. SMART TRANSPORTATION

A NETWORK OF HIGH-QUALITY TRAINS CONNECTING CITIES, TOWNS, AND NEIGHBOURHOODS TOGETHER - PEDESTRIAN-FRIENDLY DESIGN THAT ENCOURAGES A GREATER USE OF BICYCLES, ROLLERBLADES, SCOOTERS, AND WALKING AS DAILY TRANSPORTATION.

#### 9. SUSTAINABILITY

THE COMMUNITY SHOULD HAVE A MINIMAL IMPACT ON THE ENVIRONMENT BY INTRODUCING ECO-FRIENDLY TECHNOLOGIES, RESPECT FOR ECOLOGY AND VALUE OF NATURAL SYSTEMS BECOMING ENERGY EFFICIENT, USING LESS FINITE FUELS - MORE LOCAL PRODUCTION, MORE WALKING AND LESS DRIVING.

#### 10. QUALITY OF LIFE

TAKEN TOGETHER THESE ADD UP TO A HIGH QUALITY OF LIFE WELL WORTH LIVING, AND CREATE PLACES THAT ENRICH, UPLIFT, AND INSPIRE THE HUMAN SPIRIT.

#### WALKING DISTANCES

A CENTRE MUST BE ESTABLISHED TO ENABLE A COMMUNITY TO THRIVE. THROUGHOUT THE 19TH AND 20TH CENTURIES LITTLE TIME WAS PUT IN TO CONSIDER HOW NOT CREATING COMMUNITY CENTRES WOULD HAVE ON THE IMPACT OF THE RESIDENTS LIVES. AS THE POPULATION EXPANDED AT AN INCREASINGLY RAPID RATE ESTATES WERE GENERATED WITH LITTLE THOUGHT PUT INTO THE PHYSIOLOGICAL ISSUES, AS MONEY WAS THE DRIVING FORCE BEHIND THE DESIGNS. PARKS, EXERCISE, ENJOYING LIFE WAS A SECONDARY, IF NOT TERTIARY THOUGHT, THE PRIMARY IDEA WAS TO HAVE AS MANY PEOPLE IN HOUSES AS CLOSE TO THE FACTORIES AS POSSIBLE.

AFTER THE INDUSTRIAL REVOLUTION THE POPULATION CONTINUED TO GROW SO COUNCIL ESTATES WERE CREATED, SUCH AS LONGHILL IN HULL. THESE PLACES WERE GENERATED TO HOUSE THE EVER GROWING POPULATION, HOWEVER, YET AGAIN, THE LIVELIHOODS OF THESE PEOPLE WERE STILL NOT CONSIDERED AS THERE WAS NO SENSE OF PLACE, AND PARKS WERE ESSENTIALLY NONE EXISTENT APART FROM A FEW PATCHES OF GRASS. THERE WAS NO OUTLET FOR THE PUBLIC WHICH CAN HAVE NEGATIVE EFFECTS ON A PERSON.

AS THE 21ST CENTURY HAS APPROACHED, PEOPLE HAVE BECOME MORE UNDERSTANDING OF THE AFFECTS THAT HAVING LOCAL PARK SPACE, TOWN CENTRES, EDUCATIONAL FACILITIES, AND EXERCISE FACILITIES WITHIN WALKING

DISTANCE WILL HAVE ON THEIR LIVES. RESEARCH STUDIES HAVE BEEN DEVISED TO FURTHER UNDERSTAND HOW FAR PEOPLE ARE WILLING TO WALK THE SHOPS, PARKS AND TRANSPORT, IN ORDER TO BE ABLE TO DESIGN A COMMUNITY THAT WILL FLOURISH.

THEREFORE, FOR A COMMUNITY TO DO WELL IT IS ESSENTIAL THAT ALL THE AMENITIES ARE WITHIN WALKING DISTANCE.

#### BENEFITS TO RESIDENTS

THIS WILL GIVE THE COMMUNITY A PLATFORM TO LIVE A HEALTHIER, MORE ENJOYABLE LIFE AS THERE WOULD BE BETTER PLACES TO WORK AND PLAY, LESS TRAFFIC CONGESTION, AND LESS DRIVING AS THE STREET DESIGN AND FACILITY LAYOUT WOULD MAKE IT MORE APPEALING TO WALK. THE PROPERTY VALUES WOULD INCREASE. DUE TO THE NEW GREENERY AND PARKS PEOPLE WOULD BE LESS STRESSED. NOW THAT THE TOWN CENTRE IS WITHIN WALKING DISTANCE FOR ALL OF THE RESIDENTS, THIS WILL OPEN UP MORE OPPORTUNITIES FOR SOCIAL INTERACTION, THUS CREATING A STRONGER SENSE OF COMMUNITY. THERE WOULD BE MORE FREEDOM FOR THE CHILDREN, ELDERLY AND THE POOR AS EDUCATIONAL FACILITIES, RECREATIONAL FACILITIES AND POSSIBLE JOB PROSPECTS ARE WITHIN WALKING DISTANCE FROM HOME. AS THE STREETS WILL BE SAFER, PARENTS MAY BE MORE WILLING TO LET THEIR CHILDREN WALK AND RIDE THEIR BIKES TO SCHOOL ALLOWING THEM TO EXERCISE DAILY. AND FINALLY A STRONGER SENSE OF PLACE AND COMMUNITY IDENTITY WILL BE GENERATED DUE TO THE UNIQUE ARCHITECTURE AND RELATIONSHIP WITH NATURE.

### **SHARED SPACE**

#### DEFINITION

ALL STREET USERS MOVING AND INTERACTING IN THEIR USE OF SPACE, ON THE BASIS OF INFORMAL SOCIAL PROTOCOLS AND NEGOTIATION.

#### INTRODUCTION

FOR THE LAST CENTURY VEHICLES HAVE BECOME THE OWNERS OF THE STREETS, ROARING DOWN THE ROADS, MAKING THEM LESS PEDESTRIAN FRIENDLY WHICH IN TURN HAS MADE THEM LESS DESIRABLE TO WALK DOWN.

THERE HAS BEEN A RECENT MOVEMENT THROUGHOUT EUROPE, TO RE-ESTABLISH THE STREETS TO THE PEDESTRIANS, AND LESS FOR THE VEHICLES. THE IDEOLOGY IS CALLED 'SHARED SPACE'. THIS DESIGN METHOD AIMS AT CREATING AN ENVIRONMENT THAT THE WALKER AND THE VEHICULAR DRIVER CAN USE AT THE SAME TIME, WITHOUT DEFINED SPACES, INTEGRATING THE PEDESTRIAN MOVEMENT AND TRAFFIC MOVEMENT, WITHOUT THE LOSS OF SAFETY, MOBILITY OR ACCESSIBILITY, TO PROMOTE URBAN QUALITY AND CIVILITY. THE EU HAS RECOGNIZED THE SIGNIFICANCE OF THE ISSUE FOR ECONOMIC AND SOCIAL COHESION THROUGH ITS INTERREG PROGRAMME, WHICH FUNDS RESEARCH INTO SHARED SPACE. IN THE UK, CABE AND THE PRINCE'S FOUNDATION HAVE MADE STREETSCAPE A KEY PRIORITY FOR RESEARCH.

THERE IS CONCERN ABOUT THE DECLINE IN STREETSCAPES WITH VARIOUS ISSUES SURROUNDING IT. SAFETY IS A BIG TOPIC; THE NUMBER OF ROAD SIDE CASUALTIES IS SLOWLY FALLING, HOWEVER, THE PEDESTRIAN: DRIVE RATION IS NOT AN EVEN SPLIT. THE PEDESTRIAN CASUALTIES STILL REMAIN HIGH. PEOPLE WHO LIVE IN POORER NEIGHBOURHOODS TEND TO BE WORSE AFFECTED. THE WAY IN WHICH PEOPLE ARE TRAVELLING HAS BECOME AN ISSUE RECENTLY AS THE UK HAS THE LOWEST LEVELS OF PEDESTRIANS AND 'BICYCLE SHARE' IN EUROPE AS PEOPLE BECOME MORE CAR DEPENDANT.

CABE HAVE RECENTLY COMPILED A LOT OF RESEARCH THAT HEAVILY SUPPORTS THE NOTION THAT GOOD STREET DESIGN HELPS REGENERATION OF TOWNS.

IT HAS ALSO BEEN NOTED THAT THE STANDARDISATION ASSOCIATED WITH REGULATED TRAFFIC MEASURES REDUCES THE QUALITIES OF A PLACE THAT ATTRACTS INVESTORS.

RECENT STUDY ON STREETSCAPES POINTS TO THE VEHICLE BEING THE BAD GUY, CAUSING NUMEROUS PROBLEMS, AS WELL AS THE 'STREET CLUTTER' THAT CAUSE ALL SORTS OF AESTHETIC ISSUES. HOWEVER, THE AESTHETICS OF A STREET ARE NOT THE MAIN ISSUE. THERE IS A DEEPER PROBLEM THAT STREET CLUTTER CAN HAVE UPON ROAD USERS PSYCHOLOGICALLY, AND ON THE RELATIONSHIPS BETWEEN DRIVERS, CYCLISTS, PEDESTRIANS AND OTHER USERS OF PUBLIC SPACE.

THERE IS A GROWING UNDERSTANDING OF HOW BEHAVIOURAL AND ENVIRONMENTAL PSYCHOLOGY IS NOW CREATING A STIR IN STREET DESIGN.

#### HISTORY OF THE STREETSCAPE

1868 - LONDON FIRST INSTALLED A PEDESTRIAN CROSSING. THE FIRST ATTEMPT TO RATIONALISE TRAFFIC, BEFORE THE INVENTION OF THE CAR.

1905 — Eugene Henard published proposals for organising circulation around Palace de L'opera in Paris, outlining the first concepts for roundabouts and underpasses and separating the pedestrian from the horse-drawn traffic.

1933 - CIAM'S ATHENS CHARTER RECOMMENDS STRICT SEPARATION OF TRAFFIC AND CIVIC SPACES.

1963 - Colin Buchanan wrote a report arguing that the two main purposes of the street - movement and social interaction - would need strict segregation as traffic volume increased.

THE MINISTRY OF TRANSPORT IN THE UK SUPPORTED THIS DOCUMENT AND ADOPTED THE PRINCIPLE, ENCOURAGING SEGREGATION PLACING BARRIERS AND SIGNALS WHEREVER SEEN FIT.

THIS CONCEPT HAS CONTINUED TO BE UPHELD BY THE DEPARTMENT OF TRANSPORT UP UNTIL THE CURRENT DAY.

SHARED SPACE IS NOT A NEW CONCEPT. THROUGHOUT ANY MEDITERRANEAN HILL TOWN OR MARKET SQUARE, THE STREET DESIGN ISN'T LIMITING, SHARING THE SPACE BETWEEN PEDESTRIANS AND VEHICLES. THE UK HAS VARIOUS VILLAGES, CAMP SITES, COUNTRY ROADS WHERE SHARED SPACE PREVAILS.

In the 1960's, a man by the name of Joost Vahl, amongst others, started to experiment with space in the Netherlands. The aim of the experiments was to reduce the impact that traffic has upon the qualities of social space.

VAHL STRIPPED THE STREETS BARE OF ALL THE STREET CLUTTER THAT DOMINATED THE SPACE; SIGNS, ROAD MARKINGS, KERBS, BARRIERS. PLAYFUL, CREATIVE SPACES WERE IMPLEMENTED INTO THE STREETSCAPE THAT WAS RICH IN LOCAL REFERENCES AND INTRIGUE. THE RESULTS GAINED A LOT OF SUPPORT ACROSS EUROPE; NEW VARIATIONS OF THE ORIGINAL CONCEPT WERE SPAWNED.

1976 — THE DUTCH GOVERNMENT FORMALISED THE CONCEPT AS 'WOONERF' (YARD FOR LIVING). HOWEVER, THIS WAS DOOMED FROM THE VERY START, AS THE VERY IDEA OF VAHL'S SHARED SPACE WAS TO TAKE AWAY THE FORMALITIES THAT HAD BECOME ACCUSTOM TO THE STREET DESIGN, AND CREATE A MORE UNRULY ENVIRONMENT THAT GOVERNED EVERYDAY SOCIAL BEHAVIOUR.

#### HANS MONDERMAN

HANS MONDERMAN, A TRAFFIC ENGINEER FROM FRIESLAND, DISCOVERED THIS FREE STREETSCAPE CONCEPT AS THE INTEREST IN WOONERF FADED. HE IS THE PERSON THAT BROUGHT SHARED SPACE THROUGH INTO THE 21ST CENTURY.

MONDERMAN BEGAN TO EXPERIMENT WITH THE STREET LAYOUT BY EMPHASISING THE HISTORY OF THE SITE AND

CONTEXT OF EACH AREA. HE THEN STARTED BY DELIBERATELY REMOVING ANY FORM OF TRAFFIC CALMING MEASURES SUCH AS SIGNS, RAMPS AND CHICANES. THE RESULTS WERE INCREDIBLE. THE TRAFFIC SPEEDS REDUCED BY OVER 40%. OUDEHASKE WAS THE FIRST OF MANY PLACES THAT HE EXPERIMENTED WITH, 'MAKING A VILLAGE MORE LIKE A VILLAGE'.

FURTHER SUCCESSFUL SCHEMES FOLLOWED, AND THE RESULTS RECORDED KEPT COMING BACK SAYING THAT THE TRAFFIC SPEEDS AND SEVERITY IN ACCIDENTS WERE MUCH LOWER.

1992 — MAKKINGA IS THE FIRST TOWN TO REMOVE ALL STANDARD ROAD SIGN, SIGNAL AND ROAD MARKING. THE FOCUS SHIFTED TO THE IDEA OF PLACE, BY FOCUSING MORE ON LANDMARKS, PREFERRED PEDESTRIAN ROUTES OF THE COMMUNITY, EMPHASISING LINKS BETWEEN THE AMENITIES, AND EVEN A CANOPY OF A COPPER BEECH.

MONDERMAN HAD ESTABLISHED THAT ROAD SAFETY MEASURES WEREN'T ESSENTIAL REQUIREMENTS FOR A STREET TO BE SAFE FOR BOTH THE PEDESTRIAN AND THE DRIVER. THIS INDICATED A STRONG LINK BETWEEN SAFE TRAFFIC MOVEMENT AND DISTINCTIVE SPECIAL QUALITY OF STREETS AND SPACE. AS TIME MOVED ON, BIGGER JUNCTIONS WERE ADDRESSED SUCH AS THE MARKET TOWN OF WOLVEGA IN FRIESLAND AND OOSTERWOLDE.

THE CONCEPT WAS QUERIED, THINKING PEOPLE THAT WERE FOREIGN TO THE AREA WOULDN'T RESPOND LIKE THE LOCALS DO. HOWEVER, MORE RECENT SCHEMES SUGGEST THAT THIS CONCEPT CAN BE APPLIED TO NOT JUST VILLAGES AND TOWNS, BUT TO CITY CENTRES AS WELL.

#### RECENT EXAMPLES

In the city of Drachten there is a busy junction where all means of transport intersect. In 2002 this junction was remodelled. The research of it after showed an improvement on capacity, reduction in delays and accidents, and a change in the relationship between all street users. This is now a lively public space. Local and foreigner alike were all able to use the junction appropriately to the special indications. This test model has helped change how many government officials think of how we should design street layouts.

IT CAN BE COMPARED TO ICE SKATING; YOU CAN MOVE WITH THE DYNAMIC OF THE SPACE, ADOPTING A WIDE RANGE OF ANTICIPATORY AND COMMUNICATIVE SKILLS. DUE TO THE UNPREDICTABILITY OF PEOPLE IT IS HARD TO MODEL, HOWEVER THE DRACHTEN EXAMPLE PROVES THAT IT WORKS.

SHARED SPACE IS NOW A WIDELY ACCEPTED DESIGN PRINCIPLE IN SCANDINAVIA WITH OTHER COUNTRIES SUCH AS FRANCE, DENMARK, AND SWEDEN ALL ADOPTING THE NOTION AND DEVELOPING UPON IT.

#### IN THE UK

THE UK IS SLOW ON THE UPTAKE; HOWEVER THIS CONCEPT IS FINALLY STARTING TO APPEAR IN MORE AND MORE URBAN DESIGN SCHEMES. THE GROWING RECOGNITION OF THE IMPORTANCE OF THE PUBLIC REALM TO SOCIAL WELLBEING AND ECONOMIC VITALITY, COMBINED WITH POPULAR DISSATISFACTION WITH THE STATE OF BRITISH STREETS, HAS PROMPTED STRONG INTEREST FROM LOCAL AUTHORITIES, DEVELOPERS AND COMMUNITY GROUPS. THE UK IS A LONG WAY FROM JOINING THE RANKS OF SAY SWEDEN BUT THERE ARE SIGNS NOW THAT IT IS DEVELOPING MUCH FASTER IN THE UK THAN IN ANY OTHER EUROPEAN COUNTRY.

THIS CONCEPT HAS BEEN EMPLOYED INTO STREET DESIGN BY A LOT OF BRITISH COUNCILS, HOWEVER THE MOST SIGNIFICANT IMPROVEMENT HAVE BEEN SEEN WITHIN CITY CENTRES.

THE SEVEN DIALS IN LONDON SHOWS HOW THIS CONCEPT CAN BE APPLIED AND WORKS SEAMLESSLY IN REDUCING CONGESTION AND THE NUMBER OF SERIOUS INJURIES RECORDED HAS DRAMATICALLY DECREASED SINCE IT WAS REDESIGNED 16 YEARS AGO.

#### SUMMARY

IF TOWN AND CITY SCAPES IN THE UK ARE TO BECOME A MORE ENJOYABLE PLACE TO BE THERE NEEDS TO BE A TRANSITION FROM VEHCULAR DOMINANCE, TO GIVE WAY TO PEDESTRIANS. SHARED SPACE IS A PROVEN DESIGN METHOD THAT HAS ENABLE THE RESIDENTS OF AREAS TO FEEL BETTER ABOUT WHERE THEY LIVE AND REDUCES A LOT OF PROBLEMS THAT HAVE OCCURED DUE TO BARRIORS THAT HAVE BEEN APPLIED TO ROAD USERS. GIVING THE TOWN BACK TO THE PEOPLE.

### **NATURE**

#### INTRODUCTION

THROUGHOUT THE EXISTENCE OF MAN, NATURE HAS SURROUNDED US. IT HAS BEEN AN INSPIRATION FOR NEW TECHNOLOGIES AND FOR THE ARTS; IT HAS BEEN A PLACE OF WORK AND PLAY. HOWEVER, AS SOCIETY HAS DEVELOPED AND THE POPULATION EXPANDED THIS RELATIONSHIP WE HAVE HAD WITH NATURE HAS DETERIORATED DUE TO THE DEVELOPMENT OF TOWNS AND CITIES. IN THE UK, WHEN THE INDUSTRIAL REVOLUTION HAPPENED (IN THE 1800'S), NEW TOWNS AND CITIES WERE CREATED WITH THE THOUGHT OF WORK IN MIND. THOUSANDS OF PEOPLE WERE CRAMMED INTO TERRACED HOUSING SURROUNDING THE FACTORIES TO KEEP THE WORKERS CLOSE TO WORK, PARKS WERE NOT CONSIDERED VALUABLE AS THEY DIDN'T BRING AN INCOME INTO THE FACTORY OWNERS POCKETS. LITTLE TIME WAS SPENT CONSIDERING THE EFFECTS REMOVING NATURE FROM THE WORKING AND LIVING ENVIRONMENT WOULD HAVE ON THE HUMAN PSYCHE.

#### HISTORY

Towards the end of the 1990's there was a study carried out at the University of Illinois. Frances Kuo, director of the Landscape and Human Health interviewed female residents in the Robert Taylor Homes, a massive housing project on the South Side of Chicago. Kuo and her colleagues compared women randomly assigned to various apartments. Some had a view of nothing but concrete sprawl, the blacktop of parking lots and basketball courts. Others looked out on grassy courtyards filled with trees and flowerbeds.

THE TWO GROUPS WERE BOTH CHALLENGED TO COMPLETE VARIOUS TASKS. THE RESULTS SHOWED THAT THE WOMEN THAT LIVED IN A FLAT FACING GREENERY HAD SIGNIFICANT IMPROVEMENTS IN EVERY CATEGORY.

KUO ARGUED THAT LOOKING AT A TREE "REFRESHES THE ABILITY TO CONCENTRATE"; THEREFORE THE RESIDENTS CAN COPE WITH LIFE PROBLEMS BETTER.

IN 2008 MARC BERMAN LED A STUDY AT THE UNIVERSITY OF MICHIGAN. HE OUTFITTED THE UNDERGRADUATES AT THE UNIVERSITY WITH GPS RECEIVERS. SOME OF THE STUDENTS WALKED THROUGH AND ARBORETUM WHILST OTHERS WALKED AROUND THE STREETS OF ANN ARBOR.

THE SUBJECTS WERE THEN PUT THROUGH DIFFERENT PSYCHOLOGICAL TESTS TO SEE HOW THEY WOULD DEAL WITH STRESS. IT SHOWED THAT THE PEOPLE WHO HAD BEEN SURROUNDED BY NATURE WERE MUCH MORE ATTENTIVE AND RETAINED MORE INFORMATION.

MOST PARKS THAT ARE CREATED NOW WITHIN THE CITY ARE GENERALLY A BIG PATCH OF GRASS WITH SPOTS OF TREES.
THIS IS BETTER THAN NO PARK AT ALL; HOWEVER, THERE IS INFORMATION TO SUPPORT HAVING VARIOUS PLANT LIFE
IS HEAVILY LINKED TO A HIGHER SENSE OF WELL-BEING.

IN A 2007 PAPER, RICHARD FULLER, AN ECOLOGIST AT THE UNIVERSITY OF QUEENSLAND, TESTED PEOPLE WHO SPENT TIME IN A BIO DIVERSE PARK AND A PARK WITH LITTLE BIODIVERSITY. THE LATTER SCORED LOWER, PROVING THAT GREENERY WITHIN OUR LIVING AND WORKING ENVIRONMENT IS VITAL TO A HEALTHY BALANCED LIFESTYLE.

PETER KAHN, ASSOCIATE PROFESSOR IN THE DEPARTMENT OF PSYCHOLOGY AND DIRECTOR OF THE HUMAN INTERACTION WITH NATURE AND TECHNOLOGICAL SYSTEMS (HINTS) LAB CONDUCTED AN EXPERIMENT ON THE REDUCTIONS OF STRESS VIA NATURE.

HE GAVE PARTICIPANTS A SERIES OF MATH TESTS THEN PLACED AN EQUAL AMOUNT OF PEOPLE IN FRONT OF A WINDOW LOOKING ONTO A PARK, A PLASMA SCREEN WITH A PHOTO OF A PARK ON IT, AND A BLANK WALL. THE RESULTS WERE INTERESTING AS THE PEOPLE IN FRONT OF THE WINDOW REDUCED THEIR LEVELS OF STRESS THE QUICKEST; HOWEVER THE RESULTS FOR THE OTHER TWO GROUPS CAME BACK THE SAME. THIS SHOWED THAT THE ONLY REMEDY FOR STRESS IS TO BE IMMERSED IN NATURE. A REPLICA WILL NOT DO.

#### HEALTH AND NATURE

IT IS AMAZING WHAT EFFECTS NATURE CAN HAVE ON A PERSON. RESEARCHERS FROM TWO SCOTTISH UNIVERSITIES HAVE IDENTIFIED THAT GREENERY NEAR OUR HOMES CAN REDUCE THE HEALTH GAP BETWEEN THE RICH AND POOR.

SOCIAL INEQUALITIES, LIFESTYLES, DIET AND ACCESS TO MEDICAL CARE GENERALLY REFLECT HEALTH INEQUALITIES. ERGO PEOPLE LIVING IN POORER CONDITIONS HAVE WORSE HEALTH AND DIE YOUNGER THAN THOSE WHO HAVE A BIT OF MONEY. HOWEVER, IT HAS BEEN FOUND THAT LIVING NEARER A PARK/WOODLAND/OPEN SPACE CAN REDUCE THESE INEQUALITIES NO MATTER WHAT BACKGROUND YOU HAVE.

EVEN SMALL PARKS IN THE HEART OF OUR CITIES CAN PROTECT US FROM STROKES AND HEART DISEASE, PERHAPS BY CUTTING STRESS OR BOOSTING EXERCISE.

OVER 366,000 PEOPLE WHO DIED BETWEEN 2001-2005 WERE ANALYSED. IT WAS FOUND THAT LIVING CLOSE TO GREEN SPACES MADE A BIG DIFFERENCE TO THE RISK OF FATAL DISEASES.

TWO OF THE MAIN PROBLEMS IT SEEMED TO PREVENT WERE HEART DISEASE AND STROKES SUPPORTING THE IDEA THAT GREENERY ENCOURAGES ACTIVE LIFESTYLES.

DR RICHARD MITCHELL FROM GLASGOW UNIVERSITY, AND DR FRANK POPHAM, FROM THE UNIVERSITY OF ST ANDREWS FURTHER WENT ON TO DISCOVER THAT GREENERY CAN ALSO HELP REDUCE BLOOD PRESSURE AND STRESS LEVELS, PERHAPS EVEN PROMOTING FASTER HEALING AFTER SURGERY.

THEY WROTE: "THE IMPLICATIONS OF THIS STUDY ARE CLEAR - ENVIRONMENTS THAT PROMOTE GOOD HEALTH MIGHT BE CRUCIAL IN THE FIGHT TO REDUCE HEALTH INEQUALITIES."

DAVID TIBBATTS, FROM GREENSPACE SAID;

"THE STUDY CONFIRMS WHAT WE HAVE BEEN SAYING FOR MANY YEARS -PARKS ARE IMPORTANT FOR HEALTH AND EVERYONE SHOULD HAVE ACCESS TO HIGH QUALITY, BEAUTIFUL AND VIBRANT GREEN SPACES."

Unfortunately, despite the benefits green spaces bring to communities, our research has shown a decline in park services that has spread across more than 30 years which is why parks need to be redesigned into the community and city centres.

### TREES

#### INTRODUCTION

THE UK WAS ONCE COVERED BY FOREST HOWEVER, AFTER MILLENNIA OF HUMAN INTERVENTION THIS HAS REDUCED TO SMALL POCKETS OF WOODLAND.

PLANTING WOODLANDS IS A GREAT WAY TO CREATE A HEALTHY SPACE AS TREES WILL ABSORB LOTS OF CO2 AND PRODUCE LOTS OF O2. THEY ARE ALSO FANTASTIC AT ABSORBING TOXINS IN THE AIR SO PEOPLE WHO ARE SURROUNDED BY TREES WILL FEEL BETTER AND WILL BE LESS LIKELY TO SUFFER FROM PROBLEMS SUCH AS ASTHMA.

Professor Barbara Maher from the Lancaster Environment Centre said her research had shown that roadside trees improve health by protecting people from pollution.

"Urban and roadside trees may be an under-used resource both in terms of acting as natural 'pollution monitors' and actively screening people, especially, children and the already ill, from the damaging health effects of particle pollution," she said.

NOT ONLY DO TREES PREVENT ILL HEALTH, THEY ARE GREAT AT BUFFERING UNDESIRABLE WEATHER CONDITIONS SUCH AS WIND AND RAIN DUE TO THE THICK TRUNKS AND DENSE CANOPIES, BUT NOT TOO DENSE AS TO NOT LET SUNLIGHT SHINE THROUGH CREATING A DAPPLED EFFECT.

PLANTING TREES WILL ALSO HELP THE ENVIRONMENTAL STABILITY. TREES HELP TO REDUCE SOIL EROSION BY PROVIDING SHELTER FROM THE WIND, INCREASING SOIL STRENGTH AND INCREASING WATER INFILTRATION INTO THE SOIL. THIS IS ESPECIALLY WORTHWHILE IF THE AREA ENDURES LOTS OF RUN-OFF WATER OR EXISTS IN FLOOD PLAINS.

#### EXERCISE

17

RICKETS IS A PROBLEM CAUSED BY NOT GETTING ENOUGH VITAMIN D; VITAMIN D IS PRODUCED THROUGH A PROCESS THAT HAPPENS WHEN ONE IS IN CONTACT WITH SUNLIGHT.

RICKETS, A DISEASE THAT WAS A THING OF THE PAST UNTIL RECENT YEARS. CHILDREN ARE STAYING INDOORS MORE AND MORE NOW-A-DAYS DUE TO THE INCREASING POPULARITY IN COMPUTER GAMES AND WATCHING TV PROGRAMS, THEY ARE ALSO GOING OUT A LOT LESS TO PLAY DUE TO THE DWINDLING INTERACTIVE OUTDOOR SPACE TO EXPLORE AND ENJOY.

THE BRITISH DIETETIC ASSOCIATION FOUND 82% OF PAEDIATRIC DIETICIANS' HAD SEEN AN INCREASE IN THE PAST FIVE YEARS AND A STUDY IN SOUTHAMPTON SHOWED 20% OF CHILDREN HAVE SIGNS OF IT.

"CHILDREN ARE NOT PLAYING OUTDOORS AS MUCH AS THEY USED TO AND ALSO PEOPLE ARE SLAPPING ON SUN-LOTION A LOT MORE.

JACQUI LOWDON, OF THE BDA

A SPORT THAT IS GAINING MOMENTUM AMONGST CHILDREN AND TEENAGERS IS TREE CLIMBING. IT IS AN ACTIVITY THAT USED TO BE COMMONPLACE; HOWEVER, AS PARENTS HAVE BECOME MORE OVER PROTECTIVE IT IS SOMETHING THAT HAPPENS LESS OFTEN NOW.

Steve Butler, a tree-surgeon from Newbury, Berks. A father of two and a member of a family which has been clambering trees for five generations, believes that this could distract bored teenagers.

"You have to know your trees...Some can be very brittle, while others are good for climbing."

Oak, sycamore, ash and apple are classed as good climbing trees, while willows, horse chestnuts and poplars should be avoided.

"CLIMBING TREES IS NATURAL. YOU GRAB ONE BRANCH AFTER ANOTHER AND CLAMBER UP LIKE TARZAN. BUT YOU DO HAVE TO BE 100 PER CENT CONFIDENT."

HE SAID "I'VE DONE PARTIES WHERE THE KIDS HAVE DISCOVERED THAT THEY ABSOLUTELY LOVE CLIMBING TREES...IT'S A REALLY EXHILARATING EXPERIENCE AND IT GIVES THEM A GREAT SENSE OF ACHIEVEMENT."

### **EXERCISE**

#### INTRODUCTION

HEALTH IS BECOMING A MAJOR ISSUE AMONGST THE BRITISH POPULATION WITH CURRENTLY 25% OF THE BRITISH PUBLIC BEING OBESE, AND THE WAY THINGS ARE GOING, BY 2030 HALF OF THE BRITISH POPULATION WILL BE OBESE.

TO LIVE A HEALTHY FULFILLING LIFESTYLE IT IS ESSENTIAL FOR EXERCISE FACILITIES TO BE PLACED IN AND AROUND EVERY COMMUNITY.

#### HOW MUCH EXERCISE TO DO

DURING THE DAY IT IS EASY TO GET ONE'S DAILY REQUIREMENTS OF PHYSICAL ACTIVITY IN, SO THERE IS NEVER REALLY AN EXCUSE.

#### CHILDREN AND YOUTH;

Should exercise for roughly an hour a day. This is because they are at critical points in their lives as their bodies are still developing. The exercises should help them achieve greater flexibility and strengthen their bones and muscles. This can be achieved through playing various sports games like rugby, football, walking instead of taking the bus or playing during breaks at school.

IT CAN BE DONE THROUGH FUN METHODS SUCH AS TREE CLIMBING OR GOING TO THE SWIMMING BATHS OR RIDING A BIKE IN THE COUNTRYSIDE. THIS IS TO HELP ESTABLISH EXERCISE AS A FUN ACTIVITY SO THEY KEEP AT IT AND DON'T JUST THINK OF EXERCISE AS P.E. WHERE PEOPLE TEND TO PICK UP THEIR DISLIKE FOR EXERCISE.

#### ADULTS:

Should do 30 minutes of intense exercise a day (breaking into a sweat). This doesn't have to be done in one go, this time could be broken down into 3 small sessions of 10 minutes.

THIS COULD BE ACHIEVED THROUGH PLAYING A SPORT, GOING TO THE GYM, RUNNING, SWIMMING, TAKING THE STAIRS INSTEAD OF A LIFT; EVEN DIY COULD HELP ACHIEVE THE AMOUNT OF EXERCISE FOR THE DAY.

#### ELDERLY:

SHOULD TRY AND EXERCISE HALF AN HOUR A DAY, TO HELP KEEP THE HEART HEALTHY AS THE ELDERLY ARE MORE AT RISK TO HEART DISEASE, AND TO KEEP FLEXIBLE AS IT HAS BEEN PROVEN TO REDUCE THE PROBLEMS OF ARTHRITIS.

#### OBESE:

PEOPLE WHO SUFFER FROM OBESITY NEED TO EXERCISE 60-90 MINUTES AT LEAST TO BE ABLE TO HAVE ANY IMPACT ON THEIR WEIGHT.

#### ACTIVE WITH KIDS

IF ANY CHILD IS TO HAVE A HEALTHY LIFE THE PARENTS NEED TO UNDERSTAND THEY HAVE TO INTRODUCE THEIR CHILD(REN) TO WHAT IS OUT THERE. BY REINFORCING EXERCISE AS A GOOD THING AND GETTING ONE'S SELF INVOLVED WITH THE ACTIVITIES WITH THEM THE CHILD WILL GROW STRONG AFFILIATIONS WITH IT AND ALL BEING WELL TAKE THIS STRONG CONNECTION THROUGH INTO ADULTHOOD.

#### PARKS

CHILDREN LOVE TO PLAY IN PARKS THAT THEY CAN RUN AROUND IN AND EXPLORE, AN OPEN PATCH OF GRASS IS A START BUT IN THE BRITISH CLIMATE WOULD BE UTILISED VERY RARELY AS OPPOSED TO A WOODLAND PARK WHERE THERE WILL BE SHELTER FROM THE WEATHER CONDITION PROVIDED FROM THE CANOPIES, AND THE TRUNKS WILL REDUCE THE EFFECTS OF THE WIND.

A WELL DESIGNED PARK CAN GET PEOPLE TO WANT TO LEAVE THEIR HOMES AND USE IT, IF THE TREES AND CONTOURS CHANGE THROUGHOUT CHILDREN WILL BE MORE WILLING TO GO OUTSIDE, EXPLORE, AND PLAY AS THE AREA WILL CREATE INTEREST AND MYSTERY.

ADULTS WILL ALSO BE MORE WILLING TO LEAVE THEIR HOMES AND USE THE PARK IF IT IS CLOSE ENOUGH AND HAS BEEN WELL DESIGNED. AS OPPOSED TO THE HIDEOUS PATCHES OF GRASS THAT SEEM TO POPULATE MOST OF THE BRITISH HOUSING ESTATES, THAT DO NOTHING FOR THE RESIDENTS, APART FROM A FEW DAYS IN THE SUMMER TIME WHEN THE WEATHER IS NICE ENOUGH TO ENJOY.

#### SWIMMING

SWIMMING IS ARGUABLY THE BEST EXERCISE THAT ONE COULD POSSIBLY DO TO BECOME A HEALTHIER PERSON. IT HAS HUGE BENEFITS ON BOTH PHYSICAL AND MENTAL WELLBEING IF ONE IS TO SWIM ON A REGULAR BASIS.

SWIMMING OVER RECENT YEARS HAS BECOME A MORE POPULAR ACTIVITY TO TAKE PART IN SINCE BRITAIN WON MEDALS AT THE LAST OLYMPIC GAMES IN THIS SPORT. THIS IS A TREND THAT WILL HOPEFULLY KEEP ON GOING.

SWIMMING HAS SOME FANTASTIC BENEFITS:

- $\bullet$  30 minutes of swimming at a leisurely pace burns 200 + calories, making it just as effective as cycling or running.
- Due to the resistance of the water, swimming makes our bodies work harder, so the joint and muscles strength in the process.
- IT IS THE BEST EXERCISE TO WORK OUT EVERY MUSCLE IN YOUR BODY AS ONE'S WHOLE BODY IS SUBMERGED IN WATER.

- THE DENSITY OF THE WATER SUPPORTS OUR WEIGHT MAKING IT A GOOD EXERCISE FOR THE ELDERLY AND PREGNANT WOMEN WHO MAY BE SUFFERING FROM MOBILITY PROBLEMS
- REPORTS HAVE SHOWN THAT PEOPLE WHO SWIM SEE A SIGNIFICANT REDUCTION IN STRESS, ANGER, TENSION, DEPRESSION AND CONFUSION.
- TIME, A CONCERN FOR MOST PEOPLE, IS ANOTHER REASON WHY SWIMMING IS BRILLIANT, AS 30 MINUTES OF SWIMMING EQUATES TO 45 MINUTES OF SPORT ON LAND.
- SWIMMING WORKS ALMOST EVERY MUSCLE AND IT'S GREAT FOR THE HEART BECAUSE BLOOD NEEDS TO BE PUMPED RAPIDLY TO YOUR ARMS AND LEGS.
- SWIMMING FORCES YOU TO BREATHE DEEPLY AND RHYTHMICALLY WHICH GIVES YOUR LUNGS A BOOST MAKING IT A GREAT WAY TO KEEP THEM IN WORKING ORDER.

#### SUMMARY

A PLACE TO EXERCISE IS ESSENTIAL TO ENABLE A PERSON TO LIVE A HEALTHY LIFESTYLE. IT IS IMPORTANT TO HAVE THESE TYPES OF FACILITIES SUCH AS A SWIMMING BATHS, GYM, PARKS ETC. THEY NEED TO BE CLOSE TO THE COMMUNITIES IF THERE IS ANY HOPE OF SUSTAINING ANY SORT OF HEALTHY COMMUNITY.

REMEMBER, THE HEALTH BENEFITS OF PHYSICAL ACTIVITY ONLY LAST AS LONG AS YOU REMAIN ACTIVE. "YOU CAN'T STORE PHYSICAL ACTIVITY IN THE BANK," SAYS CAVILL. "IT HAS TO BE CURRENT AND REGULAR TO PROVIDE ANY HEALTH BENEFIT."

### **PARCOURSE**

#### INTRODUCTION

A PARCOURSE IS AN OUTDOOR TRAIL THAT HAS EXERCISE STATION ALONG THE ROUTE WHICH HAS BASIC EQUIPMENT TO HELP ONE PERFORM SIMPLE EXERCISES TO GIVE THE USERS A FULL BODY WORK OUT.

THE WORD 'PARCOURSE' IS DRIVEN FROM A MEDIEVAL LATIN WORD — PERCURSUS - LITERAL TRANSLATION IS "RUN-NING THROUGH".

#### HISTORY

THE HUMBLE BEGINNINGS OF THE PARCOURSE BEGAN IN ZURICH IN 1968 WHEN A SWISS ARCHITECT, ERWIN WECKERMANN INVENTED AND INTRODUCED THIS NEW CONCEPT TO THE ZURICH LANDSCAPE.

THROUGHOUT THE 70'S AND 80'S THIS NEW PHENOMENON BECAME INCREASINGLY POPULAR. HOWEVER, IN THE 1990'S, AS THE POPULARITY OF THE GYM AND FITNESS TRAINER TOOK HOLD, THE USE OF PARCOURSES DIMINISHED. YET, IN THE TEENIES, THIS CONCEPT OF OUTDOOR EXERCISE IS BECOMING, AGAIN, INCREASINGLY POPULAR FOR MANY REASONS.

#### THE BENEFITS

PARCOURSES ARE FOR A START OUTSIDE, BUT THEY ARE ALSO DESIGNED TO INTERACT WITH THE NATURAL ENVIRONMENT WHICH HAS PROVEN TO HAVE INCREDIBLE PHYSICAL AND PSYCHOLOGICAL EFFECTS ON A PERSON THAT USES A PARCOURSE.

#### PHYSICAL EFFECTS:

THE UNIVERSITY OF ESSEX RESEARCH DEPARTMENT HAVE DISCOVERED THAT WORKING OUTDOORS; ONE WILL BURN OFF A FIFTH MORE CALORIES.

BY EXERCISING OUTSIDE, NOT ONLY DOES YOUR BODY BURN ENERGY BECAUSE OF THE PHYSICAL EXERTION, BUT ALSO, THE BODY HAS TO STAY WARM IN COLD WET CLIMATES LIKE IN BRITAIN SO MUSCLES WILL CONTINUOUSLY CONTRACT AND RELAX TO SUSTAIN A THE CORE BODY TEMPERATURE.

A PERSON'S BALANCE WILL IMPROVE A LOT MORE WHEN RUNNING ALONG A PARCOURSE AS OPPOSED TO A TREAD MILL DUE TO THE UNEVEN SURFACES ENCOUNTED ALONG THE WAY. THIS WILL IN TURN HELP BURN MORE CALORIES AS DIFFERENT MUSCLES WILL BE USED TO KEEP THE BODY UPRIGHT

#### PSYCHOLOGICAL EFFECTS:

NOT ONLY DOES EXERCISING OUTSIDE HAVE PHYSICAL BENEFITS. FURTHERMORE, THE ENVIRONMENT THAT ONE IS EXERCISING IN HAS A HUGE EFFECT ON THE STATE OF MIND.

RECENTLY, UK RESEARCHERS HAVE REVEALED THAT NOT ONLY DOES EXERCISING IN THE OUTDOORS IMPROVE ONE'S MOOD; WITHIN THE FIRST 5 MINUTES THERE IS A VAST IMPROVEMENT IN ATTITUDE.

IN ADDITION, EXERCISING IN NATURE CAN HELP BUILD SELF ESTEEM AND EVEN IMPROVE ONE'S IMMUNE SYSTEM AS ONE WOULD BE INTERACTING WITH VARIOUS BACTERIA, AS OPPOSED TO BEING INSIDE IN A STERILE ENVIRONMENT WHICH HAS BEEN PROVEN TO CAUSE VARIOUS HEALTH PROBLEMS SUCH AS ASTHMA.

"EXERCISING IN NATURE LIFTS YOUR MOOD AND BOOSTS YOUR SELF-ESTEEM. IT ALSO HAS IMMUNISING PROPERTIES WHICH HELPS YOU DEAL WITH FUTURE CHALLENGES MORE EFFECTIVELY," SHE SAID.

"RESEARCH IMPLIES THIS IS TRUE REGARDLESS OF THE WEATHER CONDITIONS, WHERE YOU ARE, AND HOW LONG YOU EXERCISE OUTSIDE. EVEN A FIVE-MINUTE WALK OUTSIDE TO ESCAPE YOUR WORK CAN RE-ENERGISE YOU AND RESTORE YOUR MENTAL FATIGUE. THIS IS EVEN MORE IMPORTANT IN WINTER MONTHS WHEN DAYLIGHT HOURS ARE REDUCED."

DR JO BARTON

#### Cost

ONE OF THE GREATEST BENEFITS TO USING A PARCOURSE IS IT IS FREE! AS THE ECONOMY HAS FALLEN TO PIECES OVER THE PAST 4 YEARS, CHEAP AND CHEERFUL IS THE WAY FORWARD. ALL ONE HAS TO DO IS FOLLOW THE CIRCUIT AND WEAR THE RIGHT CLOTHING.

"No props or equipment are needed. It really is easy to join in...People don't even have to get in the car to go somewhere to exercise. It's just a case of wearing the right clothing — plenty of layers, a hat, gloves and the correct footwear — and getting outside to enjoy the fresh air, whatever the weather," she said.

JENNIE ANTELL, FROM SOMERSET OUTDOOR TRAINING COMPANY ECO FITNESS

### **EDUCATION**

#### INTRODUCTION

AS HEALTH HAS BECOME AN INCREASINGLY HOT TOPIC OF DISCUSSION AMONGST POLITICIANS, EVERY ASPECT OF LIFE HAS BEEN CONSIDERED AS TO HOW THE POPULATION HAS BECOME A CAPITAL OF OBESE PEOPLE WITH 15 MILLION OF THE POPULATION NOW LETTING THEMSELVES SUCCUMB TO THIS STATE OF HEALTH.

EDUCATION IS ONE WAY THAT HAS BEEN USED TO ASSESS THE POPULATION, AND IT HAS COME OUT WITH SOME VERY INTERESTING RESULTS.

#### More Education = Healthier person

THERE HAVE BEEN VARIOUS STUDIES CONDUCTED OVER THE LAST FEW YEARS TO UNDERSTAND HOW OBESITY HAS HAPPENED WHICH HAVE ALL COME BACK WITH SIMILAR RESULTS, FOR A HEALTHY LIFESTYLE, EDUCATION MATTERS. THE TYPE OF EDUCATION THAT IS OBTAINED DOESN'T REALLY MATTER, IT IS THE TIME THAT ONE SPENDS AT AN EDUCATION FACILITY THAT SEEMS TO DETERMINE HOW HEALTHY A PERSON WILL BE.

THE ROBERT WOOD JOHNSON FOUNDATION EXPRESSES IT THIS WAY:

"A LARGE BODY OF EVIDENCE STRONGLY - AND, WITH VERY RARE EXCEPTIONS, CONSISTENTLY - LINKS EDUCATION WITH HEALTH, EVEN WHEN OTHER FACTORS LIKE INCOME ARE TAKEN INTO ACCOUNT. BY "EDUCATION" WE MEAN EDUCATIONAL ATTAINMENT, OR THE YEARS OR LEVEL OF OVERALL SCHOOLING A PERSON HAS, RATHER THAN INSTRUCTION ON SPECIFIC HEALTH TOPICS LIKE HYGIENE, DIET OR EXERCISE."

THE STUDIES AROUND EDUCATION HAVE HIGHLIGHTED THAT PEOPLE ATTENDING AN EDUCATIONAL DISCIPLINE FOR LONGER ARE LIKELY TO LIVE LONGER, EAT HEALTHIER, AND EXERCISE ON A REGULAR BASIS. THIS HAS SHOWN TO HAVE KNOCK-ON EFFECTS WITH CHILDREN. IF A PARENT IS EXERCISING AND EATING HEALTHY FOOD THE CHILDREN ARE LIKELY TO PICK UP THESE GOOD ATTRIBUTES. THIS CAN BE SEEN EVEN WITHIN THE FIRST YEAR OF A BABY'S BIRTH, AS BABIES OF MORE EDUCATED MOTHERS ARE LESS LIKELY TO DIE BEFORE THE AGE OF 1.

#### HOW A GOOD EDUCATION HELPS

- 1. It can help improve health by increasing health knowledge and healthy behaviours.
- 2. A HIGH LEVEL OF ATTAINMENT LEADS TO BETTER EMPLOYMENT OPPORTUNITIES AND A HIGHER INCOME WHICH IS STRONGLY LINKED TO HEALTH.
- 3. EDUCATION IS LINKED TO PSYCHOLOGICAL FACTORS SUCH AS SOCIAL STANDING AND A SENSE OF CONTROL, WHICH ARE LINKED TO GOOD HEALTH.

A STRONGER SENSE OF CONTROL WILL HELP ONE BELIEVE THEY CONTROL THEIR OWN DESTINY, THEREFORE BEING MORE PROACTIVE ABOUT THEIR HEALTH.

IN 1999 A STUDY BY THE NATIONAL BUREAU OF ECONOMIC RESEARCH REPORTED THAT THE MORTALITY RATE OF PEOPLE BETWEEN THE AGES OF 25-64 WHO DIDN'T GO TO A HIGHER EDUCATION ESTABLISHMENT AFTER HIGH SCHOOL WAS MORE THAN DOUBLE THAN THAT OF THE PEOPLE THAT ATTENDED.

"Those with more years of schooling are less likely to smoke, to drink heavily, to be overweight or obese, or to use illegal drugs. Interestingly, the better educated report having tried illegal drugs more frequently, but they gave them up more readily."

#### INCOME

THE KNOCK ON EFFECTS OF STAYING IN EDUCATION AFTER HIGH SCHOOL WILL AFFECT ONE'S LIFE IN MORE WAYS THAN EXPECTED.

DURING THE SUMMER OF 2011 IN BRITAIN, UNEMPLOYMENT WAS HIGH, SO A STUDY WAS DONE TO ASSESS WHICH TYPES OF PEOPLE WERE ABLE TO GET A JOB AND WHICH WERE NOT.

IT TURNED OUT THAT THE NUMBER OF LOW-SKILLED WORKERS CLAIMING THE DOLE SINCE THE START OF THE RECESSION HAD RISEN EIGHT TIMES MORE THAN THE LEVEL FOR JOB SEEKERS WITH ADVANCED QUALIFICATIONS.

A WIDE-RANGING ANALYSIS OF JOBS AND UNEMPLOYMENT SINCE 2008 SHOWS THE NUMBER OF PEOPLE WITH LITTLE OR NO SKILLS CLAIMING JOBLESS BENEFITS ROSE BY 4.2 PERCENTAGE POINTS OVER THE PERIOD, COMPARED TO JUST 0.5 POINTS FOR HIGHLY-QUALIFIED INDIVIDUALS.

THE ONS SAID THAT PEOPLE WITH SKILLS SUCH AS DOCTORS AND NURSES, BY FAR, HAVE MORE CHANCE OF FINDING ANOTHER JOB THAN PEOPLE THAT WERE, SAY, CLEANERS.

EXPERIAN, A DATA ANALYST ORGANISATION, HAVE ALSO LOOKED INTO THE OBESITY PROBLEM AND FOUND THAT PEOPLE WITH HIGHER SALARIES AND ARE BETTER EDUCATED WERE MORE WILLING TO EAT HEALTHIER FOODS AND TAKE PART IN ROUTINE PHYSICAL ACTIVITY. WHEREAS PEOPLE WHO EARNED BELOW THE NATIONAL AVERAGE AND WERE LESS EDUCATED WERE SEEN TO HAVE MORE CHANCE OF BECOMING OBESE.

#### SUMMARY

AN EDUCATION IS AN INVALUABLE THING TO HAVE AS IT NOT ONLY HELPS ONE TO GET A BETTER JOB BUT CAN IMPACT HEAVILY ON ONE'S PHYSICAL HEALTH AND NOT JUST THE SALARY. EVERYBODY IN A COMMUNITY SHOULD HAVE THE CHANCE TO GO BACK TO EDUCATION TO RE-EDUCATE THEMSELVES TO ENABLE THEM TO FIND A BETTER CAREER, AND HOPEFULLY INSPIRE THEM TO LIVE HEALTHIER LIFESTYLES.

# BUILDING DESIGN

### SUNLIGHT

#### INTRODUCTION

WHENEVER YOU HEAR ABOUT THE EFFECTS SUNLIGHT HAS ON A PERSON'S BODY YOU MAY FIRST ASSOCIATE IT WITH SKIN CANCER, PREMATURE AGEING OR SUN SPOTS, HOWEVER, IT HAS BEEN DOCUMENTED THAT A LACK OF SUNLIGHT IS POTENTIALLY WORSE. REDUCING THE AMOUNT OF CONTACT FROM THE SUNLIGHT IS LINKED TO FERTILITY PROBLEMS, SEVERAL FORMS OF CANCER, GENERAL POOR HEALTH AND VARYING DEGREES OF DEPRESSION.

#### PROBLEM

SAD (SEASONAL AFFECTIVE DISORDER) IS A COMMON PROBLEM IN COUNTRIES THAT DON'T GET A LOT OF SUNLIGHT AND THE CYCLES WILL GENERALLY FOLLOW THE SEASONS, SO WINTER IN THE NORTHERN HEMISPHERE CAN BE BRUTAL WITH PEOPLE WHO ARE AFFECTED BY THIS DISORDER.

WITHIN MOST ANIMALS THERE IS A STRONG RELATIONSHIP WITH SUNLIGHT. THE SUN CONTROLS THEIR BEHAVIOUR TO SOME EXTENT; THESE RELATIONSHIPS ARE CALLED CIRCADIAN RHYTHMS. IN FINLAND PEOPLE COPULATE MORE IN THE SUMMER WHEN THE SUN SHINES FOR 20 HOURS A DAY, HOWEVER WITH THE REST OF SOCIETY, THE RELATIONSHIP ISN'T AS STRONG.

#### RESOLUTION

SEROTONIN IS A NEUROTRANSMITTER THAT IS TIED TO STATES OF WAKEFULNESS AND BEING IN A 'GOOD MOOD'. THE PINEAL GLAND IS RESPONSIBLE FOR THE RELEASE OF SEROTONIN.

SUNLIGHT IS VITAL TO A PERSON'S WELLBEING. WHEN THE SUN RAYS HIT THE SKIN THE PINEAL GLAND IN THE BRAIN IS STIMULATED. THIS ACTION CAUSES MORE SEROTONIN TO BE RELEASED. THE MORE SEROTONIN RELEASED, THE BETTER ONE WILL FEEL.

SUNLIGHT IS ALSO A GREAT SOURCE OF VITAMIN D, WHICH WILL HELP TO STRENGTHEN ONE'S BONES, MUSCLES AND INTERNAL SYSTEM.

"PEOPLE HAVE ARGUED WE LIVE OUR LIVES IN DIM DARK CAVES."
NEUROSCIENTIST PROF. RUSSELL FOSTER

THE AMOUNT OF SUNLIGHT THAT HITS ONE'S SKIN IS MEASURED IN LUX. WHEN YOU ARE OUTSIDE, EVEN ON A CLOUDY DAY IN LONDON ONE WILL BE GETTING 20,000-30,000 LUX. However, currently, houses are being produced with only 200-300 LUX possible of getting into the living space at any one time. This is a problem that needs to be addressed. Maybe this is why so many people that live in council houses are depressed and frustrated?

#### SUMMARY

NATURAL SUNLIGHT IS A GREAT ASSET THAT EVERYONE CAN UTILISE. IT IS A SHAME THAT, IN BRITAIN AT LEAST, DESIGN HAS BECOME MORE ABOUT THE BUILDING AND/OR MONEY AND LESS ABOUT THE USERS. THIS LINK NEEDS TO BE RE-ESTABLISHED IF A HEALTHY, MOTIVATIONAL ENVIRONMENT IS TO BE CREATED.

### **GREENERY**

#### INTRODUCTION

GREENERY IS SOMETHING THAT MOST OF SOCIETY HAS BECOME DETACHED FROM OVER THE LAST 200 YEARS. PLANTS ARE INCREDIBLY USEFUL FOR THE MENTAL STATE OF ONE'S HEALTH. THE IDEA THAT PLANTS CAN MAKE ONE FEEL GOOD HAS ONLY BEEN RESEARCHED OVER THE LAST FEW DECADES, AND ONLY NOW ARE WE STARTING TO UNDERSTAND THE IMPORTANCE OF WHAT NATURE CAN DO FOR US.

#### RESULTS

NATURE IS A BRILLIANT SOURCE THAT NEEDS TO BE TAPPED INTO. AS SOCIETY HAS BECOME MORE AND MORE MACHINE DEPENDANT, THE NOTION OF INTERACTING WITH NATURE HAS BECOME SOMEWHAT OF A DISTANT MEMORY. HOWEVER, THIS NEEDS TO BE CHANGED, AS WHAT A PLANT CAN DO FOR ONES MENTAL AND PHYSICAL STATE IS BY FAR MORE THAN WHAT ANY MACHINE CAN DO FOR ONE.

IT HAS BEEN DOCUMENTED THAT PEOPLE WHO WORK INDOORS WITH HOUSE PLANTS IN LINE OF VISION WILL COMPLETE TASKS 12% FASTER, AND THEY ARE ABLE TO CONCENTRATE MORE THAN PEOPLE WHO DON'T HAVE PLANTS IN THE ROOM. NOT ONLY DO PLANTS AID WITH CONCENTRATION, THEY ALSO HELP REDUCE BLOOD PRESSURE SIGNIFICANTLY, MAKING ONE FEEL A LOT LESS STRESSED AND HAPPIER.

STUDIES HAVE SHOWN THAT IF A CLASS OF STUDENTS ARE WORKING WITHIN AN ENVIRONMENT WITH PLANTS GROWING THERE THE ATTENTIVENESS INCREASES AS MUCH AS 70%.

The Royal College of Agriculture, Cirencester

SICK BUILDING SYNDROME THAT HAS PLAGUED OFFICES FOR DECADES HAS BEEN SEEN TO BE VASTLY REDUCED BY A QUARTER WHEN PLANTS ARE BROUGHT INTO THE VICINITY. FATIGUE, COUGHS, SORE THROATS AND OTHER COLD-RELATED ILLNESSES HAVE BEEN REDUCED BY MORE THAN 30% IN SOME CASES.

"PLANT-FILLED ROOMS CONTAIN 50-60% FEWER AIRBORNE MOULDS AND BACTERIA THAN ROOMS WITHOUT PLANTS" DR B.C. Wolverton of the Environmental Laboratory of the John C Stennis Space Centre in the US

#### Summary

GREENERY HAS TO BE BROUGHT BACK INTO THE WORKING ENVIRONMENT. A CONNECTION WITH NATURE IN THE UK SEEMS TO HAVE DISINTEGRATED EITHER THROUGH LACK OF UNDERSTANDING THE EFFECTS OR SIMPLY BECAUSE DEVELOPERS THINK IT'S A WASTE OF MONEY. THIS HAS LEAD TO WORKING ENVIRONMENTS THAT PEOPLE PHYSICALLY FEEL SICK IN. IF A HEALTHY COMMUNITY IS TO BE ACHIEVED PLANTS AND TREES SHOULD BE DESIGNED INTO THE WORKINGS OF A BUILDING.

### **CEILING HEIGHT**

#### INTRODUCTION

AS THE YEARS HAVE PASSED, DEVELOPERS HAVE BECOME MORE AND MORE PRECIOUS OVER WHAT MONEY THEY SPEND ON DEVELOPMENTS. EVERYTHING WITHIN A BUILDING HAS REDUCED IN SIZE, EVEN THE CEILING HEIGHTS IN ACCOMMODATION HAVE GOT LOWER. HOWEVER, IS THIS HAVING A NEGATIVE EFFECT ON THE USERS OF THE SPACE?

#### THE FACTS

RECENT STUDIES HAVE SHOWN THAT THE HEIGHT OF A CEILING CAN MAKE THE DIFFERENCE BETWEEN FEELING COMFORTABLE AND CONFINED. HOW A SPACE IS DESIGNED INFLUENCES OUR BRAINS, BODIES AND OUR BEHAVIOURS.

"WHEN DIMENSION BECOMES TOO SMALL THEN WE KNOW IT RANGES FROM THIS FEELING OF COMPRESSION THAT'S PALPABLE TO A FEELING OF STRESS AND AN IMPACT OF FUNCTION."

Neuroscientist, Dr. Eve Edelstein

TESTS HAVE BEEN CONDUCTED BY NEUROSCIENTISTS INVOLVING THE FEELINGS OF COMPRESSION AND OPENNESS. THE FINDINGS SHOWED THAT AS THE CEILING WAS HEIGHTENED, THIS HAS CAUSED THE SUBJECT'S BRAIN TO TRANSITINTO A MORE RELAXED STATE.

"When a person is in a space with a 10-foot ceiling, they will tend to think more freely, more abstractly," said Meyers-Levy. "They might process more abstract connections between objects in a room, whereas a person in a room with an 8-foot ceiling will be more likely to focus on specifics."

The height of a ceiling can cause the user discomfort or pleasure depending on how high (or low) it is. This can have huge effects on the users of say, an educational facility. The students will be able to perform at a higher rate if the ceilings are higher, allowing them to concentrate on their work and less on how the space makes them feel (Meyers-Levy, The Influence of Ceiling Height: The Effect of Priming on the Type of Processing People Use).

#### SUMMARY

IF A BUILDING IS TO BE SUCCESSFUL EVERYTHING NEEDS TO BE TAKEN INTO CONSIDERATION DEPENDING ON HOW YOU WANT THE USER TO FEEL. HOWEVER, FOR THE PURPOSE OF CREATING A BUILDING THAT ALLOWS THE MIND AND BODY TO BE HEALTHY, A HIGH CEILING IS REQUIRED, AS IT ALLOWS THE PERSON TO FEEL AT EASE AND BE ABLE TO CONCENTRATE ON THE TASK AT HAND.

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