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MASTER THESIS TITLE:

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Cycling Route between Milano and Piacenza

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ABSTRACT:

WITH THE RISE OR THE FOURTH INDUSTRIAL REVOLUTION THE HUMANS HAVE GREATLY ALTERED THE WAY WE CONNECT BETWEEN PEOPLE, BETWEEN THINGS, AND BETWEEN URBAN STRUCTURES. IN *THE URBAN VILLAGE* ALBERTO MAGNAGHI SUGGEST THAT CURRENTLY THE EUROPEAN CITIES ARE LINKED INTO NETWORKS WHICH BRINGS DOWN THE DOMINANCE OF THE METROPOLIS AND GIVES POWER BACK TO THE SURROUNDING SMALLER TOWNS. THIS PUTS THE ISSUE OF TRANSPORTATION IN THE CENTER. WHILE ON ONE HAND THE NEED FOR EFFICIENCY LET MACHINES OVERTAKE HUMANS, ON THE OTHER HAND, CARE FOR NATURE, ONE'S OWN HEALTH, QUALITY LEISURE AND SENSITIVITY TO LOCAL TRADITIONS CONSOLIDATE CYCLING AS PREFERRED MEANS OF TRANSPORTATION AND RECREATION.

Therefore, to adequately address these issues and needs, I would like to make a design proposition for a cycling route between Piacenza and Milano. It takes in consideration the territorial context on landscape scale: the urban connectivity, topography specifics, heritage background, biological and social context. It deals with these big scale topics by providing also human scale architectural solutions.

CURRENTLY SOME SHORT STRETCHES OF CYCLING PATHS EXIST, ESPECIALLY IN THE IMMEDIATE SURROUNDING OF THE VILLAGES. HOWEVER, THEY ARE NEITHER CONSISTENT NOR CONNECTED TO EACH OTHER. NEVERTHELESS, MANY PEOPLE TRAVEL WITH BIKES FROM TOWN TO TOWN, BUT MOST OF THE TIME THEY HAVE TO SHARE THE ROAD WITH CARS AND TRUCKS, WHICH IS DANGEROUS AND DEMANDING ON BOTH DRIVERS AND CYCLISTS. THE LATTER CAN NEITHER MOVE IN GROUPS, WHICH WOULD BE THE INTUITIONAL BEHAVIOR OF A TRAVELING PACK, NOR CAN THEY APPRECIATE THE LANDSCAPE. DESPITE THE EVIDENT ENTHUSIASM, THERE ARE NO PROPER SIGNS, REPAIR POINTS OR CONNECTIONS WITH THE RAILWAY INFRASTRUCTURE (WHICH IS THE MOST PREFERRED IN THE REGION). THE EXISTING CYCLIST PATHS ARE BARE ASPHALT INFRASTRUCTURES WITH LITTLE AESTHETICAL OR LEISURE VALUE, AND THEY MISS THE OPPORTUNITY TO RELATE TO THE BEAUTIFUL LANDSCAPE. THE PLANNED CONSTRUCTION OF THE CYCLING PATH CONNECTING VENEZIA AND TORINO WOULD IMPLY INCREASED FLOW OF CYCLISTS WHO ARE NOT LOCALS. DIFFERENT TACTICS NEED TO BE USED TO ATTRACT THEM AND THE CURRENT RESIDENTS. ALL THESE ISSUES SHOULD BE RESOLVED THROUGH CAREFUL TERRITORIAL PLANNING AND FINE DESIGN OF THE DETAILS.

MY PROPOSAL CONSISTS OF WELL-DEFINED CYCLING ROUTE WITH CONSISTENT ASPHALT FINISHING. WELL PROTECTED FROM HEAVY TRAFFIC BY PHYSICALLY SEPARATING THE TWO OR MARKING THE ROAD. ROW OF FRUIT AND NON-FRUIT TREES WOULD KEEP THE IDENTITY STABLE WHILE PROVIDING SHADOW, AND OCCASIONALLY A SMALL FRESH SNACK FOR THE BIKERS. THE ROAD IS WELL CONNECTED WITH THE SURROUNDING SETTLEMENTS AND LEAD STRAIGHT TO THE TRAIN STATIONS. THIS IS IMPORTANT AS PERCEIVED SAFETY PAYS AN EVEN MORE IMPORTANT ROLE THAN ACTUAL STATISTICAL SAFETY, WHICH MEANT THAT INEXPERIENCED USERS WOULD BE MUCH MORE INTERESTED IN GETTING ON THEIR BIKES IF THEN KNOW THAT AT ANY POINT THEY ARE NOT TOO FAR FROM A TRAIN ON WHICH THEY COULD GET ON AND REACH THEIR DESTINATION. FURTHERMORE, THERE ARE SIX RESTING STATIONS WHERE CYCLISTS COULD STOP, SIT, HAVE SOME WATER AND FIX THEIR BIKES. THESE STATIONS ALSO SERVE AS VIEWING PLATFORMS, WHICH SUBLIMINALLY REINFORCE THE CONNECTION WITH THE LANDSCAPE. LASTLY, AS THE ROUTE WOULD BE CONNECTED WITH THE ROGOREDO TRAIN STATION IN MILANO. THE ABANDONED CASCINA PALMA RIGHT NEXT TO IT WOULD PERFECTLY SERVE AS A CYCLIST HUB ONCE IT IS RETROFITTED. IT WOULD PROVIDE PLENTY OF PARKING SPOTS, AND HYGIENE SERVICES BUT ALSO A PROFESSIONAL REPAIR SHOP, A BIKE STORE, A RESTAURANT AND A BIG SQUARE WHICH COULD HOST GREATER EVENTS.

PROVIDED WITH ALL THIS INFRASTRUCTURE, I BELIEVE THAT THE CYCLING SPORT WOULD BECOME MUCH MORE ATTRACTIVE FOR MANY MORE PEOPLE. IT WILL PROMOTE SUSTAINABLE LIFE STYLE AND APPRECIATION FOR THE AGRICULTURAL HERITAGE OF LOMBARDY AND RECREATIONAL ACTIVITY FOR LOCALS AND TOURISTS ALIKE.

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INTRODUCTION:

INTERCITY BIKE TRAVELING IS LONG FORGOTTEN DESCENDENT OF THE ROMANTIC NOTION OF TRAVELLING WHICH IS SYNONYMOUS WITH EXPLORING. NOT SIMPLY CHANGING ONE'S POSITION FROM POINT A TO POINT B, BUT GOING OUTSIDE AUTONOMOUSLY AND THROUGH EXPOSING ONESELF TO THE ELEMENTS AND ENDURING THEM TO GET THE CHANCE OF GAINING KNOWLEDGE AND EXPERIENCE. TO DARE TO TRAVEL IS TO DARE TO CONFRONT THE UNKNOW OUTSIDE AND WITHIN ONESELF. TO DARE TO TRAVEL IS TO DARE TO CHANGE AND POSSIBLY GROW.

Thus it is not surprising that it is among solitary 'travellers' of the LAST CENTURY – NON-PROFESSIONAL TRAVELLERS OR SCIENTISTS, BUT TRAVELLERS ON IMPULSE OR FOR UNEXPECTED REASONS – THAT WE ARE MOST LIKELY TO FIND PROPHETIC EVOCATIONS OF SPACES IN WHICH NEITHER IDENTITY, NOR RELATIONS, NOR HISTORY REALLY MAKE ANY SENSE; SPACES IN WHICH SOLITUDE IS EXPERIENCED AS AN OVERBURDENING OR EMPTYING OF INDIVIDUALITY IN WHICH ONLY THE MOVEMENT OF THE FLEETING IMAGES ENABLES THE OBSERVER TO HYPOTHESIZE THE EXISTENCE OF A PAST AND GLIMPSE THE POSSIBILITY OF A FUTURE.¹

THE NON-PROFESSIONAL TRAVELLER IS THE TARGET USER OF THIS PROJECT, THE ONE WHO HAS NOT YET CROSSED THE SOUTHERN PLAINS OF LOMBARDY. HE IS THE ONE WHO HAS TO BE SEDUCED WITH CONVENIENT AND SLEEK DESIGN TO GET ON HIS NOT PERFECT BIKE AND THEN BE ALLURED TO RECOGNIZE THE BEAUTY AND HISTORICAL RICHNESS OF THE REGION.

¹ Augé, Marc. Non-Places: An Introduction to Supermodernity. p. 70

BUT HE DOESN'T HAVE TO BE PRACTICING INTERCITY CYCLING ONLY AS A LEISURE ACTIVITY. AS PREDICTED BY ALBERTO MAGNAGHI, METROPOLISES WILL SPREAD OUT TO BECOME REGIONAL NETWORKS OF TOWNS. THEN MORE SEGMENTED AND CONVENIENT FOR THE INDIVIDUAL TRANSPORTATION SYSTEMS WOULD BE IN DEMAND. CYCLING INFRASTRUCTURES WILL GAIN BIGGER SIGNIFICANCE. IT IS UP TO ARCHITECTS AND SIMILAR PROFESSIONALS TO CONVINCE AND EASY THIS TRANSITION WITH BEAUTIFUL AND FUNCTIONAL DESIGN.

FURTHERMORE, CREATIVE THINKING AND THE CONCEPT OF CREATIVE CLASS HAS BEEN STRESSED BY MULTIPLE THEORETICIANS. IT BRINGS ALONG A DESIRE FOR MORE EFFICIENT APPROACH TO LIFE WITHOUT SACRIFICING ITS BEAUTY. THUS, A PRACTICE LIKE CYCLING, WHICH CAN EASILY BE CATEGORIZED AS MULTIPLE SATISFIER ACCORDING TO THE ECONOMIST MANFRED MAX-NEEF. IT CONTAINS IN ITSELF RESPONSIBILITY TOWARDS NATURE, NO TOXIC POLLUTION AND CAR-RELATED MASSIVE INFRASTRUCTURES, PERSONAL FITNESS AND WELL-BEING, PERSONAL FINANCIAL RATIONALITY, BONDING EXPERIENCE BETWEEN PEOPLE AND WITH THE LANDSCAPE AS NATURE AND HERITAGE, SENSE OF AGENCY AND OTHERS.² IT EVEN BRINGS FORWARD THE ISSUE STRESSED BY ZYGMUNT BAUMANN OF EXCESSIVE INDEPENDENCE AND THE NEED FOR SOCIETY TO SHIFT TOWARDS NEGOTIATIVE INTERDEPENDENCE.

I CHOSE TO WORK ON THE SEGMENT BETWEEN MILAN AND PIACENZA (MILAN [MI] -LOMBARDY [LO] - PIACENZA [PI]) BECAUSE AS A STUDENT RESIDING IN PIACENZA AND BIKING ENTHUSIAST I CYCLED MANY TIMES IN THE REGION. IT STRUCK ME WITH ITS BEAUTY AND POTENTIAL BUT ALSO UNDERDEVELOPED CYCLING INFRASTRUCTURE AND THE INADEQUATE RISKS A CYCLIST HAS TO TAKE TO PRACTICE THE SPORT. THE WARM CLIMATE, THE FLAT TOPOGRAPHY AND THE HIGH URBAN DENSITY MAKES THIS PART OF LOMBARDY A VERY FAVORABLE BIKING DESTINATION. UNFORTUNATELY, HORTON, ROSEN AND COX VERY POIGNANTLY PUT IT: 'IN ITALY

² Horton, Dave; Rosen, Paul; and Cox, Peter eds. Cycling and Society. p. 6-7

CYCLING IS SIMULTANEOUSLY A NATION AROUSING A GREAT PASSION BUT A RELATIVELY UNCOMMON PRACTICE.'³

EFFECTS ON THE SOCIETY:

IN THE CREATIVE CITY CHARLES LANDRY POINT OUT THAT TO SUSTAIN ITSELF A CITY OR A REGION NEEDS TO BE ECONOMICALLY COMPETITIVE THROUGH THE ADOPTION OF CREATIVE INDUSTRIES. AS THESE MIGHT INDEED TOO SOON BE THE ONLY INDUSTRIES THAT EMPLOY PEOPLE THANKS TO THE UNDERGOING BOOM OF ROBOTIZATION, THIS WOULD REQUIRE CREATING THE ARCHITECTURE FOR SUCH CITIZENS TO THRIVE. HOWEVER IMAGINATIVE PEOPLE DO NOT SIMPLY MOVE IN A PLACE, HUMAN IMAGINATION CANNOT BE SIMPLY IMPORTED. IT HAS TO BE DAILY NOURISHED, AS EVEN THE MOST CREATIVE MIND WILL DULL DOWN IF SITUATED IN A STAGNANT AND STRESSFUL ENVIRONMENT.

A CITY (OR A REGION FOR THE PURPOSES OF THIS PROJECT) THAT ENCOURAGES PEOPLE TO WORK WITH THEIR IMAGINATION GOES WELL BEYOND THE URBAN ENGINEERING PARADIGM IN CITY-MAKING. THIS FOCUSES LARGELY ON HARD INFRASTRUCTURES SUCH AS ROADS, MONOTONOUS HOUSING DEVELOPMENTS, OR UNDISTINGUISHED OFFICE BUILDINGS, EVEN THOUGHT, LIKE FRENZIED BEES, ARCHITECTS TRY TO CREATE 'ICONIC' BUILDINGS. IT REQUIRES, INSTEAD, A COMBINATION OF BOTH HARD AND SOFT INFRASTRUCTURES. SOFT INFRASTRUCTURE INCLUDES PAYING ATTENTION TO HOW PEOPLE CAN MEET, EXCHANGE IDEAS AND NETWORK. IT SHIFTS THE FOCUS AND ENCOURAGES PHYSICAL DEVELOPMENT AND PLACE-MAKING OR URBAN DESIGN THAT FOSTER COMMUNICATION, BETWEEN PEOPLE. THESE PLACES HAVE HIGH LEVELS OF AMENITY AND QUALITY. IT PROMOTES 'THIRD

³ Horton, Dave; Rosen, Paul; and Cox, Peter eds. Cycling and Society. p. 6

SPACES', WHICH ARE NEITHER HOME NOR WORK WHERE PEOPLE CAN BE TOGETHER. THESE ARE LIKELY TO BE A COMBINATION OF QUIET PLACES AND MORE STIMULATION ONES WITHIN A SETTING WHERE THERE IS GREENERY AND GREAT ATTENTION TO AESTHETICS.⁴

RICHARD FLORIDA ALSO AGREES WITH THE NEED FOR EMPHASIS ON ACTIVE RECREATIONAL RATHER THAT PASSIVE CONSUMERIST INFRASTRUCTURE:

The physical attractions that most cities focus on building – sports stadiums, freeways, urban malls, and tourism-and-entertainment districts that resemble theme parks – are irrelevant, insufficient, or actually unattractive to many Greative Class people. What they look for in communities are abundant high-quality experiences, an openness to diversity of all kinds, and above all else the opportunity to validate their identities as creative people.⁵

The NEED TO RECONNECTING WITH THE LANDSCAPE IN NOT A WHIMSICAL ROMANTICAL NOTION THAT EXITS TO PUSH POST CARDS. IT HAS SERIOUS IMPLICATIONS ON BOTH LOCAL CITIZENS AND TOURISTS. THE FORMER NEED TO REESTABLISH THIS RELATIONSHIP IN ORDER TO REINVENT THEIR ROLE IN THE GLOBAL WORLD. THEY NEED TO BE AWARE ON A PHYSICAL LEVEL HOW THEIR HOME PLAYS AND HAD PLAYED A ROLE IN THE MAKING OF THE CONTEMPORARY WORLD. THE IRRIGATION CANALS OF LOMBARDY, THE PRODUCTION OF GRAIN AND THE CIVILIZATIONAL ADVANTAGES THE LOCALS HAD DUE TO THIS UNIQUE COMBINATION OF TECHNOLOGY AND NATURAL LANDSCAPE KEEPS AFFECTING THE REGION TO THIS DAY. HOWEVER, READING THIS JUST ON PAPER CANNOT GIVE GOOD SCOPE OF UNDERSTANDING. AND THIS IS

⁴ Landry, Charles. The Creative City: A Toolkit for Urban Innovations. p. xxii

⁵ Florida, Richard. Cities and the Creative Class. p. 35

JUST A SMALL PIECE OF THE HISTORICAL LAYER EMBEDDER IN THE LANDSCAPE OF LOMBARDY. ACTUALLY TRAVELLING THROUGH THE WITH MIND FOCUSED ON THE SURROUNDINGS PROVIDE ONE WITH GREAT AGENCY AND THUS THE ABILITY TO CREATIVELY OPERATE IN HIS SURROUNDINGS. IT ALLOWS HIM TO THINK BIG. FURTHERMORE IT ALLOWS HIM TO CONNECT WITH THE PEOPLE WHO LIVE IN THE REGION BY LEARNING ABOUT THEIR ENVIRONMENT. AS CHARLES LANDRY EXPLAINS:

IN THE LATTER [MULTI-GULTURALISM]. WE ACKNOWLEDGE AND EVEN CELEBRATE DIFFERENCE; YET IT OFTEN LEADS TO PARALLEL LIVES. IN THE FORMER [GREATIVE GITY]. WE ASK INSTEAD: WHAT DO WE SHARE AND WHAT CAN WE DO TOGETHER? THE FOCUS IS ON DIVERSITY ADVANTAGE RATHER THAN ITS PROBLEMS SINCE IF THE POSSIBLE DIFFICULTIES OF MANAGING DIVERSITY ARE OVERCOME. INNOVATION POTENTIAL AND THIS INSIGHTS INGREASE. REQUIRES GREATER CULTURAL LITERACY. THF UNDERSTANDING OF HOW DIFFERENT CULTURES WORK AND THE ABILITY TO LOOK AT THE WORLD THROUGH AN INTER-CULTURAL LENS. GREAT CITIES MANAGE THE ART OF LIVING TOGETHER WELL. 6

IN THIS LINE OF THINKING WE COULD ALSO DRAW THE BENEFIT FOR THE TOURING CYCLISTS. AS THEY TRAVEL THROUGH THE RATHER FOREIGN REGION THEY POSSIBLY DISCOVER AN ALTERNATIVE WAY OF STRUCTURING SOCIETY. THEY INEVITABLY PROJECT THEMSELVES IN THE NEWLY REVILED SCENARIOS. THEY GET TO PRACTICE INTERNALLY HOW WOULD THEY FUNCTION IN THIS LOCAL SOCIETIES, AND BY DOING SO ENRICH THEIR SOCIAL FLEXIBILITY. THIS OF COURSE IS ONLY POSSIBLE WHEN THE MODE OF TRANSPORTATION IS SLOWED DOWN TO THE POINT WHERE HUMAN FACES AND IDENTITY SYMBOLS REGAIN THEIR SHAPES CONTRARY TO THE FIGURELESS BLURS ONE USUALLY EXPERIENCES FROM THE CAR, BUS, OR TRAIN. A CYCLING TRAVELLER GETS

⁶ Landry, Charles. The Creative City: A Toolkit for Urban Innovations. p. xix

TO REALLY STOP AND EXPERIENCE THE FOOD, LANGUAGE AND CUSTOMS OF EVEN THE SMALLEST VILLAGES. HE GETS TO SOAK UP THE CULTURE OF THE ROAD. AND THE REVERSE IS ALSO TRUE, THE TRAVELLER IS NOT JUST AN ENTITY PASSING THROUGH POSSIBLY ENRICHING THE ECONOMY, BUT ALSO A BRINGER OF ALTERNATIVE CULTURE AS HE HIMSELF CAN BE RECOGNIZED BY THE LOCALS. THIS NEW SPACE IS NO LONGER AN ALIENATED NON-PLACE BUT ONE WHERE HUMAN SYMBOLS AND TRACES CAN BE RECOGNIZED. IT TURNS INTO A CREATIVE MILIEU WHERE RICH CREATIVE CLASS CAN THRIVE.

LANDSCAPE AS HERITAGE:

AT THE CURRENT SITUATION A VERY INSIGNIFICANT PORTION OF PEOPLE WHO PASS THROUGH LOMBARDY CAN TRULY APPRECIATE ITS HERITAGE. RIDING ON THE HIGH WAY OR ON THE FAST TRAIN, WE CATCH JUST GLIMPSES OF THE LANDSCAPE. A CHAOTIC MESS OF A COLLAGE OF THE FIELDS, VILLAGES, AND CASCINAS. THE FAST TRANSPORTATION SYSTEMS DO EASY COMMUNICATION BETWEEN CITIES, BUT UNFORTUNATELY THEY HAVE BEEN DISPLACING THE SLOWER ONES. THUS WE ARE STUCK WITH THESE NON-PLACE INFRASTRUCTURES, AS MARC AUGE PUTS IT. THEY ERODE THE CONNECTION WITH THE LANDSCAPE AS THEY COVER ITS IDENTITY WITH PRACTICALITY AND DO NOT BOTHER THE INDIVIDUAL WITH ITS SPECIFIC HISTORY AND CHARACTER.

The cycling route aims to provide an alternative to this state. There has to be an infrastructure that allows for travelers to slowly pass through the lands and sense its identity, its history and find his own relation to it. As he slowly cycles and each curve and bump on the road is affecting him; as the sun heats him, the trees protect him, and the wind pushes him all these elements become of personal significance to him. He learns how and when the fields are cultivated as the smells of soil fertilizer and blossoming crops could draw or repent him. He LEARNS THE NAMES OF THE SMALLER SETTLEMENTS ALONGSIDE AS THESE ARE THE PLACES WHERE FOOD AND TRANSPORTATION ARE PROVIDED.

FINALLY, PLACE BECOMES NECESSARILY HISTORICAL FROM THE MOMENT WHEN -COMBINING IDENTITY WITH RELATIONS - IT IS DEFINED A MINIMAL STABILITY.⁷

This personal relationship is reached thanks to the effect of human brain to blur the boundaries between the physical autonomy of the individual and his body parts (legs, arms, skin) and the inanimate tool with which one operates in the world. Thus, Matt Seaton Rightfully draws our attention to the fact that many bikers (including myself) report that they recognize their bikes as more than machines – as friends. The 'magical' thrill that one gets from cycling – nearly a conversation with a silent friend creates the necessary ambience for identity making of the Landscape.⁸

UNDERSTANDING CYCLING IN BULLET POINTS:

CYCLING IS A WELL-ESTABLISHED SPORT WITH RICH HISTORY. HOWEVER, THE AIM OF THIS WORK IS TO ESTABLISH WHO CYCLES, HOW THEY CYCLE AND WHY THEY CYCLE IN ORDER TO PRODUCE AN ATTRACTIVE DESIGN FOR BOTH EXPERIENCED BIKERS AND BEGINNERS.

HORTON, ROSEN AND COX SYNTHESIZE 5 TYPES OF CYCLING:

⁷ Auge, Marc. Non-Places: An Intruduction to Supermodernity. p. 44

⁸ Seaton, Matt. On Your Bike! : The Complete Guide to Cycling. p. 5-6

- RACING CYCLING
- <u>UTILITY AND COMMUTING CYCLING</u>
- LEISURE CYCLING
- CYCLE MESSENGERS
- UNUSUAL TECHNOLOGIES

This project, nevertheless focusses mostly on the first, second and third of these, as they make up the bulk of the population. It should be understood that when talking about racing cycling, the emphasis falls on people who perceive it as a great hobby of theirs rather than actual winners of Tour de France. Only the commuters of these three groups would prefer to cycle out of a group. This sport could and should be used to create group bonding experiences. Last thing to note is that of course the last two, messengers and unusual technologies are excluded, simply they are not the focus.

WHEN IT COMES TO THE ROAD INFRASTRUCTURE THERE FOUR MAIN CASES THAT ARE RECOGNIZED:

- SHARROWS SHARED ROADS THAT HAVE PAINTED SIGNS THAT SHOW THAT BOTH CARS AND BIKES ARE ALLOWED BUT CYCLISTS HAVE THE ADVANTAGE
- BIKE LANES A DEDICATED STRIP OF THE CAR ROAD JUST FOR CYCLIST; ONLY PAINT IS USED TO INDICATE THIS
- Separated Bike Paths a dedicated strip of the car road just for cyclist; physical barrier separates the cars from the cyclists

STANDALONE PATHS - CYCLING ROADS THAT ARE NOT CONNECTED TO ANY CAR ROAD⁹

They are arranged in increasing order of perceived safety in relation to cars. And although no one can deny the superiority of the standalone paths for their safety and aesthetical qualities an important note must be made here: in order motor vehicles and bikes to coexist happily a healthy amount of mixing is necessary. This allows the two groups to learn how to behave with each other on the road and promotes cycling to the people reliant on cars.

THE LAST THING THAT SHOULD BE LISTED IS THE EFFECT OF SPORT ON THE INDIVIDUAL. RECENTLY IT HAS BEEN BECOMING MORE AND MORE EVIDENT THE BENEFITS OF SPORTS. HOWEVER NOT ALL SPORTS ARE CREATED EQUAL. THERE ARE SEVERAL CHARACTERISTICS THAT MAKE A CERTAIN SPORT MORE BENEFICIAL:

- TRAINING VARIOUS MUSCLE GROUPS
- PRACTICED OUTDOORS IN THE SUNSHINE
- PRACTICED AMIDST NATURAL SURROUNDINGS (AMIDST GRASS, TREES, ROCK, SCENERIES THAT GATER TO OUR EVOLUTIONARY ACQUAINTANCE WITH NATURE)
- PRACTICED WITH EVER ALTERNATING ENVIRONMENT (NOT REPETITIVE SCENERIES)
- PRACTICED WITH ANOTHER PERSON/PERSONS

When a sport checks all the above, this means that it is truly worth the time, as it stimulates the body and brain in multiple aspects. Once again, the term Multiple Satisfier could be applied to intercity cycling as it could check most of

⁹ Furth, Peter. 'Bicycling Infrastructure for Mass Cycling'. City Cycling. p. 135

THE BOXES: THE FIRST ONE COULD BE DEBATED AND THE LAST ONE IS A MATTER OF PERSONAL CHOICE.

THE CYCLING ROUTE:

Space, as frequentation of places rather than a place, stems in effect from a double movement: the traveller's movement, of course, but also a parallel movement of the landscapes which he catches only in partial glimpses, a series of 'snapshots' piled hurriedly into his memory and, literally, recomposed in the account he gives of them, the sequencing of slides in the commentary he imposes on his entourage when he returns.¹⁰

INSPIRED BY THE WORDS OF MARC AUGÉ, THE AIM OF THE CYCLING PATH IS TO PROVIDE COMMUTERS AND LEISURE CYCLIST WITH CONSISTENT AND AESTHETICALLY PLEASING FOR THE LITTLE IT IS INFRASTRUCTURE. IT IS ASPHALTED IN ALL ITS PARTS. IT STRIVES TO ACCOMMODATE FOR TWO CYCLISTS RIDING NEXT TO EACH OTHER SO THAT THE SPORT CAN BE EXPERIENCED AS A GROUP ACTIVITY WITH EASE.

The current state of the infrastructure provides scattered and inconsistent stretches of cycling paths as extensions of some of the more ambitious settlements. However, as they are not connected to each other and even basic signs lack, it is impossible for unexperienced or overly ambitious cyclist to make a smooth journey between Milan and Piacenza. The new proposal addresses this issue by connecting not only these two cities but also includes the settlements that are close by. Thus, it creates a tree-like network.

¹⁰ Augé, Marc. Non-Places: An Introduction to Supermodernity. p. 69

The stem (about 68km) of this 'tree' (about 105km) is a negotiation between the need to keep proximity to the train stations but also avoiding the urban tissues which would increase the risk of collisions with vehicles or pedestrians. Furthermore to completely work as a landscape-oriented infrastructure the cycling road must be kept away from the trainline and the highway as much as possible as the latter create noise pollution, chemical pollution and obstruct the view. They draw away from the attention of the bikers and thus the experience is brought down to constant paying attention to the traffic.

The NETWORK IS EITHER UTILIZING EXISTING BIKE ROUTES, REDESIGNING EXISTING SMALL AND NOT VERY BUSY CAR ROADS, OR CUTS INTO MEANDERING STANDALONE PATHS THROUGH THE FIELDS. IT HAS BEEN OF GREATER IMPORTANCE TO RESPECT THE EXISTING AGRICULTURAL GRID AS A MAIN FEATURE OF LOMBARDY'S HERITAGE. THIS STANDALONE PATH IS 2,6M WIDE TO ACCOMMODATE FOR FASTER AND MORE SOCIAL EXPERIENCE. THESE PATHS MAKE ABOUT 1/3 OR 36KM OF THE NETWORK.

Where the route is joining a small car road the initial solution would be to create Sharrows in both directions and leave about 1m-wide lane where bikers have the advantage, but if there are none the motor vehicles could use. The second stage would be to solidify the importance of the cyclist by adding accordingly Separated Bike Path which would allow for the adequate protection. But it would be better this investment to be made once the interest for the cycling route is well established. These segments make up about 51km of the network.

LASTLY ROWS OF THREES ARE TO BE PLANTED ALONG MOST SEGMENTS OF THE MAIN CYCLING ROUTE. THEY WOULD PROTECT THE BIKERS FROM WIND, RAIN, AND ESPECIALLY SUN HEAT. THIS USE OF VEGETATION CREATE A COHERENT EXPERIENCE AND UNITY OF THE MAIN ROAD. THE CYCLIST IS INTUITIVELY NUDGED TOWARDS THE RIGHT TURNS. MOST OF THESE TREES ARE TO BE FRUITFUL APPLE, PLUM, APRICOT. AT FIRST GLANCE THE PURPOSE OF THESE TREES IS TO PROVIDE THE CYCLIST WITH SOME EXTRA SNACK ON THE ROAD WHEN THE APPROPRIATE SEASON, AND THIS IS TRUE. NEVERTHELESS, NOT A SMALLER ROLE PLAYS THE FACT THAT THEY MARK WITH THE COLOURS OF THEIR LEAVES AND SMELL AND BLOSSOMING THE CHANGE OF THE SEASONS. SO, THEY CREATE A DRAW FOR THE CYCLIST TO REVISIT THE PATH AND KEEP REDISCOVERING IT IN THE DIFFERENT SEASON – THE SEASON OF THE BLOSSOMING APPLES; THE SEASON OF RIPENING APRICOTS, THE SEASON WHEN THE LEAVES OF THE PLUMS ARE FALLING. THUS, THE VARIETY OF SPECIES ALSO PLAYS A ROLE. THE NON-FRUIT TREES ARE SAVED FOR THE STRETCHES ALONG THE CAR ROADS WHERE THE POLLUTION WOULD POSE A RISK FOR CONSUMING THE FRUITS AND IT WOULD NOT BE ADVISABLE TO STOP AND STAND AROUND.

COMBINING ALL THESE ASPECT WITH THE FEATURES OF THE LANDSCAPE CREATES AN EXPERIENCE THAT IS A COMBINATION SEWED TOGETHER OF COHERENT STRETCHES THAT ARE INTERRUPTED BY SPECIAL POINTS. '*Strangely, it is a set of breaks and discontinuities in space that express continuity in time*''' to put it in Augé's words. Such breakdown of understanding of space through movement helps understanding the importance of the following two elements – the six resting stations and the cycling hub.

THE RESTING STATIONS:

There are six resting stations along the main route between Milano and Piacenza. They are equipped with bike-fixing tools – pump, screw driver, french wrench and others, which are attached with wire to the box so steal is prevented.

¹¹ Augé, Marc. Non-Places: An Introduction to Supermodernity. p. 49

THE RESTING STATION IS ALSO EQUIPPED WITH WATER DISPENSE AND SOLAR COLLECTOR WHICH COULD CHARGE A PHONE BATTERY AND OF COURSE A ROAD MAP. ALL THESE SERVICES ARE PLACED SO BASIC NEEDS OF TRAVELLER ARE MET WITHOUT MAKING EASIER THE CHALLENGE OF THE JOURNEY. THE RESTING STATION IS THERE TO MAKE SURE THAT IN CASE OF EMERGENCY EVERYTHING IS UNDER CONTROL.

ON THE OTHER HAND, IT SERVES THE AGENDA OF THE WHOLE PROJECT - TO RECONNECT THE CYCLISTS WITH THE LOMBARDY LANDSCAPE. THE SHELTERED PART IS NOW ON THE GROUND LEVEL PROTECTED UNDER AN 'ARTIFICIAL HILL' THAT INVITES/CHALLENGES THE CYCLIST TO CLIMB UP AND OBSERVE THE LANDSCAPE. LIKE THE REST OF THE EXPERIENCE IT IS A SMALL RISK THAT DARES THE TRAVELLER TO LEAVE HIS COMPORT ZONE - THE GROUND AND EXPLORE NEW HORIZONS. FROM ABOVE A BROADER VIEW IS REVEALED AND THE PATTERNS OF THE GRIDDED FIELDS ARE REVEALED.

The perforated cross pattern is paying homage to the prevailing in Lombardy cascinas' brickwork pattern. It is even present in cascina Palma (which would be discussed in the following chapter). The enlarged crosses are tilted so to create a sense of unease and dynamics. They are in contrast to the ones in cascina Palma which are straight and create a sense of stability, arrival and standing still.

THE CYCLING HUB - RETROFITTING CASCINA PALMA:

The ABANDONED CASCINA PALMA STANDS ABOUT 20 METERS SOUTH FROM ROGOREDO STATION, RIGHT AT THE BEGINNING/END OF THE CYCLING ROUTE. IT HAS LOST ITS PURPOSE IN THE MID19TH CENTURY WITH THE LAYING OF THE TRAIN LINE, WHICH DAMAGED THE AGRICULTURAL PROFILE OF THE AREA AND CREATED GOOD CONDITIONS FOR THE DEVELOPMENT OF THE CHEMICAL INDUSTRY. NOW UNFORTUNATELY IT IS OCCUPIED BY UNOFFICIAL INHABITANTS WITH VERY APPARENTLY CRIMINAL PRACTICES, SOMETHING PROVOKED BY THE PROXIMITY TO THE TRAIN STATION. NEVERTHELESS, THIS COULD BE EASILY REVERSED. THE CRIMINALITY COULD BE SUPPRESSED AND THE CASCINA COULD REGAIN ITS MEANINGFUL EXISTENCE IF RETROFITTED INTO A CYCLING HUB. IT WOULD PROVIDE COMMUTERS WITH A WONDERFUL PLACE TO KEEP THEIR BIKES SAFE AND SURROUND THEM WITH THE APPROPRIATE HIGH-VALUE AND LOVE FOR SUSTAINABILITY AND HERITAGE. CASCINA PALMA HAS THE TYPICAL BRICKWORK PATTERN, AND BEAUTIFUL COLUMNS AND ARCHES. INTERCITY BIKERS WOULD FIND IT TO BE AN APPROPRIATE POINT TO START/FINISH THEIR ADVENTURE OF DISCOVERING THE LOMBARDIAN LANDSCAPE.

CASCINA PALMA USED TO HAVE SEVERAL BUILDINGS WHICH ARE ARRANGED INTO AN 8-SHAPE. UNFORTUNATELY, RECENTLY SEVERAL OF THEM HAD BEEN REMOVED. THIS PROJECT SUGGESTS KEEPING WHAT IS STILL THERE AND REBUILDING NEW ONES ON THE PLACES OF THE REMOVED ONES. THEIR VOLUMES AND DIMENSIONS ARE TO BE KEPT AND THE BRICK TEXTURE IS EITHER RECREATED OR COMPLETELY REPLACED WITH SLEEK WHITE WALLS WHICH PAY HOMAGE TO THE BRICK PATTERN. THE BIGGER OF THE TWO ENCLOSED COURTYARDS EVEN HAS EXISTING PAVED SQUARE. THE EXISTING FLORA IS DENSER COMPARED TO THE ONE ACROSS FROM THE FENCE IN THE PARK, AS IT HAS NOT BEEN MAINTAINED.

AS CASCINA PALMA IS RIGHT NEXT TO DESIGNED BIKE ROUTE USING IT FOR A CYCLING HUB WAS SELF-EVIDENT. THIS IS ALSO AN OPPORTUNITY TO VISUALLY PRAISE AND PROMOTE BIKING BY LETTING BIG GLASS WALLS SHOWCASE THE USED BIKES. LETTING PEOPLE KNOW THAT AN ACTIVITY IS FREQUENTLY PRACTICED IS A VERY EFFICIENT STRATEGY TO CONVINCE THEM TO JOIN IN. PRESENTING AN ATTRACTIVE FACADE TOWARDS THE LINE WOULD BE A GREAT WAY TO ADVERTISE BIKING AND EXCITE THE NUMEROUS TRAIN PASSENGERS.

The buildings surround the smaller courtyard could be used for storage, of the bikes. They could contain up to 148 bikes and 17 extra size bikes. They also contain sanitary services – toilets and showers. A couple of dozen lockers inbuilt INTO THE RAMP COULD BE USED BY REGULAR MEMBERS. AROUND THE BIGGER COURTYARD WOULD BE ARRANGED THE SPACES OF MORE INTENSE ACTIVITY - BIKE MAINTENANCE WORKSHOP AND THE CAFE/RESTAURANT WITH THE UPSTAIRS STORE.

CASCINA PALMA COULD BECOME THE CYCLING HUB THAT ACCOMMODATED LOCAL GROUPS' EVENTS AND INSPIRE MORE AND MORE PEOPLE TO PARTICIPATE. AND THUS SAVE THE LIFE OF A BEAUTIFUL BUILDING AND RESOLVE THE CRIMINALITY ISSUE OF THE AREA.

CONCLUSION:

Celebrated playwright and author, George Bernard Shaw, was, like HG Wells, typical of the progressive intelligentsia of the time in his enthusiasm for cycling. Cycling was, he maintained, "a capital thing for a literary man". An energetic rider himself, he once bet a friend he could beat the train back to London from Dorking. Not only did he win the wager, the story goes, but he had time to reach each station on the way to greet his friend gloatingly on the platform. For Shaw and millions of like-minded souls, the bicycle was an integral part of a whole package of social progress: democracy, universal suffrage, women's rights, rational dress, recreation for the masses... Nothing symbolized human dynamism so well. Cycling had become synonymous with progress.¹²

To provide the people of Lombardy with an adequate cycling route is to provide them with an opportunity to reconnect with their heritage and share it with tourist from abroad; to an opportunity to rediscover each other's' stories; an opportunity

¹² Seaton, Matt. On Your Bike! : The Complete Guide to Cycling. p. 16

TO REEVALUATE THEIR OWN PHYSICAL AND MENTAL ABILITIES AND TO REDISCOVER A STRENGTH THEY PREVIOUSLY DID NOT SUSPECT. THIS INFRASTRUCTURE WOULD LET THEM GET ADDICTED TO A SPORT THAT IS AS BENEFICIAL TO THEIR HEALTH, AS TO THEIR SOCIETY AND ECONOMY.

BIBLIOGRAPHY:

- Augé, Marc. Non-Places: An Introduction to Supermodernity. (London: Verso, 1995).
- Florida, Richard. Cities and the Creative Class. (New York: Routledge, 2005).
- Forester, John. *Bicycle Transportation: A Handbook for Cycling Transportation Engineers (Second Edition).* (Cambridge, Massachusetts: MIT Press, 1994).
- Freire, Paulo. *Pedagogy of the Heart.* (New York: Continuum, 1997).
- Freire, Paulo. *Pedagogy of the Oppressed.* (New York: Continuum, 1970).
- Gehl, Jan. Life Between Buildings: Using Public Space. (London: Island Press, 2011).
- Harvey, David. *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change*. (Cambridge, Massachusetts: Blackwell Publishers, 1990).
- Horton, Dave; Rosen, Paul; and Cox, Peter eds. Cycling and Society. (Hampshire: Ashgate Publishing Limited, 2007).
- Illich, Ivan. After Deschooling, What? (London: Writers and Readers Publishing Co-Operative Ltd., 1974).
- Illich, Ivan. *Deschooling Society*. (London, New York: Marion Boyars, 1970).
- Illich, Ivan. Tools for Conviviality. (New York: Harper and Row ; London: Calder and Boyars, 1973).
- Landry, Charles. The Creative City: A Toolkit for Urban Innovations. (Abingdon, Oxon: Earthscan, 2000).
- Lefaivre, Liane and Tzoins, Alexander eds. *Critical Regionalism: Architecture and Identity in a Globalized World.* (Munich; London: Prestel, 2003).

- Magnaghi, Alberto. *The Urban Village: A Charter for Democracy and Sustainable Development in the City.* (London; New York: Zed Books, 2005).
- Massey, Doreen. For Space. (London: Sage Publications, 2005).
- McCarter, Robert ed. Pamphlet Architecture No. 12. (New York: Princeton Architectural Press, 1987).
- Navarra, Marco, In Walkabout City: The Re-written Landscape. A Strip Park between Caltagirone e Piazza Armerina. (Cannitello: Biblioteca del Cenide, 2001).
- Paul Oliver, Dwellings, (London: Phaidon, 2003).
- Pucher, John and Buehler, Ralph eds. *City Cycling*. (Cambridge, Massachusetts: MIT Press, 2012).
- Seaton, Matt. On Your Bike! : The Complete Guide to Cycling. (London: Black Dog Publishing, 2006).
- Turner, John F.C. and Fichter, Robert eds. Freedom to Build. (New York: The Macmillan Company, 1972).
- Zimmermann, Astrid ed. Constructing Landscape. Materials, Techniques, Structural Components (Basel: Birkhaeuser, 2015).