#### JONATHAN EDKINS: VUSA COLLABORATIVE **FINAL REPORT**

#### **EXECUTIVE SUMMARY**

03-11-2015



#### **ABSTRACT: HAPPITECTURE**

The concept of Happitecture establishes a gathering point for individuals and disciplines to promote collaborative contributions to informed, people-centred decision-making in architecture, urban design and planning.

The State of Bhutan pioneered an alternative assessment for the impact of government plans, based upon the precept that monitoring intangible elements like "citizen happiness" is more important than measuring fiscal gain. "Happinomics", incorporating a Gross National Happiness Index (GNH), resulted.

The Happitecture study suggests a method for direct broad public engagement in advance of planning, which allows for individuals to capture and immediately convey emotions and experiences reflecting the values and qualities of particular spaces and places at different times of the day and the year. This results in a Space Happiness Index and an unfiltered record based on multiple user interpretations and opinions. The outcome is a peoplegenerated planning brief, compiled over time, which replaces a sterile top-down brief based on snap surveys and generalised assumptions.

With assistance from the Urban Futures Centre, and using the DUT Campus as a "laboratory", the Ushahidi Crowdmaps App was developed to generate HappiMaps. Using this App, people decide individually whether spaces and places are "happy" "neutral" or "unhappy", and upload their reports accordingly. Videos and photos can be included. The accumulated records in the HappiMaps can be drilled down and analysed, generating clear patterns for unhappy areas requiring attention to improve quality, or finding happy spaces that need to be protected, replicated and expanded.

This study suggests that Happitecture and HappiMaps could form a starting point for people-centred planning and design.

PROPOSAL (INTENT)	PROBLEM STATEMENT	RESPONSE	
Investigate alternative methodology including broad participatory processes.	Planning methodology generally includes a top-down "stakeholder" participation process, which is either superficial and selective, or invites comment on a fully developed proposal within a system which appears designed to stifle opposition. Within the standard institutional procedures there is seldom any concerted effort to engage all users of buildings and spaces in meaningful processes to arriving at informed and agreed conceptual solutions.	This study considers and appraises various methods for engaging with those affected by spaces or buildings subject to planning processes, in a way which allows for more honest and emotional responses. The intent is to create an environment conducive to this, and to capture "transient" opinions about the qualities of particular spaces and places at different times of day and year, from a broad cross-section of users.  Crowd-mapping through the "HappiMaps" system successfully demonstrates a suitable procedure to meet this intent.	
To critique the existing DUT Masterplan.	The existing DUT masterplan was created through an expedited process, using traditional top-down methodologies, which did not engage stakeholders in discussion on user preferences and experiences, subjective and emotional aspects, specific local knowledge, and perceptions of the quality of spaces and places.	This study proposes a new starting point for reviewing the Masterplan.  The existing plan needs to be improved through more inputs from stakeholders which are gathered and recorded, and then applied within a more inclusive and peoplecentred campus planning process.	
Suggest a people- centred approach for planning spaces and places.	People involved with the campus spaces and places need to be included in the process of planning. They need to participate within a conducive environment in which they feel comfortable to express their emotional responses to spaces and places, and their dreams for the future. They need to feel they will be heard, and their inputs are recorded and properly considered.	This study proposes the application of various techniques and considerations for establishing a suitable environment for honest stakeholder participation.  In addition, the "HappiMaps" tool has been developed to capture and record inputs without filtering, which are visible to all and easy to retrieve and use during the planning processes.	
Propose a different, creative and innovative approach to campus design (and urban design)	The planning process needs to be de-mystified to enable more direct inputs and influences from a variety of professions as well as a range of individuals.	This study proposes that campus design & planning be undertaken through application of the accumulated inputs from the HappiMaps, within a game-playing process in which the decision-making goes beyond a top-down directive approach.	
	Planning tends to concentrate on expansion and creation of more buildings, rather than on first improving and maximising the quality and character and potential of existing places, spaces and buildings.  Quality must be seen as just as important as quantity.	Campus planning must take account of optimal use of existing spaces, places and buildings, before proposing expansion. The quality of existing spaces places and buildings must be improved or reinforced, based on responses drawn from the HappiMaps records. This must be done with reference to the identified principles for happy spaces which are listed in the study.	

Create a new starting point for campus design.

Current practice does not provide for campus masterplans to be driven from a subjective standpoint, which prioritises the romantic, mythical and metaphysical factors.

Under current practice, if surveys are carried out to inform designs, they represent only a fleeting snapshot, and are generally structured to capture records of objective issues rather than those of an emotional or metaphysical nature.

This study postulates that the Campus HappiMap should form the starting point for campus planning and design.

The accumulated real-time and historical opinions, emotional responses, feelings, and facts which are recorded on the mapping system are drilled down and analysed, to generate clear patterns for unhappy areas requiring attention to improve quality, or identifying happy spaces that need to be protected, replicated and expanded.

Promoting collaborative discussion on peopled space and the concept of "quality".

The idea of defining "quality" is central to Robert Persig's questions into our acceptance of classical philosophy and science. Students and practitioners from planning and design disciplines are not encouraged sufficiently to explore the contradictions and inconsistencies in traditional science, technology and accepted classical philosophy, which limits our ability to plan with the metaphysical in mind.

This exercise engaged seven volunteer architecture students as participants and drivers of discussions and investigations into the place of the metaphysical within the process of design. Weekly meetings took place over the study period. This was extremely productive and stimulated new thinking amongst the students as well as the author of this paper.

Insights, ideas and philosophies which each student brought to these discussions was invaluable, and indicative of the depth of untapped intellect resident in our younger generation, which should be applied within all solution seeking processes.

Conceptualising interview procedures which capture perceptions, emotions and dreams.

Surveys undertaken to inform masterplanning processes are generally dry, uninteresting, and poorly structured. Answers are predictable and responses are often just aligned with the norms represented in the question.

The students and author researched and brainstormed alternatives, to list a series of possible methodologies for changing the dynamics of the "clipboard survey". This resulted in fourteen suggested approaches, and culminated in the practice of some of these ideas at the "HappiMaps Event" held on campus in October 2015.

This work gives clues for different approaches for campus communications. This could form the basis for further study, involving students and staff from other disciplines, including Psychology, Planning, Communications and Journalism.

Formulating "Happitecture" as a discipline which guides the development of high quality spaces and buildings.

Architecture, Planning, Urban Design and other built environment disciplines each have their own boundaries and traditions, which restrict the outcomes of planning processes which should be open, collaborative and multi-disciplinary.

The concept of "Happitecture" as postulated in this study has caught the imagination and received support from all quarters. It forms a gathering point for disciplines which otherwise perceive themselves as under qualified to participate in design and planning. This study can be taken much further.

needs, aspirations and heritage of people.

Development of a Space Happiness Index.	Measurement of emotional responses is difficult, in comparison with the capture of empirical data and statistics.  It is easier to measure other elements, and so this important dimension is often neglected.	This study develops a Space Happiness Index which is generated by individuals, and enables each person to arrive at their own definitions and quantifications. Through the HappiMaps, people decide on their own whether spaces and places are "happy" "neutral" or "unhappy", and record them accordingly. This provides a record and an index which is unfiltered, and based on multiple interpretations and opinions, rather than imposing a single definition from the top down.
Relating the metaphysical to the physical as drivers of design.	Masterplanning processes in SA often and naturally neglect the metaphysical in favour of the physical drivers. This relates to prevailing societal values and traditions of classical science and philosophy.	This study records that Bhutan has established a different way of viewing the success or failure of policies and government actions, that is based on the precept that immeasurable elements may be more important than those which are more easily discerned.  The Paper opens the discussion on this aspect, but much more work is required in order to do justice to this concept.
Defining the relationship between Happitecture, Zen and Otherwhere.	There are interesting synergies between the concepts of "Happiness", "Zen" (as a component of the Art of Motorcycle Maintenance), and "Otherwhere" (as conceptualised thematically for the Union of International Architects 2014 Durban Conference).  These three elements are central to this study about a new approach to campus planning, city planning, architecture and urban design.	This paper draws on the synergies to arrive at the "Happitecture" concept. Further philosophical discussion needs to be opened up, to move out of the current conceptualisation of space, place and buildings as purely physical elements of the visible world, which require a technical approach to "resolve" through design and planning.  The metaphysical qualities of buildings and spaces are largely ignored in planning and design, leading to spaces and places which do not necessarily relate to the

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#### **FURTHER REFERENCE:**

www.vusacollaborative.com

www.happitecture.weebly.com

https://happitecture2.crowdmap.com

#### **OVERVIEW:**

#### RECAP OF THE HAPPITECTURE PROPOSAL

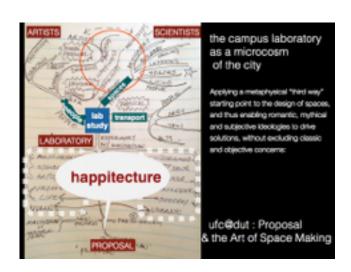
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#### AIMS OF THE STUDY

- Investigate a potential alternative methodology, including broad participatory processes, to critique the existing DUT Campus Masterplan, and suggest a people-centred approach for future planning of public and private spaces of the Campus, and subsequently the City.
- To propose a very different, creative and innovative approach to campus design (and Urban Design), as opposed to the traditional "master planning" processes currently followed.
- Applying a metaphysical "third way" starting point to the design of spaces, and thus enabling romantic, mythical and subjective ideologies to drive solutions, without excluding classic and objective concerns.

#### PROPOSED STUDY METHOD

- Facilitating collaborative discussion centred on peopled space and interactive building "quality" (including provocation of students / stakeholders to provide a definition for "quality".
- The methodology includes a proactive interview / Q&A procedure, to determine perceptions, emotions and dreams affecting the inter-relationships between buildings, spaces, systems and landscape, which would guide the realisation of "high quality" or "happy" spaces. Videos, poetry, theatre and games could be ways of establishing non-threatening communications designed to extract answers beyond the superficial.
- Using the results of these personal interactions, to initiate and formulate "Happitecture" as a
  discipline which guides development of quality spaces and buildings which relate to human
  responses beyond the physical realm and conventional constraints of science-based norms, and
  also taps into the mythical and subconscious realm.



#### BROAD PARTICIPATORY PROCESS: FORMULATION OF THE COMMUNICATIONS BRIEF

Formulation of the Communications Brief and Campaign is dependent on actions at three distinct operational levels on the DUT Campus:

#### A. DUT Management, Staff and Academics:

DUT Management needs to recognise that this intervention will probably set benchmarks for future democratic interactions. This is a positive intervention, but creates expectations that senior management at DUT need to endorse. Responsibility for establishing the necessary knowledge and understanding of the project at this level lies with UFC as the project sponsors.

There are roles for various DUT departments within the proposed communications strategy, both in the initial pilot phase, and on an ongoing basis. In collaboration with DUT, this includes academic and services departments, such as Communications, Architecture, Psychology, Electronics, Computers, Drama, Arts, Facilities Management, Maintenance and Planning. UFC have facilitated cross-disciplinary conversations and support, including participation in seminars and direct presentations to student classes.

#### **B. Students**

The DUT student body is represented in the pilot development stages, by seven students in the Architecture faculty, whom each submitted proposals for the UFC Blue Skies Call. They became known as the "Happitecture Students", and each participated wholeheartedly and proactively in the program, and in weekly meetings.

The seven students have been extensively involved, under a mentorship program, in interactions and projects aimed at establishing awareness and fresh concepts and ideas about urban and campus space, its physical and metaphysical properties, responses, and communications methodologies. This has included regular discussion meetings, formal projects and assignments, and feedback in various media.

The broader student body was called to participate directly through implementation of this Brief, in the campaign roll-out stages. This included the "Happimaps Event" and the Happimaps App. The SRC was apprised of the project, and supported its principles.

#### C. OTHER STAKEHOLDERS

The communication proposal includes interactions with additional stakeholders other than university management staff, academics and students. These other individuals and groupings include commuters through and around DUT, taxi and bus drivers, informal traders, casual workers in the vicinity, and businesses operating on or near the campus. These people need to be included in planning processes, and given a voice in informing decisions which affect their livelihood or other circumstances. Fruitful work has been undertaken by others under the UFC@DUT Blue Skies banner, results of which may be incorporated within the Happimaps capture and recording environment.

#### PEOPLE-CENTRED APPROACH

The Happitecture exploration suggests a more creative philosophical methodology for urban planning, urban design and city architecture in South Africa. It draws from an inclusive, people centred, cultural, emotional, intuitive, mythological and metaphysical approach, to shape and fashion shared public places which contribute positively to the happiness of people.

We learn most about past cultures and generations through their marks left in caves or in music or mythology passed down through dance or story telling. Cave paintings and relics record beliefs, cultures and histories. So do nursery rhymes, traditional poems and mythologies of spirits or unseen forces. They are often set in ancestral dwellings, ancient forests, and imagined lands, where people live alongside ancestors, animals, dragons, giants and unicorns. Great places of past sports and social interactions still tell their tales of communities long gone. These spaces evoke emotions which are recalled over centuries. Some happy, some not so happy.

What are the stories we will relate for future generations about our current circumstances and relationships to natural and constructed spaces? What media will we use to communicate our culture and its happy and unhappy fables, to our descendants? What will the "imagined places" be like?

History will assess today's practices through similar sets of clues. We will be seen as driven by technology rather than concerns for people. City and space planning is often premised on processed and filtered generalised information. Communications strategies are mostly informed by statistics stemming from bland written answers to stale questionnaires. Sterile technological rotes are followed, to set up schedules, reports and graphs.

"Masterplans" directly affect the spatial character and future forms of our campuses and cities. Information on which such plans are based must prioritise people in the equations. To get to the essence of human emotions, metaphysical aspects must be included. "Masterplans" must therefore be open to inputs from many people and professions, and based on multiple sources of knowledge and information. Communication techniques guiding space planning may need to span considerable time, and changing seasons or other external circumstances. Inputs should be captured and recorded in as direct a way as possible, with least translation or filtration.

Commercially driven design professions have become increasingly more technical and scientific, and so much more remote from core human emotions, Practitioners lose touch with people and their individual cultures, legacy and heritage, which should underpin all design decisions.

A new way needs to be inclusive of classical and romantic approaches to communications to mine data to inform design. The design or planning brief must look beyond the visible and obvious, to find the "otherwhere" space, through a people-centred approach.

#### REACHING OUT: EXPLORING PEOPLE-CENTRED COMMUNICATION TECHNIQUES

"Conceptualising interview procedures which capture perceptions, emotions and dreams."

#### **COMMUNICATIONS BRIEF TO THE HAPPITECTURE STUDENTS:**

**Objective:** Whilst having fun, to capture and record the suggestions and proposals for a communications strategy leading towards development of a "space happiness index".

**Intent:** The communications strategy is to be set out in a way which enables full, energetic, willing and voluntary participation from the "ground up" of all participants, who should feel complete ownership of the information process, and should buy into the potential outcomes and benefits of their spaces.

**Focus Area:** Methodologies and activities which will "ignite the sparks" necessary in order to achieve and record a spontaneous response from a range of DUT Campus stakeholders, which reflect their individual rational, irrational and subconscious relationships with campus spaces and places. This must explore the terrain beyond classic and romantic model answers, and delve into responses at a metaphysical and intuitive level.

#### Method: Optional.

- (a) internet / desktop research into alternative communication methods and psychological responses to stimuli and
- (b) direct discussion and conversation with peers and others around the topic, to widen the circle of possible approaches.

**Evaluation:** There should be no "filtering" or "censorship" of ideas and responses. There is no such thing as a bad idea! All suggestions and inputs will be captured, and further conversations will evolve as a result of all of the inputs.

**Submission:** briefly present individual suggestions, findings, and proposals. Use any suitable materials and methods to get ideas across to the group.

#### **INSPIRATION:**

The Happitecture Students were encouraged to take inspiration from the words of Prof Jose Forjaz, speaking about the city as the "locus of democracy", and to look at the potential for their work to influence and guide the "university of the future". The following quote and rationale were provided for that purpose:

### a locus of democracy.....

#### The university can demonstrate that .....

#### The city is the locus of democracy.

It must offer to all citizens the essential conditions for dignity and participation in the processes of decision making and of management of the public finances and resources. This is not happening in our cities.and universities.

The real problem of our cities is not the traffic and the lack of parking space but our inability to organize public transport, efficient and dignified; the real problem is not that our gardens may not have all the water needed to keep them luxuriant but that a majority of citizens still do not get enough water to drink; the real problem is not that some of our streets may not have the desirable level of illumination at night but that so many of our citizens can not afford electrical energy in their households; the real problem is not that prices of land are astronomical in the centre but that for most citizens there is no assurance of their right to occupy the place where they made their makeshift homes; the real problem is not that the next shopping centre is at ten minutes drive but that for most of our citizens the next pharmacy is at ten kilometres distance, the next library at fifteen and the next university even further. The only thing that seems near to them is the noise of the air traffic over their heads...

To make the city work is a source of employment. The development of the infrastructure and it's maintenance, the recovery of the ecosystems, the innovations in the creation of new jobs by the integration of the formal and the informal economies can give a powerful contribution to the economic growth of the city .... and add to the relevance, credibility,

and sustainability of our university.

(Extract from talk on inequality and the future of the city, by Prof Jose Forjaz in eThekwini, 2005)

#### RATIONALE

This project will enable all stakeholders in the campus environment to express not only their comments or suggestions about the future design of the campus, but to participate in determining the character and philosophy which will guide directions for the university of the future. The process specifically encourages uninhibited and holistic, emotional and subliminal involvement from and with any person at any level for whom the campus is important.

It opens doors for portrayal and discussion of symbolism within the campus environment, and for introduction of characteristics relating to specifics of place, culture, religion, tradition and emotion, to help guide the DUT in finding a physical realisation of the environment best suited to the well-being of those living, working, studying and playing within the "campus village".

This initiative goes well beyond planning and design, and starts to integrate people from a variety of traditionally differentiated professions, disciplines life-stages and social conditions, within an endeavour to understand and record the keys to creating and evolving "happy spaces", in an imaginative place contextualised as "otherwhere".

#### RESPONSES TO THE COMMUNICATIONS BRIEF FROM THE HAPPITECTURE STUDENTS

The following proposals, observations and suggestions arose from personal conversations, debates, and submissions from the Happitecture students:

#### 1. The "Beautiful" or "Average" campaign.

A PR research program conducted in the USA placed notices above two separate adjacent main doors into a public building. One was labelled "Beautiful", the other "Average". The intent was to challenge individual's self perceptions in a non-verbal way. Facial expressions and body language during the process of decision-making were recorded in close-up from hidden cameras. This is suggested as a possible methodology to tap into with students or stakeholders on Campus. Individuals could be provided with choices to "vote with their feet". Their choices / actions / gestures could be recorded to identify "true" responses to stimuli representing emotional responses (including happiness) to spaces on Campus.

#### 2. The "Springbok" campaign

This was seen as a prime example of the strength of group communication, to establish a "wave" of response and inspire stakeholders and the wider student group to come on board the "happitecture train". Enjoyment, joint interest, participation and group dynamics become useful tools in establishing an environment on Campus which engages all students and results in positive and willing responses to questions about their experiences of Campus.

#### 3. Yuppstuff: coffee and consumer culture conversations

In 2014, Architecture students started a small company called "yuppstuff". It was able to promote anything. It supported both the department newsletter and a coffee pop-up, selling people coffee and their own news. It was interactive newsletter space; that worked under the yuppstuff umbrella. The projects required interaction with the student body for their success. yuppstuff was able to achieve this platform space for the projects to get broader attention and interaction. The catchy phrase lit up the campus and saw students coming from all corners of Steve Biko campus to a desk placed in stairway on S3 L5 to find out what yuppstuff was, and purchase the same coffee they could have purchased elsewhere. A proposition is to run a "yuppstuff project 2015" as a real-time data collection pilot. An additional proposition is to nominate a select day in the week to create this interactive platform where opinions and comments on Campus spaces may be harvested. Practical results can be yielded on how to fashion the spaces in and around the university in a progressive way... mindful of the modern day student campus culture and lifestyle.

#### 4. Event-led communications opportunity

Cultivating an event to facilitate interactions between stakeholders, and create awareness of the Blue Sky / Happitecture initiative. Taking people into a comfortable environment, which may include games, food, music, poetry, refreshments.

Also, tapping into existing events, and using these as opportunities to engage on the issues of Campus space. Consider Musgrave Night Market, Umgeni Market, Essenwood Market.

#### 5. **Populating Negative Spaces**

Use areas identified by students as negative or unhappy, to host:

- Small sporting events for example a seven-a-side soccer match (play for change).
   Take a video after each game to find out what perceptions people have of their campus and changes they would like to see
- Fun and games turn questionnaire into accessible game-playing.
- Art inspired event (poetry/rap/singing) invite a local singer/poet to perform and attract people to freestyle a rap/ song/ poem about their campus.
- Fashion shows and exhibitions in negative spaces.

#### 6. Campus Radio

Using existing popular communications to promote the communications programme. Possibly combining efforts to get Campus Radio to engage students and others for live interviews about responses to different spaces on campus, and ideas for the future campus.

#### 7. **Applied Theatre**

Use Drama as a tool for generating debate and shift of consciousness. "Street Theatre". Engage people in questions through movement, dance, and encourage them to act out emotional responses to the spaces.

#### 8. **Experiential Programs**

Set programmes in all academic disciplines which require students to explore the campus periphery and record spaces as experienced by themselves and other students. Capture and record an awareness of other users through deliberate and facilitated engagements in the everyday reality of a variety of students moving towards, within and away from the Campus.

#### 9. Tapping into the existing knowledge base

Study and capture, for transmission, past surveys and research, particularly of a social and historical nature, to record an understanding of related sensitivities, networks, heritage, cultural needs and expectations, activities, livelihoods and interdependencies which impact on the campus. Ensure this information becomes part of the "story" which guides future planning.

#### 10. Open channels of communication

Acknowledge and respect the inherent knowledge held by students and other stakeholders. Shift the "balance of power", and open channels for communication in a non-threatening environment.

Enable open ended results, so further exploration will enable exchanges between people.

#### 11. Properly Hear Multiple Stakeholders

Engage with surrounding communities which are physically or emotionally related to the campus. Use a communication strategy which enables direct interactions in different places.

Levels of relationships exist which cannot be known unless there is direct involvement in the campus and its variety of adjacent spaces and people. Knock-on effects and unintended negatives from remote planning may be avoided to some extent if there is engagement and understanding between those responsible for capturing plans for the future, and those responsible for communicating the needs and generators.

Students from all disciplines need to be exposed to the opportunity to learn from the people on site, the communities, and the custodians of the space. They then learn to work with real people and their environments, on their own terms; from the bottom up.

#### 12. **Exposure to Stimuli**

Observing and capturing response to stimuli into the communication methodology. For example, an exhibition set up to engage participation and response. A straw-dog process to elicit outrage, or support - appealing to emotional responses to break through layers of communications.

Possible link to the traffic and commuter studies - pedestrianisation versus taxi vibrancy.

#### 13. Critique formal processes of communication

Focus Group meetings, interviews. Public meetings.

Improvement on standard EIA processes.

Developer engagement with community... Generally characterised by fear, aggression or disengagement.

How to bring social aspects into planning? Planners need guidelines on social issues.

#### Engagement:

- analyse existing processes
- focus groups on alternate methodologies.
- check other experiences, learn from positive or negatives

How can these methodologies be improved?

Change the way Planning relates to people.

#### 14. Engaging new technologies

As technology advances, so methodologies and systems for campus communications need to be reviewed, updated and re-developed. The "information age" demands that real-time communications and notifications are available for use by staff and students.

#### **DEVELOPMENT OF A SPACE HAPPINESS INDEX - CROWD MAPPING**

Examples of good practice for use of new Computer Applications (Apps) technology exist in other local universities, notably the University of Stellenbosch, which boasts an integrated electronic communication system that also provides data for planning, maintenance and management.

Suitable off the shelf free-ware Apps exist which are potential solutions to the communications gap which seems to prevail. Using Apps as communication tools could be the norm on campus, and could assist in compiling essential information about student needs, activities, interests and improvements that could be made on campus.

For the purposes of development of a "heat map" for Happitecture on campus, three possible Apps were identified:

- 1. "bu.giardino" is used extensively in Italy and other parts of Europe, for planning and urban regeneration purposes. It is designed to provoke interactions and provide active responses, all of which are captured in a spatial format linked to Google Maps. The system allows new networks to be built as needs are identified.
- 2. "Ushahidi" is freeware, used locally and internationally "as an open source platform for democratising information, increasing transparency, and lowering the barriers for individuals to share their stories." (www://ushadi.com)
- 3. Stellenbosch University's "SUN" Facilities Management (FM) App provides an interactive platform for students, staff and visitors to interact with the university campus.
  - It is described as "the campus in the palm of your hand. Find classrooms, explore buildings and facilities, learn about campus transport options, and report any problems ... the interactive map interfaces with Augmented Reality (AR) capabilities ... and provides an augmented tour of the whole campus..." (www.sun.ac.za).

#### Benefits listed include:

- direct access to FM Helpdesk
- emergency hotline
- news and social feeds
- university map with location information
- browse for faculties within buildings, contact information
- · campus map, provides directions, floor plans of all buildings, and routes
- FM information
- FM and campus feedback

The Happitecture team adopted "Ushahidi" as an interim platform, to capture and map responses leading to a Happiness Index. This program is flexible and can be adapted or changed as circumstances evolve, and linked to a more holistic system.

#### **HAPPIMAPS**

HappiMaps are pioneered on the Ushahidi platform at the Durban University of Technology campus, under the Happitecture program. DUT is viewed as a laboratory and as a microcosm of the City.

Developed in Africa, Ushahidi is characterised as a tool for community journalism. The Ushahidi website describes "an open source web application for information collection, visualisation and interactive mapping ...(which)... helps to collect information... categorise it, geo-locate it, and publish it on a map." It proved to be a useful platform for the purposes of Happitecture.

The Ushahidi framework was initially developed to monitor, report and record conditions related to the national elections in Kenya. The Crowdmapping component has been used since then for various other purposes, generally aimed at providing a platform for community information, mobilisation and coordination. The system has been used as a help and assist aid in the Haiti floods following Cyclone Katrina, as a method for recording civic interventions in India, and to report community grievances in South Africa.

The Ushahidi Crowd Map enables capture and storage of visual and written information, including videos and photos. Linked to Happitecture, this data can be analysed and applied to inform and guide regenerative and new spatial interventions, and more sensitive people-centred and user oriented planning. The resultant HappiMaps provide us with a tool for identifying spaces according to their degree of happy / unhappy response from people using those spaces.

Ushahidi Reporting Procedure (HappiMaps).

- 1. Download USHAHIDI from the App Store (free).
- 2. Open USHAHIDI App.
- 3. Press "+" at bottom right of screen.
- 4. Select "Add map by URL".
- 5. Fill in where prompted : NAME : happitecture2@dut

URL: https://happitecture2.crowdmap.com

- 6. Select the Happitecture2@dut map
- 7. Press the CAMERA ICON button at the bottom centre of screen.
- 8. Fill in the report (Description, Category, Photo, Video)
- 9. Press "upload".
- 10. Move to the next place and repeat.

The HappiMaps crowd-mapping site was established by the author. The system was intuitive, and easy for a novice to set up. Two site administrators, one from UFC@DUT, and the author, were given site access. The Happitecture Students were briefed and provided an initial response within the application. Each student downloaded the free App to their cellphone or laptop, and posted reports using the system. Early glitches included difficulty with accessing the first Happimap, limits on uploads using the Android platforms, and problems with uploading videos and photos. The deficiencies were ironed out over time, with minor changes to the program setup.

Reports and maps may be accessed through the Ushahidi App using the user name happitecture2@dut and URL https://happitecture2.crowdmap.com.

#### THE HAPPIMAPS EVENT ON 30TH SEPTEMBER 2015



The Happimaps Event was set up as a pilot for future interactions with people on campus. Interactions are consistent with the Happitecture concept and apply the suggestions arising from the proposed campus communications campaign. This first event was intentionally limited in scope and scale. Future events which should be initiated and managed by DUT as part of a broader communications strategy, can more thoroughly test the concepts for effective interactions which are suggested in this paper.

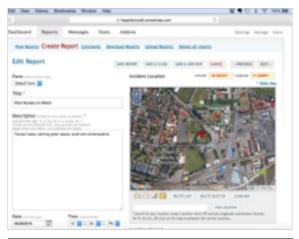


The event took place on 30th September 2015, to raise awareness of the Blue Skies initiative and the Happitecture proposals, and to encourage direct participation in the HappiMaps App. Many departments of DUT assisted with the arrangements, including Communications, Audio Visual, Maintenance, UFC, and the Plant Nurseries. The Happitecture Students volunteered to arrange musicians and were responsible for interactions with participants on the day. They also assisted with setting up and demounting the displays, and creating an attractive and enticing environment.



The site for the event was identified by the Happitecture students as one of the "least happy" on Steve Biko campus. The area to the east of the Library, at basement level, is unkempt, and characterised as a negative, undefined space, with no focus, no edges, and no distinctive character. It leads to a desolate parking area, and sits uncomfortably between the student hostels, the student fees payment offices and student counselling services offices. The library windows and office windows which could open into the space, are locked and blinded, to the detriment of the space itself, as well as the office workers and library users. The emotional characteristic of the place is negative and threatening. Students report to these offices generally in circumstances of some distress, and are made to queue in the space whilst awaiting access to overcrowded offices and under-staffed administration.









Even if only for one day, it became important as a demonstration of Happitecture, to positively change the character of the space, and create new memories. Ideas arose for introduction of a Zen Garden to replace bland paved areas, for setting out of a forest of trees to enclose and define a gathering and interaction space, for hanging bright inverted umbrellas to create focus, and straw bales to allow for seating. Arrangements were made for music and food to be provided. The solid gable end walls of the hostels were decorated with large scale maps and photos, and the space functionally divided using gazebos and screens.

Students and others were led to the event space from better populated areas, by the Happitecture students with the assistance of helium balloons and red rope route markers.

The event took place between study leave and an exam period, and was held on a day of unpredictable weather. A ferocious afternoon thunder-storm capped a humid and hot day. The wind and rain resulted in cancelation of the music and dance event, but many people were nonetheless attracted to the exhibitions and maps. A surge of enthusiasm for the process erupted during the period when free airtime was offered for participation in the mapping process.

The event attracted over three hundred posts, with participants identifying happy, unhappy and neutral spaces and places on campus, and filling in reasons for their choices. The Happitecture Students

facilitated the posts, explained the idea behind the HappiMaps, and were diligent in encouraging participants to provide responses based on their honest emotions. There was a great deal of heated and animated discussion during the process, and may students and workers expressed their appreciation of the process which allowed their opinions to be recorded.

The video booth set up at the site was less successful, with most people reluctant to be video-recorded. Only eight recordings were captured through this process. All in all, however, all involved were energised by the event, and enjoyed the experience. The main purpose, of spreading the word about HappiMaps, and capturing responses to the map and App., were adjudged to have been achieved.



The HappiTecture pilot project at the Urban Futures Centre experiments with participatory methods in designing the built environment.

Using the crowdmapping app Ushahidi we have created a HappiMap where students and staff are able to report their experiances of campus spaces using a simple cell phone app that tracks GIS leastless.

Crowd mapping apps such as Ushahidi have the potential to engage the public in a range of design, social and communication issues.

The seminar includes a live demonstration of how the app works .....

and a HappiMap tour where you get to tell us how you feel in specific spaces on the City Campus.





The large scale aerial map of the Steve Biko Campus proved a hit with students, staff and workers, who populated it with stickers of red, yellow and green. This map, and the associated comments and reasons, is used in the following section of this report, as a base from which campus planning may be reviewed.

#### THE CITY CAMPUS SEMINAR ON 2nd OCTOBER 2015

As a follow-on from the Steve Biko Campus Event, a seminar was arranged at the City Campus, to further publicise the HappiMaps process, explain how the App can be accessed, and to facilitate capture of more posts to the App.

The seminar was very poorly attended, partly because of the time of year and looming exam timetables. However, useful information was imparted, and very informative comments were received from those present.

Several posts have subsequently been logged identifying happy and unhappy spaces at the City Campus. However, it is recommended that a more intensive communications and participation process be implemented at the City campus as well as other parts of DUT, in order to ensure participation and spread knowledge of the program as a whole.

As part of the seminar, various problems with current facilities and planning at the City Campus were identified, and some potential solutions to improve the happiness index generally on this campus were suggested.

Suggestions included identification of the need for extensive negotiations with the municipality in order to rationalise traffic flows and systems around the campus. This could open opportunities for desperately needed expansion, hopefully leading to direct access to Botha Park and other adjacent neglected and under-utilised, unhappy spaces.

#### APPROACH TO CAMPUS DESIGN

Proposing a different, creative and innovative approach to campus design (and urban design)

The planning process needs to be de-mystified to enable more direct inputs and influences from a variety of professions as well as a range of individuals. A unifying vision and protocol would assist in establishing a collaborative environment within which an inclusive plan can be generated.



The traditional planning disciplines tend to concentrate on identifying future needs, assessing current capacity and then proposing expansion of premises and creation of more buildings to fill the "gap". A multi-disciplined planning approach could explore other non-technical aspects of the future campus, including the social and emotional characteristics of spaces, and the interrelationships between existing or proposed spaces and an optimal learning environment. Interventions could be set out as a matrix of improvements, which aim to provide a richness of quality of the environment on campus, which extends beyond physical change.

As a starting point for re-evaluation, quality must be seen as just as important as quantity. This means that the "quality" of the desired environment needs to be defined and agreed upfront. One method for definition of this "quality" could arise through broad participation in the

HappiMaps process, and careful analysis of responses. Campus design & planning may be directly informed by the accumulated inputs from HappiMaps. Analysis of the responses and posts should be undertaken within an inclusive game-playing and role-playing process, in which the responsibility for filtering, evaluation, summarisation and decision-making is shared across many disciplines.

The suggested re-evaluation process can be predicated on development of a campus vision and planning protocol. An important component of the protocol would include agreement that the quality of existing spaces, places and buildings should first be improved or reinforced. Plans could be based on responses drawn from the HappiMaps records, and with reference to the identified principles for happy spaces which are listed in Appendix B.

#### **DUT MASTERPLAN**

The most recent campus masterplan has followed the standard process, with emphasis on technical analysis. The plan does acknowledge the need for improvements to existing facilities, is based on thorough analysis, and addresses the identified gaps and needs included in the brief. It is a fully competent example of this planning methodology. The outcomes are somewhat predictable, but the process may not have taken sufficient account of sentiments on the ground, and specific characteristics of places and spaces about which students and other users have strong opinions and attachments. Some of the decisions informing the plan may therefore have unintended and unforeseen consequences.





Technical analysis of the campus has been carefully carried out and is well presented in a comprehensive and extensively illustrated Campus Masterplan. The plan emphasises the intention to more effectively join up the various components which make up a unified campus, and sets a direction for expansion.

Any review procedure of the existing campus masterplan would need to be conducted over a reasonable period, and with inputs from multiple stakeholders, including the authors of the existing plan.



A review of the latest existing masterplan may well reinforce most of its elements. The technological and design-driven approach provides an excellent starting point for a new look at the campus future through a more people-centred lens. The classic view will be enriched through overlay of additional inputs from multiple stakeholders.

The HappiMaps reports to date provide a snapshot of prevailing sentiments and responses; but this is indicative of a relatively small sample of students. Other stakeholders need to be encouraged to participate and log reports on a continuous basis. This requires an ongoing communications process, and buy-in from DUT management as well as others on campus.

#### **DUT HAPPIMAPS: SAMPLE**



A sample of responses received through the initial processes is illustrated on the map above. Each round sticker is marked with a unique number, which is recorded in the crowd-map against the report.

Drilling down to the detailed reports enables a reasonable depth of information to be gathered, which can be used to further analyse conditions at particular parts of the campus. Specific questions could be loaded onto the HappiMaps system from time to time, to test various options, or find out more about specific spaces.

Examples of the reports posted are contained in Appendix D. Analysis of the responses does not fall within the scope of the current exercise and study.

A typical graphic analysis of responses may seek to aggregate particular responses within specific areas at a particular time.



Any of these dimensions may be applied or moderated, so that clear pictures of the responses of affected people can be recorded and applied within the group planning process which should follow.

#### **CONCLUSION**

The Happitecture Study has provided useful ideas, and pilots a process which deserves further application and experimentation. The HappiMaps tool is in its infancy. A concerted effort is required in order to encourage more students, staff and affected people to think about the spaces they use, and to contribute to a better informed future plan.

Findings can be applied beyond the university as laboratory. Similar approaches to inter-disciplinary and people-centred planning, using simple reporting methods, apply equally to city planning, urban design as a discipline, and architecture.

Further research and analysis is required into the potential for game-playing and role-playing in planning, using the electronic records provided through HappiMaps as a useful starting point.



#### **ACKNOWLEDGEMENTS**

Dr Bev Edkins for partnership, support and assistance with ideas and the vagaries of reporting formats.

Dr Kira Irwin, Dr Monique Marks and the UFC Team for continual encouragement and suggestions and help.

Dr Alan Khan and the DUT Communications Team.

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All contributors to the UFC@DUT Seminar Series 2015, from whom inspiration has been gleaned, and ideas harvested, including Vaughn Sadie, Neil Coppen, Tyler Spencer (uShahidi), and Tinus Kruger.

The Seven HappiStudents, for their readiness to accept the ramblings of an OWM and to share in outrageous concepts and ideas, adding creativity, innovation, knowledge and skill to the many conversations and debates:

Lungile Cele
Euridice Helena Lutucuta
Mxolisi Hlongwa
Thobani Ndlovu
Thashalen Naidoo
Bonke Duma
Nelly Xaba



#### **APPENDIX A**

#### **EXPLORING HAPPINESS**

"Formulating "Happitecture" as a discipline which guides development of quality space and buildings."

"Happiness is, unarguably, a universal value that binds the rich and the poor, the developed and the developing and articulates the ultimate purpose of life. It is about making true societal progress in ways that are meaningful, joyful and lasting."

Architecture for a Sustainable and Happy Society. KEYNOTE ADDRESS BY THE HON'BLE JIGMI Y THINLEY, PRIME MINISTER OF BHUTAN, AT THE CONFERENCE OF THE XXIV WORLD CONGRESS OF ARCHITECTURE IN TOKYO, JAPAN. 28<sup>th</sup> September, 2011.

"Architects are at the heart of what makes and interprets human experience. They are the ultimate narrators of human story. And we know that man's story is one of change, of hope, dreams, of destruction and of renewal. But of late, the changes that we are experiencing are more about the unfortunate result of our callous and foolish actions. Our dogged pursuit of change for the better through material wealth at any cost has brought the world to a state when its own survival has become an issue. By striving for continuous economic growth to satisfy our insatiable hunger for ever more, we have destroyed much of the natural life support system and what remains may not last very long at this pace."

"It is almost always the grand structures and edifices that withstand the ravishes of time and the elements or their remnants that tell us the stories of great civilizations of the past. These are the works of great architects whose columns, cornices and walls are often embellished with artistic wonders. They seldom fail to cause awe and reverence."

"We are heading for an ecological disaster from which none may recover. Socially, we are disintegrating. We are failing to live together as family, friends and community and as one kind. Cities and buildings have become places that make strangers of even the closest neighbours;"

"On the political and security front, the world continues to fragment into dangerous entities with many holding destructive powers of the kind that even the largest of armies of the past would never dream possible."

"Democracy is the watch- word today. But even as democracy flourishes in form and by declaration, more people are helpless against the brutality of tyrants and corrupt governments than in the recent past. What sadly flourishes in truth is inequality, deprivation and conflict. Even in so called mature democracies, one cannot find inspiration. Good governance is rare."

"All these are happening because of our pursuit of material prosperity – because we think that development is all about GDP/GNP growth. The irony is that in the past seven decades that we have sought economic growth with little concern for ecological, social and other costs, little or no additional wealth has in fact, been created. Much of what we think we have is illusory - nothing durable and least dependable in troubled times."

"We need to change. We need to change the architecture of human society and its economy. We desperately need to alter our way of life and rethink our values. But going backward is not an option while we cannot move forward along the same path. We need to take possession of our intelligence and use it to find a way out and forward rather than accept the doom that awaits us along with all else that the fragile earth holds and sustains."

"Happiness is, unarguably, a universal value that binds the rich and the poor, the developed and the developing and articulates the ultimate purpose of life. It is about making true societal progress in ways that are meaningful, joyful and lasting."

"GNH .... is based on the belief that development must serve a purpose rather than be an endless process for continued economic growth that simply cannot be sustained by a world with limited natural resources within a delicate eco-system. As a development paradigm, it is founded on the belief that happiness is the state of being that every individual or society seeks, and that the purpose of development must, therefore, be to create conditions that enable its pursuit."

"Material prosperity must not come at the cost of spiritual impoverishment."

#### **APPENDIX B**

#### HAPPINESS AND WELLBEING

Psychological responses to spaces

For mental and physical wellbeing, we need to look at the intersection between HEALTH, COMFORT & HAPPINESS.

Well-being: "feeling good and functioning well"

Health can be measured through symptoms Comfort is about the surroundings or physical environment (satisfaction) Happiness is about EMOTIONS and so is MAINLY SUBJECTIVE Emphasis changes from quantitative to qualitative.

# FIVE KEY PHYSICAL DESIGN CHARACTERISTICS CONTRIBUTING TO WELL-BEING AND POSITIVE MENTAL HEALTH:

(Aked,, J., Thompson, S., Marks, N., & Cordon, C., (2008). Five ways to well-being: The Evidence, London: New Economic Foundation.)

"... a sufficient quantity and quality of diverse environmental, social and physical resources can influence human cognition, which, in turn, can increase the healthy behaviours of the wider population."

#### 1. **CONNECT**:

Social interaction and connections - quantity and quality matters

~ public spaces which bring people together encourage friendships and support networks to be built

#### 2. **KEEP ACTIVE**:

Physical activity reduces stress & improves happiness

~ shared exercise spaces, attractive circulation routes, fun physical experiences (trampolines / skateboards / bikes / obstacles?)

#### 3. TAKE NOTICE:

Being mindful, being there, paying attention to the present, being aware of thoughts and feelings

~ enable people to stop and inspect - e.g..insect boxes, bird nests, art, kinetic sculpture, moving water, music, seating

#### 4. **KEEP LEARNING**:

Building aspirations, participating in music, arts and extra-mural classes

~ spaces encourage learning, circular seating encourages discourse, open classrooms, good learning spaces, edu-play

#### 5. **GIVE**:

Pro-social behaviour has a positive effect on happiness; e.g. volunteering & offering help ~ make opportunities within the environment for people to help each other, encourage "random acts of kindness" (altruism).

#### RULES OF THUMB FOR HEALTHY DESIGN, BASED ON THE FIVE CHARACTERISTICS:

#### 1.

Adaptable environment
Allowing users control over their environment

#### 2.

Reduce reliance on cars - encourage walking Variety of hard and soft landscapes, for passive (quiet) or active use Bio-diverse environment

Seating

Multiple use of space

Wifi

Proximity to Nature Degrees of screening

Views of activity

Paths which require energy - slopes, stairs, obstacles

Enjoyable circulation Rewards for Movement

Universal Access

#### 3.

Enable food preparation and eating as a social activity Local food production/ urban agriculture natural light

views of the sky

personal control on indoor light quality and quantity

Natural solar radiation in winter

Natural breezes and airflow in summer

Deep Shade, dappled sun, full sunlight options

Warm and cool surfaces

Night cooling systems for daytime coolth

Daytime warming for night warmth

Local Climatic Design

Quiet places for contemplation, learning, thinking and studying

Acoustic separations

Distance separation of loud and quiet areas

Attenuation of noise sources

Spaces where noise can be welcomed

Happy noises?

#### 4.

Psychology of colour (red enhances detail-oriented tasks; blue supports creativity, etc)
Psychology of space enclosure (low caves for focus, versus open plains for abstract thinking)
Psychology of form and shape (curvilinear beauty versus rectilinear, jagged discord)

#### 5.

"...one of the opportunities for architecture is that , through the design of form, space and materiality, it can order our relationships with each other and our environment by creating interactive settings.... It can do this ... to improve our sense of well-being, and enrich our lives...". Our well-being ("happiness"?) is intimately linked to moments of delight. A successful (space) is one where there is an accumulation of many moments of delight..."

#### APPENDIX C

#### PRESENTATION AT UNIVERSITY TRES ROMA

#### **SPAZZIO PUBLICO BIENNALE - AUGUST 2015**

Happitecture suggests a more creative philosophical methodology for urban planning, urban design and city architecture in South Africa. This new approach draws from an inclusive, people centred, cultural, emotional, intuitive, mythological and metaphysical approach, to shape and fashion shared public places which make people HAPPY.

We seem to do our best to exclude emotional and metaphysical aspects from our design and decision-making processes when it comes to space design. We do not sufficiently involve ordinary people in the decision making processes for development and regeneration of their spaces.

The commercially driven design professions have become increasingly more technical and scientific, and so much more remote from core human emotions, and so we lose touch with people and their individual cultures, legacy and heritage, which should underpin design decisions. A new way needs to be inclusive of classical and romantic approaches to design, but must look beyond, and find the otherwhere space in between.

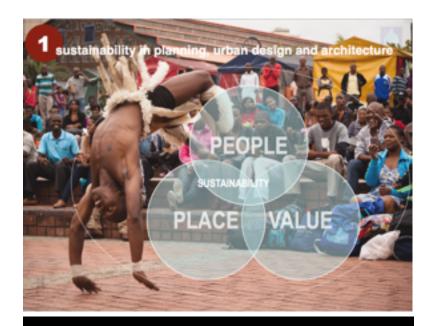
So we need to immerse ourselves in a variety of stimuli, including pictures, sculptures, stories, dance and mythologies, to find that dream world between conscious and unconscious- that place which includes classical and romantic notions, but goes beyond.... That place we call OTHERWHERE. This is the dimension described by Persig in his classic books from the seventies, Zen and the Art of Motorcycle Maintenance and Lila; that place we all inhabit or accommodate in our intuition and our individual genius.

At a recent conference at University Tres Roma, which was a component of the Spazzio Publico Biennale, the concept of "Happitecture in the context of "Happiness in Public Space" was floated. This elicited comments from many delegates, from differing professional disciplines, including amongst the Planners, Urbanists, and Architects, a Psychologist, a Sociologist, a Waste Engineer and a Cell Biologist:

- ◆ Wellbeing is much more complex than Happiness.
- Public space... Meaningful? Purpose of design?
- ◆ Space between buildings is the place people meet and do things.
- ◆ Space reflects Creation, life force...
- ◆ Space provides Shelter.
- ◆ Happiness depends on individual response.
- What is public space?
- ◆ SPACE MUST HAVE MEANING.
- How do we measure Happiness?
- ◆ Why are we looking for a common definition, as happiness is a state of mind...
- ◆ Happiness is different for each person?
- ◆ Is enjoyment a measure of happiness?
- Can Happiness be measured by the numbers of people attracted to the space.
- Cultural heritage improves happiness.
- ◆ Economic system determines happiness or unhappiness?
- Is Human happiness more important than the ecology?
- Conviviality causes us to think more altruistically and cooperatively... A shift in attitude.
- Happy city is a social city.
- Purpose of citizens, and the soul of the city.
- "Urban psychopathology."
- Ask the people about the future of the city.
- Experience based urban planning.
- Sick city sickens.
- ◆ Cities impact on social isolation
- "Subjective wellbeing" is measured by participation in social and cultural activities).
- ◆ Happiness is not permanent. Things need renewal.

#### APPENDIX D:

#### **FIVE REFERENCES AND INFLUENCES**



2

Asking the right questions Measuring the right things ....



# 9 Happynomics

In the 1970s, in the tiny Himalayan kingdom of Bhutan, the country's economy was coming under major scrutiny. By most measures - gross domestic product, national income, employment and so on, it was growing sluggishly. So the King of Bhutan did something unusual. He decreed that from then on Bhutan's progress would be measured not against these traditional economic yardsticks but against its Gross National Happiness.

#### MATTERS OF THE SPIRIT AND THE HEART

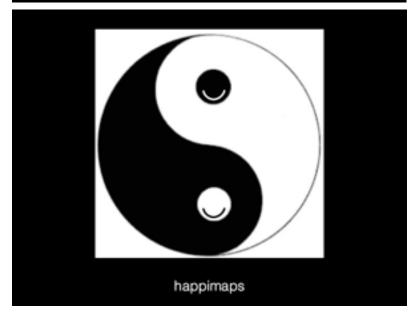
"What's wrong with technology is that it's not connected in any real way with matters of the spirit and the heart. And so it does blind, ugly things quite by accident and gets hated for that..... the solution to the problem isn't that you abandon rationality but that you expand the nature of rationality so that its capable of coming up with a solution..... Newton invented a new form of reason..... What is needed now is a similar expansion of reason to handle technological ugliness. "

(Pirsig 1999, original 1974)

Zen & the Art of Motorcycle Maintenenance



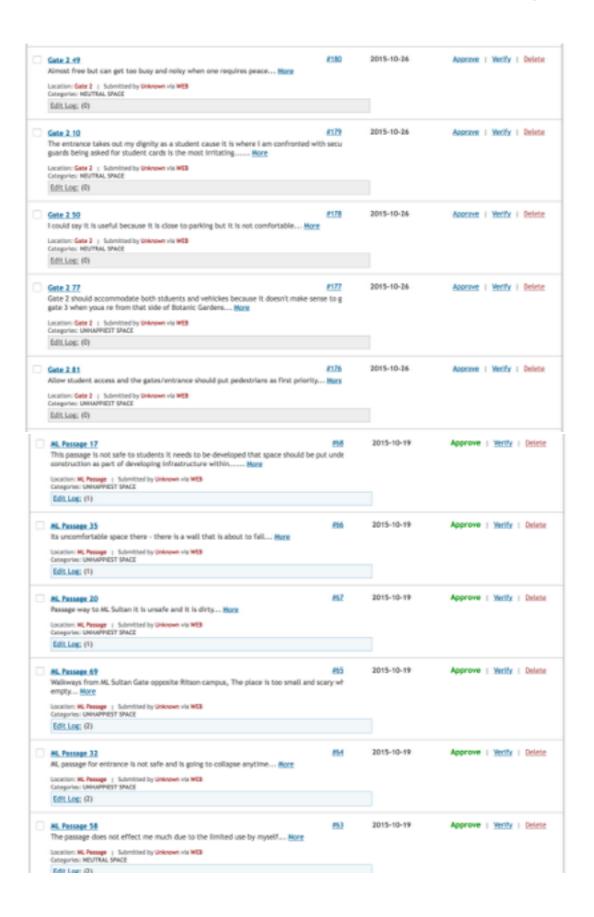




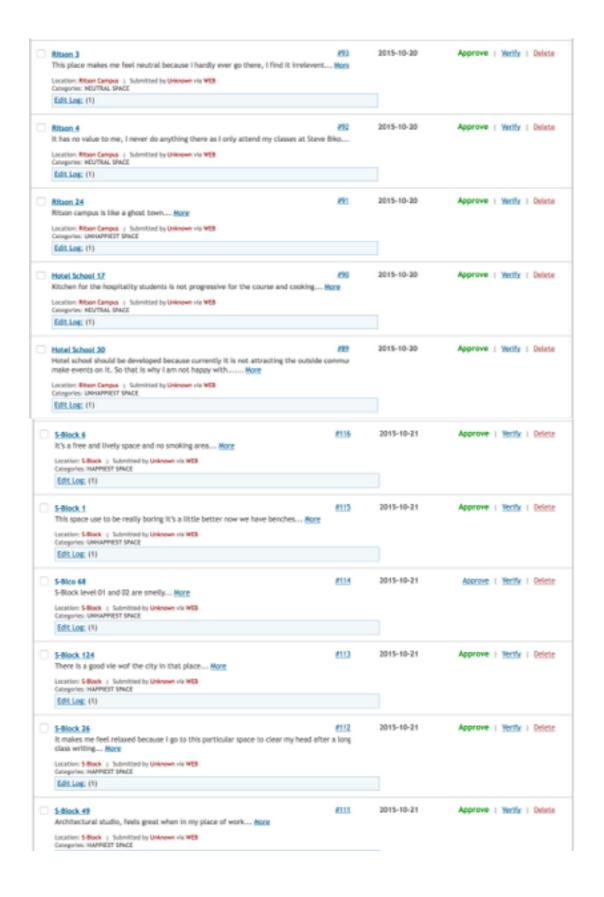
## **APPENDIX E**

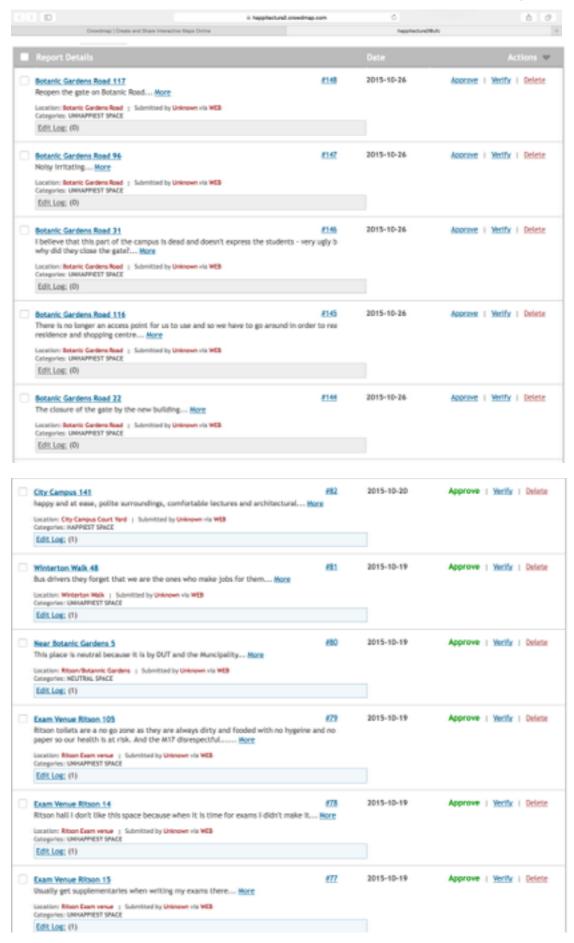
#### **SAMPLES OF HAPPIMAP REPORTS AS AT OCTOBER 2015**

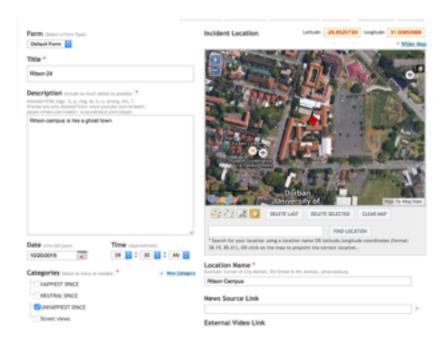
	Report Details		Date	Actions V
0	Berea Student Residence 109 I tike Berea Res because it has been renovated nicely, good place for new students close to everything and more More Location: Berea Student Residence   Submitted by Unknown via WEB	#208 because	2015-10-26	Approve   Yerlfy   Delete
	Categorie: HAPPEST SPACE Edit.Log: (II)			
	Berea Student Residence 28 Ritson I enjoy the atmosphere there it is not noisy neither that quiet. It is moderat spots on campus More Location: Berea Student Residence   Submitted by Utknown via WEB Categories: HAPREST SPACE Edit Log; (R)	#252 e určike	2015-10-26	Approve   Welfy   Delete
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	Berea Student Residence 144 Berea residence Baham Hall where I stay, It's a nice place because I stay with my fiplaying gamus tife fills and etc I fee happy	#205 rieds stu	2015-10-26	Asserove   Yerlfy   Delete
	Grassy Area 99 The area is spacious and provides a good natural space to relax More Location: Grassy Area   Submitted by Unknown via WEB Categories: HAPPICET SPACE Edit Log: (II)	/203	2015-10-26	Approve   Welfy   Delete
	ML Sultan Walkway 192 The Walk way to AL Sultan, its not safe More Location: ML Sultan   Sultan by Unknown via WEB Categories: UNHAMPREST SPACE Edit Log: (1)	e54	2015-10-12	Approve   Yelfy   Delete
	Food Area 25 Food courts has food and social areas More Location: Steve Bike   Submitted by Unknown via WEB Categories: HAPPEST SPACE EditLogs. (1)	ы	2015-10-12	Approve   Yelfy   Delete
	Library 68 Computer labs are always booked in the library More Location: Steve Bile Library   Submitted by Unknown vie WEB Categories: UNHAPPEST SPACE Edit Logs: (1)	62	2015-10-12	Approve   Yelfy   Delete
	S-Block 86 S4 Level S More Location: S-block   Submitted by Unknown via WEB Categories: NEUTRAL SPACE Edits.Logs. (1)	61	2015-10-12	Approve   Yelfy   Delete
	Food Area 87 Neutral space in-canteen area no space for seating More Location: Food Area - Steve Bibs.   Submitted by Unknown via WEB Categories: NEUTRAL SPACE Edit Logs: (1)	60	2015-10-12	Approve   Yelfy   Delete
	5- Block 93 54 - Level 5 comfortable environment with people of different years More Location: 5-Block   Submitted by Unknown via WEB Categories: MAPPIST SPACE	849	2015-10-12	Approve   Yelfy   Delete
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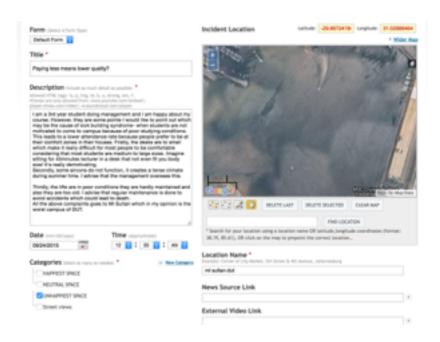


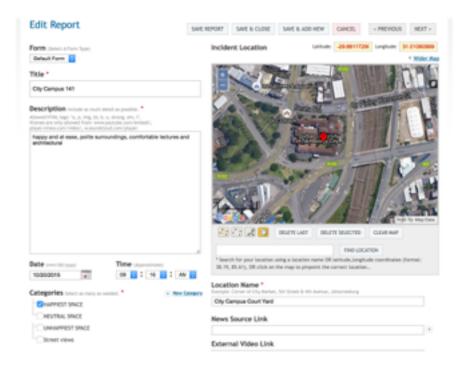
	Botanic Gardens Road 66 Food Court, untidy and does not represent the campus, which is a problem if it is at entrance of the campus More	£158 the op	2015-10-26	Approve   Weify   Delete
	Locarion: Botantic Gardens Road   Submitted by Unknown via WEB Categories: UNHAMPRIST SPACE Edit Log: (7)			
	Sotanic Gardens Road 100 I find this place useless and dangerous and I don't see any use of It Hore	£152	2015-10-26	Approve   Verify   Delete
	Location Botanic Gardens Road   Submitted by Unknown via WEB Categories LINHAMPREST SPACE			
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	Botanic Gardens Boad 25 Old gate closed is an inconvenience to the people the institution serves	£155	2015-10-26	Approve   Yertfy   Delete
	Location: Botanic Gardens Road   Submitted by Unknown via WEB Cotogonies: UniveRMISSY SMACE			
	Edit Log: (7)			
	Botanic Gardens Road 73	£156	2015-10-26	Approve   Verify   Delete
	UB computer lab is too hot they should improve aircons Hore	2.000		CARLES 1 DAILY 1 DAILY
	Location: Solarity Cardens Road   Submitted by Unknown via WCB Categories: UNHAPPREST SPACE			
	Edit. Log. (7)			
	Botanic Gardens Road 115	£154	2015-10-26	Approve   Yerify   Delete
	This gate we are not allowed to use this gate 1 and it is delaying us when we go to 8 Mace	lerea oi		
	Location: Botanic Gardens Road   Submitted by Unknown via WEB Categories: LINEARPREST SPACE			
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	Botanic Gardens Road 6	£163	2015-10-26	Asserte   Yerlfy   Delete
	This space makes me feel like I am working blind to a corner you don't know who is o			
	Location: Butanic Gardens Road   Submitted by Unknown via WSB Categories: UNHARPREST SPACE			
	Edit.Log: (0)			
	Botanic Gardens Road 64	#162	2015-10-26	Approve   Yerify   Delete
	A prominent urban intersection, there is no attempt at a proper maker/inclusive spa chaos by taxis adds to the frustrations More	co, the		
	Location: Botanic Gardens Road   Submitted by Unknown via WEB Categories: UNRAPRIST SPACE			
	Edit Log: (D)			
	Botanic Gardens Road 71	£160	2015-10-26	Assrove   Yerlfy   Delete
	Gate one should be open to open to students because of safety purposes and save till lecturers in the S block Mare	me to ç		
	Location: Butanic Gardens Read   Submitted by Unknown via WEB Congarine: UNRAPPEST SPACE			
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	Botanic Gardens Road 72	F161	2015-10-26	Approve   Welfy   Delete
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	Botanic Gardens Road 103	6159	2015-10-26	Accrove   Yerify   Delete
	Gate next to 32 block needs to be considered for student access, as the walking dist is too much. Also the wall along the walkwaycreates			
	Location: Butanic Gardens Road   Submitted by Unknown via WSB			
	AMERICAN AND STREET AND ADDRESS OF THE PARTY			
	Location: Botanic Gardens Road   Submitted by Unknown via WES Categories: UNRARPECT SPACE			

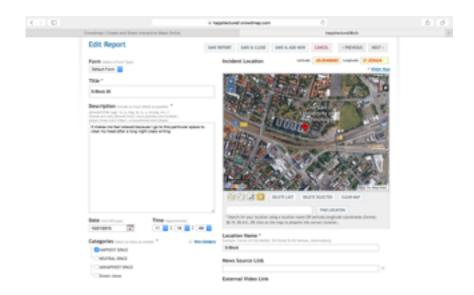












https://happitecture2.crowdmap.com