



Design Thinking and Development

DVST 3500 (4 Credits / 60 class hours)

International Honors Program:

Social Entrepreneurship: Innovation, Technology, Design, and Social Change

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Course Description

This course introduces students to *design thinking* and examines its evolution within a historical and global perspective. It is recognized that the challenges and opportunities facing societies grow more complex and interconnected in a globalised world, and that stakeholders grow more diverse and often more numerous. In this context, approaches known as "design thinking" and "human centered design" are gaining ground to define challenges and articulate practical ideas to improve the world. At the same time, design as "the conscious effort to impose meaningful order" (Victor Papanek) is an ancient human practice. As evidenced by the earliest records of human society, communities and societies have always been 'designing' solutions to their challenges. The study of design presents a productive way to learn about traditional methods of social problem solving, as well as a definitive field in which visions of the future may be crafted, tested and articulated.

Design thinking is a process of discovery, ideation, and experimentation that employs design-based techniques to gain insight and yield practical and implementable ideas for virtually any type of organizational or business challenge, prominently including those within public service. The popularity of *design thinking* reflects the imperative that big organizations and companies face to employ non-linear and creative thinking in order to 'innovate' and remain afloat in an ever more competitive global economy. *Human-centered design*, which places the intended beneficiary of design at the centre of the design process, is gaining ground as a way of addressing inappropriate market and development solutions that fail to respond to true human needs.

However, from an historical perspective, the practice of 'design' and the thought processes that accompany it present a productive way of understanding indigenous knowledge's, indigenous practices and cultural values. Any sustainable and lasting design will be sensitive to nuances in local context, to cultural difference and to a diversity of modes of social, cultural and human expression. As such, traditional and indigenous designs may in many cases offer critical learning's about the articulation of human needs, desires and ways of life in different parts of the world and in different eras.

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This course teaches design as a practical methodology, but also as a productive lens through which to study processes, products and systems in global comparative context. As students travel in the US, Uganda, India and Brazil they will learn about design thinking and how it has particularly evolved in the 20th century. To maintain a focus on practicing a critical and culturally sensitive methodology, this course will work closely with Anthropology and Social Change (ANTHRO3500). With this focus, students will engage with key thinkers of development that seek to understand social, economic, political, technological and cultural aspects of societal change in developing countries.

Students will identify and collaboratively address concerns, set goals and prototype ideas. Readings, case studies, lectures, and writing exercises will further students' thinking about local design-thinking experiences and site visits. Students will also have the opportunity to meet individuals and visit organizations doing very inspiring work in social innovation and design in each country visited.

Some of the following questions will guide our academic journey:

- What do *design thinking* and *human centered design* mean in diverse cultural contexts and what cultural influences have the terms absorbed?
- What conceptions of the human do we draw from to understand human centered design and how have ideas about what it means to be human evolved over time?
- What might we learn from indigenous design and design thinkers from the global South about effective, just and sustainable design solutions?
- Is there space in design thinking for the environment and for non-humans?
- How can design thinking help us to frame and articulate social challenges in a culturally sensitive and self-reflexive way?
- Can democratized design act as a way of distinguishing between top-down and bottom-up innovation?

Learning Outcomes

The Design Thinking and Human-Centered Design course comprises 60 class hours of instruction and field experience (4 credits). Upon completion of the course, students will be able to explain and demonstrate:

- A working knowledge of some histories of design thinking, human centered and indigenous design;
- An awareness and critical understanding of how human-centered design has successfully been integrated into new and innovative models to bring about social change;
- Enhanced individual and collaborative skills in design-based problem solving, storytelling, design research and the presentation and visualization of ideas;
- An understanding of systems thinking and service design;
- A critical awareness of the traditional and contemporary processes that inform design objects, services and systems in diverse cultural contexts.

Methodology and Materials

This course follows an interdisciplinary perspective that combines different knowledge and fields of expertise from both cultural and social anthropology and design. In addition to readings, seminars will be designed to stimulate student's critical thinking and participation through using a combination of collaborative learning activities. The course will work in tandem with the 3 other courses Social Entrepreneurship in Global Comparative Context,

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Technology, Change and Innovation, and Anthropology and Social Change, as well as with site visits and guest lectures in each country, in order to address human centered design and design thinking from different angles. This is a very hands-on learning-based course inviting students to embrace the methodology of human centered design.

Students are required to actively participate in synthesis and analysis seminars that will be offered in the different countries as well as group presentations and projects. Students will engage in a series of skill-developing assignments that build upon each other throughout the duration of the course. The class will culminate in a final project that will allow students to apply what they have learned to a specific social challenge they are passionate about. Aside from having an open mind, students will also need access to a computer and camera (smart phone cameras are acceptable); as well as a visual journal that will be presented to them at the launch.

Readings

Students will be expected to read between 30-40 pages per class. In some cases, readings will be divided up amongst students and feedback on the readings will be provided to the group in the class. There is a corresponding list of recommended readings for each class that you will find at the end of this document – it is not expected that you read all of these. However, they may be particularly helpful to refer back to during assignments.

Pre-Departure Readings:

Mirzoeff, N. 2015. Introduction. pp 1 – 29 in Mirzoeff, N. 2015. How to See the World. London: Penguin, Random House.

Course Schedule

LAUNCH: San Francisco, CA, USA

CLASS 1: Design History, Modernity and Industrialization

HCD in a Global Comparative Context: During the early stages of the industrial revolution in Europe, design was committed to values of efficiency – particularly cost and time effectiveness. Design as a professional discipline emerged at a time when progress and industrialization (often at the expense of human wellbeing) were seen as values in themselves, and yet today it has become a tool that is being used to reconnect with human values and needs. How do we understand this apparent contradiction and what does it tell us about the imperative to promote ‘human centered’ design? We begin this course with some fundamental questions – why design, why human-centered, if design is about making, then why design-thinking? What better place to start asking these questions than the home turf of one of the most successful articulations of human centered design? We will look closely at California based firm IDEO (www.ideo.org), which has pioneered the promotion of human-centered design as a methodology that can be applied in multi-disciplinary and multi-cultural contexts.

Social & Environmental Responsibility through Design: Why has ‘design thinking’ become the new mantra of upcoming organizations? What is it about the design process that has come to be seen as valuable? If design is such a fundamental expression of being human, then why does it seem like a relatively new word? Where did the idea of the designer emerge? Where did the idea of ‘socially responsible design’ come from? In this class, we will

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reflect on the emergence of the discipline of design, its philosophical underpinnings in modernism and anthropocentrism and its movement towards the idea of ‘social responsibility’ in the context of globalization.

The classic principles of design as defined by modernists like Buckminster Fuller and Eames will be explored, along with applications of these ideas in diverse global contexts from the 1960’s to the present. Papanek’s thinking will serve as an entry point to explore ideas around innovation, invention, intellectual property and social versus commercial value. How do principles of obsolescence get treated in the social entrepreneurship world? Have we moved beyond some of the problems of ownership that Papanek describes? What examples from the USA and address social problems in innovative ways that don’t simply produce another product to be bought, owned and disposed of to solve a problem?

Required Readings:

- Papanek, V. 2005. Do it Yourself Murder’ pages 23- 34; ‘Rebel with a Cause’ pages 60-69 in Papanek, V. 2005. Design for the Real World: Human Ecology and Social Change. Chicago, IL: Chicago Review Press.
- Brown, Tim and Jocelyn Wyatt. 2010. Design Thinking for Social Innovation. Stanford Social Innovation Review
http://ssir.org/articles/entry/design_thinking_for_social_innovation
- Chen, D. -S., Cheng, L. -L., Hummels, C., & Koskinen, I. 2015. Social design: An introduction. International Journal of Design, 10(1), 1-5.

Pre-departure Assignment (10%)

Introductory poster: The pre-departure assignment acted as an introduction to creative and visual methods of enquiry and learning. It asked students to share knowledge and information about themselves and challenged them to represent it in new and perhaps unexpected ways. This assignment will be reviewed in the first week.

Assignment due date: 23 January 2017

KAMPALA, UGANDA

**SUMMARY
Sessions in Uganda**

CLASS	Lecture Topic	Key Concepts or Topics
2	Decolonizing Design Innovation	Indigenous design Decolonized Design Anthropology HCD as Imperialism Hegemony
3	Human Centered Design in Uganda	Human needs vs wants Defining the Human Humans vs Nature Design in Agriculture Tradition and Innovation Co-design

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		Collective Design
4	Heritage Mapping and Storytelling	Archetype vs Prototype Empathy vs sympathy Resource Mapping

CLASS 2: Decolonizing Design Innovation

This class considers the contributions that anthropology has made to design and design research, and moreover how a decolonized conception of anthropology can enhance the field of design. We will consider the potentially imperialist character of dominant design discourses, which may impose a developmental framework in a top down manner and posit certain actors as agents and others as passive recipients in the field of human development. We will discuss concepts like indigenous knowledge, indigenous design and design histories as a way of framing the pedagogical approach of this traveling course. Design thinkers from the Global South are brought in to contest the ‘Northern’ hegemony of existing design discourses.

Required Readings:

- Tunstall, E. 2016. Design Anthropology: Theory and Practice. Chapter 13 - Decolonizing Design Innovation: Design Anthropology, Critical Anthropology and Indigenous Knowledge.
- Nussbaum, B. 2010. ‘Is Humanitarian Design the new Imperialism? Co. Design, July 7. www.fastcodesign.com/1661859/is-humanitarian-design-the-new-imperialism.
- Nussbaum, B. 2010. “Do-gooder Design and Imperialism, Round 3: Nussbaum Responds”, Co. Design, July 13. www.fastcodesign.com/1661894/do-gooder-design-and-imperialism-round-3-nussbaum-responds.
- Nussbaum, B. 2010. ‘Should Humanitarians Press on, If Locals Resist?’ Co. Design, August 3. www.fastcodesign.com/1662021/nussbaum-should-humanitarians-press-on-if-locals-resist.
- Pilloton, E. 2010. “Are Humanitarian Designers Imperialists? Project H Responds”, Co.Design, July 12. www.fastcodesign.com/1661885/are-humanitarian-designers-imperialists-project-h-responds.

CLASS 3: Human Centered Design in Uganda

To design is to materialize an idea to improve the existing order of things, and thus to partake in an age-old human practice. As such, design brings some fundamental questions to the fore: what does it mean to be human? Is the ability to design an innate part of being human? What conceptions of being human have informed designers traditionally and how has anthropology and, in particular, design anthropology, enriched ideas about being human? To begin to answer these questions we will look at strategies from development, anthropology and

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psychology to define human needs versus human desires. What kind of human is the centre of design – how does class, race, gender and history figure in this? As societies develop their conceptions of what it means to be human, how does this get reflected in design? When and how do certain designs become outdated, and how do we distinguish between innovations and impositions?

Examples of explicitly and implicitly contemporary HCD projects in Uganda, as well as examples of the resilience of traditional design in Uganda and East Africa will be utilized to think about the nature of the human that figures in design. The concept of co-design and collective design will build on our introduction to indigenous design, as we consider both traditional design and more recent innovations that have been successful in Uganda.

Required Readings:

- Mutungi, E. 2015. When the Butter Got Done: The Resilience of Indigenous Design Processes During Dictatorial Regime in Uganda in *Journalism and Mass Communication*, September 2015, Vol. 5, No. 9, 495-504.
- Open IDEO Case: mTrack UNICEF - <https://challenges.openideo.com/challenge/fighting-ebola/ideas/mtrac-unicef-a-mobile-based-case-on-monitoring-uganda> and Open IDEO Case: Tamuka Hubs – Community Centers and Libraries for Refugees in Kampala: <https://challenges.openideo.com/challenge/refugee-education/ideas/tamuka-hubs-community-centres-and-libraries-for-refugees-in-kampala>
- Appadurai, A. 2005. “Commodities and the Politics of Value” in M.M Ertman and J.C Williams (eds), *Rethinking Commodification: Cases and Readings in Law and Culture*, New York: New York University Press, 34-44.

Design Thinking Frameworks:

- Stanford Design School’s Bootcamp Bootleg- (<https://dschool.stanford.edu/wp-content/uploads/2011/03/BootcampBootleg2010v2SLIM.pdf>)
- Stanford University dSchool. An Introduction to Design Thinking Process Guide (https://dschool.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf?sessionID=68deabe9f22d5b79bde83798d28a09327886ea4b_)
- Frog Collective Action Toolkit - (http://www.frogdesign.com/sites/default/files/pdf/frog_collective_action_toolkit.pdf)
- Human-Centered Design Toolkit: <http://www.designkit.org/resources/1>

CLASS 4: Heritage Mapping and Storytelling

In this class we will begin to reflect on the practice of design research. In particular, this class reflects on the emotional and psychological aspects of design research, particularly in relation to inequality, poverty, privilege and cultural difference. Design manuals encourage storytelling and ‘persona’ creation – we will explore and critique these processes in this class. Students will be able to reflect on HCD research methods that they will have had a chance to test out, and consider the limitations and the insights gained from their assignments.

Some of the questions considered will be: How do our own cultural biases and lenses come to play into our interpretation? How do we know if we are feeling empathetic or sympathetic?

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What is the action that flows from understanding and empathy? Who can our knowledge benefit? What is the difference between an archetype and a stereotype? When are stereotypes harmful and when are they helpful? What problems might emerge when we categorize cultures and cultural values? How much of what we understand and SEE is relating to our own lens that we cast on the world?

Required Readings

- Battarbee, Katja, Fulton Suri, Jane and Gibbs Howard, Suzanne (2012). Empathy on the Edge: Scaling and Sustaining a Human Centered Design Approach in the Evolving Practice of Design. IDEO In-house Publication. (https://www.ideo.com/images/uploads/news/pdfs/Empathy_on_the_Edge.pdf)
- Cipolla, C., & Bartholo, R. (2014). Empathy or inclusion: A dialogical approach to socially responsible design. International Journal of Design, 8(2), 87-100.
- Park, Alex (May 16, 2012). How Design Links Storytelling to Social Enterprise. Media Shift. (<http://mediashift.org/2012/05/how-design-links-storytelling-to-social-enterprise137/>)
- Quesenberry, Whitney and Brooks, Kevin. (April, 2010). Storytelling for User Experience. Brooklyn, New York: Rosenfeld Media. (https://uxdesigntherapy.files.wordpress.com/2014/03/storytelling_for_user_experience.pdf)

UGANDA Assignment (30%)

This assignment is about exploring the ways in which we might construct the human at the center of the design process. You are not expected to come up with a solution to anything – this exercise is about experimenting with design methodologies to deepen your experience of the country you are immersed in. Complete both of the assignments below - both options require engagement with (local) people around you.

- **Heritage Interview** (15%)
- **Voice of the People mini survey** (15%)

Heritage Interview: Sit down with a member of your home-stay family, or someone whom you have met in Uganda and is local to your neighborhood/ classroom etc., and create a personal cultural heritage map with them (about them). Develop a list of questions to ask them about their heritage, their family tree, their culture, their values and their identity, and leave space open in your questions for identity indicators that **they** find most important.

You might ask questions about places where they have lived, where previous generations of their family came from, communities that they have (or have not) been part of, historical influences from family members or loved ones. Ask your participant to share with you an image (photo, painting, picture) AND an object (could be domestic, religious, personal, aspirational etc) that could help to tell the story of their heritage. Find a way to visually depict the different aspects of your interviewee's heritage and identity – this is something that you could do during the interview itself. Please submit a final product that includes both a map and photographs. (Suggested visual prompts that you could work with are: family tree, map of Kampala, map of Uganda/ East Africa, list of family names, important religious symbols, mind –map, flow chart etc). In this exercise you might use techniques of *photo-elicitation*, *collaborative map/ image making* and *interviewing*. In terms of HCD techniques, you might use *drawing*,

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collage, storytelling and *'peer observing peer'* techniques. Please Consult the IDEO HCD Toolkit pages 57 - 64 to inform your mapping and interviewing processes.

Write a reflection on the process – what worked well, what didn't, were there any ethical considerations or hurdles that you encountered, how did your own identity possibly limit or enable certain parts of the conversation? The written part of the assignment should be a minimum of 1 page, single-spaced (12pt Times New Roman). Please save the PDF including the imagery and reflection as *Name. Heritage Interview*.

Voice of the People mini survey: Choose a burning social question that has emerged in your first days in Kampala (or perhaps that you have carried with you) to explore through **action research**. This could relate to health and hygiene, gender roles, nutrition, trade, financial access, education, beauty standards, migrational patterns, tradition and culture, transportation to name a few. Start asking people you meet a few key questions about this issue – after the first 5 (or less) people interviewed, consider whether you want to rephrase or rethink your question. Make sure to interview at least another 5 people with the refined question. In the end, you should have interviewed 10 different people. Try to create a mix of home-stay people and people you might encounter in public life. Find a way to visualize the data that you collect, as well as the research process that you went through in this exercise (suggestions would be flow charts, venn diagrams, timelines, bar graphs, illustrations, mind –maps etc). Included in the visual aspect of the project, you are required to hypothesise about whether the views you collected expressed mainstream or extreme views, and experiment with creating 2-3 dominant character profile groups of the participants. Consult the IDEO HCD Toolkit pages 39-45 to inform your interviewing, profiling and data gathering processes.

Write a reflection on the process – what worked well, what didn't, were there any ethical considerations or hurdles that you encountered, how did your own identity possibly limit or enable certain parts of the conversation with the different people that you spoke to? The written part of the assignment should be a minimum of 1 page, single-spaced (12pt Times New Roman). Please save the PDF as *Name. Voice of the People*.

Assignment due date: Friday 3 March 2017 by 12:00pm - give to Sophia on a flashdrive by the stated deadline, saved as two separate PDFs.

DELHI, INDIA

SUMMARY Sessions in India

CLASS	Lecture Topic	Key Concepts or Topics
5	Tradition and Modernity in Indian Design	Everyday Objects Gandhi vs Nehru McDonaldization vs Nationalism Democratized design
6	Non-Human Centered Design?	Anthropocene

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		Innovation and Warfare Technologies of Control Spaceship Earth Environmental protection and degradation
7	Designing Systems and Services	Service design Designing Change Patterns of Consumption and Production Social Engineering

CLASS 5: Tradition and Modernity in Indian Design

India's rich history of craft and design has been a source of inspiration for many Indian design thinkers, and influenced the foundations of modern design education and the design industry in South Asia today. In this class we will reflect on how post-colonial India has been shaped by the development legacies of both Gandhi and Nehru. While Gandhi emphasized economic self-sufficiency and cottage industries, Nehru supported strongly state led industrial development, and a notion of modernity that was in deeper dialogue rather than conflict with 'Western' conceptions of modernity.

The current field and the future of design becomes an interesting space to consider these tensions, and how they play out in relation to aims of the social entrepreneurs to 'solve complex problems'. When does the drive for innovation skip over existing design and how can more effective, just and sustainable design solutions be inspired by indigenous practices? We will consider the extent to which India has been susceptible to 'McDonaldization' particularly in relation to digital technological developments, and the influence of cultural norms and values in the design of both systems and products that we will encounter on the field visits. Additionally, we will explore the idea of democratized design as a way of distinguishing between top-down and bottom-up innovation.

Required Readings

- Eames, R and C. 1958. The India Report. National Institute of Design, Ahmadabad. (http://nid.edu/Userfiles/Eames___India_Report.pdf)
- Ranjan, MP. 1999. Design Before Technology: The Emerging Imperative. file:///Users/sujay/Downloads/Design_Before_Technology_JIDA_Osaka_1999.pdf
- Mitra. B. 2016. Democratization of Design. Talk given at the 2016 Pune Design Festival. <https://www.linkedin.com/pulse/democratisation-design-what-does-mean-india-bikram-mittra>
- Lodaya, A. 2003. "The Crisis of Traditional Craft in India", Lodaya.Webs.Com. Available at http://www.geocities.ws/lodaia/paper_craft.htm
- Tung, F. –W. (2012). Weaving with rush: Exploring craft-design collaborations in revitalizing a local craft. International Journal of Design, 6(3), 71-84

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CLASS 6: Non-Human Design – the environment, technological innovation and warfare

We are often told that creativity and innovation are values in themselves, but many innovations and technologies that we take for granted and that can play a transformative social role, were born out of imperatives that were not necessarily socially responsible. This class will explore some thinking around the darker side of ‘human centered design’ which looks at the wealth of design technologies and innovations that have been born from the intention to control, dominate and suppress humans, environments and territories. From maps to tele-communications, to drones and even the internet itself, we will explore examples of design innovations that came from the military.

In this class we will also be introduced to the ways in which design discourses are affecting and being affected by dominant debates about the environment. If not for humans, then who/ what is design for? Do we design for the environment and is the environment broadly conceptualized with or without humans? Do we design for animals? Is human-centeredness a value in itself? Malthusian versus Cornucopian perspectives will be examined and questioned. We will examine the concept of ‘Spaceship Earth’ – which considers the earth as possessing finite resources that are common to all humankind. From a Design perspective, the legendary Buckminster Fuller will be our guide to understand earth as a spaceship, populated with astronauts who have an obligation to maintain and care for their spaceship, lest the ship falls apart.

Required Readings:

- Uberoi, J. P. S. 2008. Sociology of Commerce and Industry, or the Three Lives of Things. Sociological Bulletin, 57 (1), 41-59.
- Mirzoeff, N. 2015. How to See the World. Chapter 3- The World of War pp 101-127.
- Fuller, B. 1969. Operating Manual for Spaceship Earth. Pages 2-44. (http://designsciencelab.com/resources/OperatingManual_BF.pdf)
- [Kent](#), A. 2014. Warfare, Software, and Industrial Design: The benefits of an organic, more iterative approach to product development in Strategy Business. August 8, 2014 / [Autumn 2014 / Issue 76](#). Accessed: <http://www.strategy-business.com/article/00268>
- Satell, G. 2015. 4 Innovation Lessons from the History of Warfare published 14 March, 2015 in Forbes.com. Accessed: <http://www.forbes.com/sites/gregsatell/2015/03/14/4-innovation-lessons-from-the-history-of-warfare/#a52e2e2bfe4c>

CLASS 7: Designing Systems and Services

Students will be introduced to the idea of *service design*: the activity of planning and organizing people, infrastructure, communication and material components of a service in order to improve its quality and the interaction between service provider and customers. The purpose of service design methodologies is to design according to the needs of customers or participants, so that the service is user-friendly, competitive and relevant. Service designers watch and interpret needs and behaviors and transform them into potential future services. In

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the process, exploring, generating and evaluating approaches are used similarly and a redesign of existing services is just as much a challenge as the development of new ones.

Harvard University's proposed multi-disciplinary study of the Maha Kumbh Mela will be introduced to as a case study of large scale human centered spatial design and 'bottom up' methods of devising services and systems for masses. In addition, the practical assignment for India will give students the opportunity to create a journey map and a life-cycle of a product to gain experience in mapping resources, systems and products.

Required Readings

- Dubberly, Hugh and Shelley Evenson. 2010. Designing for Service: Creating an Experience Advantage. Wiley Online Library.
- 2013. GSD Urban India Project | Harvard University - An Interdisciplinary Research Proposal. KUMBH MELA Mapping the Ephemeral Mega-City. <http://southasiainstitute.harvard.edu/website/wp-content/uploads/2013/05/Kumbh-GSD-Proposal.pdf>
- Del Gaudio, C., Franzato, C., & Oliveira, A. (2016). Sharing design agency with local partners in participatory design. International Journal of Design, 10(1), 53-64
- Mager, B., & Sung, T. J. (2011). Special issue editorial: Designing for services. International Journal of Design, 5(2), 1-3.
- Sangiorgi, D. 2011. Transformative services and transformation design. International Journal of Design, 5(2), 29-40
- Zhao, T. J., & Siu, K. W. M. (2014). The boundaries of public space: A case study of Hong Kong's mass transit railway. International Journal of Design, 8(2), 43-60.

INDIA Assignment (30%):

PART 1: India Home-stay Food Journey (15%)

This assignment is about mapping the value chains involved in the consumption of food as 1) a way of deepening our understanding of human centered and service design processes, 2) a way of experimenting with action research and photography as a research tool, 3) a way of documenting a part of your home-stay experience and integrating it with your academic program and 4) utilizing a comparative learning framework. In addition, it aims to bring together ideas about conscious consumption, systems theories and environmental consciousness explores during your time in India.

You will create a 'journey' documentation about the way in which food is typically **purchased** (where does it come from, who purchases it, where does the stockist procure the stock, if it is fresh produce - does your family know where is it grown, if it is imported- where does it come from?), **consumed** (who prepares it, what recipes are used, what produce is most popular in your home and why, how is mealtime typically arranged) and **discarded** (how is food related waste dealt with, are there systems for packaging waste, is there a culture of left-overs, what happens to the waste, who removes it and where does it go) in your New Delhi home.

OUTPUT: A photographic documentation of the journey of food in your home that you will create in the following 5 days - using at least 3 photographs for each of the three stages (purchase, consumption and waste - 9 photos in total). This document should also include a map of where the purchases are made and the travel between home and outlets. This can be

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hand-drawn, taken from Google maps and annotated or created in another (imaginative) way. PLEASE NOTE: Some interviews with and quotes from your family will enhance your research hugely and I expect you to include this.

Your final product will be a photo essay that should contain visual components (a minimum of 9 photographs) and a written reflection to tell your story and share your observations (single spacing, 12pt. font, 1-in. margins). In your written component, please offer some potential insights you have gained with regards to: a) the **cultural, social and economic** influences on the practices of consumption
b) the *systems* that you observe that inform the purchase, creation and disposal of food
c) your perception about the consciousness around you about waste and environmental degradation.

PROJECT GUIDE IN CLASS

- 1) create a timeline template that includes a category for the three stages (purchase, consumption, waste management), for the action/ touch points and for emotions
- 2) populate the template with possible questions that can guide both your secondary research and your action research
- 3) at each point where an action might be take, ask yourself -who, what, where, why, how (feelings), when. This should lead you far beyond what you already know.

OUTSIDE OF CLASS

- 4) your homestay parent/ friend will be the ‘persona’ that you are following, the food they purchase is the ‘product’, you will actually journey with them (along with a camera) to create this story
- 5) pay attention to any emotional insights you might come to - how were you feeling, how was your host feeling, how were the people you interacted with appearing at various steps along the way (affinity diagram)
- 6) after checking your actual notes, memories and observations about the actual experience against your template created in class, brainstorm some ideas about how to visualise your journey that best captures the particularity of your experience
- 7) find a way to refine these ideas into a final product.
- 8) write a reflection on the process (see below for details).
- 9) find a way to share your (or a part of your) product with your homestay family and of course your faculty and classmates.

Assignment due date: **Thursday 30th March at 9:30am.** Please submit it on a flashdrive in class. Save as PDF: **NAME, DELHI FOOD JOURNEY.**

PART 2: VOP OR Heritage Interview (15%)

Heritage Interview: Sit down with a member of your home-stay family, or someone whom you have met in India and is local to your neighborhood/ classroom etc., and create a personal cultural heritage map with them (about them). Develop a list of questions to ask them about their heritage, their family tree, their culture, their values and their identity, and leave space open in your questions for identity indicators that **they** find most important.

You might ask questions about places where they have lived, where previous generations of their family came from, communities that they have (or have not) been part of, historical influences from family members or loved ones. Ask your participant to share with you an image (photo, painting, picture) AND an object (could be domestic, religious, personal, aspirational etc) that could help to tell the story of their heritage. Find a way to visually depict the different aspects of your interviewee’s heritage and identity – this is something that you could do during the interview itself. Please submit a final product that includes both a map

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and photographs. (Suggested visual prompts that you could work with are: family tree, map of Delhi or a relevant part of India, list of family names, important religious symbols, mind – map, flow chart etc). In this exercise you might use techniques of *photo-elicitation*, *collaborative map/ image making* and *interviewing*. In terms of HCD techniques, you might use *drawing*, *collage*, *storytelling* and ‘*peer observing peer*’ techniques. Please Consult the IDEO HCD Toolkit pages 57 - 64 to inform your mapping and interviewing processes.

Write a reflection on the process in which you also look comparatively at the process you went through in Uganda – what worked well, what didn’t, were there any ethical considerations or hurdles that you encountered, how did your own identity possibly limit or enable certain parts of the conversation? What did you learn from the first time round, what do you learn from your colleagues, what did you learn about the evolution of your questions? The written part of the assignment should be a minimum of 1 page, single-spaced (12pt Times New Roman).

OR

Voice of the People mini survey: Choose a burning social question that has emerged in your first days in Delhi (or perhaps that you have carried with you) to explore through **action research**. Start asking people you meet a few key questions about this issue – after the first 5 (or less) people interviewed, consider whether you want to rephrase or rethink your question. Make sure to interview at least another 5 people with the refined question. In the end, you should have interviewed 10 different people. Try to create a mix of home-stay people and people you might encounter in public life. Find a way to visualize the data that you collect, as well as the research process that you went through in this exercise (suggestions would be flow charts, venn diagrams, timelines, bar graphs, illustrations, mind –maps etc). Included in the visual aspect of the project, you are required to hypothesize about whether the views you collected expressed mainstream or extreme views, and experiment with creating 2-3 dominant character profile groups of the participants. Consult the IDEO HCD Toolkit pages 39-45 to inform your interviewing, profiling and data gathering processes.

Write a reflection on the process in which you also look comparatively at the process you went through in Uganda – what worked well, what didn’t, were there any ethical considerations or hurdles that you encountered, how did your own identity possibly limit or enable certain parts of the conversation? What did you learn from the first time round, what do you learn from your colleagues, what did you learn about the evolution of your questions? The written part of the assignment should be a minimum of 1 page, single-spaced (12pt Times New Roman).

Assignment due date: Thursday 30th March at 9:30am. Please submit it on a flashdrive in class. Save as PDF: **NAME, DELHI HERITAGE MAP or NAME, DELHI VOP.**

SAO PAULO, BRAZIL

SUMMARY Sessions in Brazil

CLASS	Session Stage	Key Concepts or Topics
8	Research Design, Strategy and Immersion	Immersion Deep Hanging out Discovery

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9	Interpretation and Data Collection	Ideation Interpretation Action Planning Framing
10	Preparing Presentations: Tying it all together	Self Reflexivity Group input

CLASS 8: Research Design, Strategy and Immersion

The practical **HCD project** (which culminates in a presentation) will kick off in this class, and students will present feedback on their group composition, their potential topic and their secondary research about their chosen topic. Please see the assignments segment below and the Evaluation and Grading section for more detail.

The HCD process starts by the design team getting out into the community and learning from people. Discovery builds a solid foundation for a design team's ideas. Creating meaningful solutions for the people for whom a product/service/solution is being developed begins with a deep understanding for the needs of those people. Discovery means opening-up to new opportunities, and getting inspired to create new ideas. Whether a 'deep understanding' is possible remains to be explored, but the aim here is to collect as many kinds of visual, audio and written data as possible. In anticipation of the group-work to come, students will be asked to consider how different team members respond to the same situation, consider the different conceptual and imaginative strengths of team members. The readings on creative confidence and brainstorming will assist in planning-out the research process.

Rather than focus on an existing organization or enterprise, this project asks students to identify a real-world social challenge that they feel would benefit from a Human Centered Design approach. For example: *water and sanitation, public transport, social marginalization, waste disposal etc.* The target group and key informants that will inform the research could be student's host family, people that students have met through site visits, people living nearby to where students work etc.

Required Readings:

- Stanford Design School's Bootcamp Bootleg- (<https://dschool.stanford.edu/wp-content/uploads/2011/03/BootcampBootleg2010v2SLIM.pdf>)
- Stanford University dSchool. An Introduction to Design Thinking Process Guide (https://dschool.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf?sessionID=68deabe9f22d5b79bde83798d28a09327886ea4b_)
- Frog Collective Action Toolkit - (http://www.frogdesign.com/sites/default/files/pdf/frog_collective_action_toolkit.pdf)
- Human-Centered Design Toolkit: <http://www.designkit.org/resources/1>

CLASS 9: Interpretation and Data Collection

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The second phase of the Human Centered Design process includes brainstorming and exploring many potential ways of framing the context/ dynamic/ situation/ group you have been spending time with. In this class, we will use the HCD frameworks to work through the interpretation, action planning and framing process. In this class, groups will analyze the various data forms collected in the previous weeks and begin to interpret responses and use this to start testing and articulating frames or design questions.

Every design process begins with a specific and intentional problem to address -- **a Design Challenge**. One of the most difficult parts of the design process is framing a challenge that is approachable, understandable and actionable. It shouldn't be too big, and it shouldn't be too small. It shouldn't be too vague, but it shouldn't be too simple. Interpretation transforms stories into meaningful insights. Finding meaning and inspiration is how actionable opportunities for design are created. It involves storytelling, as well as sorting and condensing thoughts until a compelling point of view and clear direction has been developed.

Required Readings:

- Kelley, David and Kelley, Tom. 2013. Preface and Introduction pp 1-6 in Kelley, David and Kelley, Tom. (2013). Creative Confidence. New York: New Doubleday Publishing Group.
-

CLASS 10: Presentations -Tying it all together

Teams will continue working on their final projects this week, with a focus how they will be presenting their work and overall findings and experiences. In this week, teams should be finalizing their projects and beginning to think about how to distill and communicate their idea to internal and/or external stakeholders, reflecting on what they learned and how they might recommend moving forward. There are no readings for this week, as the focus will be on addressing practical concerns experienced in the group project.

Required Readings:

- Stanford Design School's Bootcamp Bootleg- (<https://dschool.stanford.edu/wp-content/uploads/2011/03/BootcampBootleg2010v2SLIM.pdf>)
- Stanford University dSchool. An Introduction to Design Thinking Process Guide (https://dschool.stanford.edu/sandbox/groups/designresources/wiki/36873/attachments/74b3d/ModeGuideBOOTCAMP2010L.pdf?sessionID=68deabe9f22d5b79bde83798d28a09327886ea4b_)
- Frog Collective Action Toolkit - (http://www.frogdesign.com/sites/default/files/pdf/frog_collective_action_toolkit.pdf)
- Human-Centered Design Toolkit: <http://www.designkit.org/resources/1>

Evaluation and Grading Criteria

Description of Assignments

Pre-departure Assignment (10%)

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The SEN program, like all IHP programs, is based on a comparative and experiential learning model. What is unusual in the SEN program is a focus on creative and visual methods of enquiry and learning. We would like to develop your innate visual, analytic and representational skills through this course. Your pre-departure assignment therefore asks you to share knowledge and information that you already possess, but challenges you to represent it in new and perhaps unexpected ways.

We would like you to create a poster about yourself using photographs, drawings, maps and other media. We would like you to include information/ data about your family, places where you have lived, things you like to do, your education, your influences and your aspirations. You should be prepared to share the poster with the group visually and verbally, and through the poster allow us a peak into your past, your mind space and your dreams. Please remember that we will not be assessing you in terms of your aesthetic skill- your poster does not have to look 'designed' or 'beautiful'. Rather, we will be looking for how creatively you analyzed your own data and how experimental you allowed yourself to be. If you would like to create your poster digitally you may, otherwise you are welcome to hand-draw/ create your poster (or you may use a combination).

Pre-departure Assignment due date: TBA

Two Country Assignments (60%)

In each country, there will be a practical and reflective exercise. Your faculty member will tell you upon arrival in each country when each of these assignments are due. These exercises are mostly completed individually, but through a process that can be inclusive and collaborative. Some of them will only be submitted to faculty and some of them will also be presented by students during class.

The aim of this component is to familiarize students with visual methods of research, documentation, reflection, observation and analysis so that by sessions 8, 9 and 10 during which groups work on a Human Centered Design project, a range of tools are available for use. In addition, the exercises are the 'doing' part of design thinking – in order to see the world differently we also have to visualize it differently.

Each student will keep an individual journal/sketchbook throughout the semester – this will be presented to students at the launch. The aim is that by the end of the semester students have inculcated a habit of visual journaling, will have practiced visual research methods and will be left with a collection of both text/written, sketched/hand drawn, and printed/digitally produced notes, ideas, reflections, fieldwork documentation, etc. Creativity is encouraged.

Practical Project: Human Centered Design in Brazil (30%)

The Design Thinking and HCD class will culminate with a project that consists of a 6-page project (including visual and written components).

HCD PROJECT BRIEF: Identify a particular social issue/ challenge that either a) connects to **your Case Study theme** OR b) has struck you that could benefit from a Human Centered Design approach. Once you have chosen a **key question**, you need to:

1. **Research** it using various HCD techniques listed below. You should **also** include the planning of your research – creating a framework of people/ sources you would like to consult with to gain deeper understanding of the question. You are required to use at least 4 of the methods below.

HCD Methods: *Secondary Research, Interview, Group Interview, Expert Interview,*
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Define Your Audience, Conversation Starters, Extremes and Mainstreams, Immersion. Analogous Inspiration, Card Sort, Peers Observing Peers, Guided Tour, Draw It, Resource Flow, JOURNEY MAPPING, VALUE CHAIN CREATION, HERITAGE/ IN DEPTH INTERVIEW, VOICE OF THE PEOPLE.

2. **Document, visualize and analyze your data** (using techniques like map-making, chart creation, value chain drawings, photography, value chain modeling, video and audio recordings etc). **The visualization the information should help you analyze** your data - to create insight statements, refine your question, decide what aspect you find most compelling to act upon and to be able to frame/ define the design challenge in a more nuanced way.

HCD Methods: *Data Collection, Interpretation and Framing, Download Your Learnings, Share Inspiring Stories, Top Five, Create Insight Statements, Explore Your Hunch, How Might We, Create Frameworks, Brainstorm, Bundle Ideas*

3. **Propose a potential ‘solution’ to the challenge (IDEATE)**

How? Use the IDEO HCD Toolkit as a guide and try to come up with as many ideas as possible to find a plausible ‘solution’ to the problem. Since the time is limited, these can all be hypothetical - however if you think of an idea while doing your fieldwork, see what people think and present feedback on that. Please try to be as **creative** and **specific** as possible when outlining your solutions - explaining in words (and images).

Here are some examples:

- **product** - how is it made, who designs it, what does it do, how does it look etc.
- **system or process** -perhaps it is a be a campaign to lobby government - who, how, where, what is the timeframe, who are the stakeholders, what are the significant power relations etc.
- **service or business** - what is the business model, stakeholders, sustainability plan, organization etc.

HCD Methods: *Get Visual, Mash-Ups, Design Principles, Co-Creation Session, Determine What to Prototype, Storyboard, Role Playing, Rapid Prototyping, Business Model Canvas, Get Feedback.*

SPECIFICATIONS:

Your final project must be 6-pages (in A4) and must take us through:

Phase 1) the identification of your initial idea, the data you collected in your research, and Phase 2) the analysis of your data, the refining of the idea and the articulation of the problem.

One of the 6 pages will be a reflection on the process.

Be as visual and creative as possible. Please show your research (who, when were, how many people, what were the circumstances, how did people react, what were your insights etc.) using text and visual methods.

Note on Group Grades: Grades for case studies will largely be given as group grades. PLEASE NOTE: This syllabus is representative of a typical term. Because courses develop and change over time to take advantage of unique learning opportunities, actual course content varies from semester to semester.

However, your country coordinator, and case study facilitators will be actively checking in on group dynamics and participation to ensure that all members are participating and contributing equally to a great research experience. In select cases where faculty and staff deem appropriate, an individual grade may be given in the place of a group grade.

Assessment:

USA	Pre-Departure assignment (10%)
Uganda	Country Assignment (30%)
India	Country Assignment (30%)
Brazil	Applied HCD project (30%)

Rubrics for individual assignments will be handed out later in the course.

Examples of criteria:

- Strength and effective development of arguments supporting your position
- Clear analytical connections to concepts we have studied
- Effective use of primary and secondary information for descriptive and analytical purposes
- Ability to skillfully synthesize information from various sources
- Clarity and concise communication

Grading Scale:

94-100%	A	Excellent
90-93%	A-	
87-89%	B+	
84-86%	B	Above Average
80-83%	B-	
77-79%	C+	
74-76%	C	Average
70-73%	C-	
67-69%	D+	
64-66%	D	Below Average
Below 64	F	Fail

Explanation: An “A” represents truly outstanding work that exemplifies through analysis, superior insights and crystal clear presentation. A “B” signifies highly competent work that accomplishes the task at hand very well, through considerable thought, reasonable analysis and an organized presentation. A “C” represents adequate work that meets basic requirements but does not demonstrate distinction in terms of analytical insight or organization. A “D” is characterized by poorly or partially completed work that reflects a lack of initiative, inconsistent analysis and/or erratic presentation. Plus and minus indicate relatively better or poorer work within each category. There is no A+.

Papers/reports/presentations without thematic ideas or arguments – those that lapse into mere narration or description, or whose arguments are buried within the text – will be graded with their low level of organization.

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Specific rubrics will be provided.

Expectations and Policies

Participation: IHP is an experiential learning program. You have to show up to have the experience. As such, participation is a minimum expectation, not generally to be rewarded with class credit. Students are expected to attend all classes, guest lectures, and field activities unless they have a medical excuse that has been communicated and approved of by IHP staff, faculty, or Fellow.

Class Preparation: Show up prepared and have your readings completed and points in mind for discussion or clarification. Complying with these elements raises the level of class discussion for everyone. This program is built upon the strong belief that your experiences result in deep insights and powerful learning. Course assignments are created to facilitate learning opportunities and experiences. Dialogue in class about these insights and participation in these activities is critical. For this reason, your participation is very important. As a learning community, each one of us will influence the learning environment. Please take responsibility for your role in this environment and come to class prepared and ready to engage with others in a positive and thought-provoking manner.

Meeting deadlines: All assignments have to be turned in on the date indicated on the specific country module schedule. Have assignments completed on schedule, printed, and done accordingly to the specified requirements. This will help ensure that your assignments are returned in a timely manner. In keeping with IHP policy, late papers will drop one point per day, unless other arrangements have been made in advance. Course assignments are due at the beginning of the day.

Technology in the classroom: Electronic devices are critical tools for learning and communication, but our IHP courses prioritize engaged conversations unhindered by personal electronic devices. Students, faculty, and visitors are expected to *keep cell phones, laptop computers, and other devices out of sight, sound, and mind* during class sessions – except under extenuating circumstances that have been discussed in advance with the faculty member.

Academic Integrity: Academic dishonesty is the failure to maintain academic integrity. It includes, but is not limited to, obtaining or giving unauthorized aid on an examination, having unauthorized prior knowledge of the content of an examination, doing work for another student, having work done by another person for the student, and plagiarism. Academic dishonesty can result in severe academic penalty, including failure of the course and/or dismissal from the institution/program.

Plagiarism is the presentation of another person's ideas or product as one's own. Examples of plagiarism are: copying verbatim and without attribution all or parts of another's written work, using phrases, charts, figures, illustrations, computer programs, websites without citing the source; paraphrasing ideas, conclusions or research without citing the source; using all or part of a literary plot, poem, film, musical score, computer program, websites or other artistic product without attributing the work to its creator.

Students can avoid unintentional plagiarism by carefully following accepted scholarly practices. Notes taken for papers and research projects should accurately record sources of material to cited, quoted, paraphrased, or summarized, and research or critical papers should acknowledge these sources in footnotes or by use of footnotes.

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Respect differences of opinion: (classmates', lecturers, local constituents engaged with on the visits) You are not expected to agree with everything you hear, but you are expected to listen across difference and consider other perspectives with respect.

Please refer to the **SIT Study Abroad Student Handbook** for policies on academic integrity, ethics, warning and probation, diversity and disability, sexual harassment, and the academic appeals process.

Online HCD & DT Resources

- <http://www.rockefellerfoundation.org/blog/how-social-innovation-labs-contribute>
- http://www.positivedeviance.org/about_pdi/history.html
- <http://www.innocentive.com/>
- <http://www.tballiance.org/>
- <http://www.borgenmagazine.com/human-centered-design-ideo-orgs-designkit/>
- http://www.ideo.com/images/uploads/news/pdfs/IDEO_RF_Guide.pdf
- http://plusacumen.org/wp-content/uploads/2013/07/Week1_readings.pdf
- <http://www.ideo.com/work/human-centered-design-toolkit/>
- <http://dschool.stanford.edu/wp-content/uploads/2011/03/BootcampBootleg2010v2SLIM.pdf>
- <http://productrealization.stanford.edu/>
- <http://extreme.stanford.edu>
- <http://www.gsb.stanford.edu/stanford-gsb-experience/news-history/design-extreme-affordability-addresses-global-poverty>
- Mars Solution Labs - <http://www.marsdd.com/entrepreneurship-101/>
- MIT Mobile Experience Lab - <http://mobile.mit.edu/> (Include in Tech syllabus)
- HBS Cases on Social Enterprise
- <http://www.hbs.edu/faculty/topics/Pages/social-enterprise.aspx>
- <http://www.schwabfound.org/>
- <http://www.aspeninstitute.org/policy-work/aspen-network-development-entrepreneurs>

Inspiring Design and Visual Culture

- http://thecreatorsproject.vice.com/en_us
- <http://dalberg.com/blog/>
- <http://www.thisiscolossal.com/category/design/>
- <http://culturainquieta.com/en/>

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