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Inertia vs

MOVE

The Body-Mind Connection in Design for Co-Creative Processes:

a proposal for **PowerFlowing**



to *Sparkling Brains...*

Inertia vs

MOVE

The Body-Mind Connection in Design for Co-Creative Processes:

a proposal for **PowerFlowing**



MENT

English Abstract

PowerFlowing: Movement routines to overcome inertia against innovation in small design companies.

Since the shift to knowledge economies, creativity, which was at the center of human progress, allied with innovation now is acknowledged as the main factor of organizational performance. [1] Today organizations are required to innovate to survive and improve their processes in order to create a collaborative, creative environment in the workplace. However, in spite of this interest and emphasis, managers are still far away from a practice to harness creativity in the daily routines of the workplace. Many individuals can't perform to their best creative capacity in collaborative tasks. [2]

PowerFlowing is an adaptive model which aims to bring a novel approach to creative workplace performance using recent research from neuroscience, social psychology and movement analysis. It offers the principles, frameworks and tools to bring together small size design companies with local movement professionals.

The proving and development of this Product, Service, System concept includes the analysis of the very recent literature, consultations with specialists, preliminary tests, theory building and prototypings. All of these processes took place in many iterations in order to adapt the approach to the needs of real contexts.

Designers, design managers, academics of design, organizational psychologists, performers and movement analysts took part in this research through observations, interviews and advisories. Also one multidisciplinary design company from **New York** and a design studio from **Istanbul** contributed my work as collaborators.

Both this journey and the outcome itself shares the same purpose:

Empowering talented individuals which can not perform their best during co-creation phases through movement. And making already existing knowledge from science and movement studies clear, adaptable and sustainable so that regardless of background all teams and organizations can benefit from that knowledge.

1. Harnessing Creativity and Innovation in the Workplace, Serrat, 2009
2. Personal professional experience in design

Italian Abstract

PowerFlowing: routine di movimento per superare l'inerzia contro l'innovazione in aziende di design di piccole dimensioni.

Fin dal passaggio ad economie della conoscenza, la creatività, che era al centro del progresso umano, insieme all'innovazione oggi è riconosciuta come il principale fattore di performance organizzative. [1] Oggi le organizzazioni sono chiamate ad innovare per sopravvivere e migliorare i propri processi, al fine di creare un ambiente collaborativo e creativo nei luoghi di lavoro. Tuttavia, a dispetto di questo interesse ed enfasi, i manager sono ancora lontani dal mettere in pratica la creatività nella routine quotidiana del luogo di lavoro. Molte persone non sono in grado di esprimere e mettere in atto al meglio le proprie competenze creative in obiettivi collaborativi.[2]

Il PowerFlowing è una soluzione conoscitiva che mira a portare un nuovo approccio alle prestazioni degli ambienti di lavoro creativi affidandosi alle recenti ricerche delle neuroscienze, della psicologia sociale e dell'analisi del movimento. Offre i principi, i limiti e gli strumenti per mettere insieme imprese di design di piccole dimensioni con i professionisti locali del movimento.

La determinazione e lo sviluppo di questo Product Service System concept include l'analisi della recente letteratura, le consultazioni di specialisti, test preliminari, la costruzione di teorie e prototipi.

Tutti questi processi si sono svolti in molte iterazioni per adattare l'approccio alle esigenze dei contesti reali.

I progettisti, i design manager, i docenti universitari di design, gli psicologi del lavoro, interpreti e analisti del movimento hanno partecipato a questa ricerca attraverso osservazioni, interviste e suggerimenti. Anche una società di progettazione multidisciplinare di New York e uno studio di design di Istanbul hanno contribuito al mio lavoro come collaboratori.

Sia questo processo che il risultato stesso condividono lo stesso scopo:

Qualificare le persone di talento che non riescono ad esprimersi al proprio meglio durante le fasi di co-creazione attraverso il movimento. E rendere le conoscenze già esistenti da studi scientifici e casi di movimento chiari, adattabili e sostenibili in modo che, indipendentemente dalla provenienza, tutti i gruppi e le organizzazioni possano beneficiare di tale conoscenza.

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One

Innovation, creativity and collaboration are necessities of new way of working. Can individuals really fit in and perform their best in this new setting?

Focus

Context

Problem

Opportunities

Method

Part One sets the area of interest and lays out the main roles and goals of the whole thesis. In this part, a preliminary analysis of literature is included in order to have a clear explanation of the problem area. The section lists several trends and phenomena that will be guiding the solution paths. Finally in this part, the methods and structures are demonstrated through various steps, frameworks and maps.

FOCUS

Overcoming Inertia With Movement

Today design has achieved a larger context of implications than ever before. Design is now a part of the solution mechanism for global and complex problems. Now designers take place in processes of problem definition, research, analysis, solution synthesis, and implementation for issues such as health care, aging, food and poverty. Designers' contribution consolidates aspects such as human factors, environment, sustainability and communication. Taking into consideration this trend, as an opportunity and responsibility, from the beginning of my graduate studies, I wanted to address the problems of wellness and health care with design tools.

Health care starts from the quality of the living and working places. An average worker spends 8 hours a day in an office which add up to a total 1900 hours a year. For knowledge workers who perform in creative businesses, the physical conditions are relatively appealing and comfortable. Notwithstanding, many of those creative workers suffer from mild to extreme cases of mental pressure caused by continuous expectation of new ideas, new productions and keeping ahead of the competitors. And also by an environment lacking adequate regulations about motivation, communication and collaboration. Many workers quit their jobs because of interpersonal dynamics. **95% of the communication happens nonverbally.**[1] And today's education system doesn't provide the tools to use this channel of communication in an efficient way.

Thus, my thesis has a focus and approach towards the problem of inertia in collaborative creative activities with a movement point of view.

In this project I will be sharing my journey as a

Consider the following facts:

- The changing economy demands innovation and collaboration.
- Recruiting and promotions are based more on "soft skills," such as creativity, ingenuity, and resilience.
- New leadership models are required to support this ongoing creative demand.
- Trust and confidence are the key elements for dynamic leadership and collaboration.
- Individuals' self image and cognitive performance can be supported by movement activities.
- Many companies encourage their employees' physical activity because of concerns about
 - Health costs
 - Number of sick days
 - Work performance

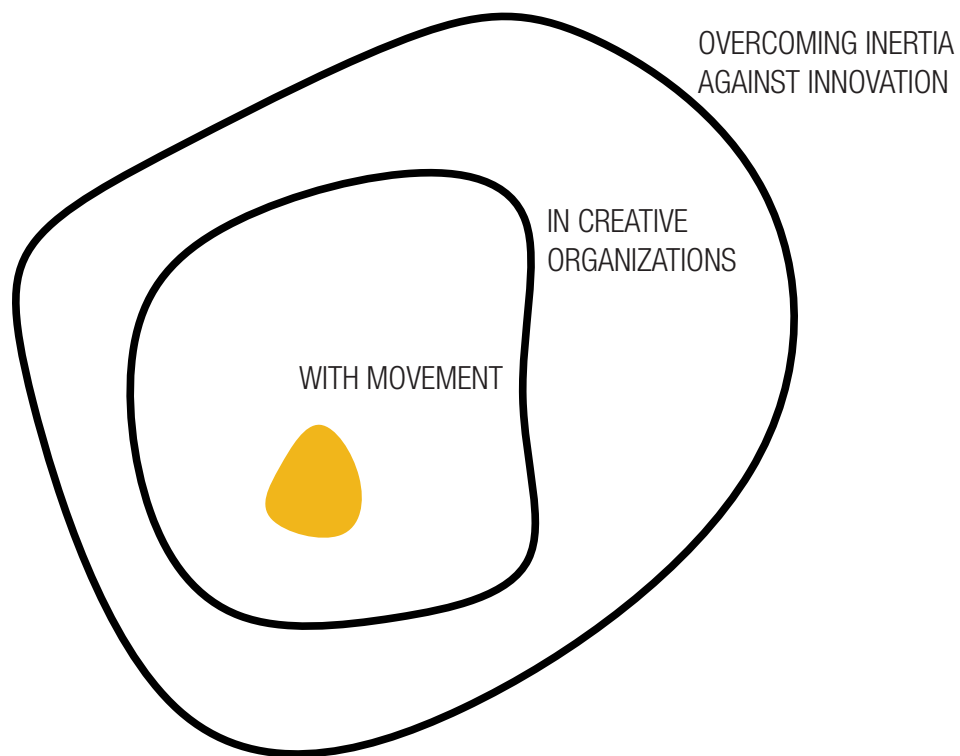
Through theoretical and empirical research, this thesis will study the possibilities and methods to implement movement studies into the daily routine of a small design company.

I sincerely believe that this outcome can have a widespread impact and the frameworks can be rescaled to other fields of work life in order to create better performances via healthy, happy workers.

1. Albert Mehrabian stated that 95% of the emotional content of any message is nonverbal.

Figure A

Framing the design question



Reflective practice is “the capacity to reflect on action so as to engage in a process of continuous learning”, which, according to the originator of the term, is “one of the defining characteristics of professional practice”. According to one definition it involves “paying critical attention to the practical values and theories which inform everyday actions, by examining practice reflectively and reflexively. This leads to developmental insight”.

Reflective practice can be an important tool in practice-based professional learning settings where individuals learning from their own professional experiences, rather than from formal teaching or

knowledge transfer, may be the most important source of personal professional development and improvement. As such the notion has achieved wide take-up, particularly in professional development for practitioners in the areas of education and healthcare. The question of how best to learn from experience has wider relevance however, to any organizational learning environment. In particular, people in leadership positions have a tremendous development opportunity if they engage in reflective practice.

http://en.wikipedia.org/wiki/Reflective_practice

1. CONTEXT

Istanbul, Milan, New York

PowerFlowing is the outcome of a 5 year professional design background in Istanbul, the multinational collaborative atmosphere of Product Service System Design program of Politecnico di Milano in Milan and open-ended complex problem solving culture of Transdisciplinary program of Parsons The New School for Design in New York.

the similarities instead of the differences. Using general rules about human the body and mind, this project aims to design tools and methods to serve the same in need in different conditions. In today's global scenarios, your methods of performance and communication should be valid not only in your specific cultural settings.

Three different cities, three languages, two institutions and many collaborators. This thesis work faced many challenges through a 15 months time, such as; difficulties in applying consistent theories, methods and solutions across cultures. One of the main aims was to turn those challenges into a unique combination of various perceptions and textures.

This thesis work was inspired by these different contexts and could have relevance to all of them, if adapted slightly to cultural differences.

The main purpose of this work is *not* a comparative study of collaborative work in these different contexts. However, I observed some barriers to innovation in each culture that could be addressed with movement.

These observed differences can be listed as:

- Innovation types,
- Collaboration levels,
- Managerial attitudes,
- Work routines,
- Criticism and tolerance,
- And relationship to movement.

The unifying attitude of this work embraces the human factor in an embodied point of view. That focuses on

Figure B
Turkey, Italy, USA



The New Economy And Innovation

Big cities like Milan, Istanbul and New York are the manifestations of industrialization. Millions of people wake up at the same time, use their cars or public transportation to go to a workplace, sit down and be busy with their given duties until the end of the workday. This system was designed during the beginning of industrialization. Efficiency, synchronized lives and lack of personalization defined the main characteristics.

The education system that was supporting this way of production was simulating the same principles: Sitting down all day on benches, listening and giving the closed ended right answer when asked. The growth of the economy was big, there was no unemployment and inflation was low. [1]

The “New Economy” is not a new term. For American economists the date of October 7th, 1957, is the day when white collar workers outnumbered the blue collared. (Toffler 2006)

“The New Economy is a term to describe the result of the transition from a manufacturing-based economy to a service-based economy.” [2]

The nature of workplace changed as the knowledge was the main production of the economy instead of materials.

Cities became incubators for the creative class. (Florida 2002) Service sector also got very strong in cities as the knowledge workers of today need the supporting web of services around them, from the barista who prepares her coffee to wellness and health services provided within company offices.

However the life didn't get completely easy for the knowledge worker. Expectation of fast pace of production and over-saturated global human source created a big competition.

Today the problems are less defined, more complex. Time is a shrinking resource that makes creativity a requirement for workers, who don't resemble assembly line workers anymore. Multidisciplinary and multicultural team work is a necessity in this setting. Companies and education systems aren't always sufficient to equip people with the required tools. The roles of the leaders change towards organization of these creative activities and programs. Also the role of the designer changes towards a change agent and a facilitator of conversations.

1- <http://www.wired.com/wired/archive/10.07/Myth.html>
2- http://en.wikipedia.org/wiki/New_Economy



Image 1: New tools of creative work

Creativity And “Innovation Engine”

In this New Economy, a key question on the minds of entrepreneurs and organizations is: “Where do ideas come from?”

Many scientists, neurologists, organizational psychologists are working on this topic today.

“According to many people, creativity is like your height or skin color; it can not be changed. You’re born with it... But this is not true. Creativity is like math, science and sports. It can be learned and improved. Yes, some people are more talented than the others but everyone can increase their creativity through training and practice. We are not given a script for life but we are creating with each sentence we build or each action we take we are creating. We are inventing a future every day. So we have the capacity.” -Seelig, 2012 [1]

Dr. Tina Seelig is the Executive Director for the Stanford Technology Ventures Program. In her online course at Stanford, Creativity and Innovation, she teaches tens of thousands of people, either from creative businesses or not, how to perceive creativity, how to create individually, and how to create collaboratively. Her theory of The Innovation Engine, clarifies the complex process of unlocking creativity. Seelig separates the effecting factors into two. Internal and external parameters. She explains the internal parameters such as:

IMAGINATION, coming up with interesting ideas
But how you answer a question is defined by how the question is asked.

FRAMING & REFRAMING is the scale and perspective. This can change the whole question instead of looking for an answer.

CONNECT & COMBINE makes it possible to bring together different resources .

CHALLENGING ASSUMPTIONS work on the first right answer to look for more. Because the first right answer just creates incremental change.

KNOWLEDGE is achieved by paying attention.

ATTITUDE creates the drive or motivation to look for solutions and to create ideas.

We need to believe that we can actually solve the problems to starting from any given point of the equation.

According to Seelig, these internal parameters are crucial but yet not enough to innovate. There are external factors such as:

HABITAT: people, rules, awards, constraints, incentives and the physical space make up the habitat. If the physical space is flexible, giving the message “here you can be creative”, then this will support creativity.

RESOURCES can be money, natural resources and processes.

CULTURE is the whole mood that makes it possible to use the resources effectively.

The journey of any organization, community or company can start at any point of the *möbius strip*. And internal factors are directly affected by the externals, and vice-versa.

Innovation Engine



© Tina Seelig

Co-Creation For Innovation

The traditional vision for creativity involves a single person locked up in a room and working day and night in neurotic attacks in order to produce something novel. However, day to day business life both requires different perspectives to address complex problems and demands sustainable creation processes that can be codified and communicated. That's why many innovative organizations experience co-creation in various levels.

“Despite the fact that western studies have focused more on individual creativity, there are also signs of an increase of awareness and sensitivity towards collective creativity.” -Meroni, 2007

What distinguishes collective creativity from individual creativity is listed below: (McDonnell, 2009)

- Co-operation and Leadership
- Relational qualities, social interactions, trust
- Systems thinking
- Direct interaction
- Organization and Coordination
 - Help seeking
 - Help giving
 - Reflective reframing
 - Reinforcing reflections

Co-creation can be analysed according to the phase of innovative activity that it takes place. Eduardo Staszowski's research on Co-Design lists those phases such as:

OBSERVING AND UNDERSTANDING: understanding and depicting context and people in order to develop empathy within the audience, constituencies and

stakeholders involved in a project and learn from their expertise and experiences.

CO-CREATING: Generating ideas in a collaborative fashion and of a collaborative nature, involving different stakeholders.

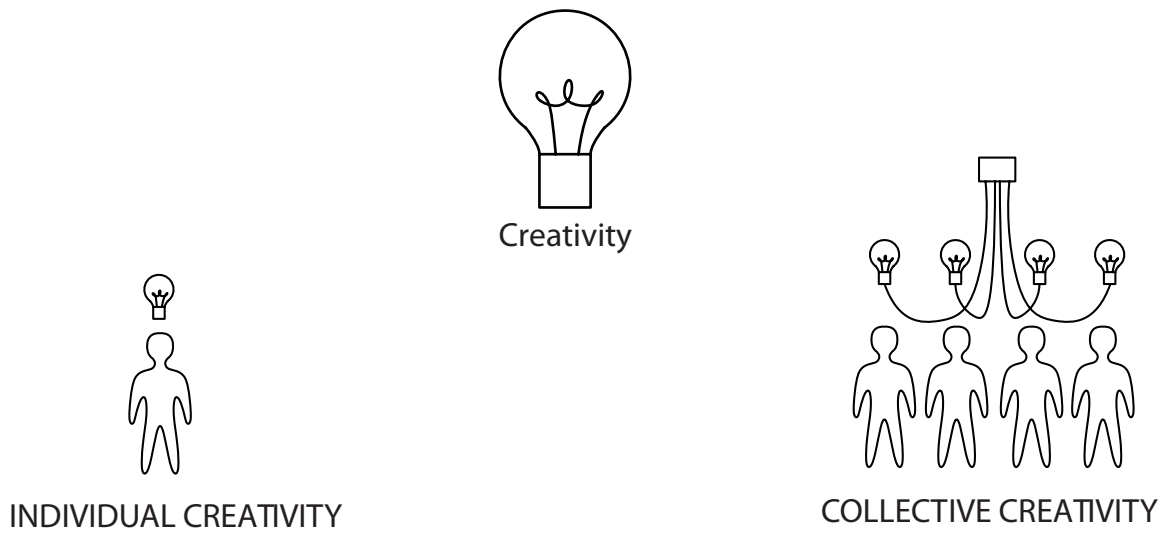
DEVELOPING: Developing ideas through collaboration and participatory sessions, and creating the conditions to develop empathy among the different actors collaborating in a service.

PROTOTYPING: Experimenting with a solution or a tool, via a real activity put in place in real context, with real users.

Co-creation can take place between the business - organization and user or between the employees - participants of the organization.

In this thesis, the main focus is on the **ideation of co-creation activities in small design companies**. In this context innovation and creativity is a collective endeavor. My proposal addresses self image of individuals in order to help them work together in a creative group.

Figure 1
Types of Creativity



Team Building

In order to foster innovation and creativity in an organization, team work is a crucial tool. However, organizing and optimizing collaboration can be really hard. Moreover, dealing with other people while working is the most frustrating part for many professionals. But figuring out how to create with a great team is worth the effort.

Each person brings different knowledge and skills to the group. If you are doing team sports or playing music in a band, you will get the chance to learn how to perform in teams. But many of us don't know how to create together.

SIX THINKING HATS MODEL

Sharing the same vocabulary and goals is one of the biggest helpers for teams to collaborate easily and efficiently. **Six hats Model of Lateral Thinking** creator **Edward de Bono**, lists 6 characteristic moods in a team work. The white hat represents logical thinking, green hat creative, red hat intuitive, blue hat organized, black hat cautious and yellow hat is optimistic thinking. Practitioners of different disciplines usually manifest different characteristics. Business school students for example support blue characteristics, whereas engineering supports white, and art shows red characteristics. [1]

Also, different phases of the innovation processes require different hats, such as: for planning phase blue, for ideation green and for risk definition black hats would help team members to reach the goal much more easily.

If participants of group works are aware of these

moods would be easier both for the management or the facilitator and participants. In my thesis work **the green hat, creativity, will be the main focus as a characteristic of collaboration.**

TRUST AND CONFIDENCE

Creating in groups means relationships between people. We notice certain things when we first come together with new people. Things such as trustworthiness and competency. We want to look competent, and we want to see trustworthiness. The nature of trust involves risk taking. There is an uncertain situation if you will be harmed, judged or supported. In this uncertainty the trustor should abandon control and allow themselves to be fragile. He or she can only develop expectations about the trustee's actions and consequences.

That's why confidence is also a part of the equation. Comfort and positive self image can develop a lower emphasis on risks and vulnerabilities. Thus, the individuals or group can be take bigger steps and lose control in order to come up with more original ideas.

Co-authorship is also another aspect of collaborative processes. The definition of the rules must be set in early stages in order not to create ambiguity about the ownership of the outcomes among the participants.

Trust is developed naturally over time. Rapid processes, including technology, create problems in constructing trust. That's why regular or occasional group sessions should be designed so that the activities include ice breaker and warm-up exercises to catalyse this natural reaction to occur in relatively short and limited times.

Figure 2
Six Thinking Hats



1. <http://venture-lab.org/creativity>

2. PROBLEMS

Innovation And Barriers - Organizations to Individuals

“Changing institutions is harder than designing a chip.” - Toffler 2006

Today organizations are aware that they are required to innovate to survive. And there is also a common awareness about processes being improved in order to create a creative environment in the workplace. However, many of those organizations are still far away from a culture of placing change in the core of day-to-day practice. In order to offer methods for improvement, one should understand the nature and dynamic of innovative processes. [1]

INNOVATION TYPES

Everett Rogers defines an innovation as “an idea, practice, or object that is perceived as new by an individual or other unit of adoption.” Time, culture, ways of communication and social systems are key elements defining the innovation processes. When we analyze an organization in terms of innovation, first we should question the context. The application area of innovation can be products, services or processes. The triggers of innovational processes are mostly market-led or market-push, and for some cases the technology the trigger. The timing and the size of the innovation can be classified as incremental, radical or systemic. (Serrat 2009)

SOURCES OF INNOVATION

According to Peter Drucker, the sources of innovation are unexpected occurrences, incompatibility of various kinds, process needs, changes in industry or market, demographic changes, changes in perception and new knowledge.

BARRIERS AND RISKS

If the organization lacks the adequate knowledge about the technology or the market, does not have the right partners to collaborate with, or has limited resources the innovation process will be disturbed. Costs and time are the most common limited resources. The complexity of the problems might be requiring new competence other than the ones already achieved. Low risk tolerance also inhibits innovation. Another factor that is very relevant to risk tolerance is inertia.

REASONS FOR ORGANIZATIONAL INERTIA

In their research for Stockholm University Ahrne and Papakostas analyze the main reasons of inertia in two sections: inability and unwillingness. “Inability may be understood in terms of the resources of the organization, in terms of established decision processes and also in terms of their inability to perceive the possibility or need for change. Unwillingness is related to vested interests, ideological or cultural factors and a fear of change.”

PERSONAL INERTIA

This fear of change can be similarly scaled down to the personal level. A person facing an immediate necessity to use new technologies, work in different environments with new people, or adapt new habits and values will have the parallel stuck feeling and tendency to keep the things as they are. **Among these reasons for inertia, my thesis addresses the interpersonal level and personal perception of competence in the workplace, self confidence essentially.**



Image 2: Can arms be a sign of inertia in a group?

Inertia Against Creativity

“Insanity: doing the same thing over and over again and expecting different results.” -Einstein

Inertia as a work performance issue for individuals seems to be caused by the routine, formulaic and codified nature of the work environment. The problem for organizations however is how to structure and strategize their work based on past experience and practice without becoming stuck in old ways of doing things and thus remain competitive.

Working has a sedentary nature. Being creative in your day job stuck at your desk all day can be sometimes an oxymoron. Institutions or businesses live on routines, rules and cycles. Codifying tacit experiences into controllable, framed ways bring efficiency and sustainability.

However, the nature of creativity demands several internal and external conditions that can sometimes conflict with institutional states. According to Stenberg, three intellectual abilities are particularly important in order to acquire creativity:

- The synthetic ability to see problems in new ways and escape the bounds of conventional thinking;
- The analytic ability to recognize which of one's ideas are worth pursuing and which are not;
- The practical and contextual ability to know how to persuade others of the value of one's ideas.

When the first of the abilities listed below is missing, inertia is faced. When an organization has the tendency to continue its own trajectory, this is called organizational inertia. (Gilbert 2005) This usually

happens in mature organizations because of the fact that inertia is actually residue of the previous innovations. (Moore 2005) When a threat is perceived by the organization, this can be a new competition in the market or the diffusion of a new technology, this either acts as a catalyst factor and causes the decrease of the innovation or creates a fear factor and blocks innovation. (Gilbert 2005)

“Weisberg believes that when a person makes some innovation, no matter how radical, in order for that idea to make sense to the creator, he or she must be able to link it to what has been done before. Therefore in order to produce it in the first place, the thinker must have started from the past. And any changes introduced, which may serve to turn the product into something radically new, are also based on knowledge. On the other hand knowledge about a field can result in a closed or entrenched perspective, leading to a person not moving beyond the way in which he or she has seen problems in the past.” -Frensch, Sternberg, 1989

That's why it is quite normal and very often also very useful that companies continue doing the same things, following the same principles achieved over time. Time and knowledge bring quality. This differentiates the qualities of one organization from the other. It becomes a distinguishing character. However, problems of today are getting more and more complex. And, in a way that we can define brutal, old good thinking is destined to fail most of the time. Because now information is open and reachable for all and only dynamic qualities maintain competitive advantage.



Image 3: Bureacrats can be manifestations of organizational inertia

“On a different note, one may refer to an analogous term called “Creative Inertia” citing the TV show Yes Minister. Creative Inertia refers to certain delay tactics that a bureaucracy uses to stop action and progress. In the context of Yes Minister, the bureaucracy is the British Civil Service. The technique comes in five stages and is in response to a new proposition by the elected minister:

- 1. Your administration is very new and it is too early to make any changes*
- 2. The idea is certainly excellent, but are you sure that the proposal is the right way to make the change*
- 3. Minister, this is not the right time for such proposal.*
- 4. The proposal has ran into technical, political, and legal problems. Legal ones are the incomprehensible ones.*
- 5. By this stage the technique should have worked for three years, and the response would be “Minister, there is a general election coming up very soon, are you sure you can get this policy through” [1]*

1. <http://orientalfreelancer.blogspot.com/2007/03/creative-destruction-creative-inertia.html>

Incorporating movement can help individuals break the physical and mental routines that limit creativity and can help organizations create an employee culture that is more flexible and open to innovation and change.

Self Image Problem

Design is one of the sectors where new graduates start their work lives with great, sometimes even unrealistic expectations. And because of education is not parallel to the sector, because of wage limitations, but mostly because of interpersonal problems and lack of motivation, they end up quitting jobs and changing sectors. Female designers suffer from this factor even more than males. Researches point out that more female graduates end up quitting their jobs or moving into academia or curation jobs instead of staying in production and gaining managerial positions over time. In addition to the psychological conditions that promote creativity, interpersonal conditions should also reinforce trust and confidence. Organizational hierarchies and conventional gender roles often inhibit positive self image. As a result there is resentment, and low self esteem contributes to poor collaboration low productivity and low job satisfaction. [1]

“The majority of students studying the creative arts will never have an opportunity to practice as professionals. In itself, this is not a problem. After all, most students who read law don’t become solicitors or barristers. The concern is that there is too little preparation for creative arts students to use their skills in a wider context.”

[2]

There are several researches studying the wage difference between male and female professionals. The general average is that women earn 80% of what males earn for comparable work. This number changes dramatically in design sector with an average of 75%. This might be an evidence to show that design is dominated not by males but male attributes. So we can assume that females and males showing less masculine attributes will not be perceived as leaders.

[1][3][4]

34

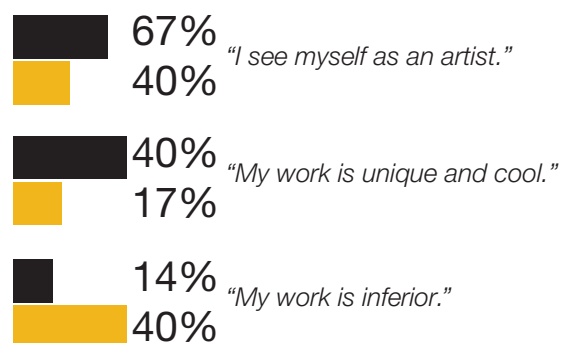
Barron studied young artists at the San Francisco Art Institute and at the Rhode Island School of Design. He pointed out a difference in self image in the women, and that these differences were not indications of the real quality of the men’s and women’s art work, indicating that the quality of the women’s art work was equally high

The main difference came in the intensity of the commitment of the young artists to their work.

The table below indicates the results of male and female students (black male, yellow female) about their self evaluation of their work.

Graph 1

Self evaluation of male and female students



Confidence and persistence are a main factors in succeeding in business life and reaching the managerial positions. (Pew Research on Female Managers) The regulations and all the external factors might be listed as the real reason behind the low rates of female managers around the world. This is a major issue that policy makers should address. However, this change requires confident individuals to push and demand.



Image 4: Undergraduate design students

1. UK Design Industry Skill Development Plan, Design Council)
2. Cox Review of Creativity in Business, 2005
3. The Dynamics Of Warmth And Competence Judgments, And Their Outcomes In Organization, Amy J. C. Cuddy, Peter Glick, Anna Beninger
4. <http://www.pewsocialtrends.org/2012/04/19/a-gender-reversal-on-career-aspirations/>
- 5 <http://hbr.org/2009/01/women-and-the-vision-thing/ar/1>

3. SUPPORTING TRENDS

Managing Creativity - New Leadership Models

Many creative professionals complain about how their creativity is blocked by their managers and how this affects their productivity. *“With exceptions, most of the managers don’t stifle creativity on purpose. Yet, in the pursuit of productivity, efficiency and control, they often undermine it.”* -Serrat 2009

There is a new management style rising recently called “Integral Leadership”. The term describes an approach bringing together different management ways. The main aim is to understand the people’s goals, mindsets and values and then find the appropriate way to interact with them “as they are”. This model can be suggested as a new HR policy, too. In order to address the high level demand towards creative outcomes and processes, letting different actors perform, cherishing their unique quality and capacities, helps organizations reach their goals towards valuable creations.

“I think people work better when they are afforded to be themselves.” -Stella McCartney, 2013

The challenge for this kind of approach is *to adequately understand all of the factors (individual capability, behavioral, organizational/social/cultural, and systems) to know which approaches to draw upon in a given situation will produce the greatest positive results, usually a significant change for the individual or organization.* (Wikipedia. 2012)

As we mentioned before creativity has different aspects. Some of them are intrinsic and some extrinsic (See page 10) . Some of these qualities can be improved by individual personal attempts and some require a whole environment where the conditions and incentives

are set according to *the generation of ideas, concepts and associations.*

“Managers can make a more effective difference by boosting the intrinsic motivation of the personnel. To manage for creativity and innovation there are five levels:

- 1- The amount of challenge they give to personnel to stimulate minds*
- 2- The degree of freedom they grant around procedures and processes to minimize hassle*
- 3- The way they design work groups to tap ideas from all ranks*
- 4- The encouragement and incentives they give, which should include rewards and recognition and the nature of organizational support.*

Needless to say, managers must themselves be motivated.” -Serrat 2009.

Any kind of new attempts to create new habits, to harness creativity, this new approach for leadership is crucial. In order not just to implement new strategies but also to define that there is a significant need for these new strategies.

“The hell is not something that will be: if there is one, it is already here, the hell where we live every day, that we form staying together. There are two ways not to suffer from. The first one is easy for many people: accepting the hell and become part of it up to the point not to see it anymore. The second one is risky and requires attention and continuous learning: searching and being able to recognize who and what, into the hell, is not hell, and to make it last, and to give space to it.” -Italo Calvino, Invisible Cities



Image 5-6: Workshops from Parsons

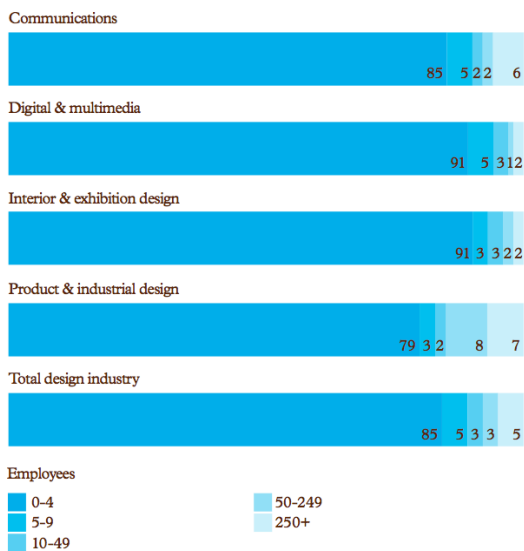
Small-Local-Open and Connected*: Small Design Companies

“Never doubt that a small group of thoughtful, committed people can change the world. Indeed, it is the only thing that ever has.” -Margaret Mead

A study conducted by Design Council in 2007 shows that in UK, 85% of the companies in the design sector are composed of 1-4 people.

Graph 2

Company size by discipline %



Source: *The Business of Design: Design Industry Research 2005, Design Council/DBA*

The UK design industry is the biggest in Europe, currently employing more than 185.000 designers and generating a turnover of £11.6bn in 2004-2005 (The Business of Design: Design Industry Research, Design Council and DBA 2005)

According to the Design Council, these design businesses employing by less than 5 people have increased in number in last five years. Again according to the same research, these businesses are highly fluid, mobile and flexible. Consequently many of these small businesses are fragile and owner intensive.

This new structure of small, young and flexible companies is a good opportunity for integral management methods to take place, as the hierarchies are more parallel and rules are less rigid. (3) Teams can simply decide to try new techniques to flourish creativity in the processes and can handle the risk of trial and error.

Nevertheless, this style of small businesses lacks a corporate HR protection for workers. So when a problem occurs, usually the respondents have to deal with that by themselves without an experts supervision.

That's why personal attitudes and sensitivities become very important for the positive creative environment.

* An orienting scenario for social innovation and design, in the age of networks.
Ezio Manzini



Image 7: The Moderns, a small design company in New York

PRECEDENT 1: CONTINUUM

Empathy, Criticism, Managing Conflicts

Innovation is about arguing.[1] Daniel Sobol from Continuum claims that brainstorming with the famous “No Criticizing” rule [2] can be detrimental to good ideas.

Innovation requires a supporting atmosphere for creative thinking. Creativity will flourish when the participants are free to use their imagination, sometimes even say crazy things in order to expose bad ideas for the sake of putting out good results. In this process sometimes you have to work alone sometimes with other people. However, the discussions should go beyond mutual agreements but heat up a bit for profound outcomes. Ideas should be expressed and criticized but this criticism should not create a feeling of judgment. Without any defence mechanisms activated, the cycle of creation can continue.

In a standard brainstorming session, all ideas are equal and no judgement takes place. That’s why many scientists nowadays argue about the effectiveness of this common approach to generating new ideas since the 1940’s.

In Continuum, the method for ideation is called “deliberate discourse”. Sobol explains the process: “Argue. Discuss. Argue. Discuss.” The main principle of the approach is, focused on a common goal, working collaboratively and participatively, but not without critique. However no yelling happens in these discussions. Sobol suggests 5 rules in order to succeed with this way:

“1 - No Hierarchy : Everyone can truly contribute without vertical role limitations.

2 - Say “No, Because”: The mantra of brainstorming is “Yes, and...”. In this method No represents criticism and backing up the critique with a grounded argument.

3 - Diverse Perspectives: Curating diverse multidisciplinary teams with T-shaped character people to support diversity.

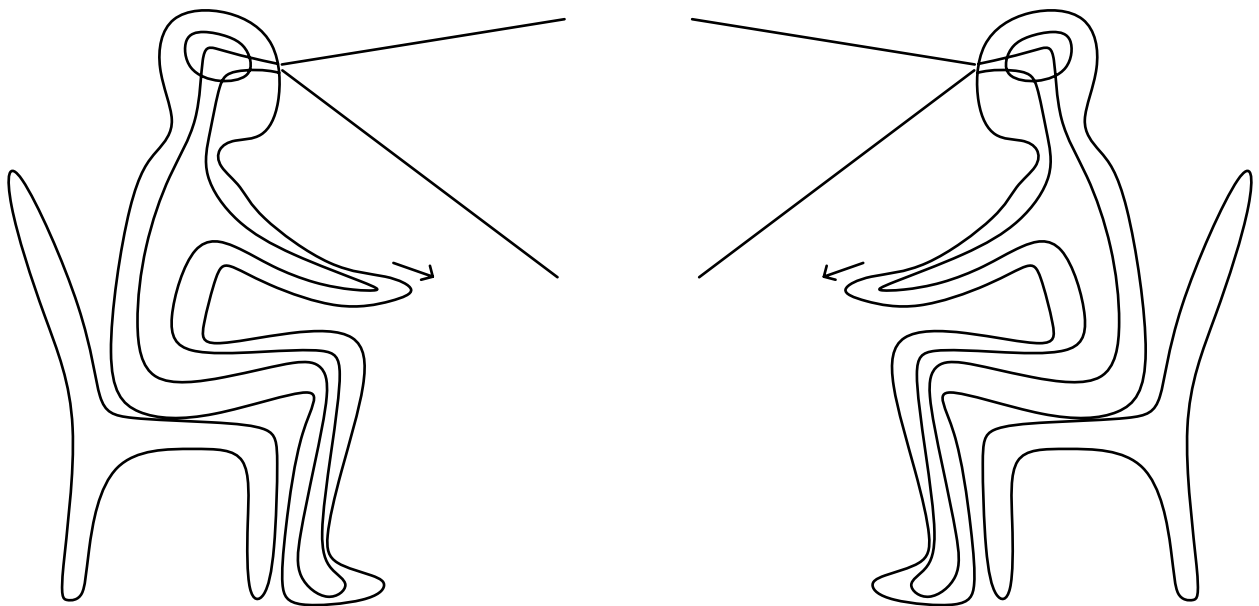
4 - Focus On A Common Goal: Seeing the meeting as a playground where everyone is working together to move the ball down the field.

5 - Keep It Fun: A project might be about any topic, from poverty to serious diseases. The work requires intensity, thoughtfulness, and rigor In any case. But no matter the nature of the project, it should be fun to work together. That’s how a group can keep up creating new and good ideas.”

In the following sections, my hypothesis and solution sets will aim;

- To address the organizational changes supporting the flat hierarchies.
- To build confidence to maintain stamina to say no and face criticism.
- To create of a trust environment to foster diversity and weave a common culture and focus around the parties.

Figure 3
Empathy



1. <http://www.fastcodesign.com/1668930/the-brainstorming-process-is-bs-but-can-we-rework-it>
2. Walt Disney's Brainstorming Method

4. METHOD

A Journey Through Disciplines - Iterative Development

“You should be rigorous in your research so as not to be misled, but you should also feel free to experiment, make, and play.” -Winter, 2012

The methods used in this work can be explained in a helix form (Figure 4) because there were iterations to literature and experts as time passed and new complexities appeared.

After nourishing a personal interest with a preliminary literature analysis, the structured method for this thesis followed the steps below:

1- OBSERVATION: The observation part includes the group works that took place in Parsons The New School for Design Building where Transdisciplinary Design and Design and Technology programs share studios and common areas. This part was necessary as, even though I had personal experience in group creativity sessions, a more focused observation was crucial in order to define some patterns and best practices that exist in the New York context.

2- CONVERSATION: The conversation part has talks and interviews with fellow designers, design teachers, experienced design managers, yoga and dance teachers, dancers, actors and an organizational psychologist. Being in New York made this part pretty rich, because in a city culture, professionals are open to sharing practices and also to new ideas. With these conversations I could have more insights about how embodiment already is used for creativity and what else I can add to this experience.

3- DIGESTION: This part involves the hypothesis generation combining the insights and supporting knowledge from literature.

4- IDEATION: After analysing what is already existing and what I can add to that, through ideation I created a set of principles and tools forming the whole system.

5- TESTING: Even though the principles were designed concerning the conditions and risks, they had to be tested in the exact environments. The testing phase took in place in form of three different workshops and a long term prototyping activity. Also the effectiveness of the tools were controlled through this phase.

6- DEVELOPMENT: After several changes sourced by the testing outcomes, the tools were designed to be implemented.

7- ITERATIONS: After each time problems or risks occurred, there was a certain need to revisit the literature and conversations in order to diffuse the idea in different contexts. This made the process more and more complicated but at the same time more organic and adaptable to real environment, and unique at the same time.

Among the previous segments, especially during the observation and testing parts, creativity as the main factor was a challenge because it is a very qualitative quality combined with its quantitative elements. After significant findings from the Torrance Method in the social researches about creativity of infants and adults, I decided to use this framework to assess the creative outcome of the workshops and other group activities.

Figure 4
Helix of Iterations

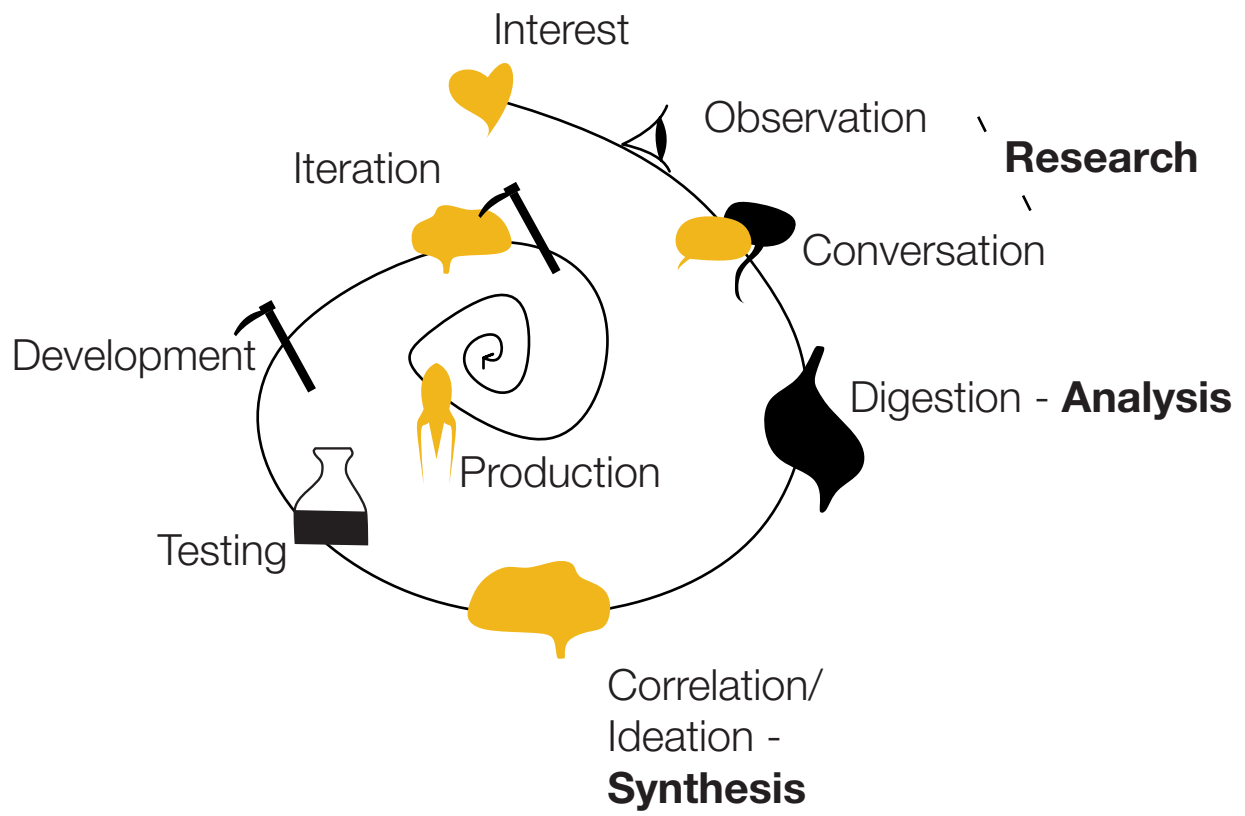
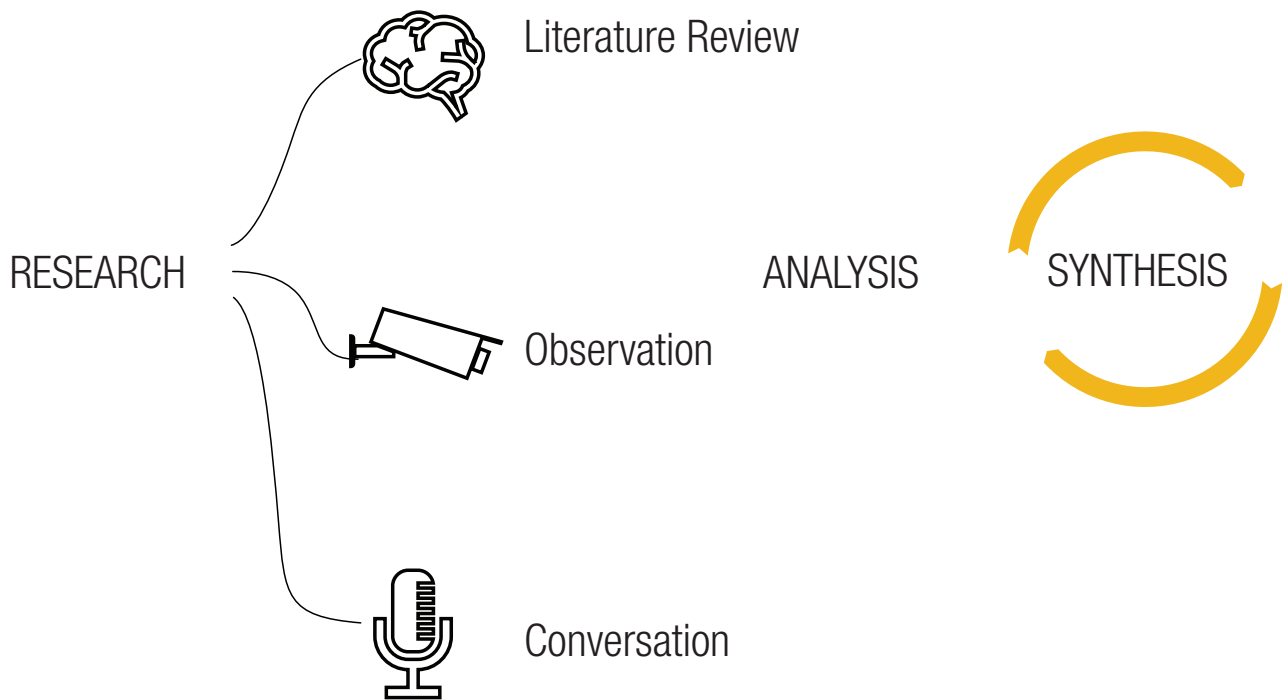


Figure 5
Thesis Phases



ACTION RESEARCH

Workshops

1-February 28th

2-March 20th

3-April 7th

-Observation

-Verification

-Codification

DEVELOPMENT

The artifacts are:

-Principles

-Tools

-System

PROTOTYPING

Testing the principles in NY

June - August 2013

DIFFUSION + ITERATION

Analyzing the Istanbul context

November 2012 - March 2013

Torrance Method for Evaluating Creativity

TORRANCE METHOD FOR EVALUATING CREATIVITY

Since creativity was the main parameter of the whole observation and testings, I used the Torrance method, which is a common tool among studies on creativity. This method was built by Ellis Paul Torrance built on the work of J. P. Guilford.

The Torrance Tests of Creative Thinking (TTCT), a test of creativity, originally involved simple tests of divergent thinking and other problem-solving skills, which were scored on four scales:

Fluency - Flexibility - Originality - Elaboration

Fluency refers to the production of a great number of ideas or alternate solutions to a problem. Fluency implies understanding, not just remembering information that is learned.

Flexibility refers to the production of ideas that show a variety of possibilities or realms of thought. It involves the ability to see things from different points of view, to use many different approaches or strategies.

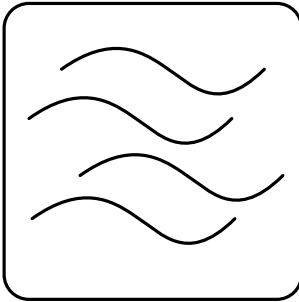
Originality involves the production of ideas that are unique or unusual. It involves synthesis or putting information about a topic back together in a new way.

Elaboration is the process of enhancing ideas by providing more detail. Additional detail and clarity improves interest in, and understanding of, the topic.

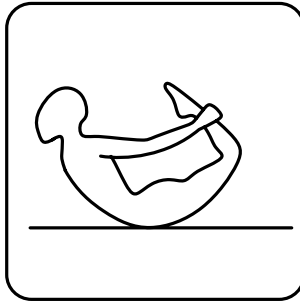
Figure6

Criteria to Evaluate Creativity - Torrance Method

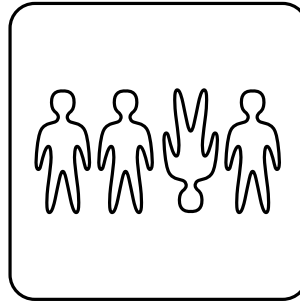
FLUENCY



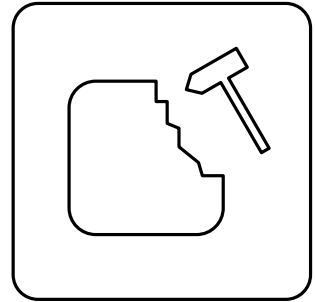
FLEXIBILITY



ORIGINALITY



ELABORATION



VARIABLES AND PARAMETERS FOR EVALUATION OF CO-CREATION ACTIVITIES

In the workshops I designed, the criteria designed by Carlos Teixeira is used. Teixeira is a professor from Parsons The New School for Design and also a design professional specializing in on revealing the operational logics that guide design practice. This framework is used in order to assess the overall performance of the activity by focusing on several variables and parameters.

VARIABLES

TIME: The activities I designed function as a warm-up phase, so the amount of time has to be optimum in terms of efficiency and time consumption.

SPACE: Space has a significant effect on the embodiment of the attendees. So the arrangement of the space is an important variable that is effecting the results.

PARTICIPANTS: As the activities are about the interpersonal level of creation, the age, profession, culture and hierarchy were important variables in the assessments.

TRANSACTIONS: The interactions happening between the attendees were valuable data as they were composed of verbal and nonverbal transactions.

INFORMATION: Before each activity a various amount of information has to be passed to the attendees in order to have the activity fulfilled in the right way. This information must be designed clearly before hand. At the same time capturing of the information from the attendees is very important as the outcomes of a workshop rely on this information.

FEATURES: The special characteristics of interactions taking place in the activities which are used to define it.

IDEAS: All the time and effort is spent to get the ideas from the attendees. At the end the following criteria are applied:

PARAMETERS

- Efficiency
- Productivity
- Quality
- Relevance
- Uniqueness
- Cost

These listed parameters are simple yet, challenging tools in practice, help navigate through the open ended and weakly defined problem settings of collaborative design environments.

Theoretical Framework



Creativity

Measuring creativity? _____

Extrinsic Factors → environment _____
→ leadership _____
→ team work _____

Intrinsic Factors → knowledge
→ attitude
→ motivation
→ abilities

Cartesian Dualism

← NO ←

Body effects creativity?

→ YES →



Design

Question:

How might we overcome creative inertia with movement?

Outcomes: PowerFlowing: Principles, Activities, Tools

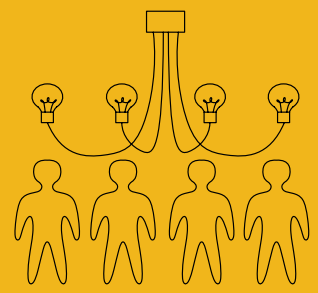
→ **Torrance Meth.: fluency/flexibility/originality/elaboration**

→ **No chair offices**



→ **Transformational leadership**

→ **Creating together?**



→ **YES**

→ **No criticism**

→ **NO**

→ **Conventional creation**

→ **YES, BUT...**



Managing conflicts



→ **Experts**

Movement Studies

Case Studies

- K. Bradley
- C. Culley
- R. Manix
- E. Polman
- A. Schmidt

- Laban
- Improv
- Tai Chi
- Yoga

- Continuum
- Googleplex
- Brandmood

Diffusion:



Two

What are the
existing knowledge
and best practices
about creativity,
body movement and
workplace wellness?

Research
Analysis
Synthesis

Part Two aims to list the observations, interviews, and iterations of literature review on different disciplines in order to create a knowledge base for the hypothesis and maintain theoretical background for the idea.

5. RESEARCH

Observation of Creative Teams - “The 12th Floor”

Parsons The New School For Design in New York has many buildings and floors around the island of Manhattan. The 12th floor of the building on 6 East 16th Street close to Union Square is shared by two departments: Master of Fine Arts in Transdisciplinary Design and Master of Fine Arts in Design Technology. The open studios and common rooms shared by these sister programs constitute one of the most creatively vibrant atmospheres on the university’s whole campus.

The creativity of the individuals working at this location is highly inspiring. But most of their work is collaborative, so creating together is a “must.” All day one can witness students designing social games using the latest technology, and groups using chalk and cardboard to diagram preparedness solutions for disaster-prone areas in Africa.

The teams working in this space are almost always multidisciplinary in nature. An architect, a photographer, a dancer and an engineer might come together to discuss problems, come up with ideas and go through implementation together. Managing and maintaining these diverse collaborations is difficult work. Groups are often plagued by problematic power relationships, secret leaders, discontent followers and otherwise naïve, uncompromising or pessimist teammates. It’s a wonder that they don’t kill each other. *“Sometimes meetings are interrupted by crying team members”* explained one of the collaborators I talked to.

These qualities make the 12th floor a unique observation lab for co-creation. Both as a team member and an outside observer, I had the chance to watch people crowd around tables, early in the

morning and late at night, consuming enormous amounts of coffee, and trying to create something truly new. Clearly, this was sometimes easier than others. There were strong and weak collaborators in every group. There were leaders, followers and those who were simply lost. There were those who were enthusiastic and supportive, and those who were anxious or antagonistic.

With a little attention and awareness, one can begin differentiate these different roles and attitudes among group members.

CONFIRMED INSIGHTS FROM OBSERVATIONS:

There are unspoken roles and power dynamics in working groups. If a group is well organized and roles are clearly defined (e.g. who is the time keeper; who is the documenter) then participants often experience better performance in creating new ideas.

In co-creative groups, regardless of the organization and experience-level of the participants, there is almost always someone who doesn’t contribute or pull their own weight. In some cases, there may be several such participants, who feel alienated from the rest of the group and essentially “shut down” or create conflict.

Both negative and positive group behaviors physically manifest themselves in the bodies of group members.

I observed that the following factors have a direct impact on the fluency and originality of ideas generated during group ideation sessions:



Image 8: Losing one group member

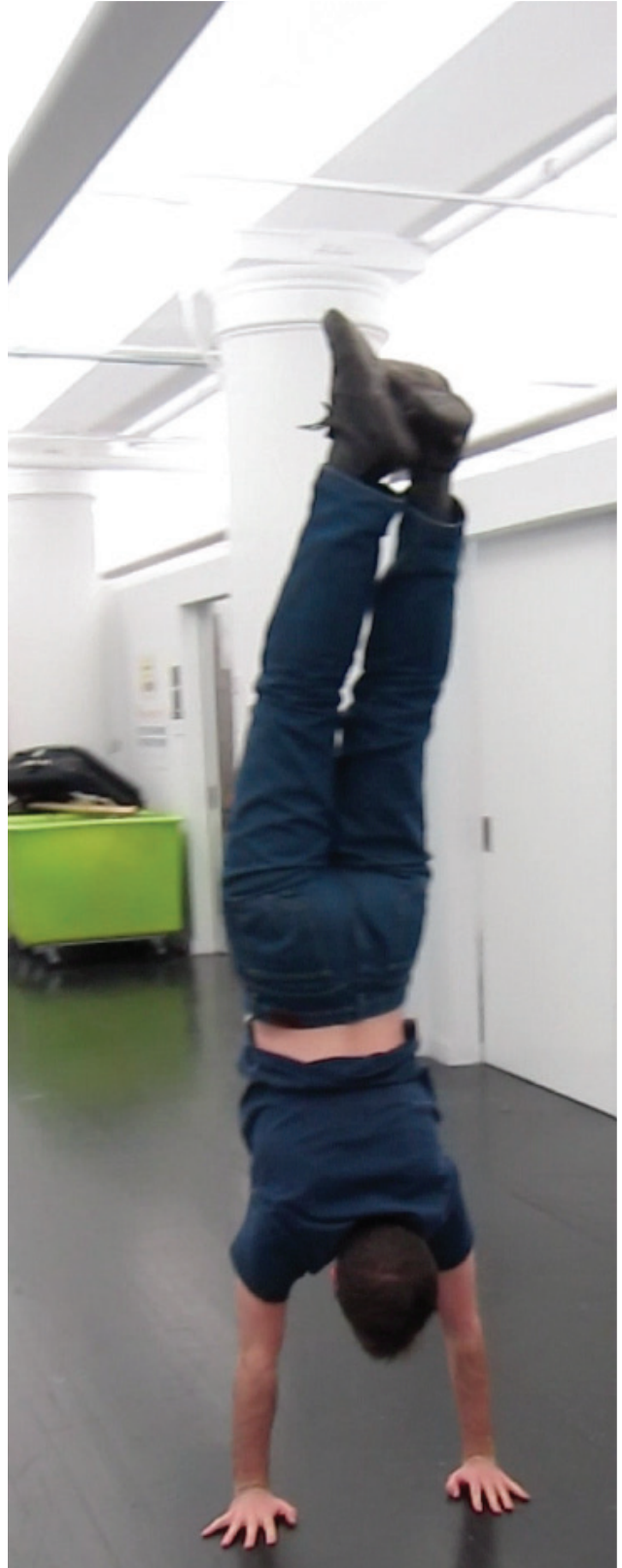


Image 9: Upside down on coffee breaks

-
- Position of hands and arms
 - Posture and openness of torso
 - Standing versus sitting
 - Amount of personal space

The relationship between these physical factors and collaborators' creative output will be discussed further in the following sections.

Theories on Body and Mind - Embodied Cognition

There is significant evidence drawing the link between creativity and body. However before building a system on this theory, I had to go through the literature in order to lay out the competing philosophies about the connection or lack of connection between mind and body.

According to Rene Descartes, mind is a nonphysical substance. He again identifies the bond with intelligence and self awareness. It is completely independent of the body and its functions.

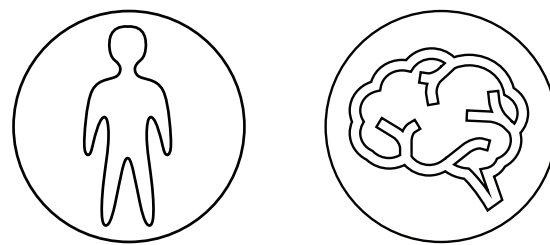
Today, the Body and Mind question is also a topic for neuroscience. Consciousness is correlated with brain activity and substance. Cognitive science is increasingly interested in embodiment of human perception, thinking and action. There are various studies on the human body, its surroundings and how these interactions shape the mind. In philosophy the embodied mind thesis is opposed to cognitivism, computationalism and Cartesian dualism. Embodied cognition researches in social and cognitive psychology, on issues such as social interactions and decision making.

The most famous example of studies in this area found that, when participants hold a pencil in their teeth to use the smile muscles, they performed faster in making pleasant sentences as opposed to unpleasant ones. The experiment worked also in the other way around when frowning muscles were activated to make unpleasant sentences. [1]

During my research, I got into contact and had several conversations with an organizational psychologist from New York University STERN business school, Evan Polman. Evan and his colleagues' work, just published in The New York Times, was about their research on 102 students from again NYU. Those students were asked to complete an innovative thinking task. Some of the students were randomly placed into 125 cubic foot (3.5 cubic meters) plastic boxes and the rest outside, next to where boxes were located. Those working out of the box came up with 20% more creative solutions. [2]

Empirical studies like this show that bodily experiences can help create new knowledge and we should therefore be questioning our "box" about the strict separation between body and mind.

Figure 7
"The Smile Effect"



BODY - MIND



1- Strack, Martin & Stepper's test of the Facial Feedback Hypothesis
2- Embodied Metaphors and Creative "Acts", Angela Leung, Suntae Kim, Evan Polman, Laysee Ong, Lin Qiu

Body-Mind Connection of Famous Creators

Thinkers, writers and painters as creators, have more experience in the inertia of generative processes. Thus, there are many artists and novelists famous with their working habits aiming better performances through their body position and movement. These working habits have one quality in common: no sitting down on a chair. They use their embodiment to break the routines of ordinary thinking and use the most of their creative abilities.

STANDING DESKS

Hemingway for example, is famous for his standing writing. He used to write on a standing desk while creating his novels. Standing desks were also used by, Thomas Jefferson, Winston Churchill, Virginia Woolf and Donald Rumsfeld.

VERTICAL POSITION

Truman Capote laid down to work. "I am a completely horizontal author. I can't think unless I'm lying down, either in bed or stretched on a couch and with a cigarette and coffee handy." (Truman Capote, 1957) These habits can now be explained with embodied cognition theories, as postural differences breaks the mental status quo that causes creative blocks .

DAILY MOVEMENT ROUTINES

Japanese writer Haruki Murakami describes his routine:

"When I'm in writing mode for a novel, I get up at 4:00 am and work for five to six hours. In the afternoon, I run for 10km or swim for 1500m (or do both), then I read a bit and listen to some music. I go to bed at 9:00 pm. I keep to this routine every day without variation.

The repetition itself becomes the important thing; it's a form of mesmerism. I mesmerize myself to reach a deeper state of mind."

Kurt Vonnegut, in a letter to his wife, describes his day, which starts early and includes regular walks and swims, push-ups and sit-ups all the time.

There are also visual artists who integrate their embodiment with the creative process itself.

Jackson Pollock, the influential American painter, was well known for his unique style. In his process of painting, he moved away from the traditional way of using hand movement and used the whole body to paint.

"...When I am in my painting, I'm not aware of what I'm doing. It is only after a sort of 'get acquainted' period that I see what I have been about. I have no fear of making changes, destroying the image, etc., because the painting has a life of its own. I try to let it come through. It is only when I lose contact with the painting that the result is a mess. Otherwise there is pure harmony, an easy give and take, and the painting comes out well."

-Jackson Pollock, My Painting, 1956

Keith Haring, 1980's artist was also famous with his energetic style of using movement while creating his paintings. Haring explains: *"I am becoming much more aware of movement. The importance of movement is intensified when a painting becomes a performance. The performance (the act of painting) becomes as important as the resulting painting."*



Image 10: Jackson Pollock painting with his whole body.

1. <http://www.brainpickings.org/index.php/2012/11/20/daily-routines-writers/>
- 2.

Fight or Flight Response - The Amygdala

"We are analog beings trapped in a digital world."
-Don Norman

In these following chapters I will try to explain my interest in examining and comparing fundamental functions of the brain (e.g. the limbic system) and main functions of the body (e.g. posture and poses) and their impact on collaboration and creativity.

"The human brain is a fascinating organ, but it's an absolute mess." -Schneier 2007. Because our brains as it is today is a result of an evolution over millions of years, the way it works is not always clear and logically organized. Some of the operations are optimized for best results, some of them are not.

Our newest brain part, the neo-cortex is responsible of the analytical and intelligent decisions.

But there is another parallel and even stronger system working in our brains. The limbic system and the amygdala* processes functions of basic emotions such as fear, defence and anger. This old system seems to have originated in early types of fish.

This system is very useful if you are a lion in a forest, or if you have to run away from a dog in the street.

It's what causes adrenaline and other hormones to be pumped into your bloodstream, triggering the fight-or-flight response, causing more rapid and forceful heartbeats, increased muscle tension and sweaty palms.

When the fight-or-flight response is triggered by a threatening situation, the reptilian brain part takes over. In this scenario, the strong tendency is to repeat a previously achieved solution. This means that when your fear mechanisms are activated, it is impossible to innovate: You just follow the past.

In modern society we have to deal with more complex problems which can not be solved by immediate reaction. A calmer and relaxed, trust infused environment should be created to support analytic thinking and efficient collaboration.

This calmer and relaxed condition can be measured and notified with the *Alpha Waves* of the brain, which are in the 8-12 Hertz range in electroencephalography (EEG) or magnetoencephalography (MEG) detections. In intentional, goal oriented tasks, the brain relaxes and alpha waves in the brain increases. This is a sign of a deep relaxation. *"Spontaneous wandering of the mind is something you become more aware of and familiar with when you meditate, this default activity of the brain is often underestimated. It probably represents a kind of mental processing that connects various experiences and emotional residues, puts them into perspective and lays them to rest."* -Øyvind Ellingsen, 2010

In this work, the main focus will be on body movement and not the meditation itself. However, the positive effects of meditation in creative phases will be acknowledged in synthesising the principles.

Figure 8
"The Lizard Brain"



**"Amygdala is an almond shaped/sized gland in the brain which is a part of the limbic system. This region in the brain is mainly responsible for memory and emotional reactions. Research indicates that, during fear conditioning, sensory informations reach the amygdala, particularly the lateral part, where they form associations with memories of the stimuli. The association between stimuli and the events they predict may be mediated by long-term potentiation, a sustained enhancement of signalling between affected neurons."*

1. <http://en.wikipedia.org/wiki/Amygdala>

Social Psychology - Amy Cuddy's Work

Amy Cuddy is an American social psychologist working on stereotypes and behavior. She is Associate Professor in the Negotiation, Organizations & Markets Unit at Harvard Business School.

Lately she was listed number 1 in Time Magazine's list of "Game Changers, innovators and problem-solvers that are inspiring change in America".

Her inspiring work with colleagues [1] *"hypothesized that high-power poses (compared with low-power poses) would cause individuals to experience elevated testosterone, decreased cortisol, increased feelings of power, and higher risk tolerance. Such findings would suggest that embodiment goes beyond cognition and emotion and could have immediate and actionable effects on physiology and behavior."*

According to her research, people's high power and low power behaviors, are mainly controlled by two hormones: testosterone and cortisol. While testosterone rises in case of winning in competitions, cortisol rises during loss and moments of depression. Research also cites that high level of testosterone combined with low cortisol levels are linked to better immunity and leadership abilities.

Previous research in embodied cognition examined smile muscles, clenched fists and approach oriented behaviors such as touching, nodding and pulling. But her study adds a new type of embodiment equation.

"Expansive, open postures (widespread limbs and enlargement of occupied space by spreading out) project high power, whereas contractive, closed postures (limbs touching the torso and minimization of occupied space by collapsing the body inward) project low power."

Forty-two participants (26 females and 16 males) were randomly assigned to the high power pose or low power pose condition. Participants' bodies were posed by an experimenter into high power or low power poses. Each participant held two poses for 1 minute each. Participants' risk taking was measured with a gambling task; feelings of power were measured with self reports. Saliva samples, which were used to test cortisol and testosterone levels, were taken before and approximately 17 minutes after the power-pose manipulation.

As a result a simple 2 minute pose manipulation was proved to affect mental and emotional states of the participants significantly. According to the research the implications of these results for everyday life are substantial.

These experiments focus on personal performances in classes, offices, job interviews and presentation. In this thesis work, however, I use this data to improve performances in a specific environment: *group work in creative fields.*

1- Power Posing: Brief Nonverbal Displays Affect Neuroendocrine Levels And Risk Tolerance, Dana R. Carney, Amy J.C. Cuddy, And Andy J. Yap



Image 11: Amy Cuddy presenting her theory

6. ANALYSIS

Nonverbal Behaviors of High Power Individuals - Power Poses:

“Expansive, open postures (widespread limbs and enlargement of occupied space by spreading out) project high power, whereas contractive, closed postures (limbs touching the torso and minimization of occupied space by collapsing the body inward) project low power.”



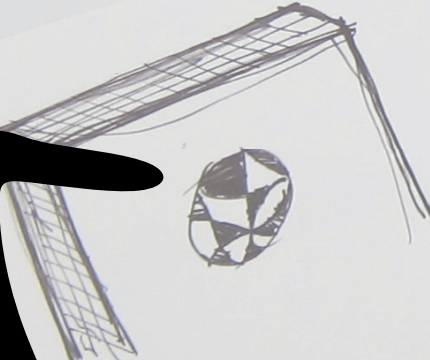
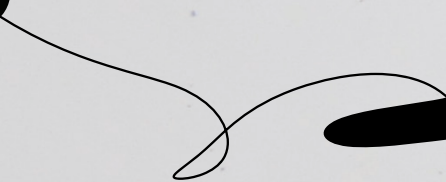
Image 12: Mangaaka Power Figure, 19th century, Congo.
Metropolitan Museum Of Art

dress code

cultural product

Ideas cause movements

language(s)



JOKER

national sport

landmark

nature/geography

Movements cause ideas

food

weather



landmark

music

7. SYNTHESIS

Being a designer and a mover: A Personal perspective

This thesis work was encouraged and inspired by many sources. When working on a topic on different continents, in different languages and even more different cultures, a big passion and a strong belief in the value is a must to keep going. Even though I sometimes lost my hope and belief in this relatively novel subject, my background and daily practice were always inviting me to continue trying.

I have been moving for 29 years.
14 years of this movement is through yoga.
3 years of this practice is has been devoted to teaching and sharing.

I have been creating for 29 years.
12 years of this practice was through product (and service) design.
3 years of this practice was consolidated by co-creating in groups.

I was always mesmerized by how my creative and professional practice was effected by the quality and regularity of my movement routines.

Much of what my embodied practice has taught me can be encapsulated by the four parameters of creativity of the Torrance Method.

FLUENCY: Movement's foundation is change. The flow of the breath directs the flow of the limbs and one state follows the other. In design environments this reflects on adaptation of the constant change in conditions, requirements and interactions. Being familiar with fluent embodiment made it easier for me to create more solutions.

FLEXIBILITY: Design teams have to work within constraints that may include their resources, their market and the problem itself. Learning to keep the breath flowing even in the most uncomfortable, unfamiliar and restricting poses, helped me execute better work in teams surrounded with constraints.

ORIGINALITY: Each body has different limits and patterns. A rich practice can be achieved by understanding and accepting one's dispositions and reflecting this nature to the overall attitude of the practice. Originality in creative teams again is enhanced by accepting the different colors that form the team structure.

ELABORATION: Mastery in one yoga pose requires commitment and long hours of practice. Regardless of one's talent, flexibility or original approach, the true pose is never reached without working on it. This resembles the fact that an idea's value is not realized before elaboration and details

Over the years, my movement practice has served me both as means of personal development and a form of embodied research. It has helped me to sense possibilities and potential that I am now beginning to confirm. It continues to serves as an intuitive basis for the theoretical propositions of my work.

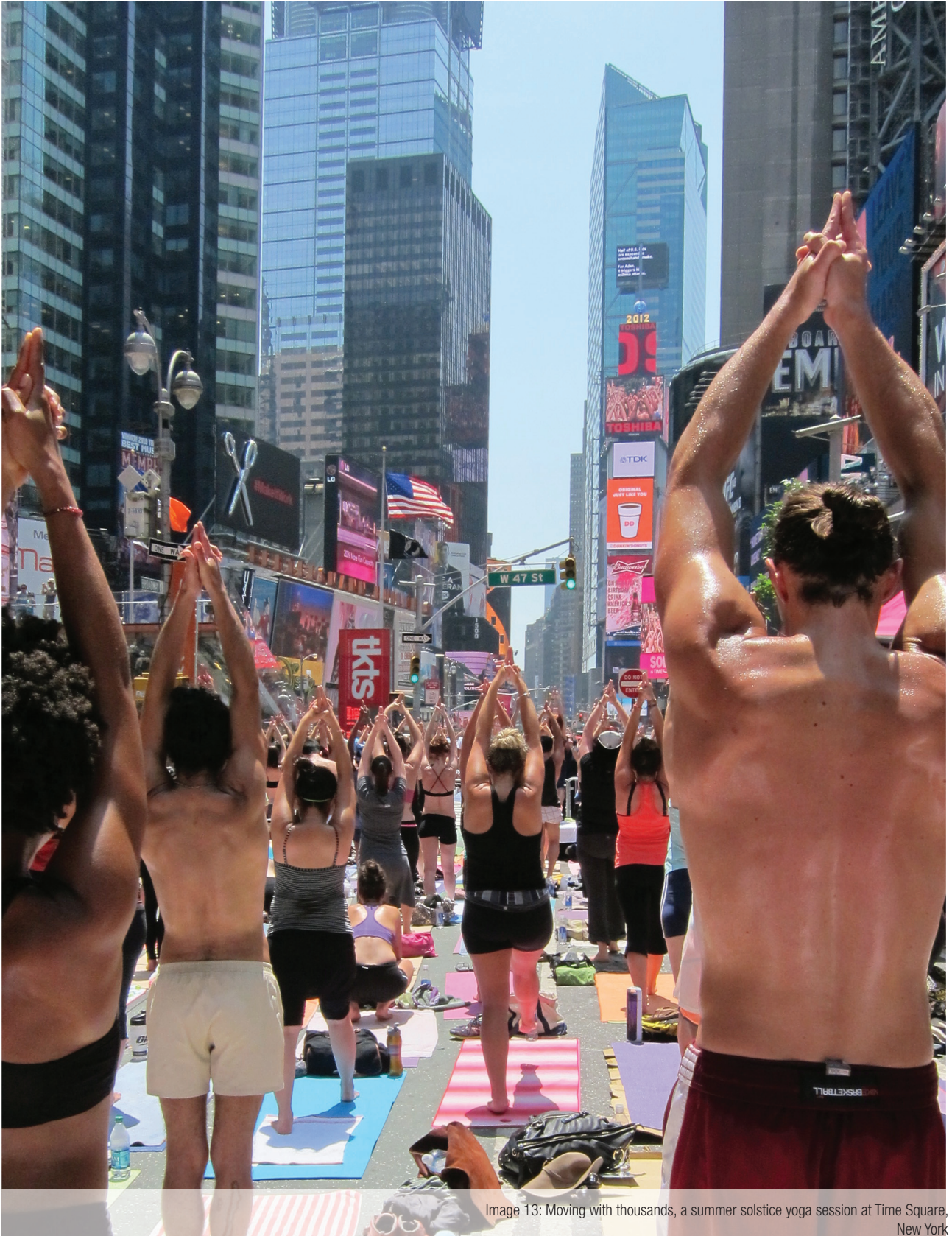


Image 13: Moving with thousands, a summer solstice yoga session at Time Square, New York

Movement Disciplines

In addition to my personal experience, in this work I studied certain movement disciplines as a tool to apply to design environments. The most significant of these studies are: Laban Movement Analysis, Improv, Tai Chi, 5Rhythms and Yoga. Combined with literature analysis, I had chance to practice and also interview with the experts in some of these areas and tried to reflect their insights.

LABAN MOVEMENT ANALYSIS

“Laban Movement Analysis (LMA) is a method and language for describing, visualizing, interpreting, and documenting all varieties of human movement.” This work is originated by Rudolf Laban’s work and is extended by Lisa Ullman, Irmgard Bartenieff, Warren Lamb and many others. Many other practices are inspired by LMA techniques. *“Also known as Laban/Bartenieff Movement Analysis, it uses a multidisciplinary approach, incorporating contributions from anatomy, kinesiology, psychology, Labanotation and many other fields. It is used as a tool by dancers, actors, musicians, athletes, physical and occupational therapists, psychotherapy, peace studies, anthropology, business consulting, leadership development, health & wellness, and is one of the most widely used systems of human movement analysis today.”*

One of the experts I received help in this thesis was **Karen Bradley**. Karen Bradley is the Associate Professor and Director of Graduate Studies in Dance at the University of Maryland. She helps executives perform better, especially in gender intensive positions. This example encouraged me to build a new method to help not only the directors but also the entry level designers to perform better.

The other very important movement advisor of my work was **Colleen Culley**. Colleen is a dancer - founder of the Body-Based Model for Creativity. She encouraged me very much about my hypothesis and explained her work on teaching Laban-inspired movement sessions for students and professionals. Colleen also introduced me to The Moderns in order to prototype my thesis work.

IMPROV

“Improv” techniques are often taught in standard acting classes. Some of the basic skills improvisation teaches actors are to listen and be aware of the other players, to have clarity in communication, and to be confident to find choices instinctively and spontaneously. Knowing how to improvise off the script helps actors find lifelike choices in rehearsal and to then keep the quality of discovery in the present moment in their performance, as well.

Roger Manix is an actor and also a professor in the New School. He also facilitates workshops for professional and academic groups to maximize their ability as efficient problem-solvers and communicators. Roger uses the “play” factor to generate a sense of vitality and paves the way for increased strategic thinking. *“By confronting old ideas and patterns, the brain creates new neural networks. An increase in innovation, stronger partnerships, and successful transmission of ideas are all direct results of Play.”*[1]

I worked in one of Roger’s workshop In Parsons as an observer and photographer in order to understand the role of playfulness in group dynamics and how dramatically the rhythm of the group changed after the

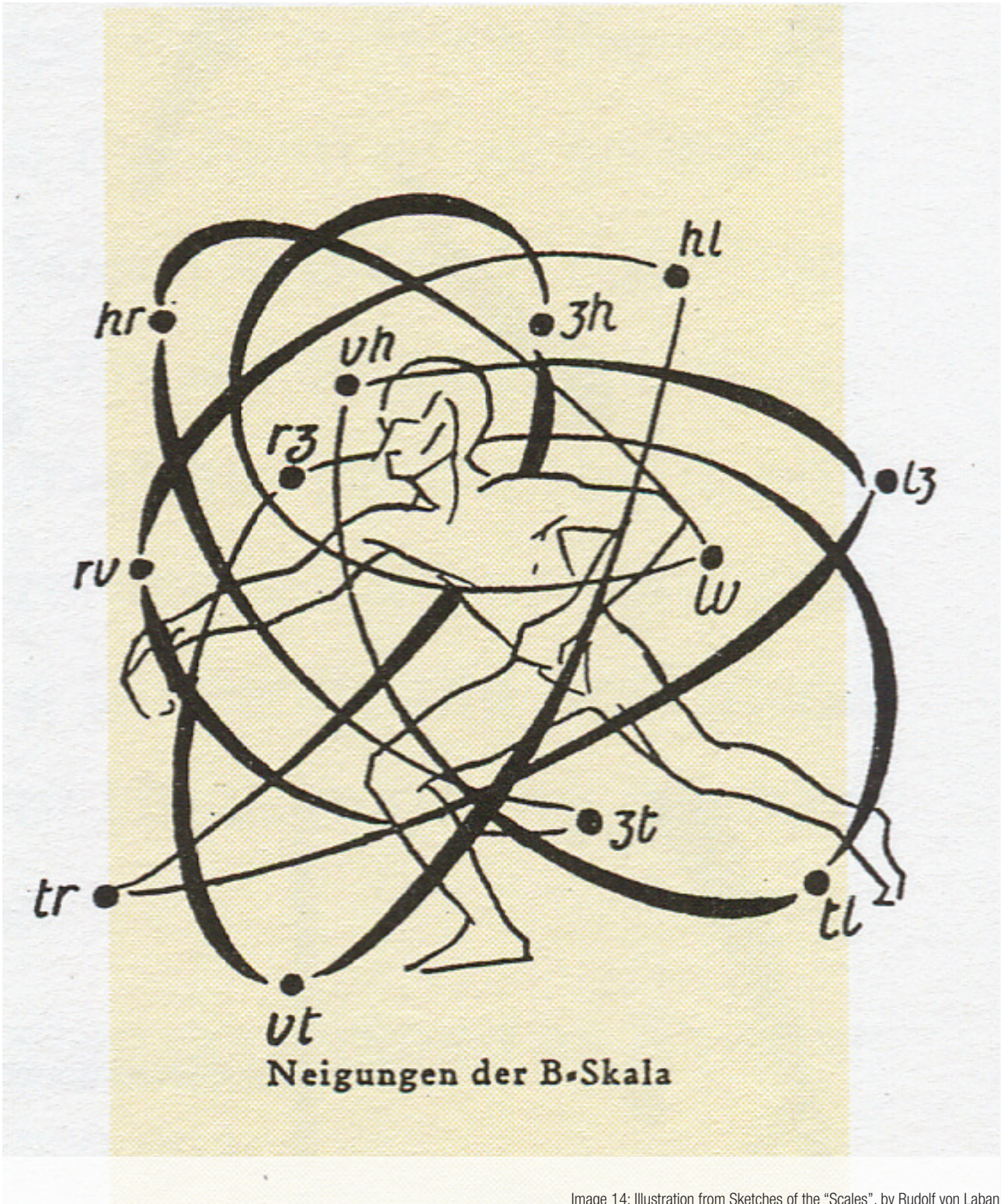


Image 14: Illustration from Sketches of the "Scales", by Rudolf von Laban

1- www.rogermanix.com

2- DK Whole Way Library Kundalini Yoga, Shakta Kaur Khalsa

activities. Having observed Roger work, the question of top-down approach in these kind of activities appeared in addition to the personality intensive nature of teacher-oriented movement activities. I started to question if there is a way to create a more bottom-up approach for movement in corporations.

TAI CHI

Long before embodied cognition started to question the effects of movements and poses, the Eastern world found benefits from movement rituals.

Even today many companies in China are continuing to practice Tai Chi everyday, which is believed to improve conditions such as, pain, fatigue, sleeplessness and depression.

“Twenty-one of 33 randomized and nonrandomized trials reported that 1 hour to 1 year of regular tai chi significantly increased psychological well-being including reduction of stress, anxiety, and depression, and enhanced mood in community-dwelling healthy participants and in patients with chronic conditions. Seven observational studies with relatively large sample sizes reinforced the beneficial association between tai chi practice and psychological health.”

The Tai Chi example is a good proof of how local culture defines the penetration and diffusion of movement in life, as well as personal practices.

5RHYTHMS

5Rhythms is a movement meditation practice devised by Gabrielle Roth in the late 1970s. It draws from

indigenous and world traditions using tenets of shamanistic, ecstatic, mystical and eastern philosophy. It also draws from Gestalt therapy, the human potential movement and transpersonal psychology. Fundamental to the practice is the idea that everything is energy, and moves in waves, patterns and rhythms.

Alexa Schmidt, a Swiss dancer, is a 5Rhythms method instructor. Alexa pointed out the differences in people's expressions through movement and how shyness for example can be caused by judgmental thinking. She emphasized the importance of encouragement as a trainer and how movement can enable self-confidence and curiosity in daily life to become more courageous to try out different ways of expressing and creating.

“Accepting what's in body, emotions and mind within the moment, enables self-confidence and curiosity in my daily life to become more courageous to try out different ways of expressing and creating.”

YOGA

Among all the other disciplines I studied to enrich the movement vocabulary of the system, yoga is the major source of information, for several reasons: not just because of the convenience caused by long years of personal practice but also for the reasons such as, Yoga being an ancient knowledge about human body and mind, requires very few tools and little space. There are very new studies on yoga in the work place to improve wellness and performance.

In particular, the specific type of yoga called Kundalini is oriented to *unlocking the creative potential that already exists in every human.*

Kundalini yoga also is designed to fit in the everyday life of a person. It doesn't require a specific religious orientation, physical background or environment to do the exercises. Also according to my personal experiences, the kriyas are the least risky exercises in terms of physical harm and injuries. Kriya means "action". A kriya is an exercise or group of exercises that work toward a specific outcomes. [1]

Today there are many Kundalini Yoga workshops that aim to teach people to use their creative capacity at maximum levels. Some of those activities focus on female potential for creativity, so it is a great source about the previously mentioned problem about the lack of female managers in design.

However, as practiced today, Kundalini Yoga is so far away from being adapted to the work environment, because of the probable personal concerns about humiliation, cult-like image and the idea that it is like a religious routine. So in my thesis, I will just use the vocabulary from Kundalini and use this rich source to design a workplace oriented set of movement habits.

YOGA AT WORK:

Over 100 studies on yoga show that this discipline works well on backaches, neck problems, repetitive strain injuries caused by bad posture, nonstop computer use and many more. [1]

That's why many individuals are trying to implement the fine results of regular practice of yoga into their work life.

There are many D.I.Y. instructions showing how to stretch the neck while sitting at the desk, use breathing techniques to overcome the stress load of the day and flex the spine to avoid serious spine and lumbar injuries.

There is even a new style of yoga called Chair Yoga. Which is specifically designed to be practiced in one's office chair without leaving their cubicles.

In some cities like New York, today many small companies have yoga type activities in their offices. Mara Hoffman, a well known fashion designer from New York is one of them. Before a big show, the whole crew relaxes and focuses together with a yoga session held in their workplace. (Picture next page)

However for many other contexts there are still weaknesses in these already existing practices, including:

- Embodiment and wellness are perceived to be individual activities that usually do not relate to work activities.
- In order to get measurable and meaningful change, long-term commitment is required.
- Existing practices are usually teacher-intensive and top-down oriented.
- Many individuals are afraid to commit to a regular movement practice in the work place because of humiliation and distracting others



Image 15: Mara Hoffman studio during a yoga class before a stressful fashion show, New York

Study participants, who were employees of the British government, were asked to practice yoga for 50 minutes once a week for eight weeks. They were also allowed to practice up to twice a week for 20 minutes at home with a DVD. When compared with a group that did no yoga at all, the yoga practitioners reported lower levels of stress and sadness as well as less back pain. While this was a small study with 37 participants in each group, it adds to a growing body of research that confirms yoga's many benefits.

"Integrating yoga into the workplace, at lunchtime or after work, may provide a time-effective, convenient and practical method for reducing the costly effects of stress and back pain." [2]

1- www.medicalnewstoday.com/releases/255465.php

2- September 25 issue of Occupational Medicine.

YOGA SATURDAYS MILANO

During my post graduate study in Milan, I looked for affordable and bilingual movement studios with a friendly atmosphere. After 6 months of trial and error, I decided to teach my own classes to people like me: designers, artists and students who wants to come together and move and share. So in spring of 2011 Yoga Saturday Milan was started up in Parco Sempione.

This experience built up the initial knowledge base for this embodiment journey for creative people. Hosting and organizing movement sessions gave me general understanding of the issues and necessities.

Figure 10
Yoga Saturdays Milano Logo



100 real great things to do in Milan:

The advertisement features a vibrant, close-up photograph of green grass with several water droplets on the blades, set against a bright, slightly blurred background. The text is overlaid on the right side of the image in a white, bold, sans-serif font. At the bottom left, there is a small circular logo identical to the one in Figure 10. At the bottom right, the website address "yogasaturdays.tumblr.com" is written in a smaller white font.

#46: **HAVE**
A YOGA
session
in PARCO!
(Each SATURDAY 10am IN PARCO SEMPIONE, near the pond)
yogasaturdays.tumblr.com

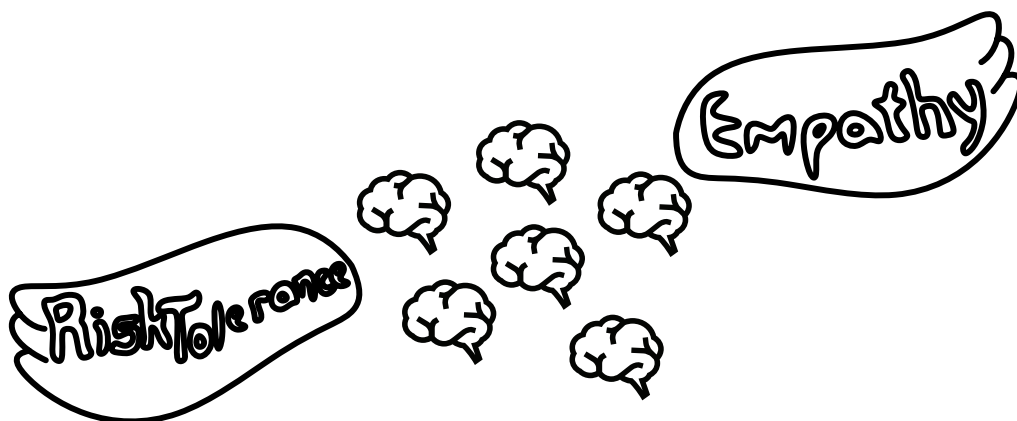
Image 16: An advertisement for Yoga Saturdays Milan

Hypothesis

Literature above which is about the dynamics about the group creativity paired with current science on embodied cognition and movement science is squeezed through my personal filter and leads me to a hypothesis:

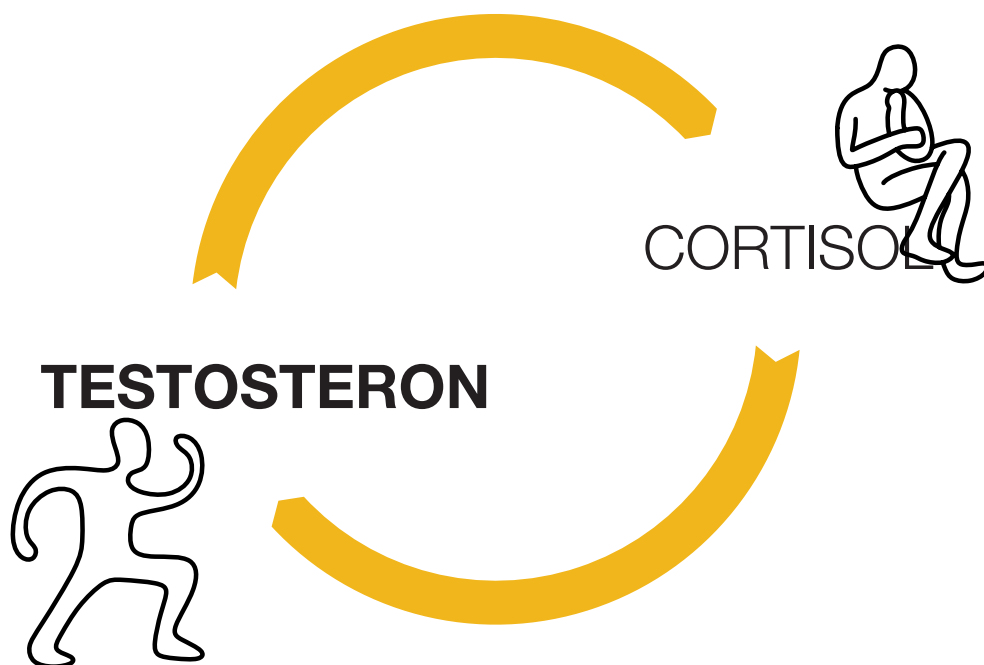
Idea generation requires a calm, relaxed and understanding state, and the expression and elaboration of these generated ideas require a significant amount of risk taking qualities. These states and qualities can be moderately manipulated and modified by application of movement disciplines to daily work routines.

Figure 11
Embodied Group Dynamics



A healthy performing group should be balanced in risk tolerance and empathy. This depends attendants' cortisol and testosterone levels. Before each group session, people can adjust their: testosterone levels by performing expanded movement and postures and cortisol levels by warm-up activities including elements such as talking and touching.

Figure 12
Hormones & Attitudes



Testosterone rises in anticipation of a competition and as a result of winning. (Booth, Shelley, Mazur, Tharp, & Kittok, 1989)
Power holders show lower basal cortisol levels and lower cortisol reactivity to stressors than powerless people do. (Abbott et al., 2003; Coe, Mendoza & Levine, 1979; Sapolsky, Alberts, & Altman, 1997)
Cortisol was elevated in people who reported experiencing empathy while it declined in those reporting distress. (Barraza, Zak, 2009)

PRECEDENT 2: GOOGLEPLEX

Embodiment and Mindfulness in Creative Corporations

For the western world, the Cartesian way of Body - Mind perception is still dominant. However, many companies, especially the ones that operate in creative sectors, have started to embed movement and sports into their physical space and daily routines.

The best known example of workplace wellness is Googleplex, the famous complex of Google in California, with novel office arrangements, sport and wellness facilities, and a large selection for healthy nutrition alternatives.

“Google named Fortune magazine’s “Number 1 Best Place to Work” for two years running and is jokingly called the Emerald City for its menu of perks that includes free gourmet meals, subsidized massages, volleyball games, and endless-wave swimming pools.”

But now Google also is aiming employees to grow as human beings, in physical, mental and emotional ways. Google works with Chade Meng, who before was working as a system designer for Google for eight years. Chang teaches a course called SIY: Search In Yourself. The course was developed in consultation with psychologists and a Zen priest. So far, 200 Googlers at the Mountain View campus have taken the course which covers practice of meditation, mindful listening and mindful emailing.

“The concept isn’t as new agey as it sounds. There’s a practical side to developing well-rounded employees: they’re likely to be more creative and thereby contribute more to the bottom line.”



Image 17: Chade Meng Tan sits in the lotus position in a meeting room at google HQs

Three

Can we use the
knowledge from
science and
movement studies to
improve group work in
design environments?

Action Research
Development
Diffusion
Conclusion

Part Three describes the three workshops and the long term prototyping with the American partner company. It explains aims, techniques and results; the artifacts designed to produce those outcomes and the iteration of research aiming to find possible ways to reproduce similar interactions in Turkish context.

8. ACTION RESEARCH

Designing and Facilitating Workshops

According to many movement practices, the sure way to progress is through finding your edge - physical strength, effort or flexibility - and challenging your mental resistance to pass that edge.

The workshops I conducted provided valuable empirical data for my work. At the same time, they acted as platforms to play around with the edges of designers' traditional roles and to seek out new ways of incorporating movement into the work of creative people and organizations. These activities constituted both practical research for design, and theoretical research through design. Although I sensed both internal and external resistance to the edge where a designer becomes a movement teacher, challenging this limitation helped me understand the barriers that a more-conventional movement teacher might come across in working with creative teams in a corporate context.

The workshops I observed and conducted varied in length, program, and intent. The first was aimed simply at observing the reaction of designers engaging in a short movement routine followed by some simple creative exercises. The second was aimed at verifying the accuracy and relevance of certain movement theories and embodiment patterns in co-creative processes. The third was aimed at synthesizing and codifying my findings into an engaging workshop activity.

All three workshops were held at Parsons The New School for Design and co-designed with colleagues from the Enterprising Design Knowledge course of the Transdisciplinary Design program.

In addition to conducting these workshops, I was able to establish a partnership with a small, New York based, design firm and conduct longer-term testing of a sustained movement routine specially designed for their company. This allowed me to validate my hypotheses with designers and test my prototype of a possible new service provision.

My findings from these action research efforts form the empirical basis for the main theoretical propositions, practical guidelines, and design recommendations of my thesis.



Image 18: Workshop facilitation



Image 19: Action research for movement teaching

Workshop 1 - Observation

As a part of Parsons Transdisciplinary Design Program Enterprising Design Knowledge course with Professor Carlos Texiera, I co-hosted a workshop with a fellow student Elie Kahwagi. The topic of the workshop was *Passports*. Elie and I wanted to establish a sense of cultural empathy among participants. So we designed an warm-up activity where the participants were grouped in pairs and asked each other about their home towns and drew pictures of them, influenced by their knowledge about that culture. In this way, we aimed to create a focus on being from different countries and how prejudices affect our perception about the other.

This activity didn't have any manipulations or priming about embodiment so I could observe the natural tendencies and patterns about embodiment in creative sessions.

ACTIVITY OVERVIEW:

Number of participants: 7

Age: 25-30

Gender: Mixed

Time: 1,5 hours

Phases: Warm-up, video show, ideation, development

ACTIVITY OUTCOME

This activity gave me initial empirical input that supports my hypothesis about codifiable relations between body and creativity.

The factors listed below have direct relationship with the fluency and originality of the ideas during the ideation of co-creation sessions:

- **Hands and arms:** Participants who frequently used their hands and arms to express themselves, generally contributed more ideas to the group but were less likely to build on the ideas of others.

- **Torso:** The direction of the torso can be an indicator of the motivation and focus of the participants. Torso facing directly towards the group shows an intent to participate.

- **Standing vs Seated positions:** Standing discussions bring more perspective and less stagnation compared to seated meetings.

- **Personal Space:** The amount of space a participant takes up on a desk or wall space can be used as another indicator of self expression, idea generation and contribution.

These factors are helpful to recognize to observe the flow of a participants mental states and performance. However, one should always keep in mind that these factors are conditional. A broken button on a shirt, a sore arm or a cold room can also effect the direction or the expansion of one's body and work space.



Image 20: Personal space as an indicator of performance

“The proud peacock fans his tail feathers in pursuit of a mate. By galloping sideways, the cat manipulates an intruder’s perception of her size. The chimpanzee, asserting his hierarchical rank, holds his breath until his chest bulges. The executive in the boardroom crests the table with his feet, fingers interlaced behind his neck, elbows pointing outward. Humans and other animals display power and dominance through expansive nonverbal displays, and these power poses are deeply intertwined with the evolutionary selection of what is “alpha”” -Darwin, 1872/2009; de Waal, 1998; Curney, Cuddy, Yup, 2010



Image 21: Personal space as an indicator of performance

Workshop 2 - Verification

If there are certain relations between body and creativity, could we actually manipulate some factors to improve the performances of groups that come together for creative purposes?

In this second workshop I designed and facilitated a warm up activity with the help of fellow student Fernanda Alcocer.

We had the participants in the workshop get into pairs, and we gave one member of each pair a card with a negative mental state written on it. Then we asked these participants to assume a position with their body that they felt reflected the mental state written on their card. (e.g. From Isolated to Observing.) Their partners were then asked to guess what mental state they thought was being depicted. Finally, the partners doing the guessing were invited to change the bodily position of the partners doing the posing in order to reflect a more-positive mental state written on the other side of their card. Some participants chose to recompose their partner's position with verbal commands while others resorted to touching and physical direction.

There were three main focuses of this activity: creating self-awareness of embodied mind, creating awareness of others' embodied signals of their mental states, and finally using those signals as opportunities that can be turned into advantages with a little fine tuning. The activity also had a side effect of building trust among the group members as they were asked to create a mutual communication to allow the other to change them. (See Image 22 on the next page.)

ACTIVITY OVERVIEW

Number of participants: 6

Age: 25-30

Gender: Mixed

Time: 1,5 hours

Phases: Warm-up activity, video show, ideation, development

For this specific activity I created an assessment sheet using the variables and parameter that were mentioned in the method section earlier. (See page 48)

Using this framework, I tried to analyse the overall flow of the actions and efficiency.

In the following subsection you can find this evaluation with added graphics about the visual plan of the classroom where the activity took place including the placement of the attendees, facilitators, observers and recording cameras. In addition to that there is an emotional map of the activity that reflects the observation about the emotional ups and downs of the participants.



Image 22: Changing the other's body state for awareness



Image 23: No chair ideation

PARAMETERS AND VARIABLES TO ASSESS THE ICE BREAKER ACTIVITY

VARIABLES

Time:

5 minutes

Space:

App. 5 sq meters empty space, standing, no chairs

Participants:

Group of 6

Both genders

Age: 25-30

Different nationalities

Transactions:

Verbal communication - same letter partner finding

Nonverbal communication - showing the proposed emotional state by body language

Transformational transaction - touching or verbally directing the partner in order to shape her/him into the suggested new state.

Information:

The letter and emotional states written on pieces of paper

The verbal directions of:

Not showing the paper

Finding the partner

The assignment of the starter in the pair

The demonstration of the activity

The time warnings

Ideas:

The different ways of attendees to animate emotional states

Frameworks/tools:

Written pieces of papers

PARAMETERS

Efficiency:

The activity helped attendees get into a more emphatic and active mood.

Productivity:

Each pair created one form and then transformed this into another. In total 6 emotional states were analyzed and performed.

Quality:

The interactions could be encouraged to be deeper but considering the intimacy and comfort of team members, no depth was pushed by the facilitators.

Relevance:

The emotional states were related to the topic of the workshop; Evolving Identities.

Uniqueness:

The body forms the attendees got into were not significantly unique, a parameter can be added to the activity

Cost:

This warm up activity in terms of time and tools used can be defined as cost effective.

Figure 13
Activity plan

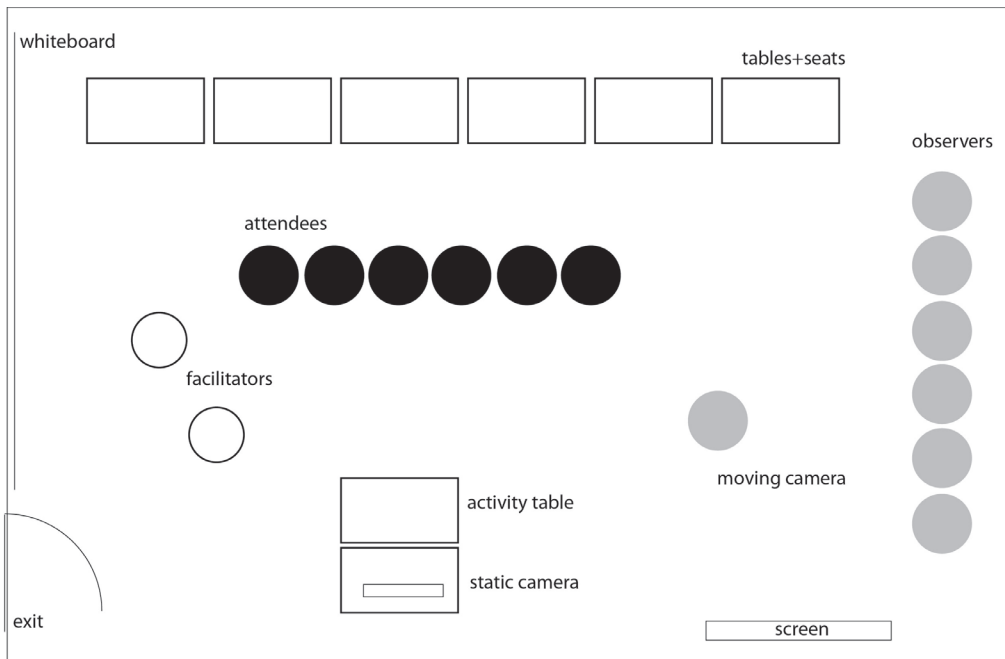


Figure 14
Emotional map of the activity



ACTIVITY OUTCOMES

In this activity, compared to the first workshop, the overall positive feelings of team building and challenging attitude among participants were significantly stronger. The participants were comfortable, communication was strong and risk taking behaviors didn't cause resentment or isolation of the others. So workshop two verified that embodied interventions to group activities can improve co-creative performance.

The warm up activity could be more effective if the transformation was performed by two parties of each team by changing roles after one is finished. This would assure both the two-way empathy creation and the movement vocabulary. Timing was optimum. The relevancy to the topic created relatively difficult emotional states that blocked the attendees from being more creative. Less sophisticated but more "group dynamics" related emotions could have been used. In the activity cards, the primary state and secondary state should be stated. Otherwise the facilitator should warn the attendees about which party is supposed to start first.

Workshop 3 - Codification

After co-facilitating two workshops to observe small interventions on embodiments of the participants, it was necessary to hold a whole activity based on embodiment.

The flow of the session was movement, talks, design and prototyping.

We had a 45 minute movement session focusing on creativity, which means using the lower back and the pelvis area with vigorous breathing exercises and a small meditation. Then we talked about the embodiment awareness in offices. The conversations were followed by an activity sheet for self embodiment assessment (See following pages) and designing an office oasis.

After the sheets, we had a food break and finalized the event with prototyping of the oasis ideas with Playmobil toys and materials such as paper and fabrics.

Some ideas were about staying alone in dark. Some were about somehow reaching the nature to recharge during a workday.

ACTIVITY OVERVIEW

Number of participants: 7

Age: 25-38

Gender: mixed

Time: 2 hours

Phases: Physical activity, discussion of work environment experiences in terms of embodiment and filling out the activity/assessment sheets, lunch break and then prototyping of *office oasis* ideas.

In all three workshops I facilitated activities with the help of volunteer friends and peers. As time and energies of those people are valuable and the insights gained from them are precious for my work, I had a big focus on keeping my participants motivated and happy. In order to create a feeling of a well spent time among participants, I used nicely designed materials, colored stationery and many snacks and drinks. "*Feed your attendees*" is one of the biggest lessons I learned from Lara Penin, Parsons the New School for Design faculty and DESIS Lab principal investigator, in her workshops teaching how to facilitate workshops.

Another important lesson was to test the activity materials beforehand because even the most clear explanation for the designer can be sometimes confusing for the attendee. So after I designed the activity sheets I asked peers to fill them out and changed the overall design and the texts according to the feedback from them. This way the participants could fill the sheets without any confusion.

In the following pages you can find these filled sheets and pictures taken from the physical activity session which was focusing the *increase of creative potential*.



Image 24: Printed materials of the workshop



Image 25: Fuel for the participants

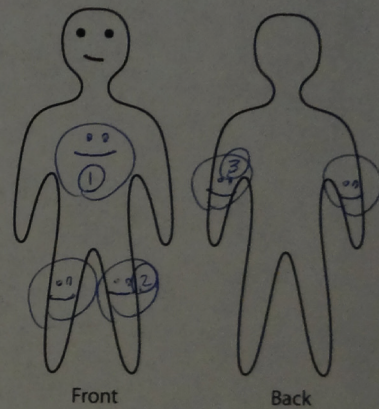
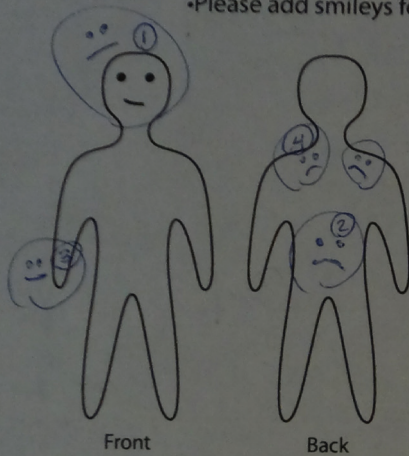
Name: BEN

1-Body at Work

• Which body part do you use most at work:
(Please mark 1,2,3,... most to less)

• Which body part do you use least at work:
(Please mark 1,2,3,... least to more)

• Please add smileys for good feeling in the part, sad faces for pain.

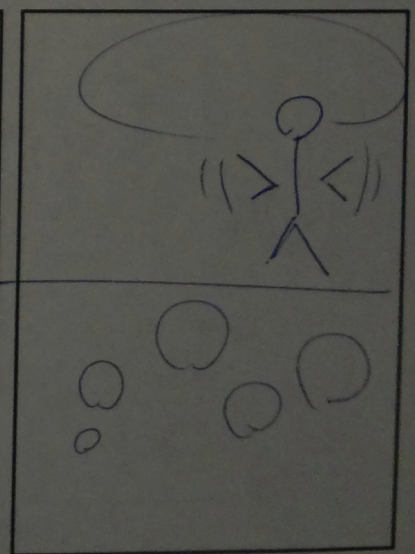
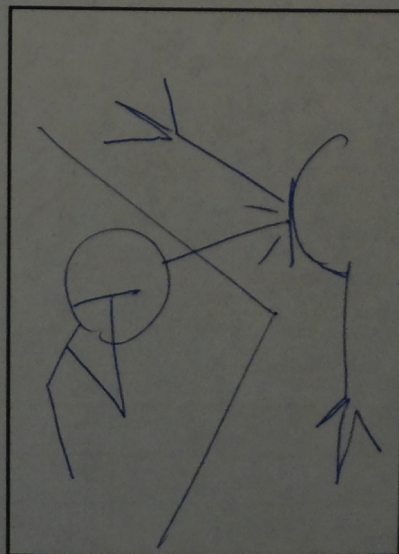
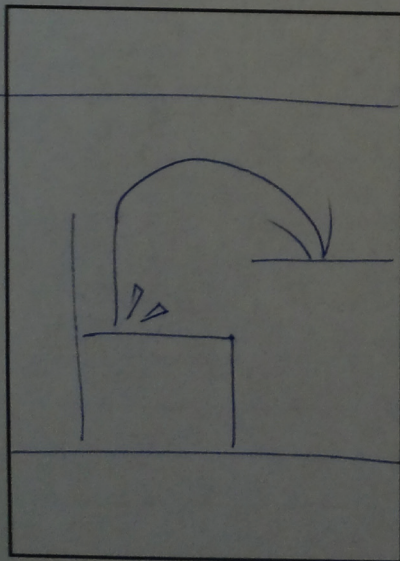


• Can you draw your body

working at your desk?

having an arguement in a meeting

while making a presentation



2- Design an office oasis for you.

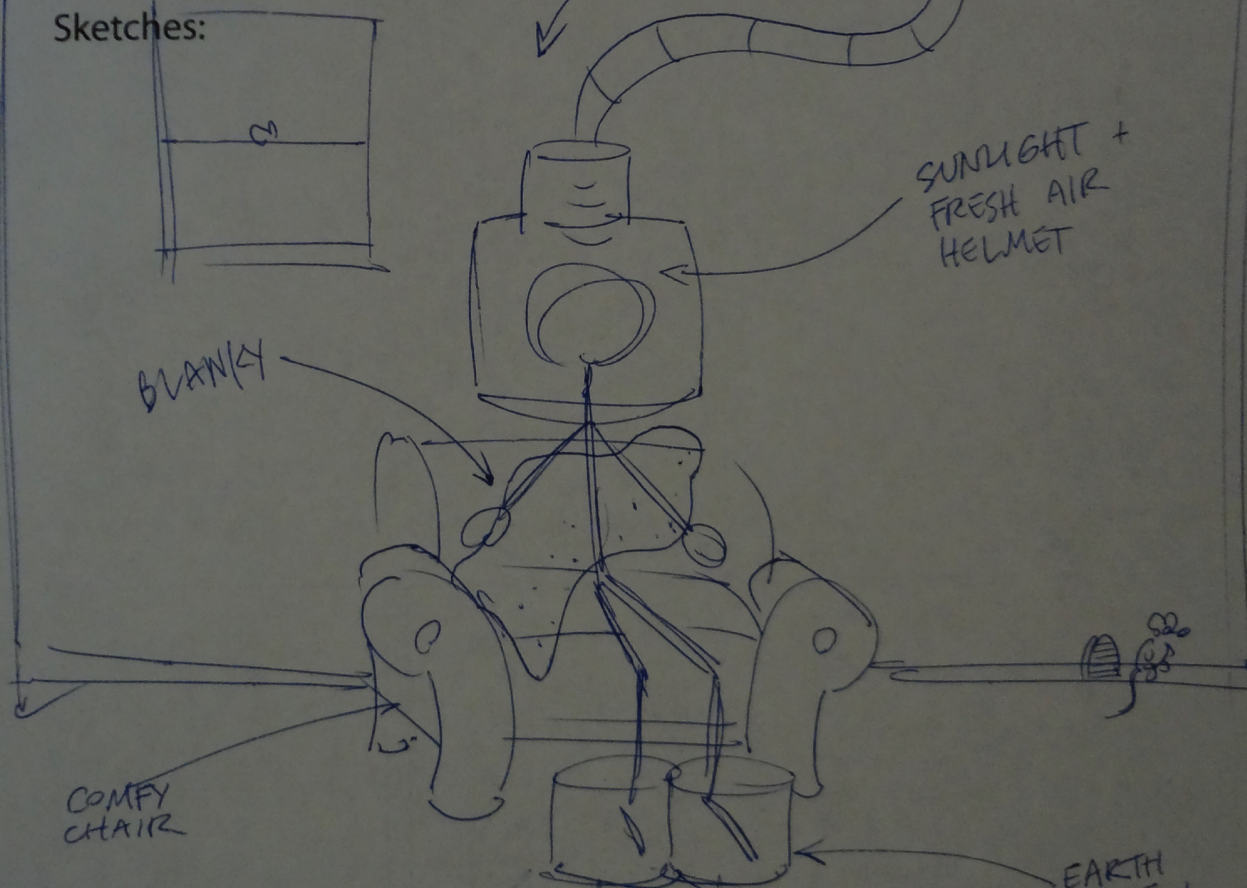
Please make a sketch to describe a small space/tool/vehicle/... for you to have a break, ground and charge yourself in.

In the workplace; for small groups or single use. Built, temporary or modular.

Think of:

Space - Light - Sound - Size - Visibility - Objects - Materials

Sketches:



Description:

SENSORY
REJUVENATION
CHAIR



Image 28: Collaborative balance



Image 29: Participant designing: a "workplace oasis"



Image 30: Pausing before creating



Image 31: Prototyping the workplace oasis

ACTIVITY OUTCOMES - NEW INSIGHTS GAINED FROM PARTICIPANTS:

- Breathing and closing the eyes are very commonly used techniques to deal with work stress.
- Some people prefer the bathroom to stay silent and alone for a moment to relax.
- Females face power and communication of competency issues more than the males do.
- Embarrassment and loss of authority is a common factor that limits physical activity during work sessions.

From the outcomes about workplace embodiment I learned that a full body practice including meditation doesn't prepare a group to talk, argue and create; it creates a peaceful group in silence. This valuable teaching helped me develop this main principle: in order to achieve an optimum creative potential in the group, the physical activities should follow observation and discussion.

The relatively controlled nature of the academic environment where these three workshops took place, prepared a stronger foundation to go out and test the hypothesis in professional contexts.

Prototyping - Designer as the Embodied Change Agent

FINDING THE RIGHT PARTNER - THE MODERNS

Having a corporate partner to collaborate in a thesis work can be vastly difficult, especially in big cities like New York where people are famous to be busy all the time. Besides the time problem, many companies also hesitate inviting a stranger (and a foreigner) to their work environment, if not also telling their stories.

Serendipity played a big role in my case, on meeting The Moderns, a multidisciplinary design company.

It took us weeks to establish the first contact. I almost left the country as I couldn't find a company to have the tests with.

However, after this long period of e-mail threads and waiting, we had our first meeting together. And we started our collaboration.

At the first meeting, executives of The Moderns explained me the problems they were facing recently and told me about their expectations.

The fact that they already had some movement sessions was the biggest reason our period of adaptation and explanation of the principles was very brief.

In other circumstances, convincing the management of a small company would be a whole other big long phase. I will mostly skip this phase in this scenario. I will revisit this issue when I explain my attempts to repeat this activity in Istanbul.

The stressful time before the established partnership with The Moderns thought me to plan ahead and schedule a big amount of time just for the "flirting" period before the activities start. At the end of the day, a company is a closed habitat. And a creative company, however open and innovative might have concerns to accept a complete stranger and who is also a national stranger to its environment and work flow.

As a designer i believe that the experience I had with The Moderns was more than precious because I just wasn't accepted to modify their weekly routines about also had to change to go through a whole service journey with them to see the all obstacles and magical moments of improvement with them.

In this section I will go through the process of getting to know a company and designing a movement service for them, including the tools I used to facilitate the activities and also to record and assess them.

T H E M O D E R N S



Image 32: The Moderns

DESIGNING FOR THE CONTEXT

After our meeting, I designed a 40 day schedule concerning their time tables, physical capacities and backgrounds and their possible energy needs depending on the time of the day.

On the initial planning of the schedule, the week was arranged like this:

- Energizing activities for the week on Mondays,
- Work on strength to see and respect our limits on Wednesdays,
- And finally stretch and slow down to digest the whole week on Friday mornings.

There would be elements of breathing, balance, flexibility and endurance combined with partnered trust and collaboration games. And the whole program evolved as we start moving and started to see our needs.

Concerning the frequency of lawsuits and the intensity of legal precautions against them, combined with my visiting scholar visa situation, I prepared a detailed movement teacher liability - student waiver agreement to create an awareness against physical injuries of my students and protect myself against possible legal actions. (See Appendix 2)

Page 112-113 explains the routine of a movement session from the mover's perspective. The experience of the movement agent starts with the entry of the building. An office the door is open and I let myself in. Then I say hi to everyone. I get the keys from the vase at the entrance and go to the ladies room to change clothes. For many office buildings toilets are the only place for that. Taking shoes off in an office building can be challenging sometimes. The floors might not be clean enough. That is also a concern when putting the mats on the floor. Turning phones off is a must of the session. However, in an office the land lines are always on and being disturbed by some calls or visitors is very likely.

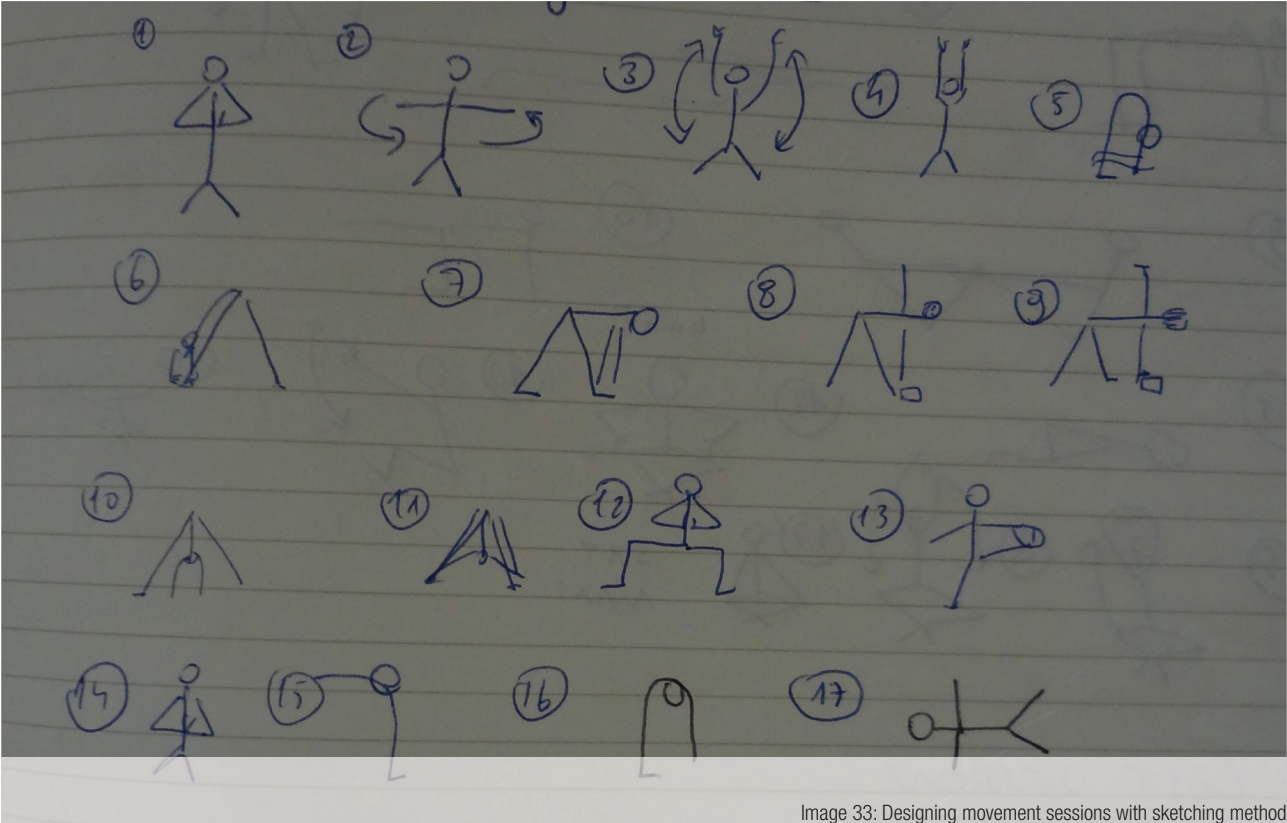


Image 33: Designing movement sessions with sketching method



Image 34: Application of the designed movements



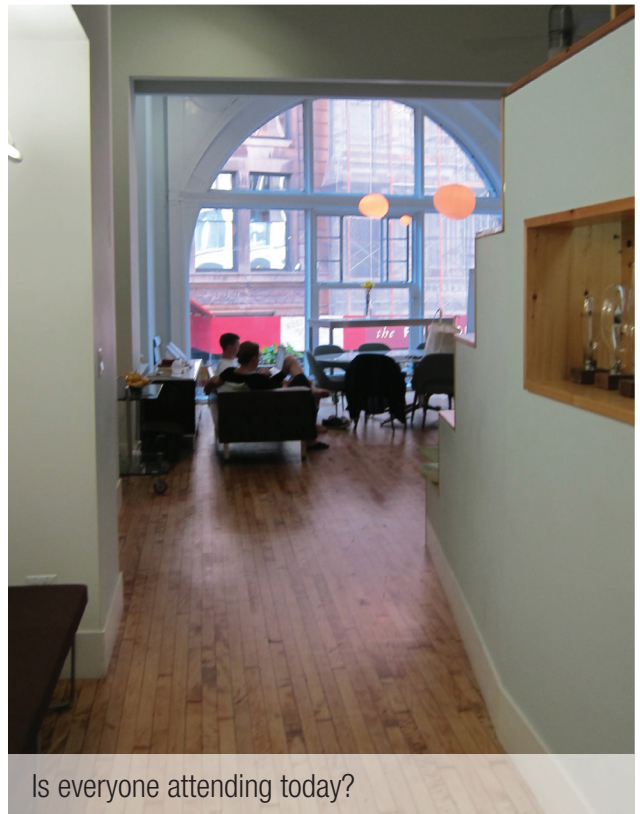
Finding the door open and saying a loud HELLO!



Taking the keys to the bathroom.



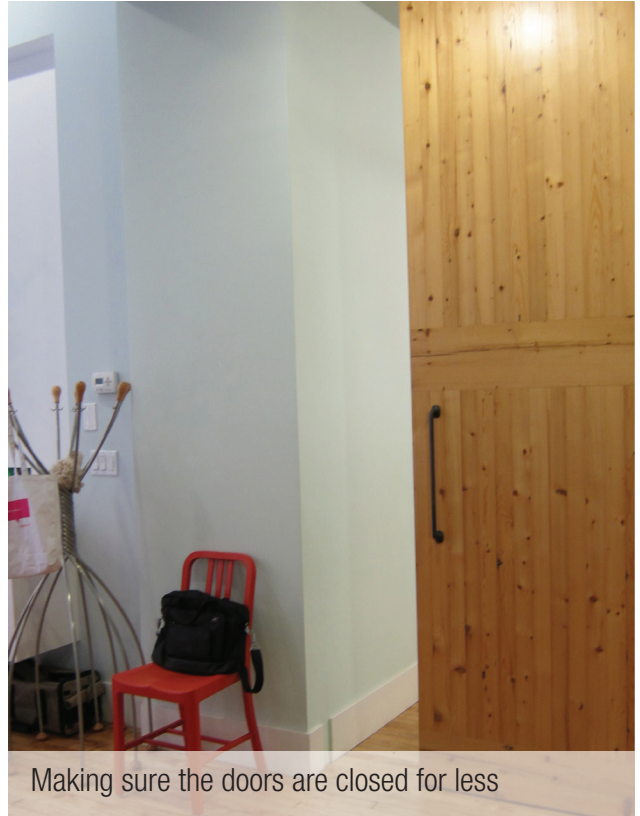
Changing clothes.



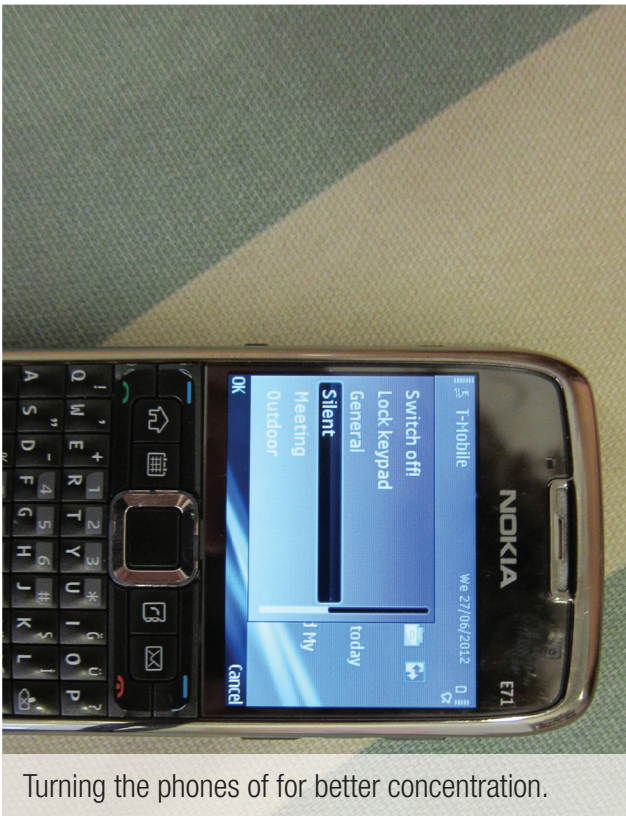
Is everyone attending today?



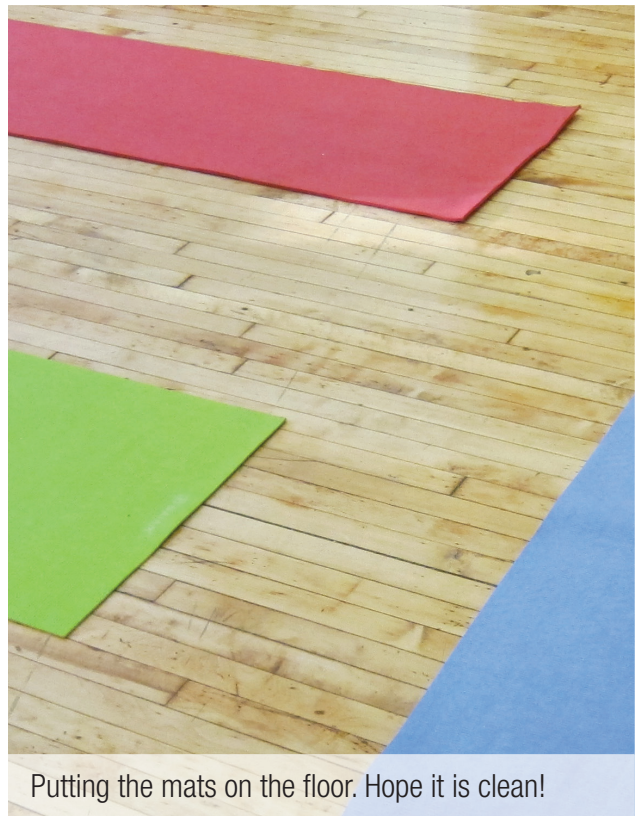
Taking shoes off in an office?



Making sure the doors are closed for less



Turning the phones off for better concentration.



Putting the mats on the floor. Hope it is clean!

OUTCOMES - JOURNALS

I used several tools for this testing phase. I designed a blog to keep the communication flowing mutually. [1] I also designed personal journals to help the attendees keep their own progress and filmed a video so that they could continue using the techniques even on times of holidays and weekends. [2]

Among those tools, only the journals provided real feedback. I couldn't get good returns for the other tools.

In order to verify:

- Their main expectation for the embodied change sessions
- Their body awareness, in terms of usage and wellness of body parts
- Their self assessment of daily work performance.

Only after the sessions were finished and I picked the journals from them, I could actually see the results of our activities. **It worked!** Routine sessions if done in a longer period can help with: **clarity of mind, flexibility of ideas, agility of actions, confidence, communication and personal wellness such as, backpain, and sleep quality.** (See images on next page.)

BRIEFING

A system of principles, movement activities, and soft and hard tools enabling these activities can be named as the main elements to be designed for the development section.

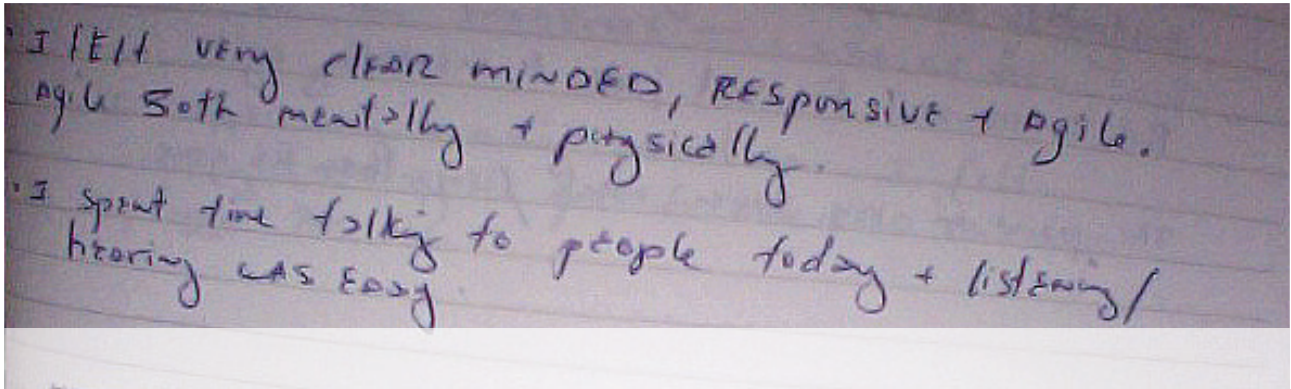
The main streaming of information shouldn't be online. A teacher is necessary for the adoption of innovation. For companies, self-sustaining develops with time. After building a habit in the context, the system can enable the companies to design their movement routines themselves. They can work with local movement teacher using a barter method for facilitation for office space. Many design companies have a clean nicely designed customizable space that is not used at nights or weekends.

Dedicated individuals can use self move tools. These can be sold as objects or instructions for DIY projects can be given.

Finally the following factors should be taken into consideration while designing the artifacts:

- Space (furniture, temperature, flooring, etc.)
- Time (scheduling, absenteeism, etc.)
- Physicality (strengths and limitations of participants)
- Morality (hierarchy, authority, shame, etc.)
- Preparation (before and after activity)
- Distractions (visitors, phone calls, pets, etc.)

1- <http://movethemoderns.posterous.com/>
2- <https://vimeo.com/45259352>



- I felt very clear minded, responsive + agile. Agile both mentally + physically.
- I spent time talking to people today + listening / hearing was easy.

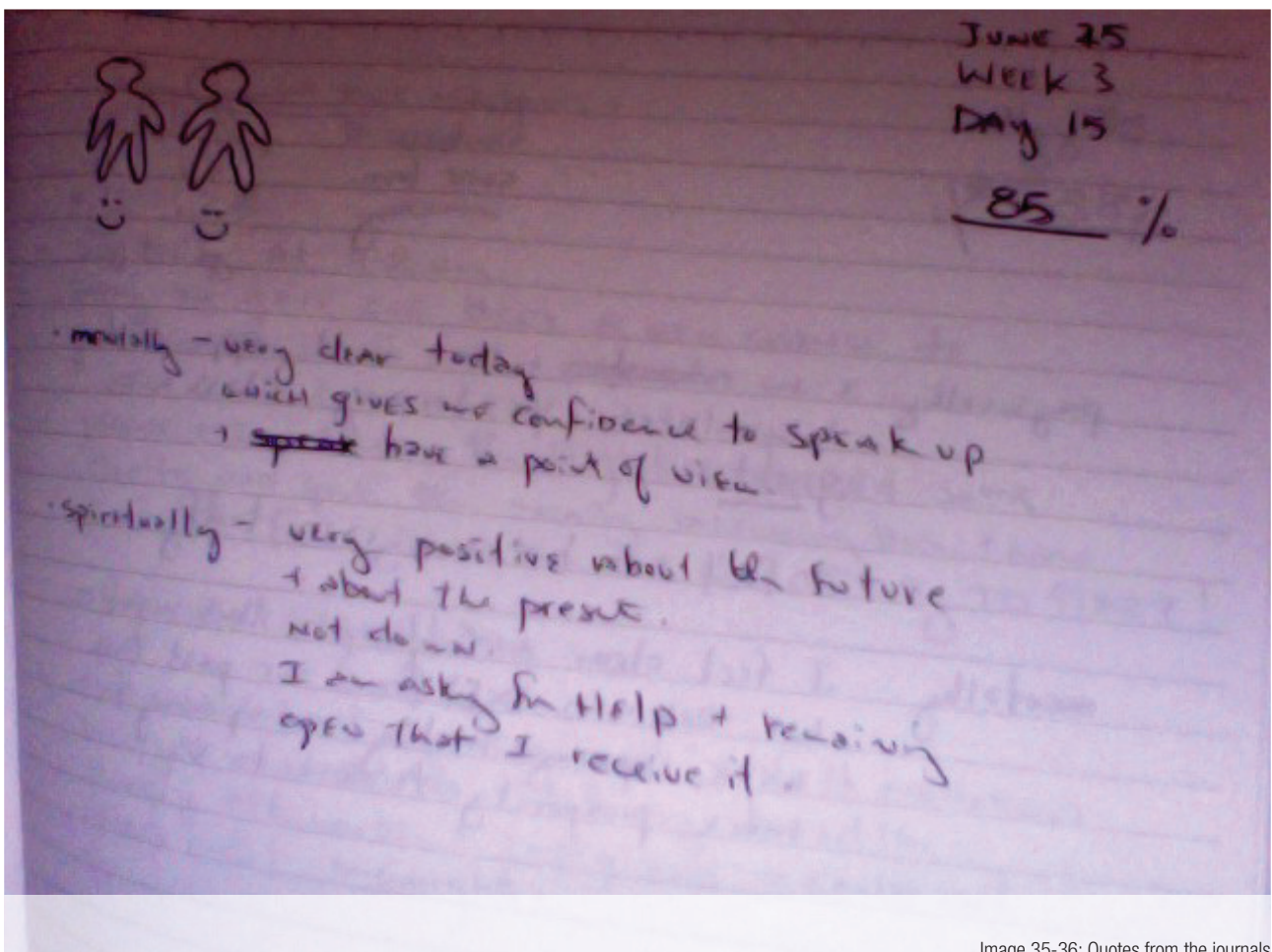


Image 35-36: Quotes from the journals

- Mentally - Very clear today which give me confidence to speak up
- Spiritually - Very positive about the future and about the present. Not down. I am asking for help and receiving it. Open that I receive it.

Companies can experience the transformative benefits of a regular movement routine if provided with the proper tools and frameworks.



Image 37: The Moderns were used to moving already

9. DEVELOPMENT

Introduction to PowerFlowing

Based on findings from my research and testing I have designed the essential features and functions of a service system I call PowerFlowing. PowerFlowing is an adaptable model reinforced with a series of principles and tools to apply movement activities in creative work life. PowerFlowing acts on three foundational principles: *Pause, See and Flow*.

PAUSE: Creating time for small breaks. Activating alpha waves in the brain by closing the eyes, taking a breath and relaxing. Pausing is necessary to create a platform, an enabling moment so that the following actions such as see and flow can take place. Pause also can be described as the sudden freezing moment before the awareness.

“Some of the best results come when people stop to think about things that no one else has stopped to think about.” -Edward De Bono

SEE: Creating awareness on:

- Torso direction
- Hand and arm use
- Standing and sitting positions
- Personal space

In a co-creation session hands are an indicator of activity. More use of hands usually indicates cognitive activity. The direction of the torso indicates the intention of the participant. A torso facing away from the group means distraction and loss of interest. The personal space used on the desk during the activity is directly related to the participant's fluency and originality. In short, ideation meetings such as brainstorming, and standing activities end up with more fluent results.

FLOW: Creating a vocabulary of body moves to *Energize + Empower*, embedding movement in the work place and routines.

Flow can manifest itself in two ways:

- 5 minutes movement routines for preparation for group work sessions. (Self led - using tools)
- 1 hour regular sessions as a team activity. (Trainer led)

Figure 15
PowerFlowing principles

Pause | See | Flow



Inspirations for the Model

BENT ON LEARNING

Bent On Learning is a nonprofit organization committed to teaching yoga to New York City public school children. This organization provides every child with their own mat and integrates the practice of yoga into their daily routine. Bent On Learning aims to help children feel better about themselves, release stress, and calm their emotions—all of which makes them healthier and happier. Their motto is: *“Kids need to be healthy and happy in order to learn.”* As of 2011, their impact can be summed up with 136 classes a week in 16 schools throughout Brooklyn, Manhattan, Washington Heights, Harlem, and the Bronx. That’s 3,300 kids every week!

This was a great example on both how yoga can effect performance and how institutions can benefit from it.

NEW YORK CITY REAL ESTATE MARKET

The New York real estate market is also one of influencers of this system. As there are a lot of people willing to move their bodies, and there are almost as many well trained movement teacher, those two factors can’t come together lacking a space.

Brooklyn Bridge Bootcamp (See Image 39) is a workout program that takes this obstacle and turns it into an opportunity. Bootcamp uses outdoor and indoor public areas like the Brooklyn Bridge, Central Park and Cadman Plaza to offer an alternative workout experience for their participants.

This trend inspired me to consider a barter option that can be used as an alternative payment method between movement teachers and small design companies.

AFRICA YOGA PROJECT

The Africa Yoga Project inspired PowerFlowing with its model for empowering young people in Kenya’s urban slums through yoga. Their innovative and replicable model aims to create jobs, improve health and develop leaders. I practiced with AYP in Milan Yoga Festival 2010, a part of paid activities that are held to increase funding for the organization.

Figure 16
Africa Yoga Project Model

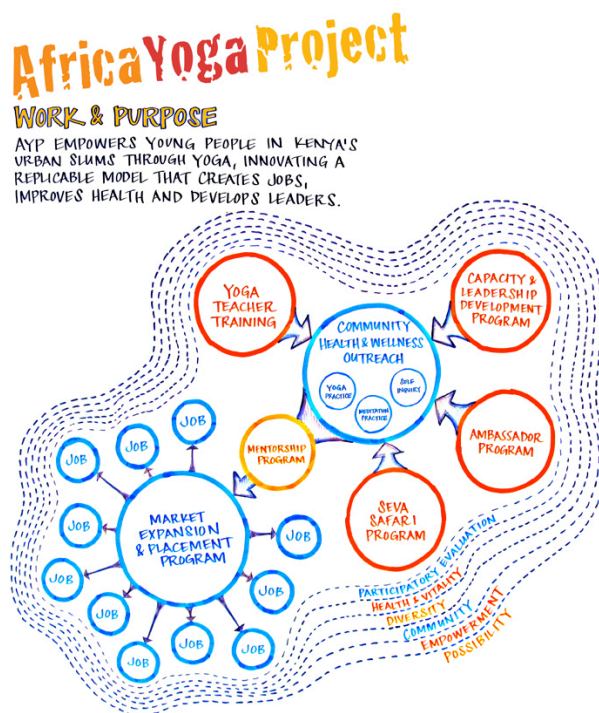




Image 38: Bent On Learning



Image 39: Brooklyn Bridge Bootcamp

A service for creatives:

Figure 17
PowerFlowing logo

PowerFlowing



Product-Service-System

SYSTEM OVERVIEW

The PowerFlowing system works on three main stages.

Stage 1: In the top-down consultancy model, PowerFlowing reaches small design companies to improve their creative collaborations in two ways: regular activity and intensive workshops. Regular activities are held in the office space of the company. Intensive workshops can be held in a designated studio which is arranged depending on the number of attendees. This version has revenue streams of hourly payments for the know-how and facilitation.

Stage 2: In the bottom-up model, PowerFlowing acts as a matchmaker between local movement teachers and small design offices that can't afford the direct consultancy. System collaborates with Laban Institute as a partner and reaches new teacher training graduates and trains them for PowerFlowing principles. The fees for the system entry also covers the kit for teachers. In this scenario the design company offers office space for weekends and nights for the movement teacher. PowerFlowing's mediatory is needed for security purposes.

Stage 3: For the wide-spread model, free self move cards that can be downloaded by individual creatives to use for their daily routines. They can also download and print/cut the doorknob signs, stickers to use in their cubicles to create awareness for the activities they follow.

PowerFlowing also offers PowerCarts office furniture systems to create momentarily isolated activity environments to support privacy and invisibility for those who need it.

PARTNERS

In order to keep the service light, connected and sustainable, the human resource and training elements were planned to be delegated to partner institution and communities.

LABAN INSTITUTE NY (LIMS): As a specialized movement school Laban Institute's designated role in the system is to find new graduates and provides trainings for local movement teachers. Their main function starts from the second stage.

LOCAL MOVEMENT TEACHERS: Again as an actor of the second stage, Local Movement Teachers are composed of new graduates of dance, yoga teacher training or movement analysis programs. They pay for an online certification program in the LIMS school and join the system as local movement teachers.

PowerFlowing starts as a context specific, highly customizable and instructor/consultant intensive system. As the system evolves towards the third stage, the tools become more generalized and aims at larger impact.

Figure 18
PowerFlowing service stages

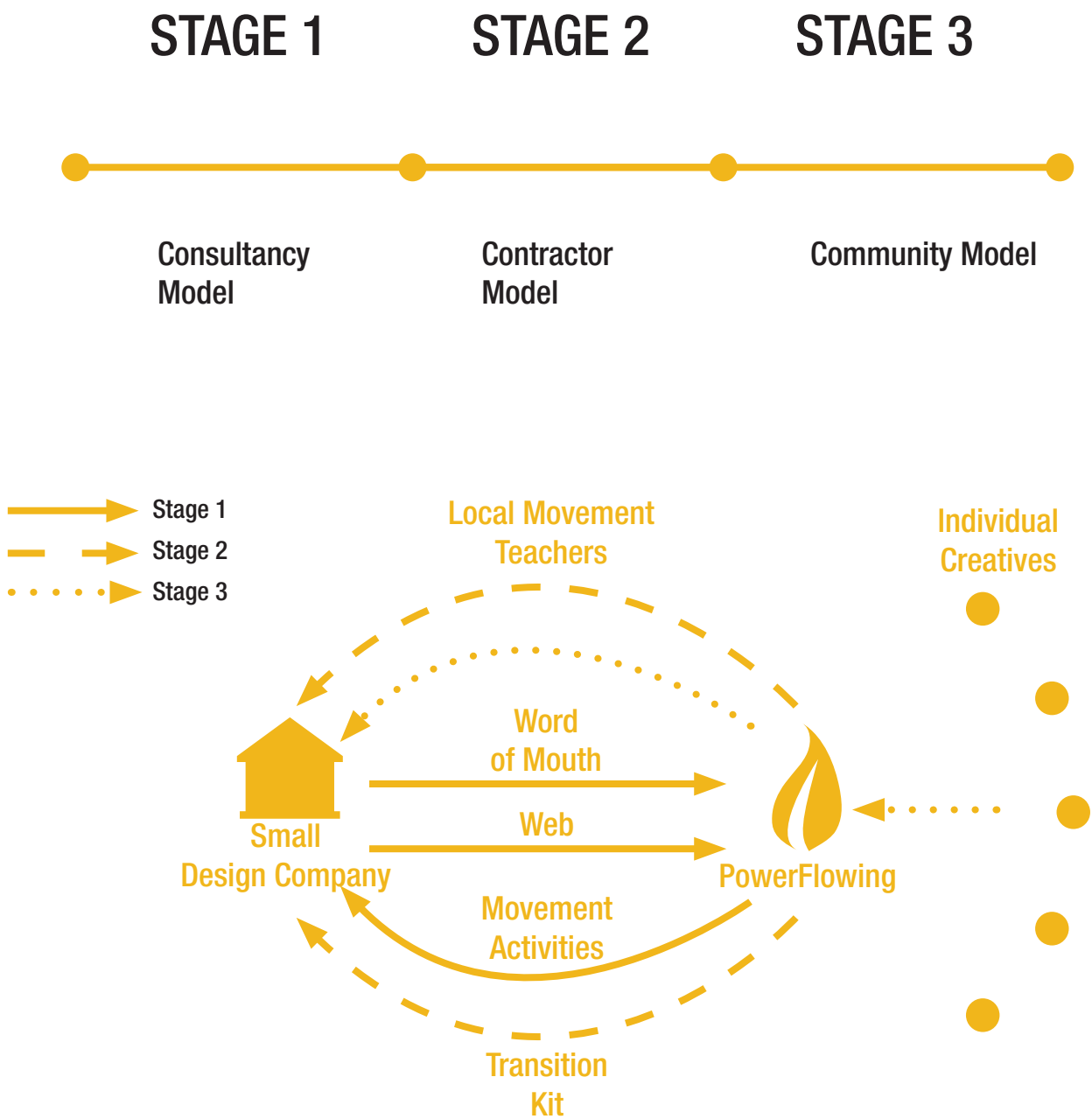


Figure 19
PowerFlowing service stakeholders

ACTORS	ROLES	FEATURES	
	<p>Embodied Change Agent (ECA)</p>	<p>An embodied change agent is the designer with adequate movement knowledge working as a consultant. She enters the system of a small design company and designs customized solutions and implements them as either intensive workshops or</p>	<p>Design, Analysis, Facilitation, Marketing, Documentation.</p>
	<p>Small Design Company (SDC)</p>	<p>A small design company is the main user of the system. In order to foster creativity and collaboration in-house, meets the ECA and collaborates with sharing information and needs. The office space of the SDC is used to facilitate the activities. When it contracts with a Local Movement Teacher, the SDC offers office space in return for regular movement activities.</p>	<p>Office space, Management of time, Promotion of the activities, Maintenance of the space, Keeping track of performances.</p>
	<p>Community Network (CN)</p>	<p>A community network is made of up of individual creatives. A CN is created after the second phase when a critical mass has been created and a platform to participate and share knowledge is needed. The community members shares best practices and uses self help tools. Depending on the amount of contribution to the society, the community members can become ambassadors.</p>	<p>Bottom up, Participatory,</p>

PARTNERS

ROLES

FEATURES

LIMS

**Laban
Institute**

The Laban Institute is the education partner of the system where the movement science is applied on the system's basics and local movement teachers receive a training by paying the fees.

Education,
Source of new graduates,
Control of the materials.



**Local
Movement
Teacher
(LMT)**

A local movement teacher enters the system in the second phase when SDC decides to self sustain itself with the help of a teacher. LMT is trained by the partner institution LIMS and facilitates the activities that are previously designed by ECA. The LMT gets free office space in return.

Facilitation,
Received rehearsal/
teaching space in
return of movement
classes.






**Movement
Ambassador
(MA)**

When the system achieves its critical mass, some individual creatives of the network receive an ambassador degree as a sign of their regular contribution and participation in facilitation.

Level participation,
Incentive for regular
contribution,
Motivation,
Increasing
responsibility and
reputation.

Figure 20
PowerFlowing service touch points

	ROLES	FEATURES
 <p>Movement Activities</p>	<p>Movement activities are the gatherings performed in all three stages where the service provider reaches the creative businesses: they take place in two levels. Intensive workshops or long term weekly sessions. In the third stage the movement activities also include SelfMoves, which are individual activities done with the help of SelfMove cards.</p>	<p>Awareness Collaboration Workplace Wellness Routine</p>
 <p>Website</p>	<p>PowerFlowing.com is a second stage platform to create awareness and provide information about the system.</p>	<p>Design Analysis Facilitation Marketing Documentation</p>
 <p>Portal</p>	<p>The portal is the third stage extension of the website enabling online user contact and teacher registry and distribution.</p>	<p>Office space Management of time Promotion of the activities Maintenance of the space Keeping track of performances</p>

ROLES

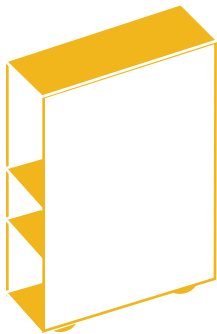
FEATURES



Transition Kit

A transition kit is handed to the SDCs after the end of the consultancy phase. In an alternative second stage scenario a company may start their PowerFlowing journey through the kit. Kit includes the SelfMove cards, Doorknob signs and PowerFlowing stickers, providing movement vocabulary, awareness and privacy.

Design
Analysis
Facilitation
Marketing
Documentation



PowerCarts

PowerCarts are wheeled separators / storage elements / white boards that provides privacy for open spaces where the activity will take place. PowerCarts are opensource design objects that can be bought online via PowerFlowing. com or the production manual can be downloaded for local production.

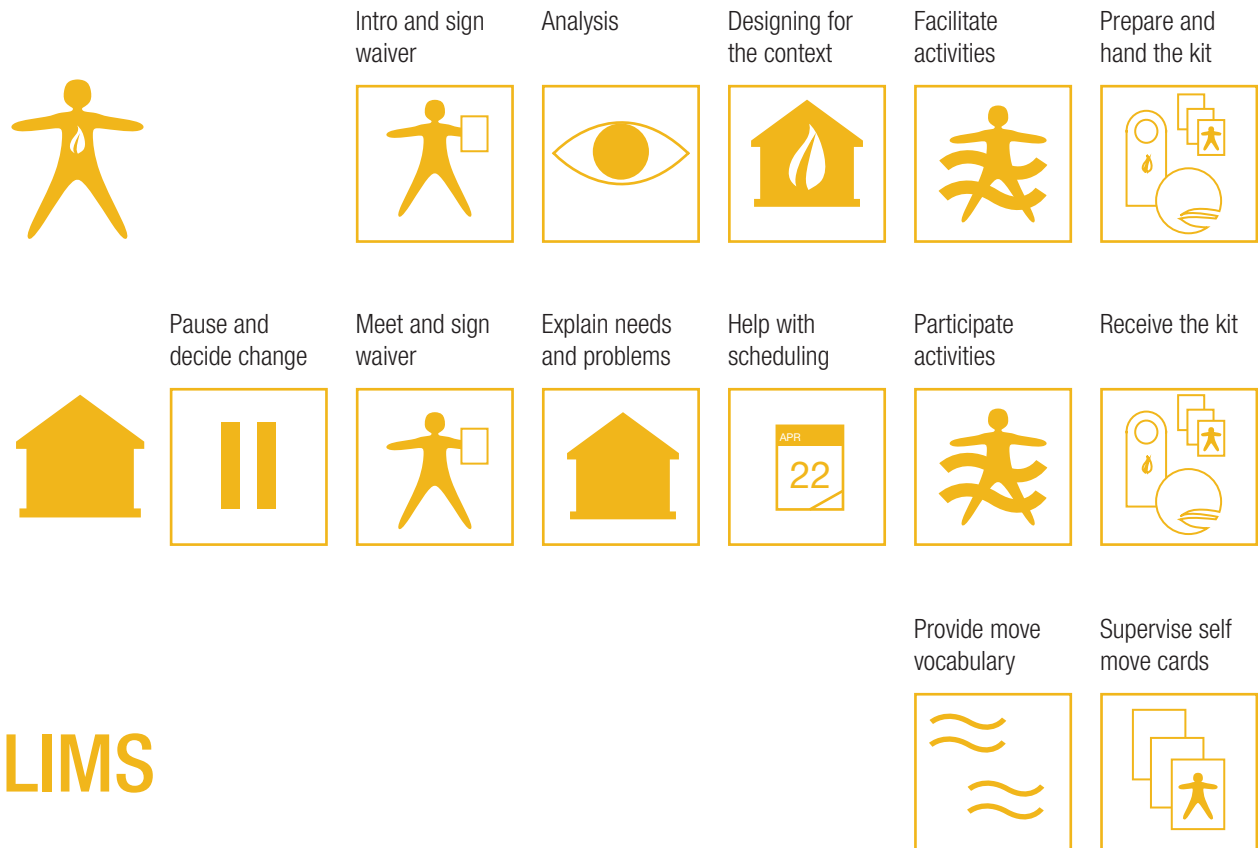
Office space
Management of
time
Promotion of
the activities
Maintenance of the
space
Keeping track of
performances

Figure 21

PowerFlowing service journeys

STAGE 1:
CONSULTANCY MODEL

The first stage is the initial starting point of the service where the scale is kept small, agile and highly customizable.



STAGE 2:
CONTRACTOR MODEL

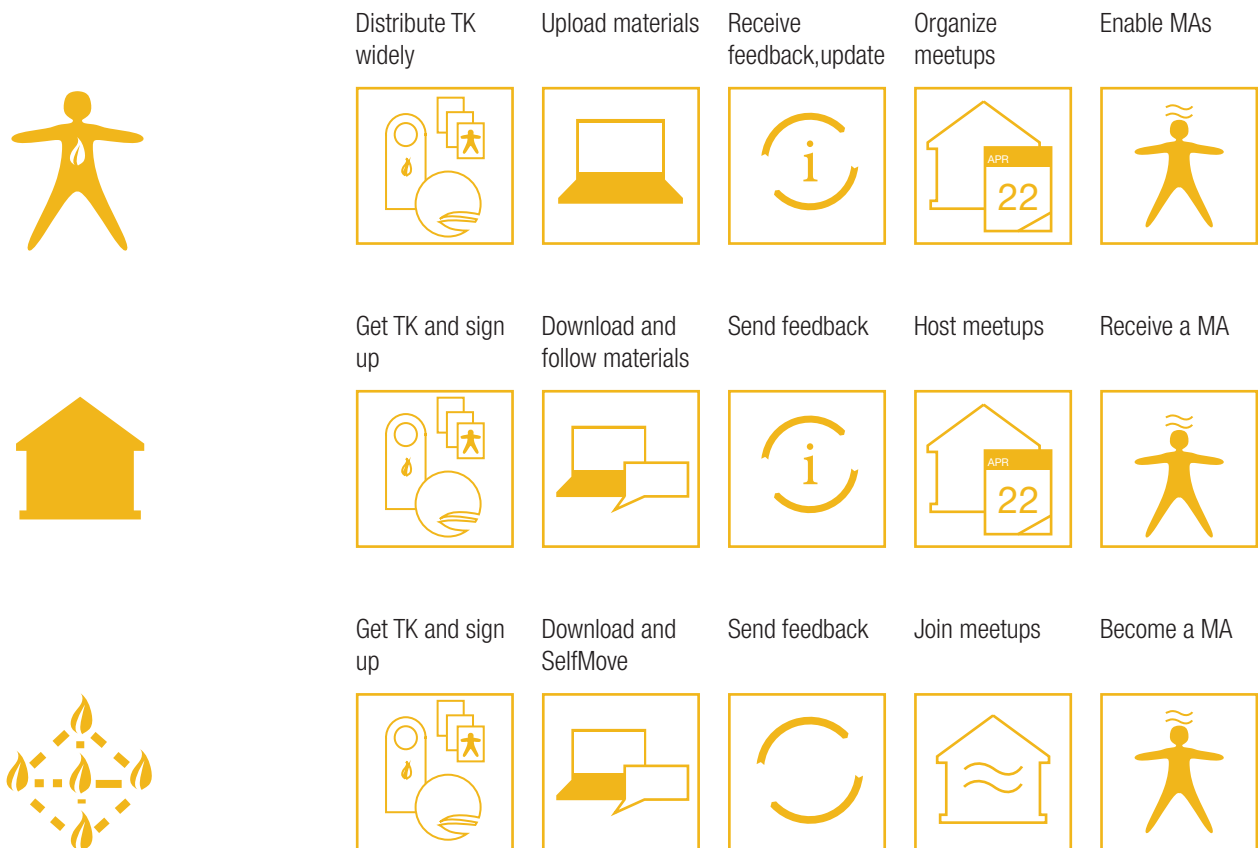
When the system receives a certain amount of companies, in order to sustain the growth of the system a transition kit is sold to the company.



Figure 22
PowerFlowing service journeys II

STAGE 3: COMMUNITY MODEL

The third stage takes place at the community network level where public participation and empowerment is the main focus.



SERVICE STEPS

For all three stages, there are common steps of awareness, involvement, facilitation, self sustaining and support. Various touch points function in these steps.

Figure 23
Touch Points Matrix









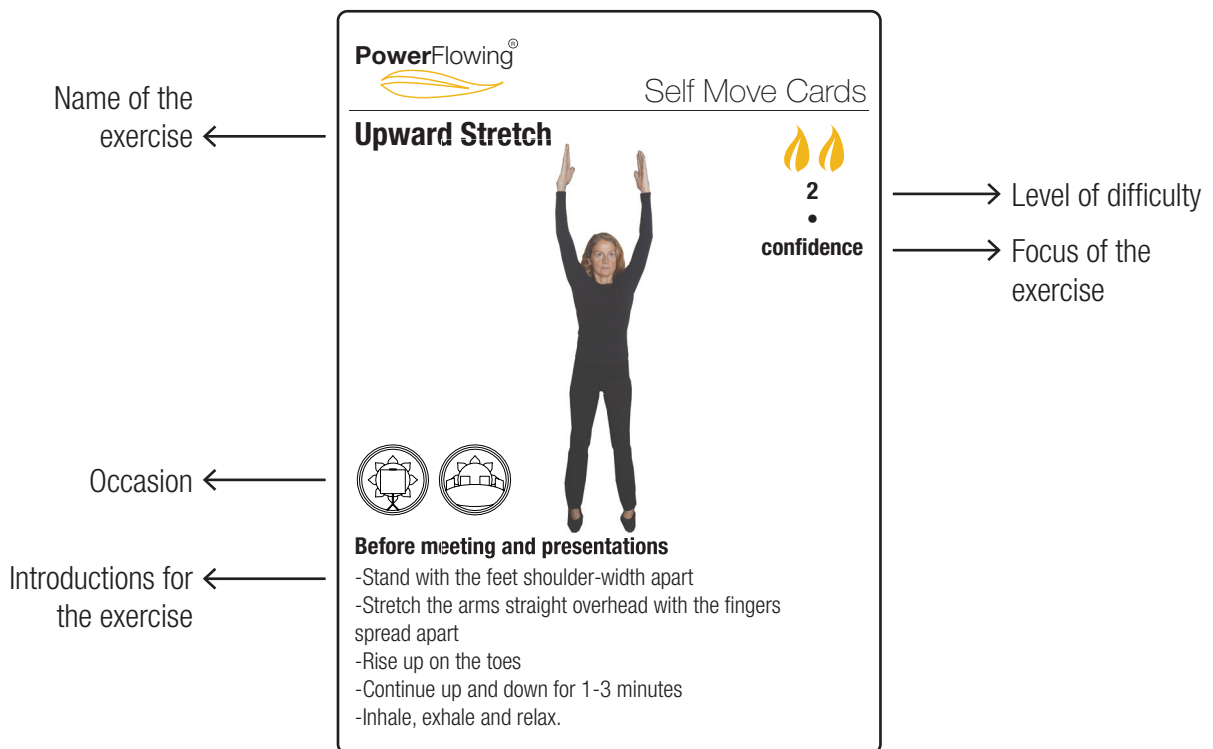
<div style="text-align: right;">SERVICE STEP</div> <div style="text-align: left;">TOUCH POINT</div>	Awareness	Involvement	Facilitation	Self Sustain	Support
WEB					
PORTAL					
MOVEMENT ACTIVITIES					
TRANSITION KIT					
POWER CART					

Figure 24
Self Move Cards



These pocket-sized cards are practical solutions that keep the movement vocabulary handy while displaying several kinds of information about difficulty, focus and detailed instructions.

Figure 25
Occasions of Self Move



DESKSPACE, JOB INTERVIEWS, FIELDWORK, PRESENTATIONS AND MEETINGS.

WEBSITE AND PORTAL

During the hypothesis phase of this project, I was assuming that the biggest artifact of this project would be a website - a platform that can enable people who want to have movement activities in their workplaces. But after having tested this idea, I have decided to use the website as a tool but not as a main product.

The PowerFlowing website can be used to inform and create awareness from the first stage. After the second stage, the function of the website increases with the addition of an embedded portal that can handle the transitions through the system, Small Design Companies and Local Movement Teachers. In future variations, the portal can also offers services such as calendars and space/person calculators to help people arrange their movement sessions.

The subscription fees for the portal can be used as a revenue stream for the business model.

In the following pages a mock-up design of the website is presented with the features such as:

- Logo
- Payoff
- Descriptions
- Material downloads for self move tools
- Sign In for Movement Teachers
- Sign In for Companies
- Login for existing users
- Title to show the identity of the subscriber
- Navigation menu
- Social media following options
- Search menu

<http://www.powerflowing.com> is already registered for this project's use and will be launched very soon after April 2013.

PowerFlowing



pause.see.flow

How It Works

Teachers

Workshops

Sign Up

Sign Up and Move!

Creatives

- Looking to enhance your practice through movement?

Movers

- Looking to teach in the PowerFlowing community?



Login

username:

password:



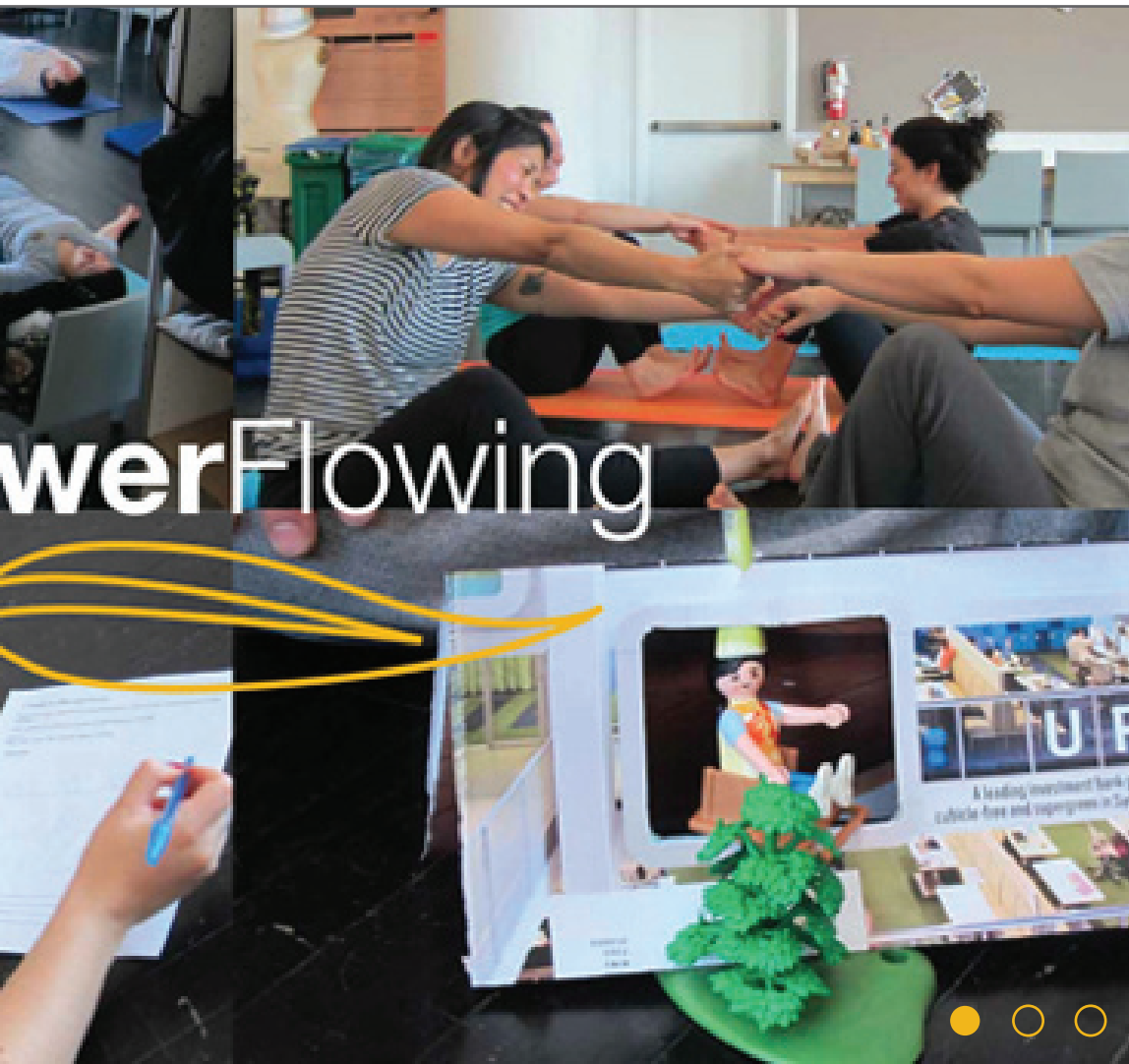
Welcome, **Guest!**

[SelfMove Tools](#)

[Join Us](#)

[Blog](#)

[Contact](#)



Follow us!



10. DIFFUSION

Turkish Design Culture - Research Iterations in a Different Context

After returning to Istanbul in order to complete the documentation of my thesis work, I started to search for companies where I could replicate my original work in the US. I contacted many companies from creative sectors such as industrial design, digital design and advertising. Even though all of these companies were excited about the topic, we couldn't establish a partnership in order to hold regular or short-time activities with them.

Even though this created some frustration and caused inertia in my work, I started to see this as an opportunity to look for the reasons behind this block as a way to reflect the main differences between two design cultures. New York and Istanbul. In spite of the fact that this thesis work doesn't focus on the cross-cultural examination of those two contexts, I acknowledge the importance of displaying the main characteristics of two cultures.

In the first step I tried to ignore my bias through 10 years of academic and professional experience in Turkish design and sent several surveys to designers, design managers and design program faculties to verify: (See Appendix 5)

- Importance and emphasis on creativity
- Amount of collaborative work in design
- Context specific barriers to collaborative work
- Thoughts on the possible uses of embodiment in workplace

The survey results show that creativity is verbally expressed as a big determining factor for designers. They are also personally open to possible benefits of embodiment in workplace but have certain

concerns about the fitting into the office life. Many designers actually don't work in creatively enabling environments. Co-design only occurs in special workshops and in an academic context. Teamwork is used for closed ended problem solving. For the open ended problems an individual decision maker (most of the time with a top-down approach) decides, and distributes the smaller roles to technicians.

AN INTERDISCIPLINARY DESIGN FIRM IN ISTANBUL-BRANDMOOD

Brandmood was established 3 years ago in Istanbul. I observed Brandmood as a small interdisciplinary design company case study from Istanbul.

The founder Kerem Kucukgurel is an industrial designer who worked on areas such as furniture, branding, communication and food design.

I interviewed Kerem to understand the journey of a small design firm in Istanbul to seek possible implementation opportunities for embodied co-design. According to Kerem, most of his customers are reluctant to share their know how with a designer. This trust issue, creates its own structure where an individual designer works with the same company a long time and build up trust. The communication can be through long meetings but also by exchanging pictures with iPhones in the middle of the night when ideas pop-up. Because of this structure, Kerem usually goes to customer meetings alone, designs the backbone of the project with the client, and then uses his team's support in order to build things.



Image 40: Branding of Branmood



Image 41: Tailored male's clothing from Civan, sidebrand of Branmood

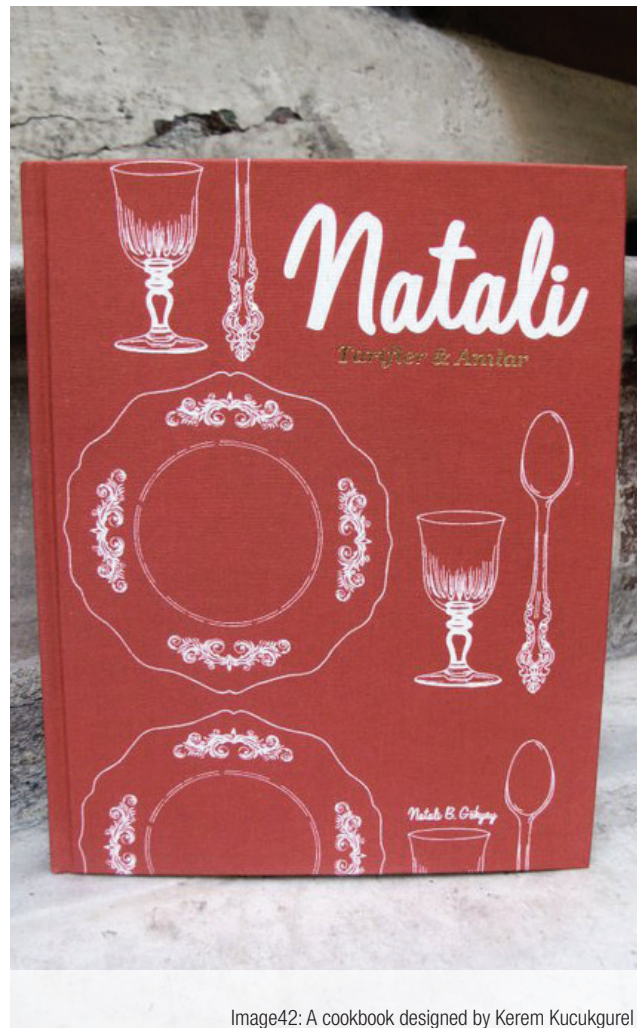


Image42: A cookbook designed by Kerem Kucukgurel

According to my personal experience, this model is very common in the Turkish design context. The Small Medium Enterprises (SMAs) make up a serious amount of design clientèle. And most of those SMAs are top down structured family establishments. In this scenario, principles of open innovation and co-design interfere with the immediate priorities of these companies. I think this fact can be considered as a indicator of an unsaturated yet risky area for the penetration of culturally customized collaborative methods and tools.

PowerFlowing is designed for environments that already create together; can't perform well in this setting. So, Istanbul is not an immediate testing environment for it. However, Turkey can be perceived as a future diffusion point for the different stages of the system.

SERVICE DESIGN JAM ISTANBUL

Each year in more than 100 cities, groups of creative people come together to design new services collaboratively.

Service Design Jam Istanbul has been organized for three years by Bilende, a digital services company. I had the chance to join the team of mentors just before the event took place. This gave me opportunity to teach PowerFlowing moves with the participants.

Second morning of the workshop, before the brainstorming with 12 attendees and mentors we had a 10 minute warm up session. We used expanded poses, little jumps with breathing. That not only energized the participants but also helped with the literally freezing atmosphere of the building caused by the failure of heaters on that weekend.

At the end of the activity the participants were ready to build teams and exchange ideas in order to build a service. Teams also didn't hesitate changing members and merging in between even after a couple of ideation sessions. This is usually avoided by teams as some kind of structural inertia occurs and teams don't want to change the dynamics by adding new members, merging with a new team. I assume that this fluidity was caused by the warm up we performed before the team formations.

As an outcome of this activity, my biggest insight is this: the personal reactions to PowerFlowing moves didn't change compared to New Yorker participants. However, the corporate and organizational cultures that can enable this kind of activities are still developing in Istanbul. In conclusion, this can be an evidence showing that the launch self-move tools in Turkey can be used as an initial penetration, instead of corporate service applications.



Image 43: Turkish designs of the Service Design Jam 2013



Image 44: PowerFlowing at Service Design Jam - the theme was "grow"

11. CONCLUSION

Moving Forward

The way we are doing business is changing. So how we should equip ourselves in order not just to survive but to enjoy an effectiveness, substantial work life full of interactions, learning and problem solving.

There are many responsibilities for policy makers and managers in order to create a work environment shaping the team's and individual's motivation and health. These responsibilities include healthcare benefits, work facilities supporting exercise and social activities, and rules and programs regulating interpersonal relationships in the work place. However, there are also significant responsibilities for us as creative workers. It is our daily task to keep ourselves high at energy, healthy with required stamina and a clear mind to listen to others and see and recognize the conditions in which we are producing.

Movement techniques are among the tools we can implement in our daily work routine to benefit from a more relaxed mind, a clear cognition and willingness not just to come up with new ideas but also to vigorously share them.

There are still many open areas to be explored in interpersonal, managerial and infrastructural effects on group creativity. They include: the effect of interiors, furniture and light in creativity; nutrition and blood sugar as a factor effecting creative group dynamics; use of creative drama games in design contexts and designing of new tools and frameworks enabling workplace embodiment as the topic becomes more widespread and there is a critical mass of late adapters who demands specific tools.

I very sincerely believe that the near future of creative industries will be full of embodiment stories where organizations and individuals exchange their stagnated state for better flowing and value creation.

With the excitement and awareness of being among the early promoters of this trend, I will be performing my best to implement this information in every company, team or organization I work with.

“Flow. Flow. Eventually you will know.”

Thank you!

Never walk alone!

This thesis faced some challenges. And it received even more support. This is a pleasure to be able to say thank you to all those contributors now.

First of all, I want to thank my thesis director Claudio Dell'Era. He kept working with me, in spite of the scope of my thesis growing out of main his area of interest. He was the voice of logic, keeping my work rooted and en route. He challenged me to deliver better outcomes.

Another remarkable person who made this thesis possible was my advisor in Parsons The New School For Design, Lara Penin. She set my expectations high. She shared many resources and ideas with me. And she made me believe that I am doing something significant. With this feeling I could dare to ask for collaboration from many important experts. I also want to thank to another Parsons faculty Scott Pobiner for his support and interest.

This thesis journey began with an exchange program to New York from Milano. Anna Meroni and Eduardo Staszowski made this dream come true by organizing the exchange.

And there are all those great people who I've met in New York. Karen Bradley, the director of Laban Institute New York, Evan Polman, a brilliant researcher from NYU STERN, Joan Blumenfeld, an inspiring female architect / manager. It was an honor to have their contribution. I've learned a lot from them.

Colleen Culley, with her energy, made me love what I was working on even more. She shared a great deal of information with me. And she made it possible for me to collaborate with The Moderns. And dear Moderns: Janine James, Kevin Szell and Anthony Loria. They let me in their office, let me change them and they changed me. That 40 days period and having movement sessions with them was one of the greatest experiences. Thank you!

Alexa Schmidt, Benjamin Taylor, Kendall Zini Jones, Aaron Cansler, Kelly Tierney, Judit Boros and Kerem Kucukgurel has shared their valuable experiences and thoughts with me. They created many sparkles in my brain.

And I want to remember and thank all my friends who participated in my workshops, filled out surveys, shared their stories with me. They also kept sending any related news and contacts. That buzz was the luckiest thing that could happen to a thesis student.

Going back to student life in a foreign country was fun and hard. Thanks to my beloved friends making me feel at home both in Milan and New York.

Writing a dissertation in a foreign language means making mistakes. A lot of them! Ken Winter, thank you for editing this document. Your contribution enriched my work with the subtleties of English language. Only this section hasn't been edited!

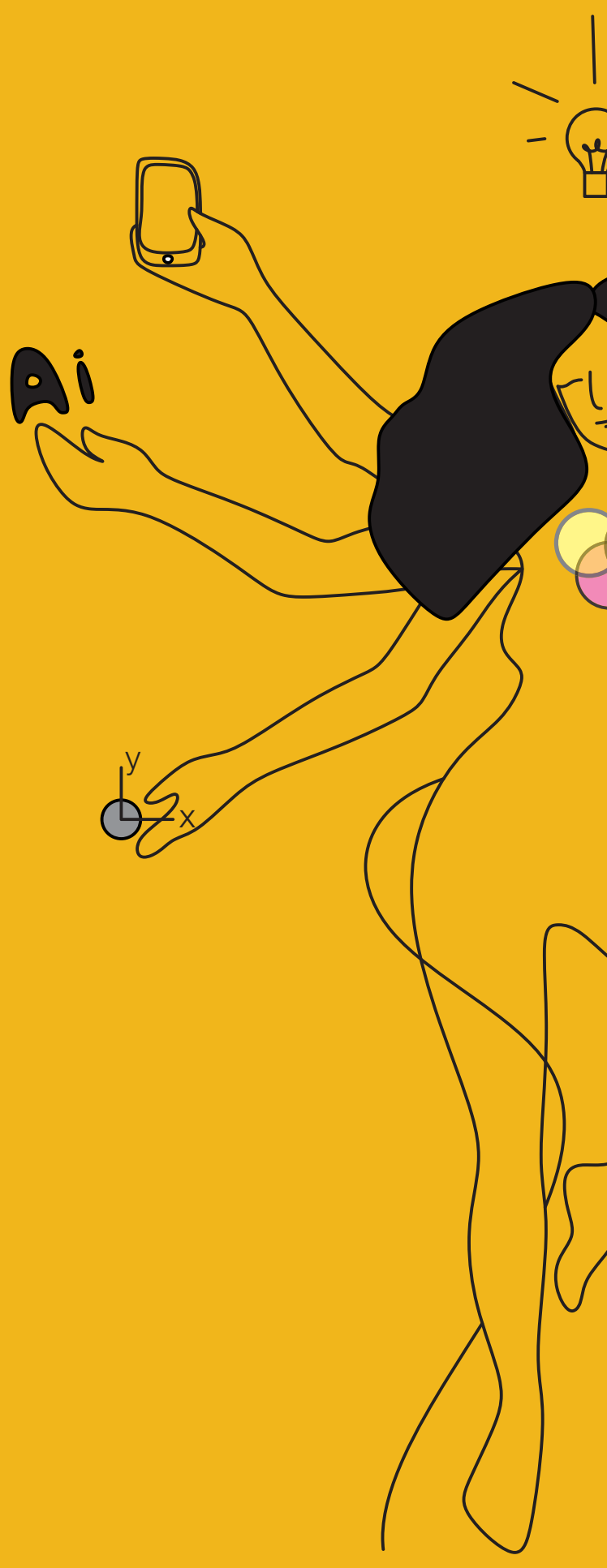
Salvatore Difrancesco helped me with the Italian translation of the abstract. He saved academia from exposure to my Italian poetry!

My family, my father. You believed in me in this journey, you were there whenever I needed throughout my whole academic life. Mother. My *project* wouldn't have even started without your support. And without yours Mesut Irier. You nudged me into a new life. Thank you.

And finally. Benjamin Winter. My teammate, a fellow Farm Friend. My guide in New York, when I first moved there. My love. My fiancè. You were there when PowerFlowing was born. You helped me with my workshops and edited my work. You brainstormed with me. And on the hardest days, when I lost hope, you were there to help me keep going. Even from miles away.

Thank you for your *Sparkling Brains*.

Thank you life.





APPENDIX 1: CONVERSATION A

Conflicts

(Transcript of an interview with a fellow colleague from the Parsons Transdisciplinary program.)

Q: What do you think about group work?

A: At its best its a really great opportunity to combine ideas and to work them through in a way that generates more then the sum of its parts, i think at its worse it's like the worst thing in the world. It's painful, frustrating and much work gone for people collaborating it's still striking how badly we are at it."

Q: What are the bad parts of group process?

A: Good work often comes from conflict, where ideas meet, where people meet in spaces where they connect or more often don't connect, that's the place where a lot of ideas come from. However i think people are so bad at conflict and so poor at existing in an environment of conflict , executing it effectively, this disrupts a lot of group processes.

Q: Can we influence better conflicts?

A: In the initial phase of ideation, you are not supposed to criticize but i think you should. Because we already censor ourselves in many reasons, not just because we think we will be criticized. So in an atmosphere where defensive position doesn't have to be a personally defensive position but more like a conceptual defensive position and everyone gets that and it's not like you are being mean! It would be a nice starting point.

Q: Do you think your body affects you while creating?

A: Yes. On every level, from blood sugar to posture to clothes you are wearing to the environment you are sitting, the chair position , it seems to me it's a feedback mechanism. Where your mental state affects your body and your body affects other people's mental states and that affects their body. Which comes back to you again.

Q: Do you ever manipulate others in group sessions?

A: Yes, for example when conversation is stuck you can.

Q: Do you think your body affects you while creating?

A: Yes. On every level, from blood sugar to posture to clothes you are wearing to the environment you are sitting, the chair position , it seems to me it's a feedback mechanism. Where your mental state affects your body and your body affects other people's mental states and that affects their body. Which comes back to you again.

Q: Do you ever manipulate others in group sessions?

A: Yes, for example when conversation is stuck you can and use a silly joke. I think that's why people designed humor. Everything awkward, weird and uncomfortable If done correctly, is a wonderful way to navigate that territory. For me that's absolutely a big deal. I am always doing thins like this kind of generative behaviors.

I have an unfortunate brain, whenever someone says something, i always think about the opposite. Just like, When someone says i want to drink water, i instinctively think, what if the water wants to drink you. And in group processes like ideation, i will open up that tab a little more. Given the right situation and

Q: Do you have any habits while creating?

A: lately my individual work is procrastination and terror. Although i have a new theory, that my procrastination is a background mental process running as my subconscious is way smarter than my conscious and the smartest thing you can do is to give the package to the sub conscious and take some time to do something fun. Just to take some time to chew on that. And eventually, like four days later, the answer comes. I don't know if this is an excuse for procrastinating or that's the truth.

Q: Can you do the same in groups?

A: In some groups I am super vocal. In some I just remove myself from the crowd and stop talking. And listen to everything that's going on. And then I will start digesting everything. And send the package to the back and wait to get the return parcel to come and then maybe I will speak up. So I switch roles back and forth. From active to a more passive, digestive mood. Sometimes people call out and say Hey what are you doing? Actually they don't say that. But they just think that. But you can tell from body language and look. And that changes the whole dynamic.

APPENDIX 1: CONVERSATION B

Habits

(Transcript of an interview with a fellow colleague from the Parsons Transdisciplinary program.)

Q: What do you think about group work?

A: It needs a lot of energy. You come together and break apart and we have just fallen into this process. We know we can work separately by breaking up into teams but we know when we co-author we can come up with a mediocre product, it can happen many times. But when things go well, they go very very well. Even after a year and a half we haven't fully exhausted by understanding what co-authorship means.

Q: What are the best things about the process?

A: I think for us the best part of the collaborative creative process is that we have been working together now for several semesters and so there is a high level of trust. Trust in each other but also a trust in decisions.

We put in contingency plans to make it happen. You never schedule one meeting. You schedule one and a backup meeting. Things can go wrong, someone can be in a bad mood, you then call the day and come back together in the secondary schedule meeting.

Q: How would you describe a bad day?

A: Through experience we came up with best practices to set up a good day. And we came up with these best practices through very bad collaborative moments. With people we trust with, with people we love like a family can still have that bad moments so we really break these down and understand them. In worst days, people cry. Creativity sometime might come out of emotions or you are just having a bad day. Or maybe you haven't eaten on time. For example people that drink coffee a lot: they need coffee. You don't start the

meeting without coffee drinkers having coffee. Don't go to the cheap coffee in the vending machine. Go out and walk: to get the coffee. Even for the non-coffee drinkers. Because its a part of the process. You are kind of warming up into the mode of getting creative. And you walk in the way that everybody likes to walk, might be a longer path but it's louder and there is construction on the road so you don't go that way. All these little things. If it takes 20 minutes to find the right place to work and half your time is gone, it's time well spent. It's fine.

There is no such a thing as starting the meeting late. That's work that needs to be done. You are sorting out among each other what kind of mode you want to work in, what kinds of needs you have and when you are in it you are completely in. There is no other distractions there is nothing else that is going to bother you. So to be completely in for fifteen minutes is more valuable than being on time and compromising on space for an hour. Another thing is, meeting should be timed. Can not go on for ever, ever and ever. You should have discrete goals. The more actually you structure your time, the more creative you can be. It's nonintuitive. They should be small activities considering that you will picks at energy and then cool down. These are the things we learned over time working together and testing things out and having things go wrong. Over time we gained who to trust. And who not to work with. If there is not enough trust then you can be in a more combative space. If there is defensiveness that's happening, clinging to ideas or fear comes up, this all comes down to trust. And it takes time. Sometimes you might have to work a group of people with no experience together before, but if each of the members have that past experience of trust, you can just lean into it. And make it work.

Q: What happens when same people work together for so long?

A: When everyone becomes too agreeable, you never get to anything interesting. So you really need to have people that are equal contributors. For example if you are working as a group of three, by the way 3 is a beautiful number to get together, if one of the three is a low contributor, you are off balance and if they are really agreeable, everything comes down to a neutral space. So you need:

-High energy people

-Ways to mix things up

In order to mix things up, you need a certain type of person. When you are trying to bring the people together for a good mood, that's a different person. And when you need a task master, to control things, that's another person. And if you are lucky, you have all three in a group.

APPENDIX 2: WAIVER AGREEMENT



//move the moderns//

MOVEMENT TEACHER LIABILITY
STUDENT WAIVER AGREEMENT

I _____ (print name) understand that PowerFlowing includes physical movements as well as an opportunity for relaxation, stress re-education and relief of muscular tension.

Participation in a class includes, but is not limited to, participation in meditation techniques, breathing techniques, and performing various postures. Postures, are designed to exercise every part of the body stretching and toning the muscles and joints, the spine and the entire skeletal system. They also work on the internal organs, glands and nerves.

As is the case with any physical activity, the risk of injury, even serious or disabling, is always present and cannot be entirely eliminated. My signature acknowledges I understand that in a class I will progress at my own pace. If I experience any pain or discomfort, I will listen to my body, adjust the posture and ask for support from the teacher. I will continue to breathe smoothly. If at any point I feel overexertion or fatigue, I will respect my body's limitations and I will rest before continuing my practice.

PowerFlowing is not a substitute for medical attention, examination, diagnosis or treatment. Any physical activity is not recommended and is not safe under certain medical conditions. I affirm that I alone am responsible to decide whether to practice PowerFlowing. I hereby agree to irrevocably release and waive any claims that I have now or hereafter may have against TEACHER and POWERFLOWING ORGANIZATION.

By signing my name below, I acknowledge that participation in classes exposes me to a possible risk of personal injury. I am fully aware of this risk and hereby release TEACHER and ORGANIZATION from any and all liability, negligence or other claims arising from or in any way connected with my participation in the class.

My signature further acknowledges that I shall not now or at any time in the future bring any legal action against TEACHER and ORGANIZATIONS; and that this waiver is binding on me, my heirs, my spouse, my children, my legal representatives, my successors and my assigns. My signature verifies that I am physically fit to participate in movement classes and a licensed medical doctor has verified my physical condition for participation in this type of class.

If I am pregnant or become pregnant or am post-natal, my signature verifies that I am participating in classes with my doctor's full approval. I realize that I am participating in yoga classes at my own risk.

My signature is binding to this liability waiver from this day forth.

Signature of student, parent or guardian

Date

APPENDIX 3: WS 3 ACTIVITY SHEET

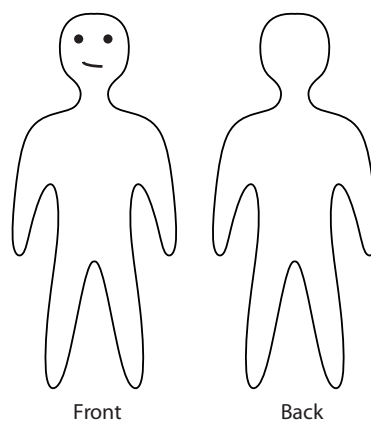
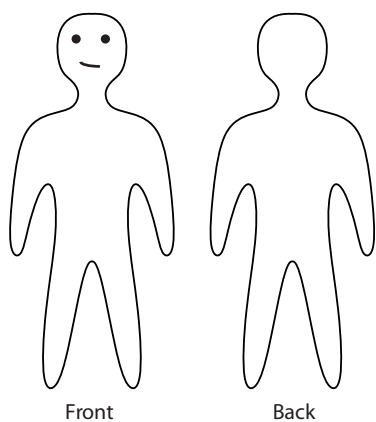
Name:

1-Body at Work

• Which body part do you use most at work:
(Please mark 1,2,3,... most to less)

• Which body part do you use least at work:
(Please mark 1,2,3,... least to more)

• Please add smileys for good feeling in the part, sad faces for pain.



• Can you draw your body

working at your desk?

having an arguement in a meetingw

hile making a presentation

--	--	--

2- Design an office oasis for you.

Please make a sketch to describe a small space/tool/vehicle/... for you to have a break, ground and charge yourself in.

In the workplace; for small groups or single use. Built, temporary or modular.

Think of:

Space - Light - Sound - Size - Visibility - Objects - Materials

Sketches:

Description:

APPENDIX 4: STORYTELLING BLOG

Workplace Stories Collected from Female Designers

CONFESSIONS OF A FEMALE DESIGNER

BEING A FEMALE DESIGNER

SEARCH

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Subscribe via RSS

9 APR 2012

shushh little baby



WHEN WE HAVE MEETING WITH A CUSTOMER WITH OTHER FEMALE DESIGNERS, THOSE GUTS TALK TO US AS IF WE WERE 5 YEARS OLD THAT'S FRUSTRATING!

Posted 10 months ago

Tweet 0

Like 0

0 responses

CONFESSIONS OF A FEMALE DESIGNER



BEING A FEMALE DESIGNER

SEARCH



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9
APR 2012

You are a flower



Posted 10 months ago

[Tweet](#) 0

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0 responses



APPENDIX 5: SURVEY

Co-design in Turkish Design Context

#3 **COMPLETE** Edit Delete


Collector: Web Link (Web Link)
Started: Monday, February 25, 2013 2:26:11 PM
Last Modified: Monday, February 25, 2013 4:03:56 PM
Time Spent: 01:37:45
IP Address: 95.14.81.197

PAGE 1

Q1: Meslek

Mücevher Tasarım

Q2: Cinsiyet

Kadın

Q3: Pozisyon ve is deneyimi (yil)

Mücevher Tasarım, Kalıp Freelans 2008-2013

Q4: Is performansinizin sizce ne kadarlık bir kismini yaratıcılık olusturuyor? (1'den 10'a kadar, 1 en az önemli, 10 en çok önemli) Aciklar misiniz?

10 çünkü mücevher tasarımında yapılacak ürünü çizim aşamasında tasarladıktan sonra, el yada bilgisayar ortamında kalıplarken, üretime uygularken, oluşacak ufak değişiklikler bile yaratıcılık ve estetik ile ilerlemelidir.

Q5: Fikir yaratimi haftalik calisma surenizin ortalama ne kadarini kapsar? (%?)

%80

Q6: Bu fikir yaratim anlarinin ne kadari yalnızken, ne kadari toplu tartisma anlarında (tasarım toplantisi, beyin fırtınası, workshop vs) gerçekleşir? Lutfen aciklar misiniz?

Benim için toplantılar, workshoplar çok verimli geçer. Toplanan gruptaki konuşmaların içinden çözümü görmek çok daha kolay olabiliyor. Bazende hiç ummadığım anda aklıma çok farklı bir fikir gelebiliyor tabi ama daha çok sektörün dışından beslenmeyi tercih ederim. Mücevher kolleksyon tasarım sürecinde örneğin; mimari, doğa gibi farklı alanlardan beslenmeyi tercih ediyorum.

Translated Survey Questions

Q1: Occupation

Q2: Sex

Q3: Position and years of experience

Q4: How much of your work performance relies on creativity? (1 to 10, 1 least, 10 most) Can you explain?

Q5: How much of your daily work is consisted of idea generation? (?%)

Q6: How much of this idea generation is done alone, how much is done together in a group? (Design meeting, brain storming, workshop etc.) Can you explain?

Q7: Do you think it is possible to create together? are co-creation processes are applied in Turkey? Do we need those processes? Can you explain?

Q8: What are your most and least favorite parts of co-design sessions? Is there a tactic you apply in these situations? What would you do if you feel that you or someone else is inefficient in this activity? Please explain.

Q9: In which conditions do you think people can share their ideas easier?

Q10: If there were 5 minute physical group activities that can improve creative performances, would you use them? Do you think the office environment is appropriate for this? Can you evaluate within the Turkish context? Thank you for your time and contribution.

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