Making Sense of Conversations in [design] groups

by **Alejandra Arango G.**

Professor Sandra Giegler
Professor Carmen Luippold

MAID - Master of Arts Integrated Design
Fachbereich Design Dessau
Hochschule Anhalt

Dessau, Germany

2017

Making Sense of Conversations in [design] groups

Acknowledgments

I would first like to thank my thesis advisors, Sandra and Carmen, for their valuable inputs to this thesis research. Also, I want to thank all my collegues in MAID - Integrated Studio class of Winter 2016-17, without them this research could not have been possible.

Finally, I must express my very profound gratitude to my parents and family, and specially to Julio, for providing me with unfailing support and continuous encouragement throughout the process of researching, writing and putting together this thesis.

Definetely, this personal accomplishment would not have been possible without **A L L** the wonderful people around me.

T h a n k y o u. <3

Abstract

The purpose of this research is to analize how design conversations, as design practice, in groups of work are affected by aspects of emotional behaviour of their members. This research is divided in three main parts. The first, presents “Coordinated actions” as the key element in the relationship in between group work, emotional behaviour and design conversations.

Following the theorical statements, due to the qualitative nature of this topics, this research developed phenomenological and ethnography research strategies, in order to find (and define) the patterns of group (and members) behaviours, using as a study case the master students class: Integrated Studio, at Hochscule Anhalt, in Germany.

Therefore, two processes of observations and interviews were designed, and made with the students, at an specific stage of their design process. As consequence, the outcome of this this research is the study of those observations collected. This enabled to stablish remarkable relationships, further explained in *General terms* (for the whole group) and *Particular terms* (for some groups that were found to have “more appropiate” conversations).

From the point of view of this research, **Making sense of conversations** is decisive for design practices and designers. More than ever before, this knowledge necessary, if designers want that their practices make a remarkable impact in nowaday’s society.

1. Questions

Motivation

"You see a lot, Doctor.

But are you strong enough to point that high-powered perception at yourself?

What about it? Why don't you look at yourself and write down what you see?

Or maybe you're afraid to.".

Agent Starling to Dr.Lecter.
The Silence of the Lambs.
1991

While finishing my bachelor degree, students were asked: What is your most remarkable learning from your formation process as Industrial Designer?. The majority argued how important were for them to learn 3D modelling, about materials and production processes. Some other, a few, went after methodologies and research tools. When it was my time to answer that question, I said that my most remarkable learning was to communicate, specifically to talk. Obviously, the rest of students could not believed, care much or understand my statement. Anybody asked anything back to me, not even the teacher.

I can not recall where from, how, or when I got that answer in mind, but it was clear for me way before the question was asked. In fact, only until today I understand better the implications of my allegation, even though ever since I have tended to be conscious of the ways I communicate. Therefore, my professional live became the first big exam, which I assume I passed when a new exam came to me.

Being part of an international master is more challenging in a personal than a professional way. In MAID all students were foreigners, speaking a different

language than the native. As some people struggled more with the language than others, we supported and taught each other to speak better to communicate better. We taught ourselves to understand our huge cultural differences, even in between countries that share the same language, or in between same country students. We also taught ourselves how not to feel alone while bearing first time winters, handling money, having birthdays abroad, missing relatives and friends, and so. I am pretty confident, that everyone developed its own emotional strategies to survive those personal demands, and also that this were (or will be) reflected in their professional lives, soon or later.

While my second semester in MAID, conversations became particularly important to me. First: learn how to set conversations. This for engaging and encouraging communication with (a not so talkative) group mate. Second: find a context to exchange ideas about design. With some classmates we founded an extracurricular space for discussing design matters. Third: encourage people to engage with others making conversations more empathic. Then the *"Amazing Handbook for Incredible Conversations"* was created (a 12 languages guide with basic and useful words, and funny idiomatic expressions). Fourth: recording everyday attempts to talk with others. I wanted to recollect those everyday experiments, using my Instagram account and the hashtag *#adateaday*.

As result, yes I was interacting more with people than ever before, I felt not only more connected but, by asking the appropriate questions, I got to knew people's values and motivations, and this was really relevant for me. Even with the ones I could not talk (language differences) I started to smile to, and that made big difference in my relationships with university staff, at least.

I was not aware about how social focused this initiatives were, and also that they were made in such informal way. More than ever before, I understood the powerful influence of emotions in communicating, therefore designing, actions. By experiencing conversations with a lot of designers (classmates, other students and even professors) I concluded that emotions were not only predominant, but were taken for granted. This people's speeches and statements were full of emotional meanings, but they can barely recognize, anticipate or deal with them.

My idea then was to go a step back to make sense about design conversations. As an excercise to look into ourselves as designers, then write down a little bit about what happens in this design conversations, while stop being afraid of pointing our high-powered perception (tools) to ourselves. I believe, this way we could re-shape means to improve our design practices, as today's society is demanding us to.

Introduction

Making sense is a wide concept. Recently, Ezio Manzini defined design as: making sense of things how they ought to be in order to create new meaningful entities (2015). What Manzini implied, was directly relating design with current social challenges. Therefore, this current social challenges use to happen with individuals (gathering together), communities or groups of people. This groups work together with an intention, this way by adding design to the equation they would improve their capabilities. As consequence, people has finally understood that, design is a widespread human capacity (Manzini, 2015).

Following that, for Manzini there are two types of designers, the expert (professionals) and the difusse (natural capacitated), and today that is quite evident. For him, design experts should be at the same time critical, creative, and dialogic (Manzini, 2015). Definitely, designers gradually have been focusing in the first two mentioned. The dialogic aspect seems so implicit, that barely is counted as determinant. However, Manzini insists this is an “special skill”, suggesting that designers should consider their creativity and culture as tools to support the capability of other actors [including diffuse designers] to design in a dialogic way (Manzini, 2015), in other words, create and support conversations that will lead to action.

However, conversations in design are not new, the point is that they are not consciously made. By conversations is understood the action of exchanging information, being this central part of the design process (Harris and Henderson, 2011). Therefore that design is considered a conversation itself (Jones, 2010). This way, exchanging information is communication, and communication requires social interaction, thus making sense of relationships. Designers are humans, they have mental constructions that drive the way they react to different contexts. And then, paraphrasing Paul Pangaro, being responsible for what its said (2016).

As result, a design conversation is not a regular conversation.

Are we designers aware of that?

Do designers recognize the tangible and non tangible parties of the conversations they hold?

Do designers structure their conversations accordingly to the outcome(s) to reach?

Do designers know how to create, feed, support and trigger conversations for design?

In order to look for answers to this questions, this research developed a theoretical frame composed for three interconnected concepts: group work, emotional behaviour and design conversations. This is a qualitative research that set a study case for designing methods for data collection. Later, the data analysis was intended to find patterns, on methodologies and group behaviours, that could tell how designers converse and how effective this conversations have been for their design practices.

Problem possition

The problem this thesis studies is how design conversations, as design practice, in groups of work are affected by aspects of emotional behaviour of their members.

Design practices tend to be more focused in the outcome, rather in the processes themselves. Many of the crucial processes that found design practices (like teaming up, building effective professional relationships and communicating accurately) are misestimated. Moreover, they are taken for granted, then to be more a matter of personality, and supposedly being learnt by personal experience.

Design conversations is a methodic proposal, built by different authors while crossed with multiple perspectives of design, cybernetics, languages studies, among others. Thus, from the cybernetics point of view, Paul Pangaro has urged designers to “Don’t design the team, design the conversation” (2016).

Making sense of conversations is decisive for design practices and designers. Nowadays, this knowledge is urgently demanded, if design wants to play a significant role battling world’s social challenges.

2. Theoretical Lens

"Groups are important to individual and society. As a person moves in the world, ***cooperation*** *becomes essential in achieving individual goals. People use communication to share resources to solve problems, and group* ***communication*** *becomes not only an instrument for accomplishing tasks but also a means of building* ***relationships****."*

(Littlejohn, and Foss, 2010).

A. Group work

Group work occurs in all fields of work, and even life. Its relevance, and effectiveness, has been matter of study since, Evolutionary theorists maintain that groups are functionally adaptive because they optimize the effectiveness with which individuals interact with their environment (Bartel, and Saavedra, 2000).

As mentioned before, this research started thinking in the current social challenges, at its relationship with design. For this relationship, is understood the role of design and designers, in the terms of social change and innovation towards sustainability. Following this frame, group work might infer: community work, collaboration, cooperation. However, this research will focus in the generic concept of group work, thinking of it as work done by a group of people in collaboration (Oxford English dictionary online, 2004).

Furthermore, design is generally a pretty collaborative business (Lawson, 2012). Group work is closely related to design, since its theoretical constructions until its multifaceted practices. This does not implies that design can not happen in the hands, and mind, of an individual designer. Although, complex design problems (or approaches) use to be tackled by groups. This groups are not always exclusively composed by designers, since nowadays problems are demanding the work of transdisciplinary groups. As consequence, it can be said that for complex problems, then the bigger the groups, then the intricate their interactions.

Therefore, every designer can narrate many personal experiences in group work, academical or professional ones. This experiences not necessarily point only to the outcome, but the process of making of the outcome. Even when group work has such predominance in design (and life), there is a lack of education about it. For group work, is taken for granted that pupils "know" how to work in groups (...). The level which they are equipped [for group work] is related to their personality and character, their self confidence and self-esteem, and their ability to communicate and relate to others (Mcallister, 1995).

As consequence, its not surprising that plenty of the speeches, that can be found about what is like group work [in design], tend to define group work as complicated, hard, frustrating, exasperating, painful, a "major piece of work".

B. Emotional behaviour

Being part of a group makes impact in the individual in many aspects. This aspects can be roughly classified as professional and personal. While designers validate their design procedures, share knowledge and skills, specialize themselves in specific tasks, they are also practicing their social skills.
In consequence, social skills directly affect the aspects mentioned, when they mean to be skills required for successful social interaction (Oxford English dictionary online, 2004).

Evidently, being a designer, or part of group work, requires to set social interactions. For this interactions to be successful, require to take a look on how appropriate individuals act (or react) emotionally to different contexts or situations.

Therefore, in group work, while the group life can affect individuals, so each participant can influence the group life (Phillips, and Phillips, 1993). This way, the group generates its own group mood. This collective construction, results from mood information (e.g., facial expressions, vocal patterns, and postural movements) that is exhibited by group members in the course of executing their tasks (Bartel, and Saavedra, 2000). As result, the group should be able to recognize on time that, emotions and feelings constitute the driving force for the group life. Understanding the emotional life of the group is the key to working effectively in a group (Phillips, and Phillips, 1993).

Then, what does mean to be effective? As mentioned in the book “Theories of human communication” (Littlejohn, and Foss, 2010), effective group is (in terms of emotional behaviour for this research) characterized for:

- Accomplishing tasks and builds interpersonal relationships.
- Requiring careful attention to the quality of communication, creative thinking and critical thinking / skills.

C. Design conversations

Working in a group necessarily requires information exchange, which in other words: require for communication. This way, the group elaborates networks for communication, according to their task and the state of their first interactions.

While designers are believed to create outcomes to communicate, evidently they also need to communicate (their individual inputs) to create that outcome. The communication process, of this inputs, is the reason to be of group work, and is crossed by group mood plus the quality of the exchange of information in between members. Moreover, as designers, conversations are at the center of our practice (Henderson and Harris, 2011).

Developing a process of communication in design will start with a conversation, even before drawing or sketching. Furthermore, in universities designers are compulsory taught how to communicate visually (drawing, modelling, audiovisuals), rather than to communicate orally or face-to-face.

Following this idea, a conversation is a requirement for design (Dubberly, and Pangaro, 2015). Then, conversations could earn their presumed strategical importance in design, because making design knowledge explicit is a necessity. (...) and thus goals and methods must be made more explicit so that designs are coherent and actions are coordinated (Dubberly, and Pangaro, 2015). In addition, from the already mentioned phenomenological perspective, design it self is a conversation (Jones, 2010).

The boundaries of design practices and conversations has been fading, as more research has been developed on this topic in recent years. As result, the following recollection of theoretical statements, specifically on design conversations from the points of view of design, cybernetics and language studies, have been selected for this research:

- **Design conversations have a system** (Lawson, 2004) *fig. 2*
- in that system, **Design conversations have roles** (Lawson, 2004) *fig. 3*
- **Design conversations are intended to agree in means to achieve goals** (Pangaro, 2016). *fig. 4*
- **Design conversations look for: coordination for action** (Jones, 2010). Coordinated action also mentioned by Bartel and Saavedra, 2000. Coordinated interaction mentioned by Littlejohn and Foss, 2010.
- **Design conversations are mainly narrative, and have its own lexicon** (Lawson, 2004).

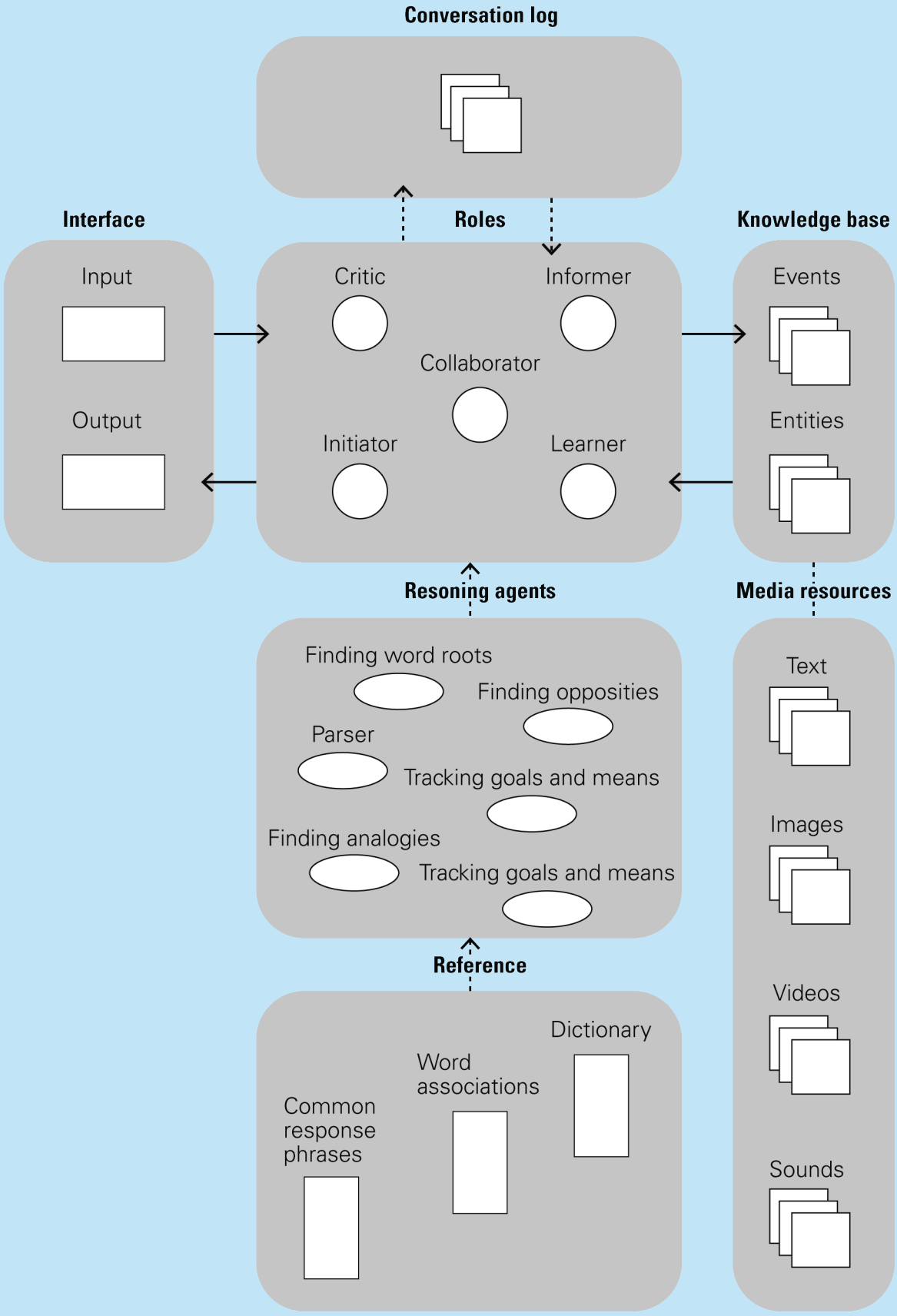
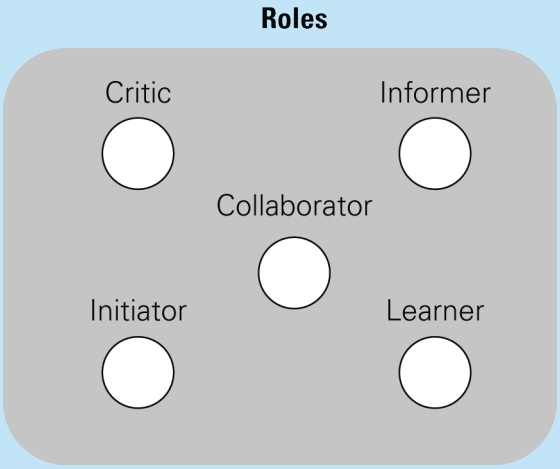

Conversation log
Interface
Roles
Knowledge base
Input
Output
Critic
Informer
Collaborator
Initiator
Learner
Events
Entities
Resoning agents
Media resources
Finding word roots
Finding opposities
Parser
Tracking goals and means
Finding analogies
Tracking goals and means
Text
Images
Videos
Sounds
Reference
Dictionary
Word associations
Common response phrases

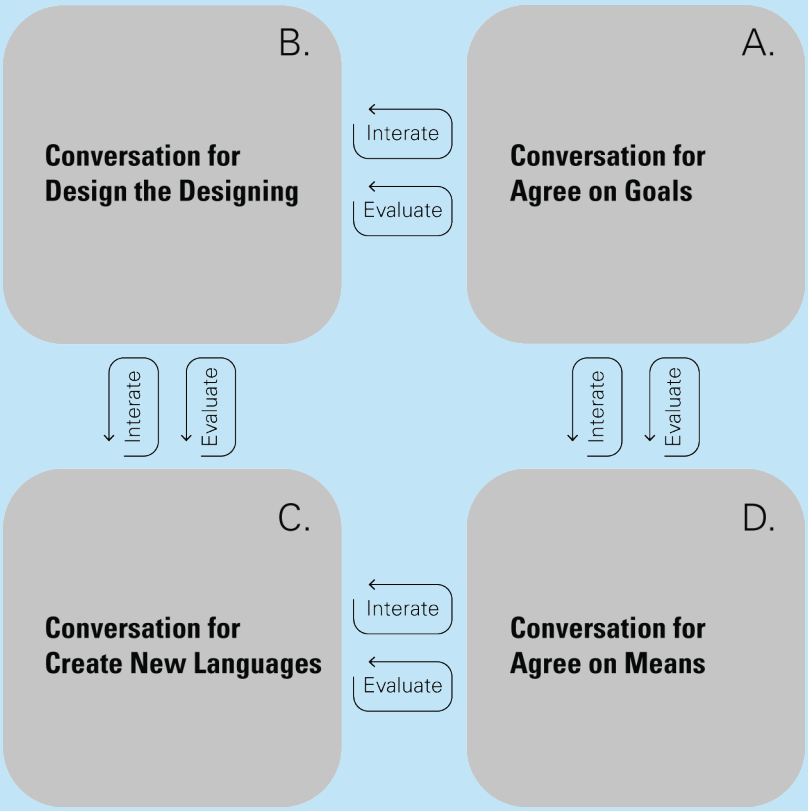
fig. 2



The Learner, absorbs what others say and remembers or learns. An Informer, answers others' queries. While, the Critic checks the validity of what others have said and makes comment on it, giving warning occassionally. A Collaborator, tries to elaborate and build on what others have said rather than criticizing. Then, an Initiator, begins a new conversational thread or develops a new perspective on the subject when others have no more to say.

However, during the research, there were found two types of Critic role. There is a Critic (+) for possitive, and a Critic (-) for negative. Both still correspond to the description developed by Lawson. But the negative version of the Critic usually brings tension to the group because of its unfavourable opinions.

fig. 3



Accordingly to Pangaro, a conversation has two purposes in a design group, agreeing in Goals and then agreeing in Means. While one is crucial to get the other, two additional steps happen in between the Goals and Means. For this process to happen en a convenient conversation, the group must be able to Iterate and Evaluate their performance at each instance.

fig. 4

Is crucial to mention that apart accuracy, this theoretical lens expose big challenges for the design practices (and practitioners). Since in real life, group work is mostly created by empirical actions of putting people together, rather than being factually selected. While, emotional behaviour relies exclusively in spontaneous reactions, of personal mental structures frequently learned over experiences. And design conversations lack of recognition of its relevance, because they disappear into "thin air" (Lawson, 2004).

One conclusion, might be that a potential solution to this challenges will necessarily mean to be a personality/cultural one. Again, this might represent a defying "steep learning curve", nearly a wicked problem to say. As consequence, Paul Pangaro has offered a valuable insight, that this research has adopted, and supported. In his conference: "Designing Conversations for Socially-Conscious Design", during the RSD5 Symposium, Pangaro claimed: ***Do not design the team, design the conversation*** (2015).

However, as visualized in the **Concepts Map** (*foldable chart **file 1***), there were five main subjects that enable relationships with Group work, Emotional behavoiur and Design conversations. While this five subjects share some features, one is more frequently mentioned in the literature reviewed, from different perspectives on the topic, which for this research is considered as the potencial factor that might allow groups ***design the conversation***, *Coordinated Management of Meaning* (CMM).

Defined by Littlejohn and Foss, as:

- Meanings and actions depend on the frame you set. They are shaped by rules, that are learned through interaction in social groups. Over time, individual internalise many of these rules and draw on them to guide their actions.

- If A and B are operating with substantially different rule structures, they will quickly discover that their respective behaviour are not what was expected, and they will readjust their rules until some level of coordination is achieved. People can have perfecty satisfactory coordination without understanding one another.

Also, by Bartel and Saavedra, as:

- A basic principle in work group research is that coordinated action is best accomplished when individuals can synchronize their thoughts, feelings, and behavior.

Methodology

Introduction to Research Methodology

The research methodology will be explained by following this methodological steps: design research planning, methods, data collection, data analysis and results interpretations. Due to the nature of this research, is hoped that the chosen methodology generate useful inputs on designers practices. Also, is important to consider that ethical concerns were counted in too.

Design research planning

The qualitative research nature of this project was primarily based in a constructivist perspective and phenomenologist strategies. This mixed with ethnography design concepts, were the starting points for designing the procedures, that would lead to answer the questions formerly stated.

As follows, the qualitative approach was also selected considering that the researcher's intent, is to make sense of conversations, therefore, the meanings others have about the world. (...), inquirers generate or inductively develop a theory or pattern of meaning (Creswell, 2003). In addition, and following Creswell's statements on qualitative research (2003), design conversations linked to group work and also to emotional behaviour, are topics were little research has been done.

In consequence, the nature of qualitative research is believed to be helpful to find variables for examination and analysis, being matched with theoretical constructions created per mentioned topic. In consequence, is proposed a Laboratory were ethnography and study case are the design strategies. Looking towards for:

- Positions itself (researcher)
- Collect participant meanings
- Focus on a phenomenon
- Bring personal values into the study
- Study the context of participants
- Validate the accuracy of findings
- Make interpretations of the data (Creswell, 2003)

Note: Creswell mentioned two additional practices of research, not included in the former list: Create an agenda for change or reform, and collaborate with the participants. This is because this two aspects are beyond the limits of this research.

Population analysed

The population analysed in this research, and study case, are the students attending Integrated Studio class during the Winter semester of 2016-2017. This class represents the core of the program of the International Master "Integrated Design" (MAID), at the Hochschule Anhalt in Dessau, Germany. The group of students belong to creative fields, mainly Design (graphic, visual, communication, industrial, product, and so), Architecture, Film, among others. An infography in the page XX summarises the general characteristics of the population analysed.

Inclusion criteria

- Current MAID students.
- Must be attending and working in groups in Integrated Studio class.
- For individual interviews, conversations and other specific activities: only will count with the support of students coursing their second semester. This because they have knowledge of how things work in the Master, class and university. Moreover, they already have overcame their settling down process as abroad students (legal and bureaucratic situation, know the environment, etc.)

Exclusion criteria

- Design groups with less than 3 members (couples or individual work). This because the bigger the groups (from 3 up to 6 members maximum) might guarantee more diverse variables, to be found in the interactions in tended to be analysed in the research.

Data collection

Qualitative data was collected following the concepts of "A frame work for Design" (Creswell, 2002), on qualitative design research.

Therefore, for this qualitative approach, two points of view were considered and mixed. In one hand, the constructivist perspective and ethnographic design

strategy, resulting in observation of behaviour of students. And in the other hand, participatory knowledge, narrative design strategy for open-ended activities.

As result, the key elements of collecting data is to observe participants' behaviours by participating in their activities (Creswell, 2003). And also, individuals are interviewed at some length to determine how they have personally experienced (Creswell, 2003).

In addition, it is important to mention that for this research, the data collected was characterized for being mainly:

- Unstructured text (transcription, interviews, conversations) / Research Diary, summaries, self memos.
- Audio recordings (Nigatu, 2009).

Data collection tools

In the Laboratory section of this research, two methods of data collection were used:

CONFIDENTIAL CONVERSATIONS	*narrative research*
What happens in Vegas, stays in Vegas 1	Interviewing [Conversation]
What happens in Vegas, stays in Vegas 2	Interviewing [Conversation]

CONFIDENTIAL OBSERVATIOS	*phenomenological research*
Session 1	Field observations [secret]
Session 2	- Interviewing - Field observations [obvious]
Session 3	Open-ended [questionaries and forms]

Each of this concepts, are considered as Creswell introduced them in his book "A frame work for Design":

- Constructivist perspectives (i.e., the multiple meanings of individual experiences, meanings socially and historically constructed. with an intent of developing a theory or pattern),(Creswell, 2002).

- Phenomenological research, in which the researcher identifies the "essence" of human experiences concerning a phenomenon, as described by participants in a study. Understanding the "lived experiences" marks phenomenology as a philosophy as well as a method, and the procedure involves studying a small number of subjects through extensive and prolonged engagement to develop patterns and relationships of meaning (Moustakas1994). In this process, the researcher "brackets" his or her own experiences in order to understand those of the participants in the study (Nieswiadomy, 1993), (Creswell, 2002).

- Ethnographies, in which the researcher studies an intact cultural group in a natural setting over a prolonged period of time by collecting, primarily, observational data (Creswell,1998). The research process is flexible and typically evolves contextually in response to the lived realities encountered in the field setting (LeCompte & Schensul, 1999). (Creswell, 2002).

- Case studies, in which the researcher explores in depth a program, an event, an activity, a process, or one or more individuals. The case(s) are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a sustained period of time (Stake, 1995), (Creswell, 2002).

- Narrative research, a form of inquiry in which the researcher studies the lives of individuals and asks one or more individuals to provide stories about their lives. This information is then retold or restoried by the researcher into a narrative chronology. In the end, the narrative combines views from the participant's life with those of the researcher's life in a collaborative narrative (Clandinin & Connelly, 2000), (Creswell, 2002).

Note: More detailed information, in each one of the specific methods of collecting data, can be found in the section Laboratory, of Data Collection in the ***folder 2****.*

Data analysis and results interpretations

The Data collection process took around 6 weeks. During this time, the Research Diary was filled of consigned and classified notes, by sessions, groups and dates.

However, the Data analysis could take almost the same time as the Data collection, in both cases an exclusively personal process was done by the researcher. Having this in mind, the Data analysis process was developed as:

1. Data analysis: Observations [content, narrative and discourse analysis]

- Verbatim (transcription word by word), also including non-verbal expressions (body language).
- Classification: chronology, events, settings, processes, issues.
- Placing data in tables, recognizing variables and factors to sort the information in a clear way.
- Designing tables, prioritizing data.

Data analysis: Observations - criteria

- The primary message content.
- The evaluative attitude of the speaker toward the message.
- Wether the content of the message is meant to represent individual or group shared ideas.
- The degree to which the speaker is representing actual vs hypothetical experience (Nigatu, 2009).

2. Data analysis: Patterns [framework analysis]

- Evaluation of tables, coding trends or links in between variables and groups.
- Discrimination of the coded patterns found, deciding which were or not relevant for the research.
- Definition of patterns.

3. Result interpretations [grounded theory analysis]

- Match patterns with hypothesis.
- Match patterns with theory.
- Definition of results.
- Write results.

Note: For the Data analysis and result interpretations processes, the slide presentation "Qualitative Data Analysis" (Nigatu, 2009) was used as reference, and adapted to this research.

Ethical considerations

As the core of this research was the information obtained not only by observations, but interviews, conversations and questionaries, appropriate data management was an extra task in Results interpretation.

When mentioned data management, it is inferred the necessity of determine values, relevance and set boundaries for the data collected, and then its correspondent results display. For this, this research has considered matters as: confidentiality, anonymity (if requested) and other potential issues that might lead to misjudgement and discontent, about the results here manifested.

Is necessary to clarify that students were aware of, and agreed, their participation during:

- **Confidential Conversations** (individual sessions 1 and 2).
- **Confidential Observations** (individual and group sessions 2 and 3).

In this two Laboratory activities, the methods developed were conversations and Obvious observations. There notes were taken and most of the times voice was recorded (only from "contributors".)

About the **Confidential Observations** (group session 1), Secret observations took place. Therefore not all students were aware, in advance, that observations were in the making (or made). There, at least one member of each group agreed to become a “contributor” to this research. However, in this sessions only notes were taken, not voices recorded or pictures were made.

Also, it was established that this research will do usage of anonymity, as a way for preserving the trustable value that “contributors” built around this research, without not compromising the objectiveness of the project. Even, when the contributors determined their names could be used in this research, when asked. In this order, groups were randomly numbered, and names were avoided to be used.

Note: More detailed information, on Ethical considerations decision of “contributors”, can be found in the section Feedback, of Data Analysis in the ***folder 3***.

3. Data Collection

D. Laboratory

Designing a conversation requires first to understand it, **making sense** of it. In that order, identify the set of patterns employed as skillful means in facilitating the relationship between designers, stakeholders, and product or materials (Jones, 2010). Although, for this research has been set a focus on relationships between designers.

Therefore, to understand design conversations, this Laboratory research section, contains the description of some methods designed to collect specific data.

The methods selected, and then designed, were:

- **Observations**, in this research observations were mostly without participation (it was participation in few times, only when the groups requested. Although, the researcher avoided give design insights to the projects). For this particular research was considered more pertinent to determine observations as obvious (when the group knew and was asked for being observed) and secret (when the group was not aware of being observed).

- **Interviews**, and questionaries were structured or semi-structured. However, it is important to consider the fact that interviews were constructed to be more like conversations, and conversations can not be scripted. As consequence, questions were designed to be followed as the conversation was being developed, and not backwards.
  In addition, the questions were hypothetical, provocative, ideal, and interpretative.

All this mentioned factors, meant to be guidelines to collect (and easily identify) pertinent data. Therefore, the set focus of this methods were experiences, opinions, feelings, and (in few cases) knowledge.

E. Case study

Not only designers develop group work, have conversations or run processes to get an outcome. However, as discussed previously, the role of design and designers nowadays, demand designers to be as conscious of their methodical procedures, as they are for the outcome to be reached.

As little research has been done about design conversations linked to designers group work and also to emotional behaviour, a case study was determinant for creating an experimental scenario for testing methods and matching results, with founded theoretical concepts. Therefore, this research scenario is composed by: **the class** (*fig. 5*), **the project timeline** (*fig. 6*), and **the students** (*fig. 7*).

The Class

The scenario taken was the international Master Integrated Design (MAID), at Hochschule Anhalt in Dessau, Germany. Since the focus of this is "the integration of different design disciplines in order to train multidisciplinary work to establish creative networks." (accordingly to their presentations statement displayed in the Design Faculty website).

As explained in *fig. 5*, the MAID office determinates the facets of Integrated Studio class for each semester. This includes of course, the advisor(s) supporting the design projects while in the making. Likewise, the Integrated Studio is mainly composed by a topic (per semester), and then by design groups.

The Project Timeline

The Integrated Studio project, is intended to be developed during one semester (approximately 4 months), with one week session of 7 hours. In the class syllabus, the professors suggested 4 main process stages and some procedures (here named "tasks"), in the figure fitted per month. Additionally, the design groups had 2 presentations before the final presentation (by the end of the semester).

Is important to mention that this research focused in, as mentioned in the class syllabus, **Define Frameworks** process (*see fig. 6*). Because is at this point where group settling process is put under test, while groups try to

reach consensus for important planning decisions to be set.

The students

The population analysed in this scenario, correspond to designer-students currently attending the Integrated Studio class. This class is meant to be the core of the MAID, simultaneously provided for first and second semester students, in a highly multicultural and transdisciplinary environment.

The *fig. 7*, explains:

- Amount of students and genres (for this late one, it was considered only Female and Male because this was found as not highly determinant data for the research, but more for contextual matters).
- Recognition of Professional backgrounds. This is a pertinent aspect because groups usually seek (or are requested) to be as most professional variated as possible.
- Determination of Professional experience. This might be a key aspect for setting personal expectations and motivations on design group work.
- MAID semester, to identify how many students are new (first studio class), and how many are coursing their second semester (second studio class). This can represent deep differences in students interactions and their performances.
- Setting Cultural backgrounds. In this case by world regions. Although, the transcultural aspect is always highly predominant, for this research was necessary to avoid cultural stereotypes constructions.

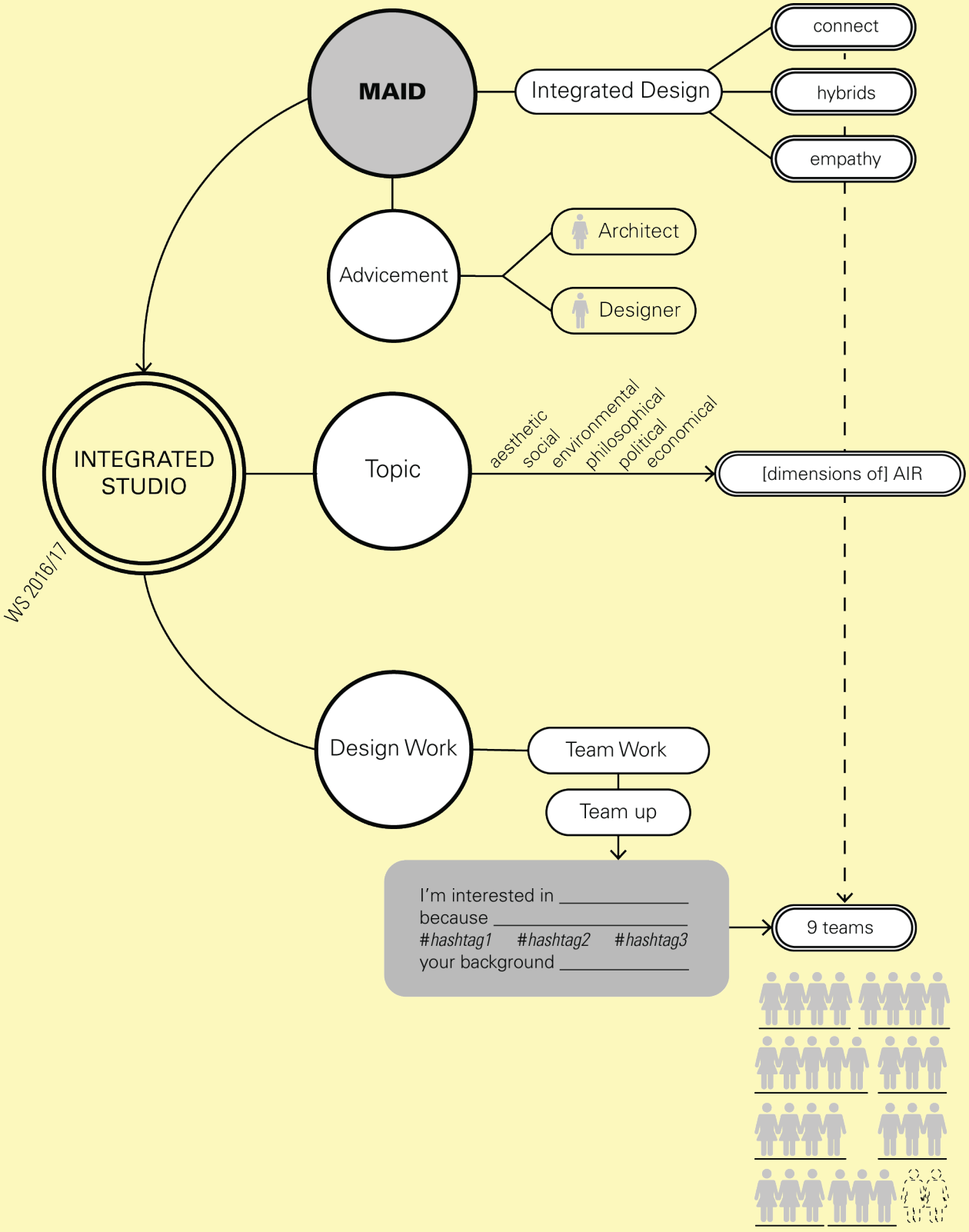

MAID
Integrated Design
connect
hybrids
empathy
Advicement
Architect
Designer
INTEGRATED STUDIO
WS 2016/17
Topic
aesthetic
social
environmental
philosophical
political
economical
[dimensions of] AIR
Design Work
Team Work
Team up
I'm interested in _____
because _____
#hashtag1 #hashtag2 #hashtag3
your background _____
9 teams

fig. 5

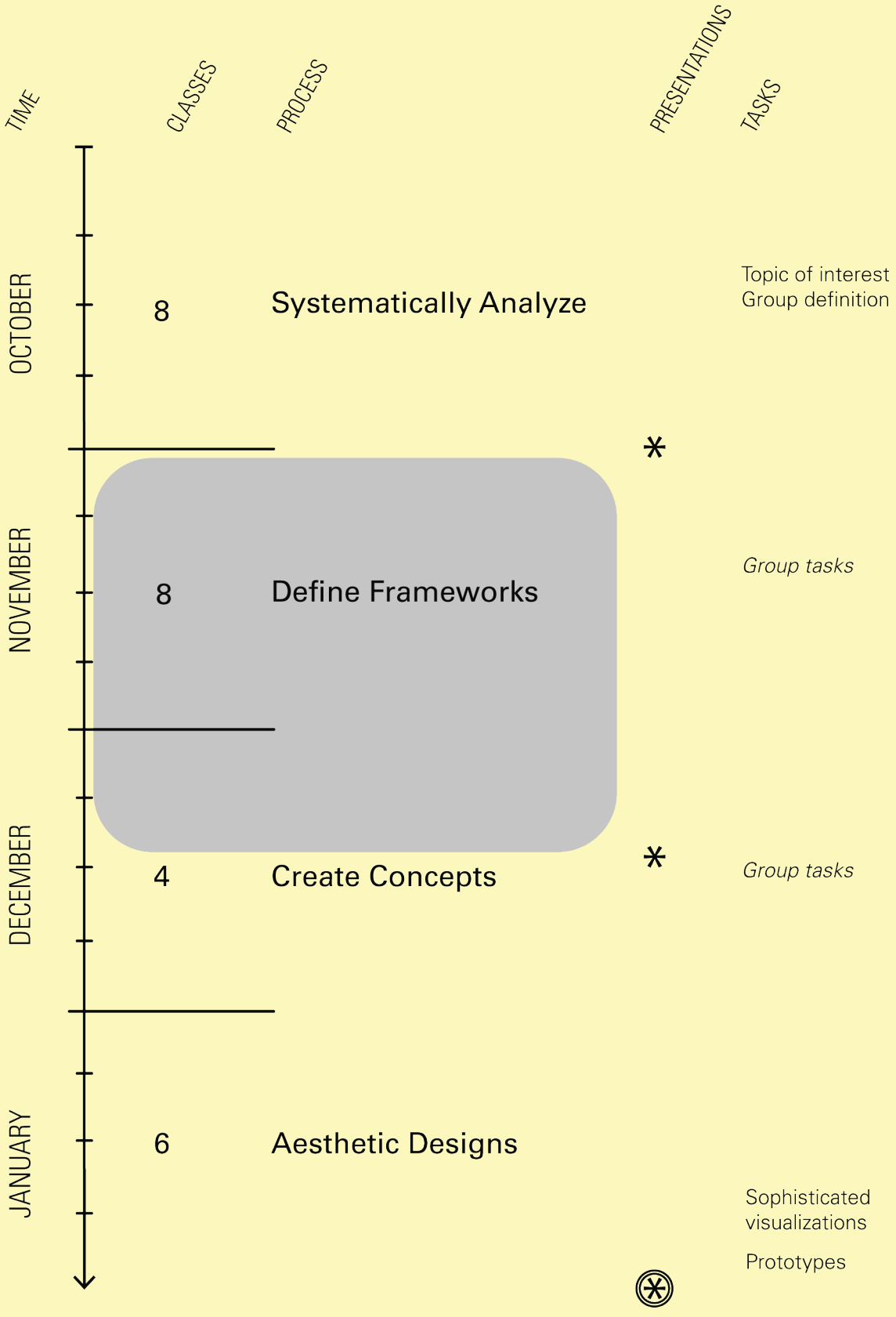

TIME
CLASSES
PROCESS
PRESENTATIONS
TASKS
OCTOBER
NOVEMBER
DECEMBER
JANUARY
8
Systematically Analyze
Topic of interest
Group definition
8
Define Frameworks
Group tasks
4
Create Concepts
Group tasks
6
Aesthetic Designs
Sophisticated visualizations
Prototypes

fig. 6

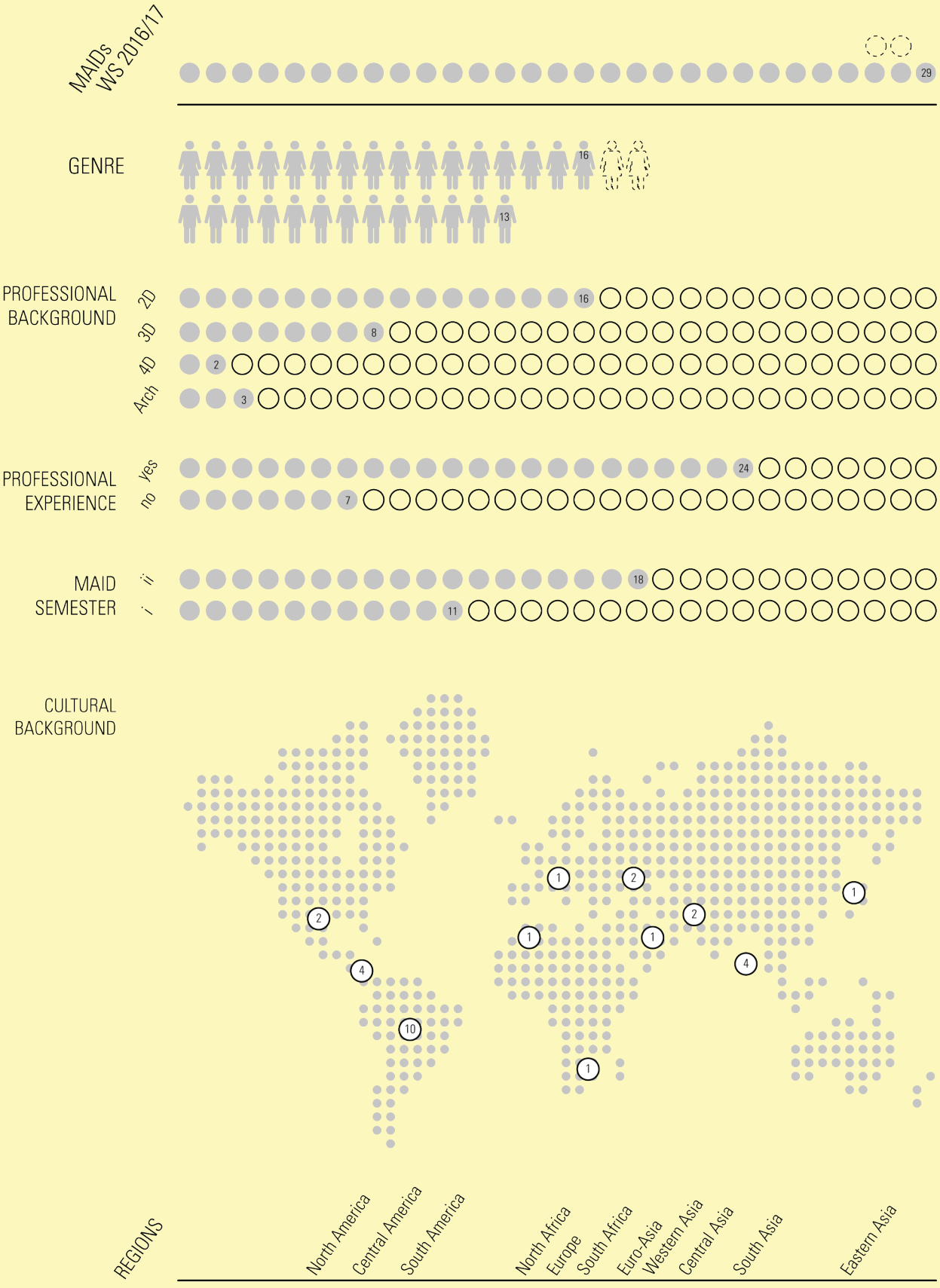

MAIDs WS 2016/17
29
GENRE
16
13
PROFESSIONAL BACKGROUND
2D
16
3D
8
4D
2
Arch
3
PROFESSIONAL EXPERIENCE
yes
24
no
7
MAID SEMESTER
ii
18
i
11
CULTURAL BACKGROUND
2
4
10
1
2
1
2
1
1
4
1
REGIONS
North America
Central America
South America
North Africa
Europe
South Africa
Euro-Asia
Western Asia
Central Asia
South Asia
Eastern Asia

fig. 7

F. Confidential Conversations

Confidential Conversations was a narrative research method designed for this research. This method pretended to create close contact with some students, towards to get to know their personal experiences and stories about their relationships, and emotional reactions, during former semesters in MAID.

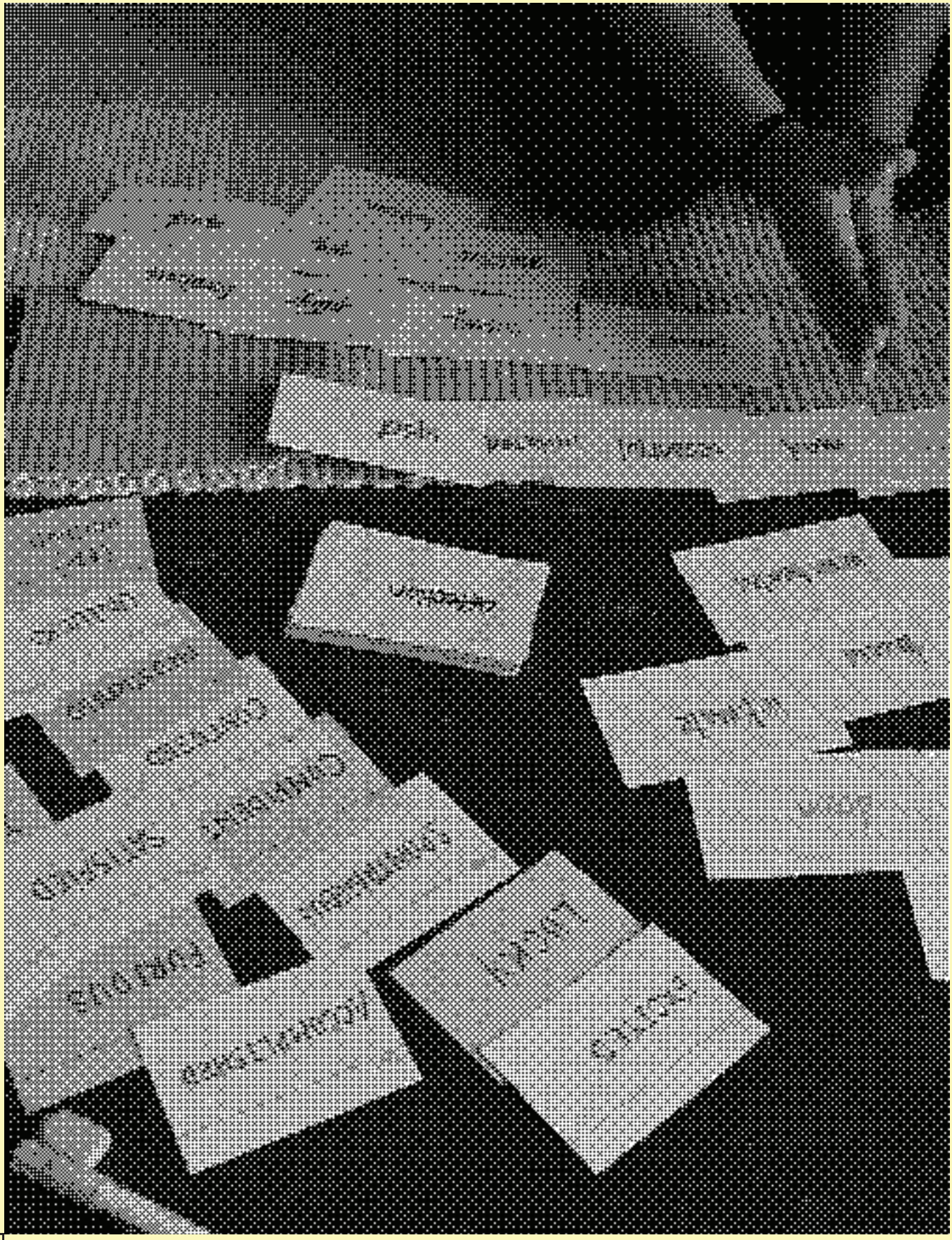
In this order, a **Confidential Conversation** was a dialogue that mixed both personal experiences and the need to communicate them to a person encountered as close. In consequence, this type of interactions might end up by saying: *"juts keep it in between us..."*, as a way to reassure that what was talked about should not "leave" that room by any instance.

That explains its name: ***"What happens in Vegas, stays in Vegas"*** (the noted North American slang). Although, this name was used as a way to empathize with students and ensure confidence and openness in the activity.

Confidential Conversations: *"What happens in Vegas, stays in Vegas"* was a two parts activity.

- Part 1, with current second semester students, while attending Integrated Studio class.

- Part 2, for third semester students, which were not attending Integrated Studio class (they already got all their Integrated Studio credits and currently working in their individual thesis projects).



Confidential Conversations

“What happens in Vegas, stays in Vegas”

part. 1

- **Data Sheet (***fig. 8***)**
- **Questionary**
- **Material**
- **Data Collected (***fig. 8a***) (***fig. 8b***) (***fig. 8c***) (***fig. 8d***)**
  - Dissection (forms, by interviewed students)

Questionary

The questions were selected thinking in potential variables that might unveil emotional reactions towards group work. The students were asked to answer them having in mind, first their professional lives (this includes experiences in MAID), and second their personal lives (when they considered necessary.)

The questions:

Something you miss the most? / What is the worst thing that has happened to you? / What is the best thing that has happened to you? / What is expectation? / What is disappointment? / What is the most satisfying thing for you? / What is frustration? / What is compassion? / What is empathy? / Have you dated a designer? / What is the worst thing of being a designer? / What is the worst holiday destination ever? / What are your thoughts on the class excursion to Amsterdam (Summer of 2016)? / Would you go back to work with your former boss (or former job)? / What makes you feel vulnerable? / What is funniest thing you have seen, or has happened to you recently? / What is the best thing you have done to someone? / What is the worst thing you have done to someone? / What constitutes a "perfect work day"? / How do you cheer up yourself? / Do you have any "muse", or inspiration source? / Do you prefer to work alone, pairs, groups? / What is your favorite quote or proverb?

This data sheet for the activity was referenced, and adapted, from "My workshop" workshop design (Schaefer, 2014).

DATA SHEET | **"What happens in Vegas, stays in Vegas" part 1**

CONTENT

DURATION	2 hours
GOAL	- Get to know the emotional state of a students sample, during their first semester in MAID. In their personal and professional lives. - Identify and code variables through their personal experiences.
Subgoals	- Encourage students to recognize the impact their emotions might have (or not).
INPUTS	- Introduction. Opening words about general thesis topic, its relevance and what they will mean for both. - Slide presentation (5 slides). Explaning what are emotions, what are not emotions. - Glosary of emotions meanings. - Rules for the activity. To reinforce trustability and set boundaries of relevant topics or approaches of their responses.
HANDOUT	- Check list form. Make sure everything is in its optimal conditions and ready to start. - I feel #1- card game. APPROACHMENT. Record the current idea of emotions before starting the conversation. - Confidencial Conversation. SENSIBILIZATION. Questions to find students reactions and emotional approaches to different situations. Make students aware of their emotions while working with other designers. - Dissection. PROJECTION. Connect and find relationships in between physical (designer techniques) and mental (emotional) conditions, to find in a designer. - I feel #2- card game. REACTION. Distinct emotions in an accurate way, by knowing their meanings, while interpreting and matching with their responses in I feel #1 card game.

SET UP

SPACE AND ATMOSPHERE	- Their homes. A place were students feel comfortable (physically and emotionally. - They were free to set the atmosphere in their houses (music, activity area, etc.)
AGENDA	- The students were asked to meet, and the time and date was set in common agreement. - Followed with the Checklist.
MATERIALS	- Suitcase and filing folder. To carry the materials all together. Also, added character, and pretended to empathize with the students. - Polaroid camera. To generate *in situ* visual record of the student. - Index cards (clean) and markers. For activity: *I feel #1.* - Index cards (typed with emotions names) in a box. For activity: I feel #2. - I feel #2- card game. REACTION. Distinct emotions in an accurate way, by knowing their meanings, while interpreting and matching with their responses in I feel #1 card game. - Forms. Statement (clearifying terms on data collection). Checklist and Agenda. Dissection. Notes.

PARTICIPANTS

PEOPLE	- MAID Students, on their second semester and attending Integrated Studio class. - Some students were familiar to the researcher, in order to verify their responses to a process that the research was already observing. - Some students were not familiar to the researcher, in order to code and contrast the information to be collected.
RECRUITMENT	- Personally approached, explained and requested. - Social media were a tool to confirm time and date of the meeting. - A gift was given to the student by the end of the activity.

DATA COLLECTION PROCEDURES

	Obvious observation
	Listening
	Conversation (intentionally
	Filling forms
	Notes taking
	Voice record
	Portrait

fig. 8

Confidential Conversations

“What happens in Vegas, stays in Vegas”

part. 2

- **Data Sheet** (*fig. 9*)
- **Questionary**
- **Material**
- **Data Collected**
  (*fig. 9a*) (*fig. 9b*) (*fig. 9c*) (*fig. 9d*) (*fig. 9e*)

Questionary

The questions were selected for their convenience to unveil direct emotional reactions towards group work. The students were asked to answer them with their first thing that came to their minds, and also considering exclusively their professional lives (this includes experiences in MAID) and factors like: transdisciplinarity and transculturality.

The questions:

- How did you experience group work back in your country?
- How did you experience group work in MAID, thinking in the Integrated Studio class?
- What emotions could represent what you experienced in group work in MAID?

This data sheet for the activity was referenced, and adapted, from "My workshop" workshop design (Schaefer, 2014).

DATA SHEET **What happens in Vegas stays in Vegas part 2**

CONTENT	
DURATION	10 - 15 minutes
GOAL	- Get direct emotional reactions towards team work, in their design practices. - Identify and code potential patterns, students can manifest, in team work in MAID.
Subgoals	- Check how relevant the transcultural factor were in their responses.
INPUTS	- Introduction. Opening words about general thesis topic. - Glosary of emotions meanings. - Rules for the activity. To reinforce trustability and set boundaries of relevant topics or approaches of their responses.
HANDOUT	- Confidencial Conversation. REACTION. Questions to find students reactions and emotional approaches to specific situations (MAID).

SET UP	
SPACE AND ATMOSPHERE	- Classroom 206. "Living room" were students work and hang out. - Not special setting, but a regular day of work.
AGENDA	- Ask if the student was up to have a conversation. - Having the conversation. - Record the conversation. - End of the conversation.
MATERIALS	- Post its. To write down the answers. - Voice recorder.

PARTICIPANTS	
PEOPLE	- MAID Students, on their third semester, not attending Integrated Studio class. - Some students were familiar to the researcher, in order to verify their responses to a process that the research was already observing. - Some students were not familiar to the researcher,
RECRUITMENT	- Personally approached, explained and requested.

DATA COLLECTION PROCEDURES	
	Obvious observation
	Listening
	Conversation (intentionally
	Notes taking
	Voice record

fig. 9

Conclusions on Confidential Conversations

This activity was designed to realize if students could engage, how do they engage, and how open they could be when narrating their experiences. Additionally to that, it was necessary to check how related (or not) are their personal and professional lives. This, taking in consideration to their emotional management capabilities, and how determinant transculturality might mean for them. Therefore, this activity was managed as a warming up session for the researcher.

From this activity, it could be concluded:

- Some assumptions did not work, like stated generalities. For example, one of the interviewed students seemed not to feel so comfortable at his place, among others.

- The activity, though was interesting for the students, in the case of part 1: it was too long, for both parties (students and researcher).

- In part 1, the amount of data collected was considerable. It was required to find ways to simplify some aspects for future activities, this thinking also in the data analysis stage.

- In both part 1 and part 2, students opened up easily, more than expected.

- In both part 1 and part 2, students were willing to keep on collaborating if necessary.

- In both part 1 and part 2, students manifested how “nice” or “important” was for them to talk about their emotions.

- Students tended to mix their personal and professional lives while narrating their experiences, responding to the questions made.

G. Confidential Observations

Confidential Observations was a phenomenological and ethnographic research. By mixing both, it was pretended to collect cultural interactions between designers working in groups, in order to document and codify their experiences. This, as an attempt to find patterns that could explain the links between their design conversations, their group work and designing performance.

In this order, a **Confidential Observation** was mainly a set of observational processes, contrasted with short interviews to selected students ("contributors"). Having as scenario the design groups composed for the Integrated Design class, at MAID.

For this sessions only 8 groups, of 9 design groups for the class, were under analysis (go back to Study Case: The Class). In consequence 29/31 students made part of this observations. From the groups analysed, at least one member became a "contributor" to this research. This character, voluntarily helped to contrast and validate the information gathered from observations.

Confidential Observations, was a three session activity:

- Session 1, intended to check group characterization (amount of designers, professional backgrounds, dynamics and methods practiced), and selecting contributors for this research.

- Session 2, determinated to check emotional statement of the groups, interactions and relationships, defining conversational (and group) roles.

- Session 3, follow groups synchrony, contrasting data (observed and manifested directly by contributors), credit (or discredit potential) patterns.

Confidential Observations

Session **1**

- **Data Sheet (*fig. 10*)**

This data sheet for the activity was referenced, and adapted, from "My workshop" workshop design (Schaefer, 2014).

DATA SHEET | Confidential Observations - **Session 1**

CONTENT	
DURATION	variated - depended on teams schedules
GOAL	- Check team conformation, dynamics and opted methods. - Selecting contributors for this research.
INPUTS	- Any, this observations were made secretly.
HANDOUT	- Literature revision. Concepts, observational interests to be found and transcripted.

SET UP	
SPACE AND ATMOSPHERE	- Classroom 206. "Living room"were students work and hang out. - Classroom 205. - Classroom 208.
AGENDA	- Check opening of the meetings, conversations, bodylanguage. - Tracking team time management adn schedules. - Verify meeting closure, and decisions on next meeting (conversation) .
MATERIALS	- Research diary.

PARTICIPANTS	
PEOPLE	- MAID Integrated Studio class, design teams, from 3 up to 6 students.
RECRUITMENT	- Teams were not informed, followed to be observed.

DATA COLLECTION PROCEDURES	
	Secret observation
	Listening
	Conversation (intentionally
	Notes taking

fig. 10

Confidential Conversations

Session **2**

- **Data Sheet** (*fig. 11*)

- **Data Collected**
  (*fig. 11a*) (*fig. 11b*) (*fig. 11c*) (*fig. 11d*)
  (*fig. 11e*) (*fig. 11f*) (*fig. 11g*) (*fig. 11h*)

This data sheet for the activity was referenced, and adapted, from "My workshop" workshop design (Schaefer, 2014).

DATA SHEET | Confidential Observations - **Session 2**

CONTENT	
DURATION	variated depended on teams schedules
GOAL	- Check emotional statement of the team. - Find interactions and relationships. - Defining conversational (and team) roles
INPUTS	- Any, this observations were made secretly.
HANDOUT	- Literature revision. Concepts, observational interests to be found and transcripted.

SET UP	
SPACE AND ATMOSPHERE	- Classroom 206. "Living room"were students work and hang out. - Classroom 205. - Classroom 208.
AGENDA	- Check opening of the meetings, conversations, bodylanguage. - Tracking team time management adn schedules.
MATERIALS	- Research diary.

PARTICIPANTS	
PEOPLE	- MAID Integrated Studio class, design teams, from 3 up to 6 students. - Contributors: at least one member of each design team, on its second semester.
RECRUITMENT	- Teams were informaly informed, followed to be observed. - Contributors: Personally approached, explained and requested.

DATA COLLECTION PROCEDURES	
	Secret observation
	Obvious observation
	Listening
	Conversation (intentionally
	Notes taking

fig. 11

Confidential Conversations

Session **3**

- **Data Sheet** (*fig. 12*)

- **Data Collected**
  (*fig. 12a*) (*fig. 12b*) (*fig. 12c*) (*fig. 12d*)
  (*fig. 12e*) (*fig. 12f*) (*fig. 12g*) (*fig. 12h*)

This data sheet for the activity was referenced, and adapted, from "My workshop" workshop design (Schaefer, 2014).

DATA SHEET **Confidential Observations - Session 3**

CONTENT		SET UP		PARTICIPANTS	
DURATION	variated 10 to 20 mins.	SPACE AND ATMOSPHERE	- Classroom 206. "Living room"were students work and hang out. - Classroom 205. - Classroom 208.	PEOPLE	- Contributors: at least one member of each design team, on its second semester.
GOAL	- Follow team synchrony. - Contrast data (observed and manifested directly by contributors) - Credit (or discredit potential) patterns.	AGENDA	- Following the forms designed for the activity. - Answer questions from contributors. - Take picture of contributor. - Manifest gratefulness for their commitment to their research.	RECRUITMENT	- Contributors: Personally approached, explained and requested.
INPUTS	- Contextualization of the state of the research. - Explanaiton of the activity to be done.				
HANDOUT	- Reality - Expectation. VALIDATION, RECOGNITION. Timeline of the real design process (developed during this Integrated Studio class) and its correspondent expectation. This for contrasting what is believed to be an expected "optimal" design process. For this, the timeline helps to visualize fluctuations in feelings, process steps, accomplishments, team synchrony points, and team issues points. - Data management. Contributors were asked about how their data should be displayed in research document. - Feedback. Contributors were asked for opinions on this research.	MATERIALS	- Forms. Statement (clearifying terms on data collection). Reality - Expectation timeline. Feedback.	DATA COLLECTION PROCEDURES	
					Conversation (intentionally
					Filling forms
					Portrait

fig. 12

4. Data Analysis

Research results

Making sense of conversations took a look into analysing verbal communication in design methods in transdisciplinary design groups. This way, this research first was based in the statement that design not exclusively can be considered as problem solving but sense maker of things (or giving meaning to things), and second up graded this definition to making sense of design practices as well. Idea that, believed, has the potential for tackling some of the current challenges the discipline, and the world, is facing nowadays.

This way, this research findings are divided in two groups, general and particular terms, as follows:

General terms

1. For the design groups, was certainly difficult to find a proper balance between the parallel processes of having a good design practice and having good interpersonal relationships. Specially for 6/8 groups, that while understanding the differences in this two processes, still struggled distinguishing in between them in their performance.

Moreover, the majority of this 6 groups were found facing an issue on one of the two mentioned aspects, and this way ending up getting a starting point of an issue in the other aspect. For example, in one team the member that engaged with the “mediator” or “guide” (group) role, ended up caring surplus for trying to keep good team interactions more than in the design process itself. In consequence, this evident lack of critical capability turned out dividing the group. (Obviously, it will be completely unfair to blame exclusively for this problem to the “guide”).

2. In 3/8 groups at least one conversational role could not be identified. This missing role, in all 3 groups was the Learner. This might be interpreted as: first, any of the members felt itself represented by being a Learner, at that design process

stage. Or second any one wanted to find itself in the *Learner* position, which in both ways (*Learner* - and lets say: teacher) might mean lack of empathy in recognising the act of learning from someone that knows something (technical, practical, methodological, emotional) better than itself.

The *Learner* bases its nature not only in modesty but in trust, and plays a crucial character in the core of Integrated Design's transdisciplinary - transcultural approach.

In addition, in this 3 groups not all members refer to all group while interacting. Also the resulting main mood of 2 of this 3 groups could be catalogued as negative, while the other was neutral.

Is important to mention as well, that while the majority of students claimed they wanted to learn things from others, during the practice they did not do it. In fact, in one particular case there was found high resistance to this *Learner* - teacher interactions, not only in between the group members but in between groups.

3. Groups did not use to set clear objectives for their meetings and developing conversations.

Almost in every group (at least) one member manifested not having clear idea what was the meeting for, or about the individual tasks that needed to be presented in the meeting. This can be interpreted as a lack of group direction, planning and even the capacity to evaluate the own design practice performance. As conversations are fluid and non scripted interactions, this represented a potential risk for not well-timed accomplished tasks.

Moreover, this situation extends beyond the meeting-conversations. While observations were made, at least one member in each group, manifested not clearly knowing what part of the process the group was on, or what was the next step to follow. Is important to mention that each group has different methodologies, approaches and motivations. What is apparently missing at this point is a procedure (device, method, opportune question) to make more evident the accomplishments (or not) made in the process and what is still to be done (dates, main steps, and so).

This issue, of not setting clear objectives for their meetings, can be extended to the fact that teams usually either can not control meeting timing. Each meeting, then conversation, has different stages which, practitioners suggests, need to be timed

for better team performance. However, teams do not track the time, or at least they do not do it consciously. A prove of this is the fact that the meetings are known for the time to be started but not to be finished, or not fitting to each membe personal schedule. This last one was particularly seen in teams, when a member had alternative things to do after the meeting, provoking misunderstandings.

4. Teams used to work on reaching the “insight”.

For “insight” is understood an potential idea. In the words of Pangaro at the Think-Tank 2011 Berlin: one that leads to solutions to problems. (At least, valuable insights do.)

In this aspect, 4/8 groups made evident a pattern of working towards a “meeting insight”: a team-constructed idea that took around 10 - 15 mins. to be discussed for giving general shape, one or maximum two ideas per meeting but that usually did not get enough detailed. Giving as result future meetings with looping steps that got frustrated, tired, stuck and lost-in-process team members.

This situation can be briefly seen in the conversation flow charts in Session 2. Here an extension of the case:

- A member gives an idea (or two).
- Some other(s) member(s) support the idea.
- The idea survives the Learner and the Critic roles arguments.
- The idea is getting shape, but not beyond a potential concept, with a couple of referents.
- The group feels good about the idea, might be some doubts but the team thinks is an idea that worth to work on.
- The team got the “insight”.
- The team automatically gets distracted from the discussion: some took breaks, did small talk, and so on. In one group it was manifested: “we got the idea, we do not need to work more” (for that day).
- The group takes more than 10 mins, to go back to the conversation.
- The group gives closure to the meeting by agreeing in task, usually a fast not detailed closure.

In consequence, in the next meeting:

- Team members expose their advances and research on the "insight".
- They manifest that they had doubts, different interpretations, misconceptions about the insight, so the results are not only diverse, but point to different directions.
- The meeting gets into consensus on one or two ideas presented.
- They work to get a "same level" insight (from that former insight.)
- Some other(s) member(s) support the idea(s).
- The idea survives the Learner and the Critic roles arguments.
- The idea is getting shape, but not beyond a potential concept, with a couple of referents.
- The group feels good about the idea, might be some doubts but the team thinks is an idea that worth to work on.
- The team got the "insight".
- The team automatically gets distracted from the discussion: some took breaks, did small talk, and so on. The group takes more than 10 mins, to go back to the conversation.
- The group gives closure to the meeting by agreeing in tasks, usually a fast not detailed closure.

Both, working for the insight plus the looping steps, seem to be pretty normal and mostly unconsciously made. As result, the aspects that trigger this looping steps happened to be:

- Not opportune detection, track and control of distractions, during the meeting.
- Not going further with insight details or clarify the limitations of it.
- Not giving proper closure to the meeting.

On the other hand, is important to remark that this 4 groups did not share a direct and exclusive link at any of the factors analyzed in the **Observations/Patterns/ Relationships chart**, *foldable chart* ***file 3***)

5. Individual group work, used to work.

For 4/8 teams was quite evident that group work can be “tricked”. For example, most of the teams did not meet more than once per week. This meeting was previous the

consultation with advisers; then they met again to talk about what happen while that consultation session. This can be understood as teams prefer to set general conditions and then follow individual processes (adding to this the former conclusions). That individualistic approach, in this teams, seemed stronger than the team work itself.

At this point, due to how “natural” this behaviour seemed to be, and apparently worked for so many groups (in this Integrated Studio class and former, even in personal experience), it turns really hard to establish how convenient or inconvenient it is. Moreover, this teams are evidently manifesting team problems (specially in factors like: M1, M3, M5, M8, E1, E4 and E5 in the **Observations/ Patterns/ Relationships chart**, *foldable chart **file 3***).

Although, some of this groups were able to track the consequences of this behaviour. They recognised on time how this behaviour was not being beneficial for the team, and then for the design process (outcome). In consequence, 2 teams manifested to be content with the fact that, after addressing the issue, the team agreed to meet more than once per week. They also expressed to feel relieved about that. Also, in a particular case, one team decided to make the individual work together, so they could support each other to make sure they all were in the “same page” of the process.

However, is important to mention that not in all cases this individualistic approach, to group work, upgrades to become a design process issue. In that scenario, the emotional behaviour of the group members would be strongly up to make apart personal relationships from professional ones. This particular condition was not experienced or seen reflected during this research was made.

6. Mindset, what.

The most conclusive term from this research is splitted in two parts. This term might explain (in different levels or relevance) group work and design process issues, and their corresponding links in between.

a) Group work demands a lot of effort, not only on skills, knowledge, but also in an emotional level. As well as any kind of human relationship or interaction, the person itself needs to set boundaries of its individual and social beings. Of course, this taking in consideration the context, pursued outcome and set expectations.

During the conversations observed, the “contributors” (before and after their eetings) manifested to be aware in advance of potential issues or problems to come.

Even, they made reality - expectation summarises of their team work, relating emotions to the design process through time.

However, was evident that team members had not all emotional knowledge, or tools, to “appropriate” behave in many of the situations observed. Obviously, even if a person has the emotional knowledge, tools, and appropriate responses to certain situations, this is not necessarily making this person more up to be a team member or behave “better” than the rest of the team. In result, emotional behave is still a considered an exclusive matter of personality, rather than a enhanced skill through education.

Naturally, each conversation, design process and team relationship has ups and downs. There is no way to say or set a perfect kind of each one. Evidently, that is not the problem. The main problem is how team members react to the natural, normal, logical, usual, innate problems that always come up with the design process or team members relationships.

In consequence, 26/29 team members evidently were not able to discriminate and adapt among personal relationships, expectations, professional capabilities and cultural background differences. This usually resulting in individual feelings like neglect, downness, anxiety, nervosity, resentfulness, irritation, upsetness, fatigue, worry, frustration, disappointment, confusion, boredom, (etc.). Therefore, all this aspects not only went contagious through the team members, but ended up strongly impacting the team performance.

b) Teams did not have a proper Shared Mental Model. This also can be seen as a lack of structured team Mindset or the display of different team motivations (were individual motivations were stronger, not explicit or not shared).

For instance, there is evidence in some teams that seemed working “more” in this central factor. This teams, compared to other teams results, showed more structured

and convenient conversations, were emotional and professionally more satisfied and the team mood was considered as positive. However, it can be seen also that most of their efforts for construct a Shared Mental Model tended to be unplanned or barely planned.

In general, it can be said that team members are not fully related with concepts as Mindset, and way less when it comes for Shared Mental Models. Just 3/15 students interviewed in the research mentioned the concept “motivation”, as part of the team construction or potential team problems, but they did not go beyond that.

Particular terms

According to the nature of design conversations, in group work and design practices, is not easy to determine which group(s) had a “better” or “worst” conversation or process. This is mainly because the observer and analyst was not an active participant, it was not intended to be emotional linked and the design outcome per se was not taken in consideration for this research. Nevertheless, following theoretical statements made possible to establish some indicators that amplify the performance of those teams, which are supposed for having more convenient conversations, and give some possible inputs to consider for future application.

In this order, it can be considered that 3/8 groups had apparent more convenient performances in conversations, which translates directly in better team relationships and satisfying design processes. This affirmation is based in the following facts:

- **Mindset**

This 3 groups (more significantly for 2 of them) demonstrated to have worked in the creation (or clarification) of an “open” mindset. This means a mindset where it was imperative mixing processes, learning from the others expertise or/and experimenting new things together.

This processes were defined as “not conventional”, “intuitive”, “organic”, “going with the flow”, but in certain way framed general design process steps, that can be generically named as: definition, research, ideation, prototyping.

This way, the experimentation vibe provided not only a feeling of shared

convenience for “trial and error”, eased by the fact that any of the team members showed to knew more than the others, due to the fact this team members also had different professional interests (different career backgrounds, and when shared there was differences in styles and motivations). But also provided guarantee uncertainty, which emotionally challenged each member and then the group.

- **Emotional management**

While uncertainty could have brought to some members feelings of anxiety or afraid, in the others excitement and expectation. For this it can be said that the mood of this late ones members was not only predominant but contagious in the team.

However, this process of dealing with uncertainty is always in the making and requires not only a clearest team mindset as possible, but also constant emotional support. The former was also proved by the fact that: there was not evidence of tension during the conversations. They had balanced and triggered conversations, where 2 of the 3 groups were actually the ones with less talking during the design conversations. This might mean that they talked what was necessary, when it was necessary.

As this might be challenging for some members, specially seen in the new semester members of this teams, they adapted on time. This point was maybe eased by the team taking and exchanging in between the different roles of the conversation. This last, seemingly was made unconsciously.

- **Group conversational roles**

While developing this research, it was realised the fact that students were no related to design conversational roles, in fact the general topic was quite new for them. This explain the matter that plenty of the decisions they made about design conversations -beyond those that can be considered common sense (like listening carefully, respecting others speaking, and so)- were intuitive or unconsciously made.

As they supported their conversations using mainly common sense, rather than structure, they manifested to have satisfactory results, at least until the observations were made. Whereas, the 3/8 teams took each conversational role into their design conversation. In fact, this teams alternated the Learner role, but more remarkably

they did not have a noticeable Critic (-). This can be interpreted as factors that made things easier, for setting a experimenting environment and include insecure, shy, or not so talkative members, while also prevented tension generation.

- **Group members**

This 3 groups also portrayed adequate relationships in between members. It can be stated that they managed a polite, inclusive and respectful tone while conversing. Aspects that also could be spotted matching their body language.

Following this, the 3 teams reached certain level of comfort, by allowing themselves to share Intimate space (far phase) amid team members. This takes more relevance while considering that only 4 team members (out of 10 in total in the 3 teams) could be considered as friends since the beginning of the studio projects, and 4 of them were new students.

In addition, this groups worked in their relationships, while not starting the meeting with missing members, all members referred to everybody during the conversations and all members interacted in the conversation. This also signified they did not need to look for a "Mediator" role for the team.

- **Group logistics**

While this 3 teams held their conversations making use of common sense, they used to open their meetings citing the previous conversation session. Nonetheless, this did not become a determinant factor for the early stages of the conversation. In other words, this did not make the impact expected because it was not conducted in a structured way.
Something similar happened with:

- Opportunely summarizing accomplishments, tasks or agreements during the conversations. This usually is made by taking notes, thing that also was not so common in this groups.

- As they did not open the conversation in an methodical way.

a) They either ask themselves what exactly it was supposed to be the next conversation. This question would have helped the team to reinforce the understatement of the set tasks, and be ready to bring more suitable inputs, not only for the project but the meeting.

b) They did not make a valuable meeting closure. Closing the conversation properly would have helped the teams to monitor their development and overcome issues (like a lost member in the process/a missing member that needs easily to catch up in the process/ask or express concerns about how the process it has been held/express emotions/etc.) in advance, or at least on time.

1. Summarizing the meetings accomplishments, agreements or tasks (even if they did not were reached as expected).
2. Detailing coming tasks to clarify terms.
3. Setting team responsibilities and team support plans (in case of being needed).
4. Tracking team mindset and members satisfaction during the meeting.
5. Defining next meeting: date, time and aims.

In result, regarding the logistic aspect, teams could have done significantly better. The former allegations might explain some of the inconvenients this teams started to experiment by the end of the observation stage of this research, right after the midterm presentation:

- A group that was dealing satisfactorily with their design practice started experiencing some member(s) not having clear idea what they were doing, or where they were leading towards, and possibly they did not communicate this opportunely to the rest of the team.
- A group that was not dealing satisfactorily with their design practice, seemed finally be framing their project, by completing their mindset.
- A group that was dealing satisfactorily with their design practice, was suggested to adjust considerably their idea of design outcome.

Feedback

This research lasted 3 months. During one and a half month, the unconditional help of some students were crucial for this project. As a way to consider their thoughts and feelings, more than practical inputs for this process, they were asked about this project and evaluate it. This was also a way to be grateful for their constant support and caring.

During the last week, groups had their midterm presentation, the contributors were asked to answer a *the feedback* form. This form asked:

- Do you have any concern/worry/issue with this project and your contribution?

- How do you feel about this project?
At the beginning/In the middle/Now that is ending.

- What did you dislike?

- What did you like?

- What learning come for you?

- Using this scale [(*fig. 14*)], can you summarize your experience with me and this project?

In this form, the first part (upper part) were dedicated to ask them how their personal information should be treated in the document that will contain the research. This aimed to make clear some possible or potential misconceptions regarding ethics and privacy.

In the second part of the form, the below part *"About this project..."*, the contributors were asked about the research and observer's performance. The answers will be kept as inputs for further work. Therefore, only some highlights will be submitted in this document.

Figures (*fig. 13*) and (*fig. 14*) explain the emotional fluctuation of "contributors" in the process, and the comments "contributors" made about their participation in this research.

Session 3 - form summarize

GROUP	EVALUATION	OBSERVATION TIME (per week)					
		November				Decem.	
1	Most common feeling						
	Highest point						
	Lowest point						
	Group Coordination			C			
	Group Issues		X				
2	Most common feeling						
	Highest point						
	Lowest point						
	Group Coordination						C
	Group Issues			X			
3	Most common feeling						
	Highest point						
	Lowest point						
	Group Coordination	C	C			C	
	Group Issues	X					
4	Most common feeling						
	Highest point						
	Lowest point						
	Group Coordination						C
	Group Issues					X	

GROUP	EVALUATION	OBSERVATION TIME					
		November				Decem.	
5	Most common feeling						
	Highest point						
	Lowest point						
	Group Coordination						C
	Group Issues					X	
6	Most common feeling						
	Highest point						
	Lowest point						
	Group Coordination			C		C	
	Group Issues		X		X		X
7	Most common feeling						
	Highest point						
	Lowest point						
	Group Coordination			C			C
	Group Issues		X				
8	Most common feeling						
	Highest point						
	Lowest point						
	Group Coordination	C			C		C
	Group Issues			X			

fig. 13

FEEDBACK

Data taken during the second week of December of 2016

GROUPS	8	CONTEXT: Classroom - MAID Building	

QUESTION	HIGHLIGHTS
DO YOU HAVE ANY CONCERN/ WORRY/ISSUE WITH THIS PROJECT AND YOUR CONTRIBUTION?	Not at all / The fact that help and information were asked at one time but not finally not taken, that produced a feeling of "follow up"/ I just wanted to contribute with the project :-)
HOW DO YOU FEEL ABOUT THIS PROJECT?	Speaking with some is good / design processes not always are going to be perfect / wondering, look forward, look forward and excited / curious / it was unclear what it was happening, curious about the results / comfortable / mystery
WHAT DID YOU DISLIKE?	Nothing / Time limitation (there is not time limitation but some how it is time based) / Keeping th information for the project
WHAT DID YOU LIKE?	Talk freely about my feelings and group / The topic, the humanist part of design (process) / Seeing differences among people, interesting / The way you approach the situations. The attitude of listening / That I coul talk with you and feel safe and also be able to vent / I enjoyed a lot /
WHAT LEARNINGs COME FOR YOU?	Design processes are never perfect / Different team member, different attitude. Different methods, different processes. Different result, relativity / There are many things to do (not only about project) be optimistic, positive / Definitely design is a conversation, and full of emotions / I think it was nice to have someone to talk to, that knew what was happening / Take in count how do I work in my group, personal feedback

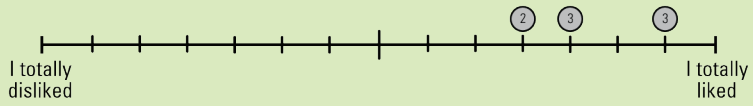
USING THIS SCALE, COULD YOU SUMMARIZE YOUR EXPERIENCE WITH ME AND THIS PROJECT?	

fig. 14

3. Data Collection

Appendix

- **"What happens in Vegas, stays in Vegas" Part 1**
  Data Collected
  (*fig. 8a***) (***fig. 8b***) (***fig. 8c***) (***fig. 8d***)**
  Additionals: Dissection forms (*left pages*)

- **"What happens in Vegas, stays in Vegas" Part 2**
  Data Collected
  (*fig. 9a***) (***fig. 9b***) (***fig. 9c***) (***fig. 9d***) (***fig. 9e***)**

- **Confidential Observations - Session 2**
  Data Collected
  (*fig. 11a***) (***fig. 11b***) (***fig. 11c***) (***fig. 11d***)**
  (*fig. 11e***) (***fig. 11f***) (***fig. 11g***) (***fig. 11h***)**

- **Confidential Observations - Session 3**
  Data Collected
  (*fig. 12a***) (***fig. 12b***) (***fig. 12c***) (***fig. 12d***)**
  (*fig. 12e***) (***fig. 12f***) (***fig. 12g***) (***fig. 12h***)**

Central
System
Exoskeletal
System
Super fuels
& Lube
Lungs-Eggs
Hammer
butter
Ankles

What happens in Vegas stays in Vegas 1

Data taken during the last two weeks of October of 2016

CURRENT INTEGRATED STUDIO - STUDENT		PROFESSIONAL EXPERIENCE	YES				
SEMESTER	ii	HAD A TEAM FORMER I. STUDIO	YES	GENRE		CULTURAL BACKGROUND	SOUTH AMERICA

I FEEL # 1		CONFIDENTIAL CONVERSATION	
Card game	excited - happy - ok - stressed - satisfied - left behind - proud - unlucky - accomplished - hated - insecure - frustrated - confused - angry - confident - lucky - spontaneous - furious - depressed	Questions	25

I FEEL # 2		DISSECTION	
Card game	dejected - down - blue / optimistic - fulfilled / touched - intimate - warm hearted / anxious - nervous / mad - resentful - irritated - upset / fatigued - worry - gratitude - boredom - pity - joy - loneliness - grief	Characteristics addressed	11

FEEDBACK

- Touched/intimate/warm hearted: during the session.
- Felt good during the process.
- Interesting
- Not only the talk but the tools and details in the activity.
- It was an open space to talk about ourselves in a deep way.
- Easy to connect.
- Nice experiment, curious to see what is going to happen next with the project.

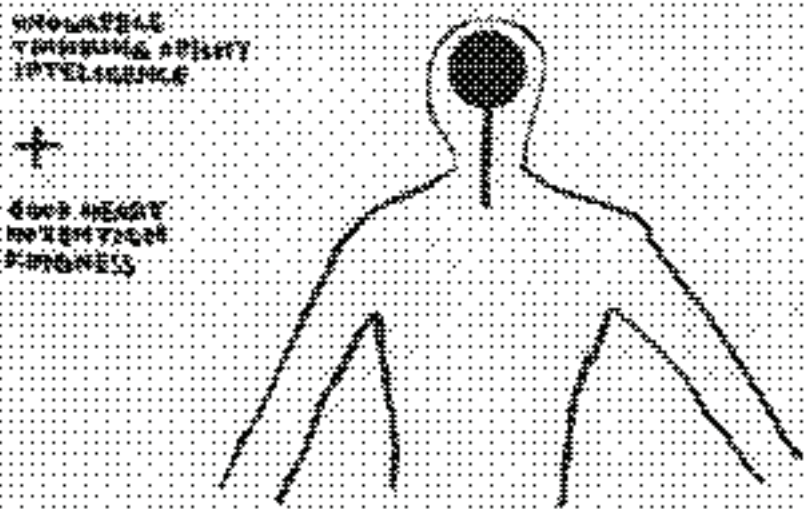
NOTES/ OBSERVATIONS

- Organized, sorted emotions in "I Feel #1" using a time line.
- Wrote things down with marker color pink.
- Wrote things down script capital letters.
- Wrote things down in colored papers.
- Some words were discussed during the session: reliable, others in her mother language that meant imperfection.
- Favorite quote: "Let your vibe attract your tribe" and your opinion is just one in an ocean of many and I'm just searching for a better tide".

fig. 8a

MY NAME IS _____ experiment 1 what happens in Vegas stays in Vegas

DIRECTION / PROJECTION Connect and find relationships in between physical (tangible knowledge) and mental (intangible) qualities | By copy and imitation, collect how much things talk and how much is interchange



What happens in Vegas stays in Vegas 1

Data taken during the last two weeks of October of 2016

CURRENT INTEGRATED STUDIO - STUDENT		PROFESSIONAL EXPERIENCE		NO			
SEMESTER	ii	HAD A TEAM FORMER I. STUDIO	YES	GENRE		CULTURAL BACKGROUND	CENTRAL ASIA

I FEEL # 1		CONFIDENTIAL CONVERSATION	
Card game	adrenaline - love - excitement - free - inspired - joy - warm - respect - trust - settle - satisfied - odd - concerned - hush - distracted - happy - content - sad - misery - solitude - lonely - down - healing - supported - strong - alive	Questions	28

I FEEL # 2		DISSECTION	
Card game	glad - optimistic - bouncy / touched - affection - happiness - loved / intimate - love - pleasure - shock - upset / down - dejected - heart broken - sad - depressed - hostility - humiliation - sadness / depression - resentment - boredom - kind / gratitude - trust / relaxed - self confidence - awe - surprise - passion - ecstasy - joy	Characteristics addressed	3

FEEDBACK

- Self realization about a lot of things, specially emotional status, which dominates his way of live and work .

- "I'd a terrible designer is I'm a sad designer. I'd be a great designer if I'm a happy designer"and for him there is nothing in between.

- Very insightful. He felt like looking to himself.

- The questions were pretty effective, they got him thinking.

- "How do I feel?" interesting questions hit the right spots.

- "Being aware of emotions gives"you more control, specialy when it comes to creation".

NOTES/ OBSERVATIONS

- He sorted emotions in "I feel #1" by month, but forgot to mention October.

- In his notes he draw faces, sun, rounded shapes.

- He had a lot of things to say, the session takes longer than expected. Once he realized that fact, he proposes to simplify and make it shorter.

- He played music and smoke.

- Appreciation / feedback / chance.

- "Do we live to work? or work to live".

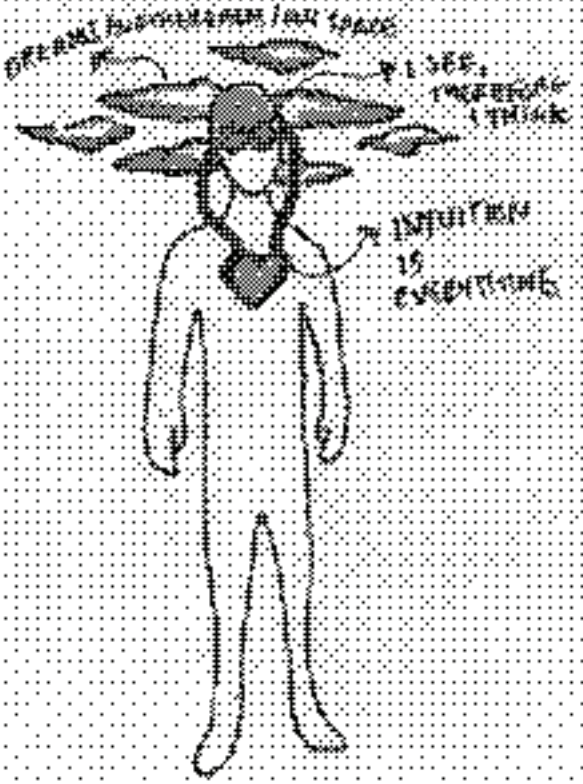
- "Be silly, be kind, be weird. There is not time for anything else...".

fig. 8b

MY NAME IS _____

experiment 1 *what happens in Vegas stays in Vegas*

DIRECTIONS: CREATE A STORY CONNECTING THE RELATIONSHIP BETWEEN PHYSICAL STIMULI, THOUGHT, AND EMOTION. USE ALL OF THE WORDS AND MAKE EACH WORD STAND OUT. ONCE YOU'VE FINISHED, DRAW AN EMOTION HERE IN THE BOX.



What happens in Vegas stays in Vegas 1

Data taken during the last two weeks of October of 2016

CURRENT INTEGRATED STUDIO - STUDENT		PROFESSIONAL EXPERIENCE	YES				
SEMESTER	ii	HAD A TEAM FORMER I. STUDIO	YES	GENRE		CULTURAL BACKGROUND	SOUTH ASIA

I FEEL # 1		CONFIDENTIAL CONVERSATION	
Card game	curious - excited - happy - exhausted - confused	Questions	21

I FEEL # 2		DISSECTION	
Card game	wonder - curiosity - nterest - excited / happy - surprise - joy - glad / calm - warm hearted - touched - gratitude - hope / empathy - loved - happiness - love - annoyance - nervous / passion - pleasure - affection - optimistic - confidence - self confidence	Characteristics addressed	2

FEEDBACK

- He smiled, "I had fun" :-)
- Interesting activity, manifests to be very curious about this project.
- He wants to keep on contributing in other activities for this project.
- He also manifested that he hoped his short answers were helpful for this activity.

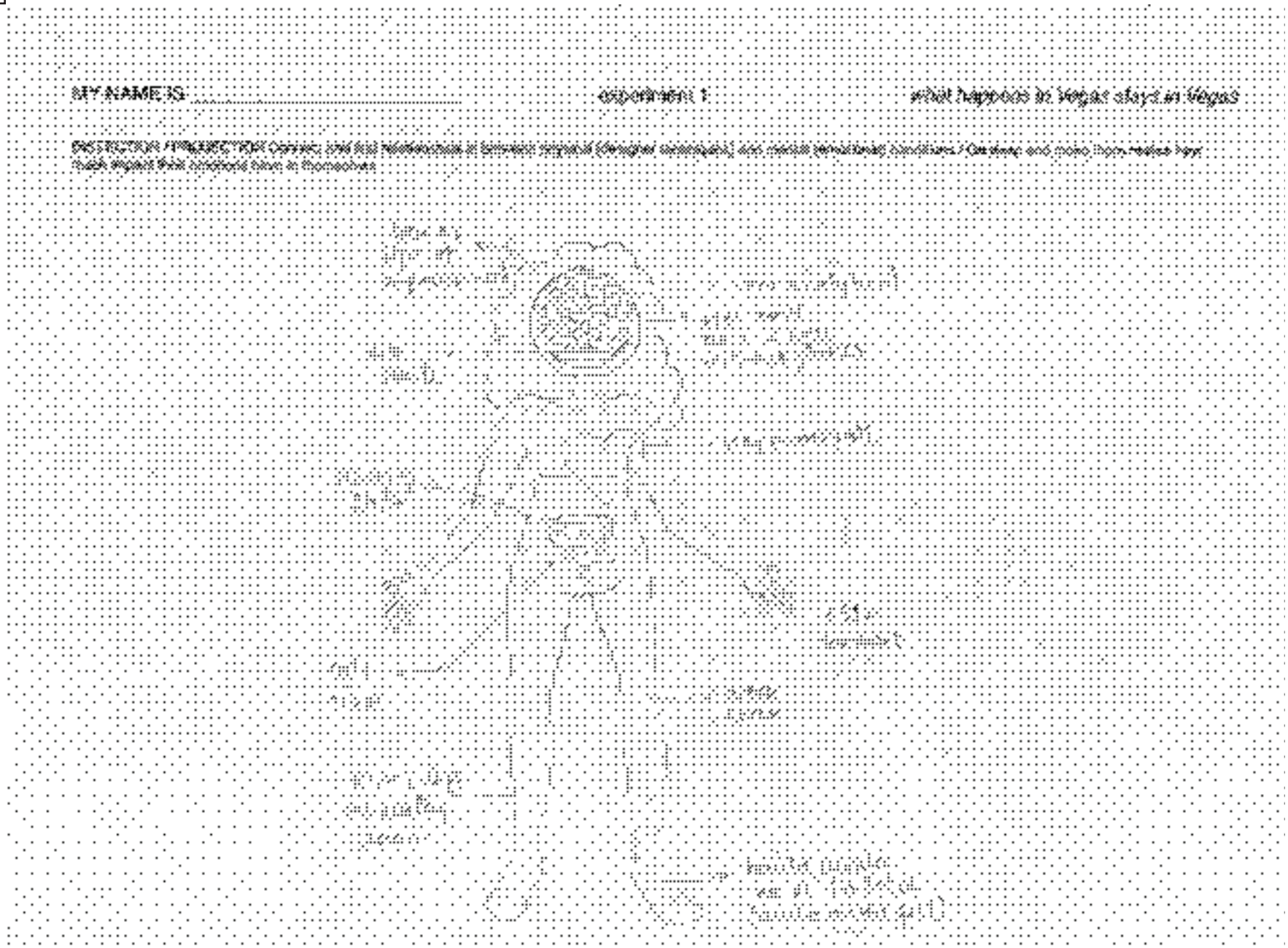
NOTES/ OBSERVATIONS

- He sorted emotions in "I feel #2" in 5 groups, each group correspond to a main emotion he manifested in "I feel #1".
- He wrote down in capital letters, with black marker ink and everything in one white piece of paper.
- He summarizes everything in it simplest form.
- His answers are short but precise.
- "The more you see, the less you know".
- "The more I see, the less I know.

fig. 8c

MY NAME IS: _____ experiment 1 what happens in vegas stays in vegas

DIRECTION / PROJECTION: Define one kid Multimodal in between original (Designer concept) and social emotional conditions / Define one more from realist type that original that conditions have in themselves



What happens in Vegas stays in Vegas 1

Data taken during the last two weeks of October of 2016

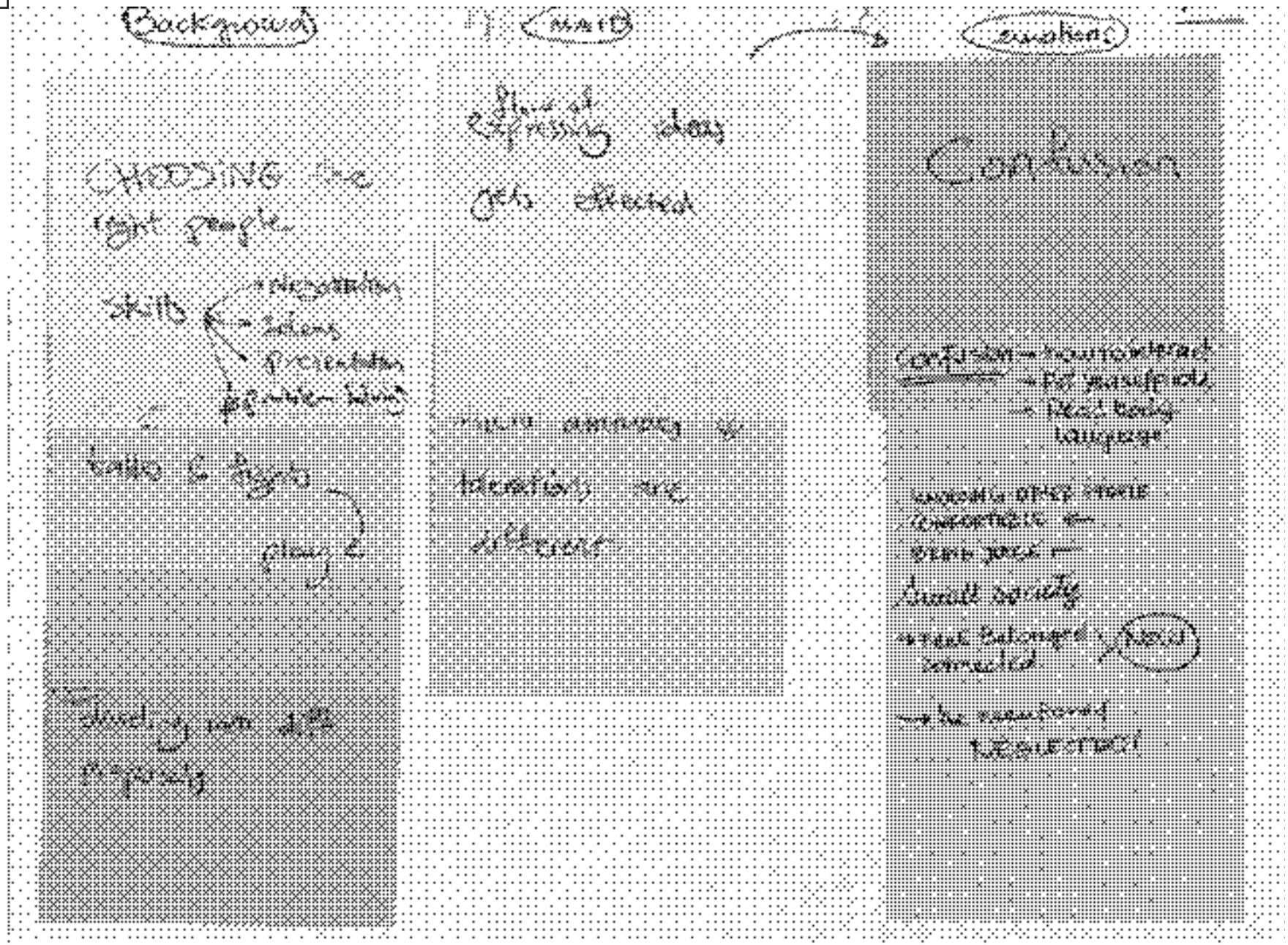
CURRENT INTEGRATED STUDIO - STUDENT		PROFESSIONAL EXPERIENCE	YES				
SEMESTER	ii	HAD A TEAM FORMER I. STUDIO	NO	GENRE		CULTURAL BACKGROUND	SOUTH AMERICA

I FEEL # 1		CONFIDENTIAL CONVERSATION	
Card game	bipolarity - rethinking [everytime] / grateful [with the simple things in life] / exploration	Questions	21

I FEEL # 2		DISSECTION	
Card game	surprise - satisfied - tender - bouncy - excited - relaxed - curious - perky - interest - sympathetic - glad - kind - antsy - blue - fulfilled - pleasure - happiness - gratitude - touched - empathy - energetic - contentment - hope - passion - optimistic - warm hearted	Characteristics addressed	6

FEEDBACK	NOTES/ OBSERVATIONS
- He expected the activity to be something different. - For him, the activity was too long and exhausting. - He asked about what the activity said about him (like defining him). - He asked with interest how the activity went with other people.	- For "I feel #1" he wrote down with purple marker ink and mixing with explanatory doodles. - He sorted emotions in "I feel #2" in 3 groups, each group correspond to a piece of paper were she wrote down emotions in "I feel #1" session. - "What do we study for?".

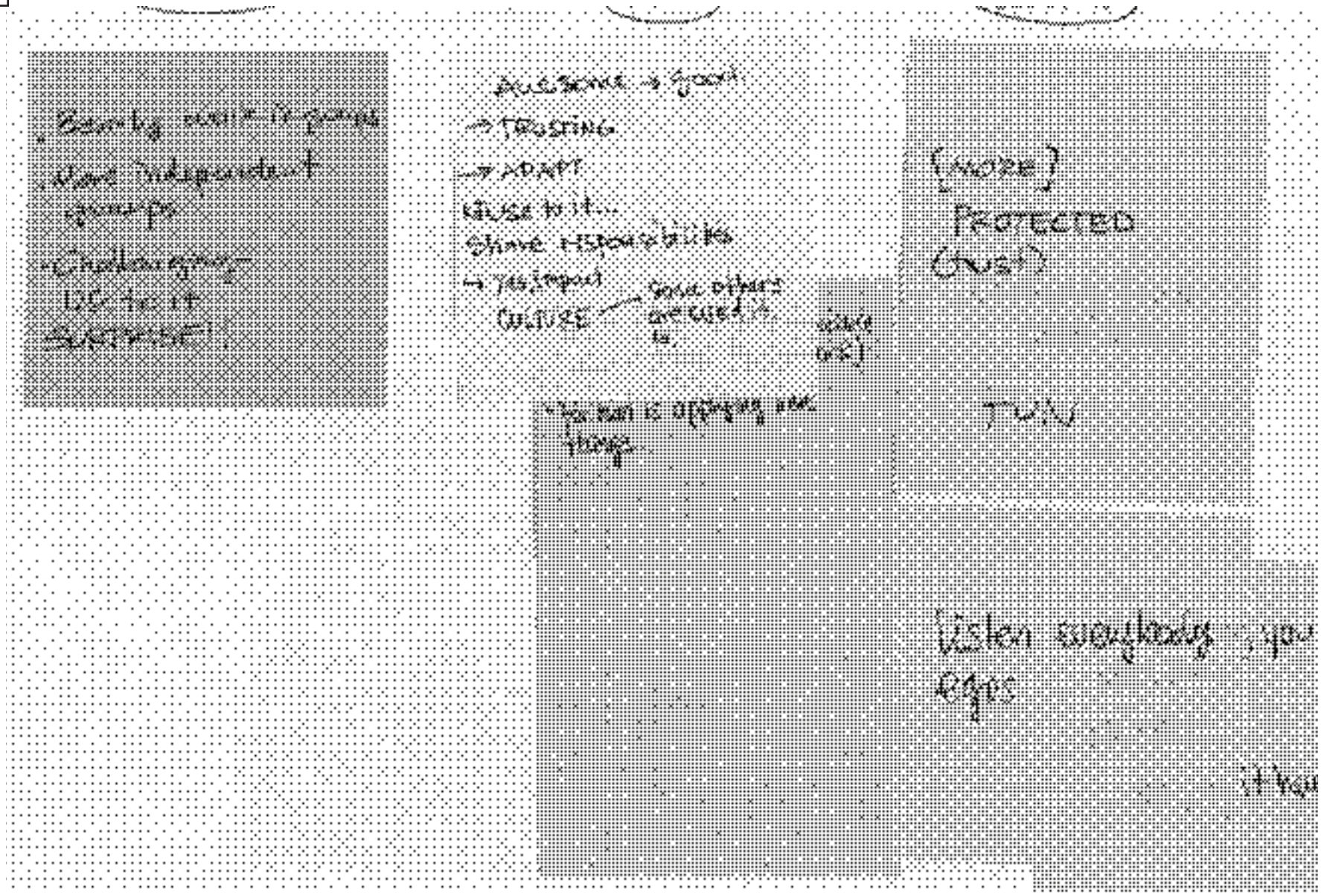
fig. 8d


Background
Main
Conclusion

What happens in Vegas stays in Vegas 2						*Data taken during the last two weeks of October of 2016*
FORMER INTEGRATED STUDIO - STUDENT	PROFESSIONAL EXPERIENCE	NO				
INTEGRATED STUDIO CLASSES	GENRE		PERIOD	S 2015 W 2015	CULTURAL BACKGROUND	SOUTH AMERICA

BACKGROUND *experiences before MAID*	- Worked better in smaller groups	- Quality of work (delivered, content)
	- Time / Waiting for others / Schedules	- Connection (same rythm)
	- Too much variables	
	- COMMITMENT	
	- MOTIVATIONS	
INT. STUDIO *experiences during MAID*	- It did not go so well	
	- Motivations, goals so different	
	- Different cultural backgrounds, ages, previous experiences	
	- Create its own standards	
EMOTIONAL REACTIONS	- Anxiety	
	- Frustration	
	- Surprised	
	- Rewarding	
	- Challenged	

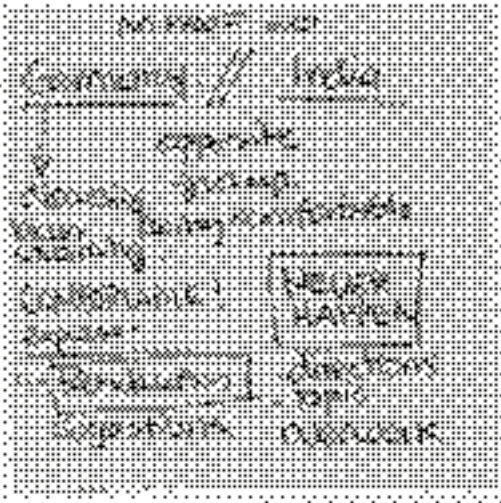
fig. 9a

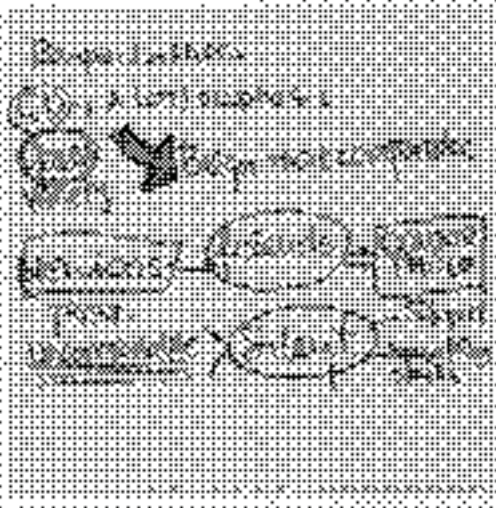


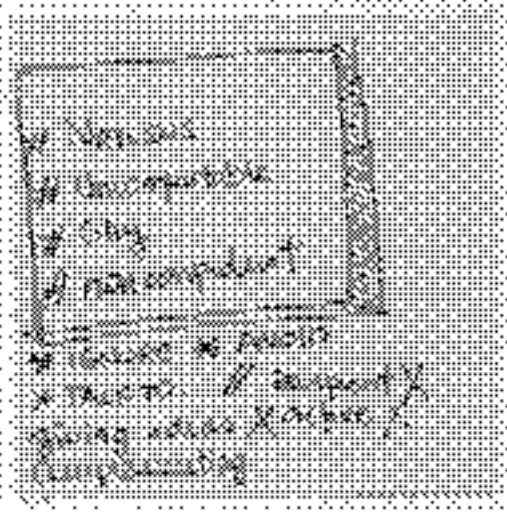
What happens in Vegas stays in Vegas 2				*Data taken during the last two weeks of October of 2016*		
FORMER INTEGRATED STUDIO - STUDENT	PROFESSIONAL EXPERIENCE	YES				
INTEGRATED STUDIO CLASSES	GENRE		PERIOD	W 2015 S 2016	CULTURAL BACKGROUND	WESTERN ASIA

BACKGROUND *experiences before MAID*	- Choosing the right people	
	- Skills: Negotiation / Ideas / Presentation / Problem solving	
	- Lots of back and forth, and PLAY	
	- Coming to agreement or dividing into different proposals	
INT. STUDIO *experiences during MAID*	- Flow of expressing ideas get affected	
	- Micro attitudes and tolerations are different	
EMOTIONAL REACTIONS	- CONFUSION	- Feel belonged, connected (now)
	- How to interact? / Roles? / Ready body language?	- Felt NEGLECTED sometimes
	- Knowing other people	
	- Being judged	
	- MAID is a small society	

fig. 9b





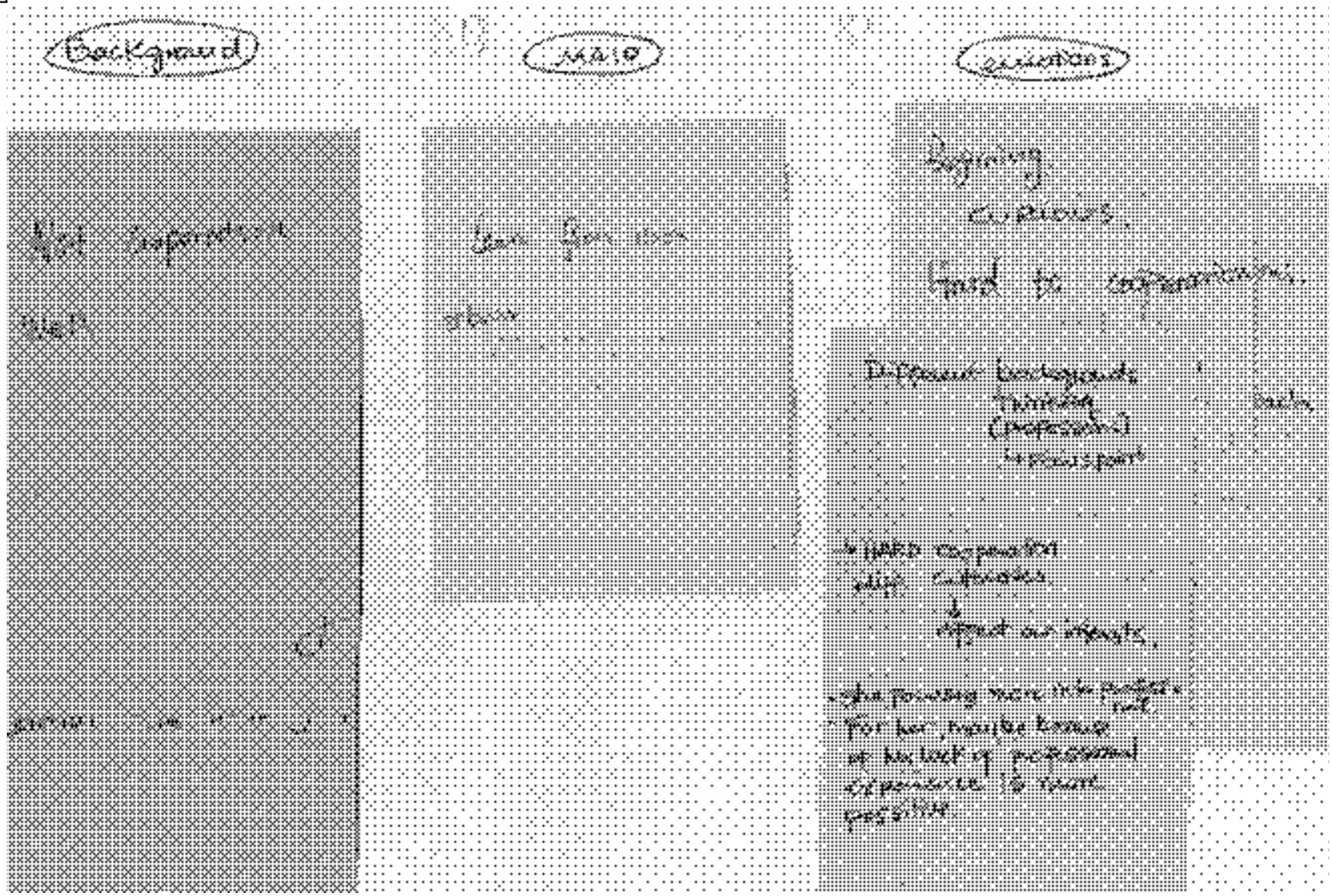


What happens in Vegas stays in Vegas 2				*Data taken during the last two weeks of October of 2016*		
FORMER INTEGRATED STUDIO - STUDENT	PROFESSIONAL EXPERIENCE	NO				
INTEGRATED STUDIO CLASSES	GENRE		PERIOD	W 2015 S 2016	CULTURAL BACKGROUND	EASTERN EUROPE

BACKGROUND *experiences before MAID*	- Bearly work in groups before	
	- Work more independent	
	- Challenging to get ues to it	
	- SURPRISE	
INT. STUDIO *experiences during MAID*	- AWESOME	- Cultural differeneces impact
	- Trusting	
	- Adapt	
	- Not used to it	
	- Share responsibilities	
EMOTIONAL REACTIONS	- [more] PROTECTED	- Humbleness
	- Trust	
	- Learning from each other	
	- FUN	
	- Listen to everybody	
	- Dealing with egos	

Making Sense of Conversations in [design] groups

fig. 9c


Background
Main
Extension

What happens in Vegas stays in Vegas 2					*Data taken during the last two weeks of October of 2016*		
FORMER INTEGRATED STUDIO - STUDENT	PROFESSIONAL EXPERIENCE		NO				
INTEGRATED STUDIO CLASSES	GENRE		PERIOD		W 2015 S 2016	CULTURAL BACKGROUND	EASTERN ASIA

BACKGROUND *experiences before MAID*	- Not cooperation	- Need a leader to control the group
	- Do not know the individual task	- Sharing ideas
	- Do not know each other well	- Communication
	- Different idea / thinking	- Personalities match
	- Good environment	- Need to understand what is the next step
INT. STUDIO *experiences during MAID*	- Learn from each other	
	- Sharing experience	
	- Sharing knowledge	
EMOTIONAL REACTIONS	- Different backgrounds / thinking / focus points	- An outcome is produced
	- Hard cooperation, different cultures	
	- Impact on personal interests	
	- Curious	
	- Get to know others	
	- Excitement	

fig. 9d

What happens in Vegas stays in Vegas 2					*Data taken during the last two weeks of October of 2016*		
FORMER INTEGRATED STUDIO - STUDENT		PROFESSIONAL EXPERIENCE		NO			
INTEGRATED STUDIO CLASSES		GENRE		PERIOD	S 2015 W 2015	CULTURAL BACKGROUND	CENTRAL ASIA

BACKGROUND *experiences before MAID*	- Big differences Country of origin (C.O.) vs Germany	
	- Germany: discussing ideas / brainstorming	
	- C.O.: not group work / not directions, topic	
	- Tended to overwork because there was not discussions	
INT. STUDIO *experiences during MAID*	- Respect others	- Helped to improve self confidence
	- Gender and cultural variety	
	- Not easy at the beginning	
	- Get to know people	
	- Then feeling comfortable	
EMOTIONAL REACTIONS	- Nervious	- Producing ideas
	- Uncomfortable	- Complementing
	- Shy	
	- Non confident	
	- Get to know people	
	- Respected	

fig. 9e

SESSION 2

Data taken during the first two weeks of November of 2016

GROUP #	1	CONTEXT: Classroom - MAID Building
EMOTIONAL STATE [MANIFESTED]	BEFORE	Expecting
	AFTER	Confident / Doubt (+)

VERBAL BEHAVIOR AND INTERACTIONS

Meetings can start with missingn members / The group discuss ideas / Use of humor for realiving tensions / They do not communicate in english inbetween / Narrative story telling for explaning advances to a missing partner / One member summarizes using the words: "axis of project","framing" / They can be totally focused not longer that 10 mins. / Polite but direct messages are transmited in between / More communicating than negotiating, in some instances / They refer to everyone, they are direct / One member is too direct, gives its opinion on others members approach, the rest of the group react / The group asks for "respecting other's moment of talking and similars.

PHYSICAL BEHAVIOR AND GESTURES

Some take notes / Narrative story telling for explaning project advances to a missing partner / Use sketches during discussion / Body language corresponde to the attitudes on their verbal messages (during different moments in the conversation: explaning, telling, discussing), they seem like close friends but also tension can be spoted in certain moments / They refer to everyone, they are direct / One member is putting itself slighty behind, taking distance in moments of discussion or design decisions / When all of them feel is too much tension (can be seen in their body language and tone of voice) they instinctively take breaks and spread in the room.

GROUP BEHAVIOR AND ROLES

Adoption of roles are evident in this group. There is also tension, some of the members are personaly alike. However they can alternate their roles accordningly to the context of the meetings.

CONVERSATION ROLES: LEARNER ⊛ INFORMER ⊛ CRITIC (+) ⊛ CRITIC (-) ⊛ COLLABORATOR ⊛ INICIATOR ⊛

PERSONAL SPACE

- In general: in between *Intimate Space (Far phase)* and *Personal Space (Close phase).*

- When critical moments of discussion, they negotiated going from *Personal* to *Social space.*

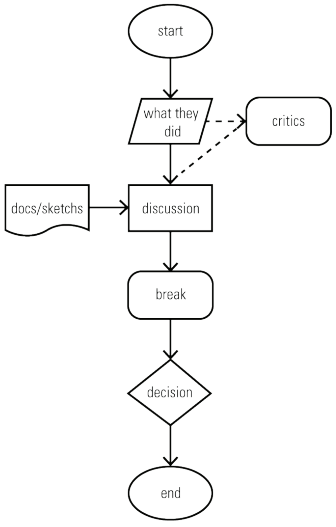
PEOPLE/SITUATIONS WHO STAND OUT

-The whole group stand at certain moments of the conversation.

-*Critic (-)* is more dominant and creates more reactions during the conversation than other team collagues.

- The *Learner* takes the mediator role, because is necessary, becoming *Initator* in special moments (like after a discussions).

CONVERSATION FLOW CHART



OBSERVATIONS

- A member asked other if today is "sad" due its attitude.

- Some members try to convince other (who gets defensive) of the idea they discussed earlier, after a while they flexibilize enough to convince it. Persuation can be felt like agressive.

- 3 tension moments in 40 minutes.

- When its too much tension they instinctively take a break.

- Communication flow: interrumpted, they do not listen each other completely.

- Breaks take longer than 15 mins.

- At least one member of the group do not want to get insights from outsiders to the project.

fig. 11a

SESSION 2

Data taken during the first two weeks of November of 2016

GROUP #	2	CONTEXT: Classroom - MAID Building
EMOTIONAL STATE [MANIFESTED]	BEFORE	Frustrated / Tired
	AFTER	Frustrated / Angry

VERBAL BEHAVIOR AND INTERACTIONS

Meetings usually start with some missing collagues / As long as the missing collagues are arriving, is evident that takes more than 10 mins. to get involved in the meeting / Everyone is polite enough, but there is not much talking when they are arriving / Is harder for some members to involve everyone in the meeting / At the beginning is evident a division in the group / Some members even arrive after 30 mins. / They tend to discuss the reasons for the meetings are not working for the group / They address issues but not concrete potential solutions.

PHYSICAL BEHAVIOR AND GESTURES

The ones that start to work seem coordinated but expecting for the rest of the team / When the team is all together they look uncomfortable / What they say is not matching with their body language / Body language shows tensions, specially in the first 10 mins. after the arrival of each missing member / Then the group looks more inclusive / Some members (the ones that were late) do not say much / They look like they are not in the same page / At least one member is not 100% in the meeting.

GROUP BEHAVIOR AND ROLES

They are splitted in two or three inner groups / Some roles are not present in the group, or at least have not been adopted yet.

CONVERSATION ROLES — LEARNER ○ INFORMER ✳ CRITIC (+) ✳ CRITIC (-) ○ COLLABORATOR ✳ INICIATOR ✳

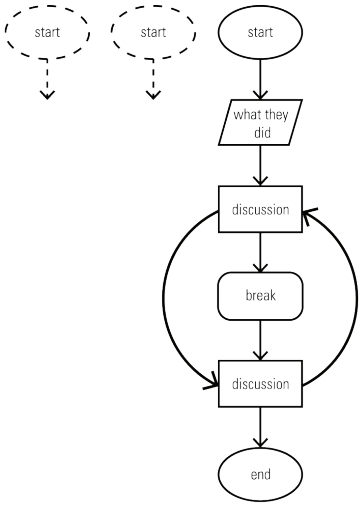
PERSONAL SPACE

- In general: is more common to find *Personal Space - Far phase*, ocassional *Personal Space - Close phase* (in the inner groups).

PEOPLE/SITUATIONS WHO STAND OUT

- Is usual that some members do not show their individual tasks (agreed in a previous meeting), they discussed about it, making evident some communication-design process missunderstandings.

CONVERSATION FLOW CHART



OBSERVATIONS

- Disjointed meetings. A lot of deep interruptions that did not allow to progress during the sessions.

- Missing conversation roles, in some cases are not even evident in some members.

- Lack of group/project/design mindset, or at least is not evident in the content of the conversation.

- They take a breaks, 10 to 15 mins.

- Meetings takes from 1,5 to 2 hours, but the progress done is not good enough (manifested).

- They are *looping*, by repeating same steps than in previous meetings, "not going forward" (manifested).

fig. 11b

SESSION 2

Data taken during the first two weeks of November of 2016

GROUP #	3	CONTEXT: Classroom - MAID Building
EMOTIONAL STATE [MANIFESTED]	BEFORE	Excited / Curious / Confused (+)
	AFTER	Excited / Curious / *+ adrenaline*

VERBAL BEHAVIOR AND INTERACTIONS

Members narrate their findings / Even when a member struggles to explain-narrate, the rest of the team supports, sometimes more than neccessary (to the point that the member that is narrating asks for more time to keep on explaining) / Polite communication / All members act and talk like really interested in what the other is saying / They complement with ideas and definitions to others proposals / They mix small talk during simple activities (like when they arrange their project-map in the wall), but always going back to the project conversation quite fast.

PHYSICAL BEHAVIOR AND GESTURES

They refer to each other, the group is inclusive and everyone looks quite into the project and the group / They can really focus into work / Body language show them really close and comfortable.

GROUP BEHAVIOR AND ROLES

They act like a group / They are polite, they do not know each other pretty well, sometimes they struggle "reading" the others attitudes / Roles are present in different moments of the conversation.

CONVERSATION ROLES — LEARNER ✱ INFORMER ✱ CRITIC (+) ✱ CRITIC (-) ○ COLLABORATOR ✱ INICIATOR ✱

PERSONAL SPACE

- In general: *Intimate Space - Far phase.*

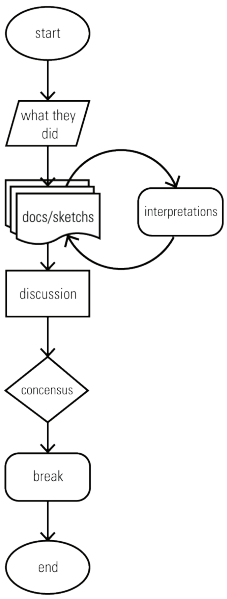
PEOPLE/SITUATIONS WHO STAND OUT

-Some members not always show their individual tasks (agreed in a previous meeting).

- Seems like there is not leader, is quite horizontal the structure of the group.

- Receptiveness.

CONVERSATION FLOW CHART



OBSERVATIONS

- Sometimes the conversation is not so fluid, but they try to keep the conversation and support it.

- All roles are present in different moments of the conversation.

- They seem to enjoy what they are doing.

- There is a clear mindset for experimenting.

- They took a breaks, no longer than 10 mins.

- Meetings take almost 1 hour, they usually end after the break.

fig. 11c

SESSION 2

Data taken during the first two weeks of November of 2016

GROUP #	4	CONTEXT: Classroom - MAID Building
EMOTIONAL STATE [MANIFESTED]	BEFORE	Interested
	AFTER	Interested / Very optimistic

VERBAL BEHAVIOR AND INTERACTIONS

They start the meeting presenting their tasks (agreed previous session) / Everyone listens / One member mediate in the process of presenting, this member collaborates to make clear the idea to everyone and summarize the most relevant comments on the idea / Everyone is ok with this "mediator"role / Communication is quite polite and serious / For several minutes there is an articulated communication / Sometimes during a serious discussion at least one member interrupt commenting a different thing, then the conversation takes other direction involving only some members / Other members try always to go back to the serious discussion they had before the interruption / There are members that talk not much than neccesarry and the rest are "talkative" / The conversation seems fluid and involving everyone / They refer to everyone in the group / They often use words like "cool", "nice" when talking about other member's ideas.

PHYSICAL BEHAVIOR AND GESTURES

Their body langugage in general show how confident they are and how commited they are in certain moments of the conversation / Also there is at least on member that gets nervious during the session, but seems like no one else sees that (or is normal already).

GROUP BEHAVIOR AND ROLES

They are quite polite and respectful in between / They reward themselves for their work in the group / Is really evident that they work for "insigths"/ All roles in a conversation can be found in this group / But not everyone become a "Critic", there is at least one member that is the "Critic" (+) and (-) according to the context of the conversation / The "Learner" is not so evident, only some members alternate this role / Everyone does its own tasks for the meeting.

CONVERSATION ROLES: LEARNER ⊛ INFORMER ⊛ CRITIC (+) ⊛ CRITIC (-) ⊛ COLLABORATOR ⊛ INICIATOR ⊛

PERSONAL SPACE

- In general: *Personal Space - Close phase.*

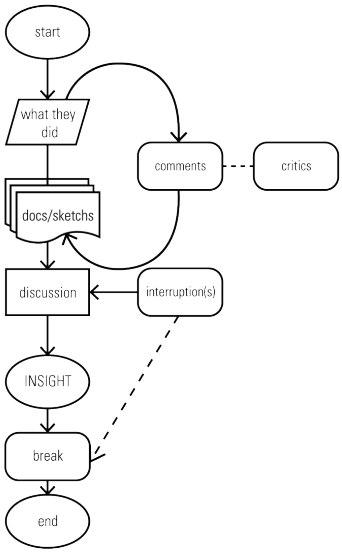
PEOPLE/SITUATIONS WHO STAND OUT

-One member took the role of "leading", thought is more a "Collaborator" and everyone seems to be ok with that, in fact helps a lot to the dynamic of the group. People trust this person.

- This group tries to plan in advance the meeting with their advisors for getting the insights they need (designing the conversation).

- There is at least one member that do not talk.

CONVERSATION FLOW CHART



OBSERVATIONS

- This is the most cultural-personality varied group, this may explain their intentions to keep everything as much polite as possible.

- This group counts with [professional] experienced people, that might explain the respect and trust they manifest.

- Sometimes the conversation is fluid, even when not all members talk or some members often interrupt it.

- All roles are present in different moments of the conversation.

- Everyone does its part, their tasks. Observing a couple meetings, seems like they compete (+) for bringing good ideas in good formats (they compliment each other for bringing "good work".

- The mindset is not 100% clear, but they work.

- They work to get insights, once got it, the conversation soon will be ended.

fig. 11d

SESSION 2

Data taken during the first two weeks of November of 2016

GROUP #	5	CONTEXT: Classroom - MAID Building
EMOTIONAL STATE [MANIFESTED]	BEFORE	Stucked / Qestioned / Friendly
	AFTER	Happy / Hopeful

VERBAL BEHAVIOR AND INTERACTIONS

Some meetings start with one member pointing to some issues it has been experiencing with the process they agreed to take / Is usual also that some members discuss group-project situations before all memebers arrive / One member becomes the "mediator"during discussions, trying not to take part but supporting both sides of the discussion / Their language is direct but nice / They try to get in concensus / The discussion on the same issue extends long time, it seems like one member has to explain a lot and in different ways the same / Even when all members look attentive and are talking about particular common issues / The "mediator"help to interpret the situation and is the only one giving options to solve problems / The "mediator"is the only one not interrupted while talking / The discussions extend from 15 to 25 mins. / Reaching agreement is not hard for them, but defining and clarifying the issues / Everybody talks and is involved in the conversation.

PHYSICAL BEHAVIOR AND GESTURES

One member arranges the place of the meeting / Everyone gets ready (printing, organizing their tasks) / They are sitted close to each other / Their body language match their behavoir and speech during all phases of the conversation / The "Collaborator"(mediator) is the only one that changes sitting possition (and body language) during discussions (usually stands up or seat in other place where the others can be seen) / They do not push themselves to pretend there is not dissagreement / They push for making everything clear, at least some members seem to be more into that than the others / They refer to everyone in the group, no one is left behind.

GROUP BEHAVIOR AND ROLES

They are quite polite and respectful in between / There are a slight division in the group, they know they do things in a different ways, but that is not problem / They listen to each other, they are confident and do not hold things back in the group / All roles are present in different parts of the conversation, but only one person takes the "Collaborator"(mediator) / Is evident that at least one member will not take the role of "Collaborator"/

CONVERSATION ROLES: LEARNER ⊛ INFORMER ⊛ CRITIC (+) ⊛ CRITIC (-) ⊛ COLLABORATOR ⊛ INICIATOR ⊛

PERSONAL SPACE

- In general: *Intimate Space - Far phase.*

- The "Collaborator" is the only one that changes sitting possition during the discussions.

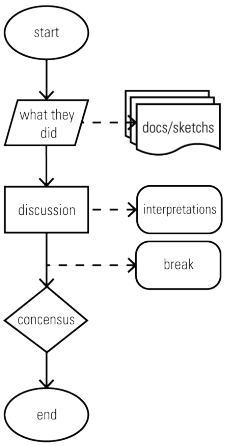
PEOPLE/SITUATIONS WHO STAND OUT

-The "Collaborator" is working hard.

- They speak in a language different than english.

- The member that uses to be "Informer"+ "Critic" creates presion in the group, a member manifests how necessary this pression is for the group.

CONVERSATION FLOW CHART



OBSERVATIONS

- Their personalities are similar and they are more friends that team members, but they struggle.

- Even when there is an issue addressed there is not a feeling of tension in between.

- They can focus in the conversation in a deep way, the conversation is fluid and everyone is involved actively.

- They do not take proper breaks, they just walk around, drink or eat something but the conversation is initated really quickly.

- At least one member tryes to get closer to the "Collaborator".

- Fast reaction to take back the conversation when there is an interruption, usually small talk (in 1-3 min. they go back).

fig. 11e

SESSION 2

Data taken during the first two weeks of November of 2016

GROUP #	6	CONTEXT: Classroom - MAID Building
EMOTIONAL STATE [MANIFESTED]	BEFORE	Stressed / Stucked
	AFTER	Stressed / Skeptical / Hopeful

VERBAL BEHAVIOR AND INTERACTIONS

Meetings can start with missing members, if the rest of the group agree on that / They talk close in confidence / Their communication is polite and friendly / But usually the conversation is interrupted to clarify logistic conditions (not project content like ideas, insights) / The conversations are structured in general terms, but they dedicate much time to decide how to arrange things / They listen each other but they are also very critic in between them, the critics usually come even before the member presenting the idea finish / Reaching agreement seems to be a major issue / Multiple same-time conversations might happen during the meeting / They give closure to the meeting.

PHYSICAL BEHAVIOR AND GESTURES

If a member arrives late to the meeting it takes more than 15 mins. in getting involved in the group / Sometimes the group do not make it easy for the person that arrives late or seems not to be in the "same page" / The body language shows what is not said or asked in the group / Not all members refer everyone in the group / At least one member of the group stays at its cellphone during the conversation / At least one member looks tired or not wanting to be in the meeting.

GROUP BEHAVIOR AND ROLES

They struggle acting as a group and coworking / They are organized and have an eye on every aspect of the project but it seems like they do not trust each other, so they over watch what everyone is doing / Not everyone is adopting or alterning roles in the group, this might be stressful for at least one member of the group (the one that became the "Collaborator" / They create methods to evaluate ideas, but it seems they do not progess much on that / They struggle much reaching concensus, even in the small details / They use soft humor-small talk as a tension reliever.

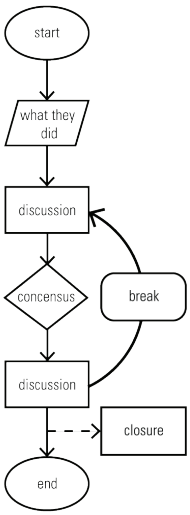
CONVERSATION ROLES — LEARNER ◯ INFORMER ✳ CRITIC (+) ✳ CRITIC (-) ✳ COLLABORATOR ✳ INICIATOR ✳

PERSONAL SPACE

- In general: *Personal Space - Far phase.*

- Sometimes is easy to see blocked spaces in between them (body language interpretations on making a part some member(s)).

CONVERSATION FLOW CHART



PEOPLE/SITUATIONS WHO STAND OUT

- They were not agree what the meeting was about, in more that one meeting.

- They are very similar, personalities alike.

- The "Collaborator"was a role taken by a person that usually is not related to that possition (manifested). The "Collaborator"is also "Initiator"and "Critic".

- The "Collaborator"has a lot of work in this group.

- The rest of the group identifies with "Informer"and "Critic" role.

OBSERVATIONS

- The is apparent tension in between some members.

- The fact a member is late, or not in the "same page" can be an evident dissapointment to some members of the group.

- The conversation flow is constant, they can talk for periods of more than 20 mins. but they constantly loop in "simple"issues that should not take that long (logistic ones like organizing data).

- They take breaks, the "Collaborator"is the one suggesting them, usually leaves the room. Everytime they feel stucked (happened twice per meeting)

- They struggle making decisions and they do not contribute to other's ideas but own.

- They take long time (more than 30 mins.) to get in "group mode"for start working.

fig. 11f

SESSION 2

Data taken during the first two weeks of November of 2016

GROUP #	7	CONTEXT: Classroom - MAID Building
EMOTIONAL STATE [MANIFESTED]	BEFORE	Confident / Expectant
	AFTER	Confident / Expectant / Excited

VERBAL BEHAVIOR AND INTERACTIONS

The meetings start with members trying to remember what they did last meeting, they check their notes and summarize content / They ask each other (as a way to clarify) where they are / They try to set objectives for the meeting / They tend to move inmediately to ideas before setting the objectives of the meeting / They split the conversation in parts, mostly because objectives / They ask each other to make notes and record what is said / They propose methods for generating ideas / They are polite and friendly / They complement with ideas and definitions to others proposals, but also they are critic when necessary.

PHYSICAL BEHAVIOR AND GESTURES

When a meeting started with some members seated in front of one member, during the conversation they equal the quantity of members at each side of the table / Their body language match their speech and attitudes / They refer to everyone in the group / They try to prototype things while working / They can move from conversation to "hands on"without loosing track of their conversation.

GROUP BEHAVIOR AND ROLES

They act as a group / They adopt the necessary roles for the conversation, the only one missing is "Critic (-)" / They are an organized group and trust in each other / There is balance in the activities done by each member.

CONVERSATION ROLES — LEARNER ✱ INFORMER ✱ CRITIC (+) ✱ CRITIC (-) ○ COLLABORATOR ✱ INICIATOR ✱

PERSONAL SPACE

- In general: *Intimate Space - Far phase.*

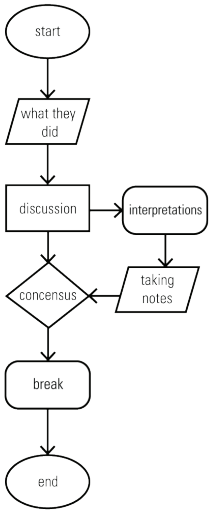
PEOPLE/SITUATIONS WHO STAND OUT

- They know they need to set objectives but they do not do it so easily, they navigate in ideas to go back to evidence they need to set objectives first, and so on looping.

- There is one member that acts more like a leader than the others, even when the rest of the group seems ok with that, is not an absolute leader.

- The "Learner" mixes also "Informer", seems to work that for the group.

CONVERSATION FLOW CHART



OBSERVATIONS

- Everyone in the group is good at giving ideas, so they can "get lost"proposing a lot of ideas even when they agreed doing other things first.

- They are empathic, respectful and patient in between.

- The conversation flow is constant, they can talk for periods of more than 30 mins. with out interruption.

- They took one break close to the end of the meeting.

- They can get into concensus easily, what seems a possible problem is the fact everyone provides or complements ideas constantly.

fig. 11g

SESSION 2

Data taken during the first two weeks of November of 2016

GROUP #	8	CONTEXT: Classroom - MAID Building
EMOTIONAL STATE [MANIFESTED]	BEFORE	Happy / Motivated
	AFTER	Happy / Trust

VERBAL BEHAVIOR AND INTERACTIONS

Meetings start with all members / They talk briefly at the beginning, they did not have documents or sketches with them / They discuss some ideas they had pending in the last meeting / They write down some ideas, and calculations / They make decisions while talking and arrange the next steps they must follow / They start building some of those ideas / During the construction of the models, they do not talk much, but they make sure of things during the process / Everyone is involved in the process / They complement other's ideas / Their communication flow is polite, friendly and close.

PHYSICAL BEHAVIOR AND GESTURES

They refer and interact with everybody in the group, and even other people in the room / The conversation is not closed only for the group, people come, see and talk to them during their session / There is music in the room and at least one member of the group dances while working, the others seem ok with that and the music /

GROUP BEHAVIOR AND ROLES

They seem to care about wanting to have a good time while working / They feel comfortable with each other / They seem to share a clear mindset (project: to experiment - personal: to have fun) / They seem to follow the same motivation(s) and sharing same mindset /

CONVERSATION ROLES: LEARNER ✱ INFORMER ✱ CRITIC (+) ✱ CRITIC (-) ○ COLLABORATOR ✱ INICIATOR ✱

PERSONAL SPACE

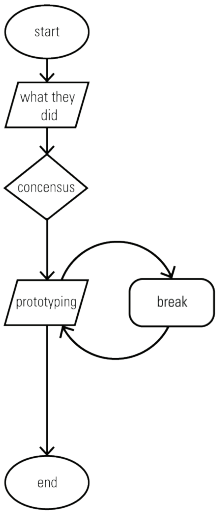
- In general: *Intimate Space - Far phase.*

PEOPLE/SITUATIONS WHO STAND OUT

- They go with the "flow"(manifested), they are not following a basic design process (step by step) but experimenting freely, in a more artistic way.

- Seems like there is not leader, is quite horizontal the structure of the group.

CONVERSATION FLOW CHART



OBSERVATIONS

- Everyone in the group is good at giving ideas, so they can "get lost"proposing a lot of ideas even when they agreed doing other things first.

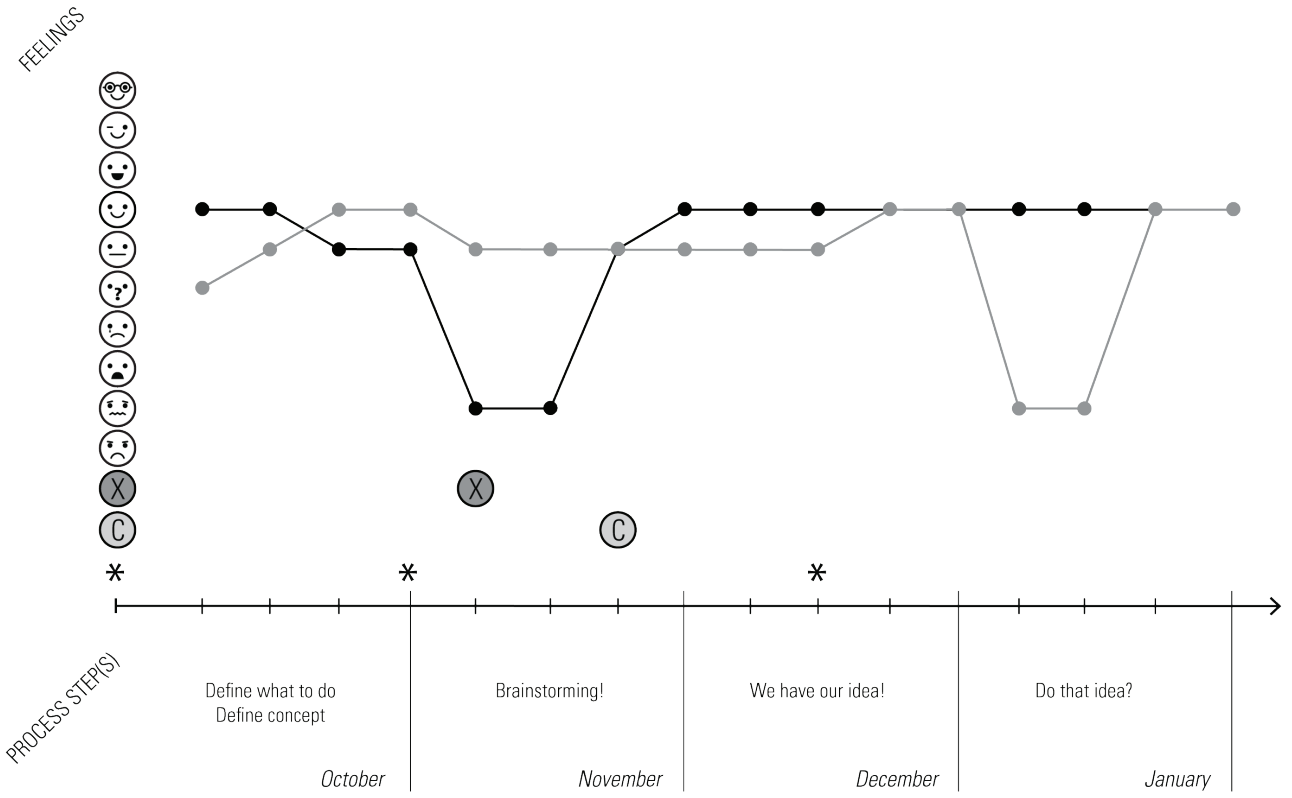
- They are empathic, respectful and patient in between.

- The conversation flow is irregular but there is conversation, they can do different activities while having the conversation.

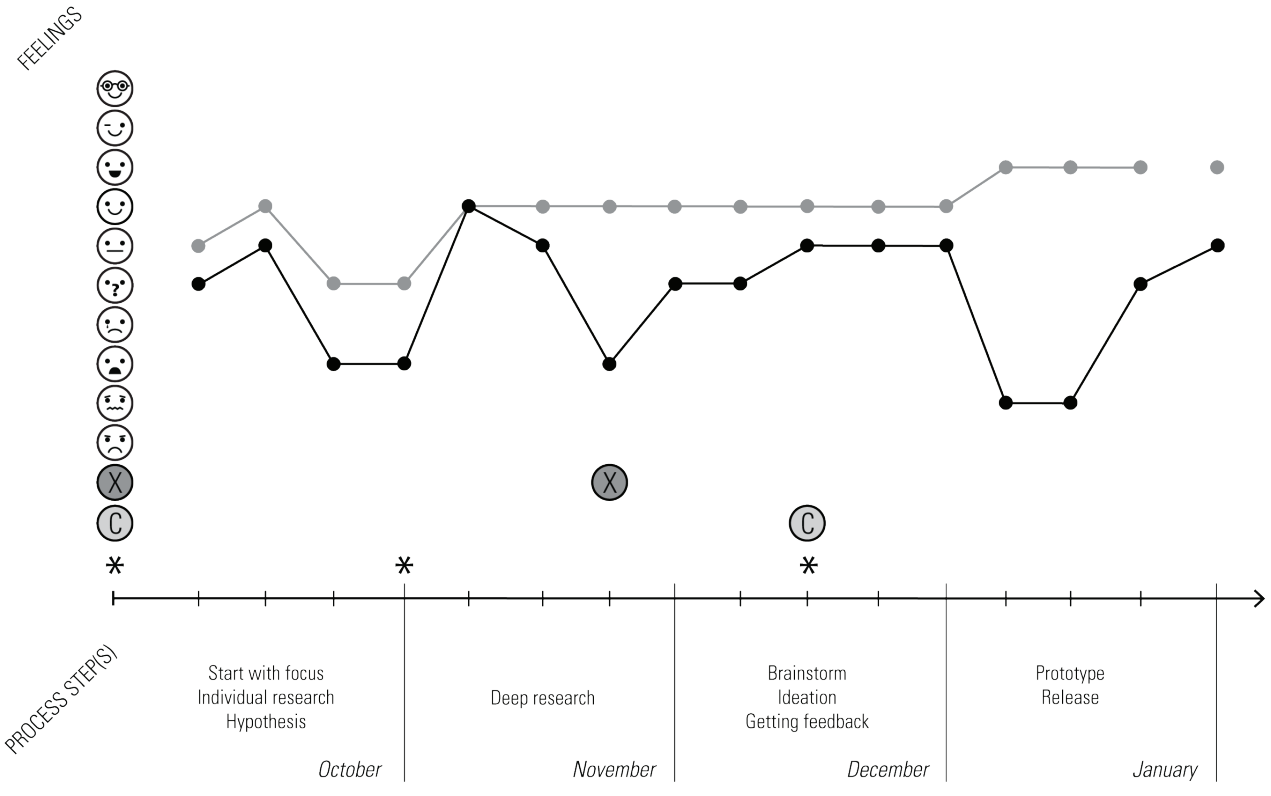
- They do not take proper breaks, if a member needs to go out it does it, the rest of the team can keep being at work.

- The new members of this group help to balance the relationship in between the ones that have worked together in the former studio (manifested).

fig. 11h

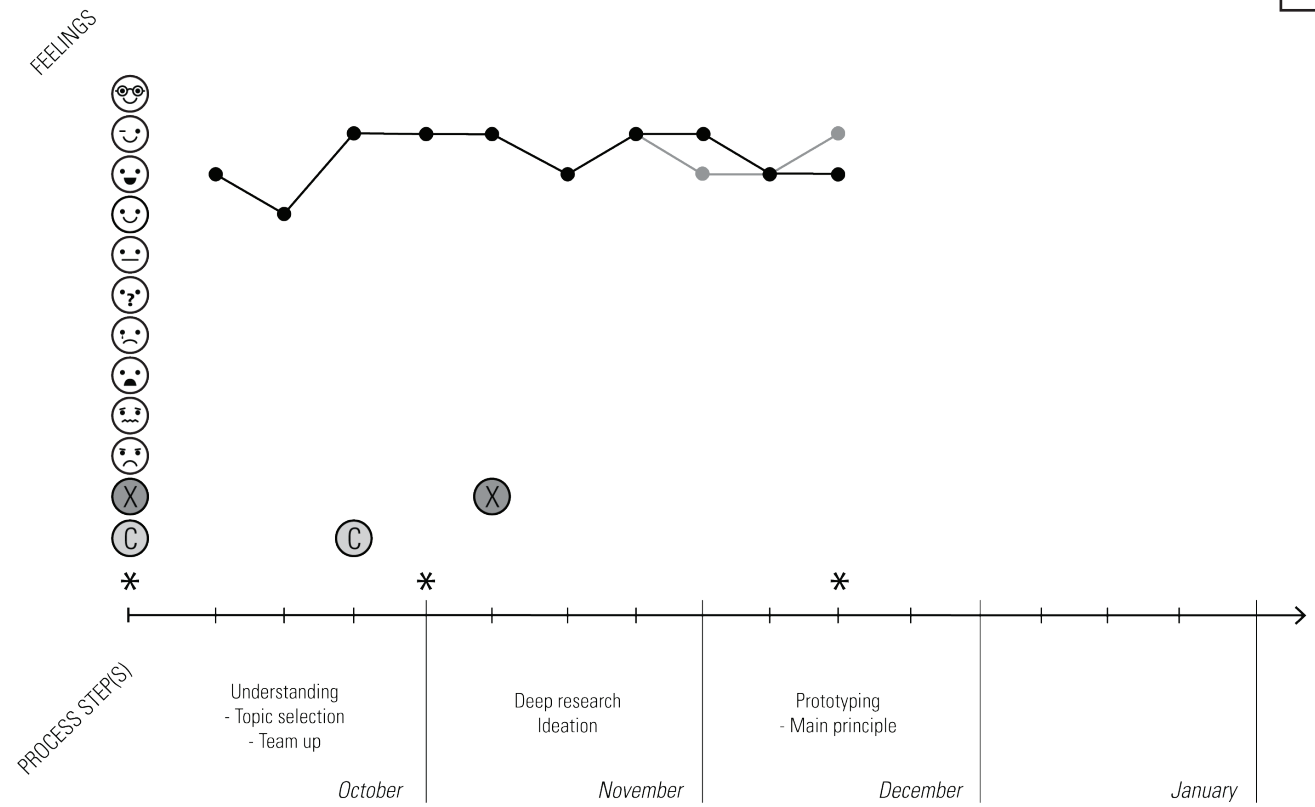


Group 1

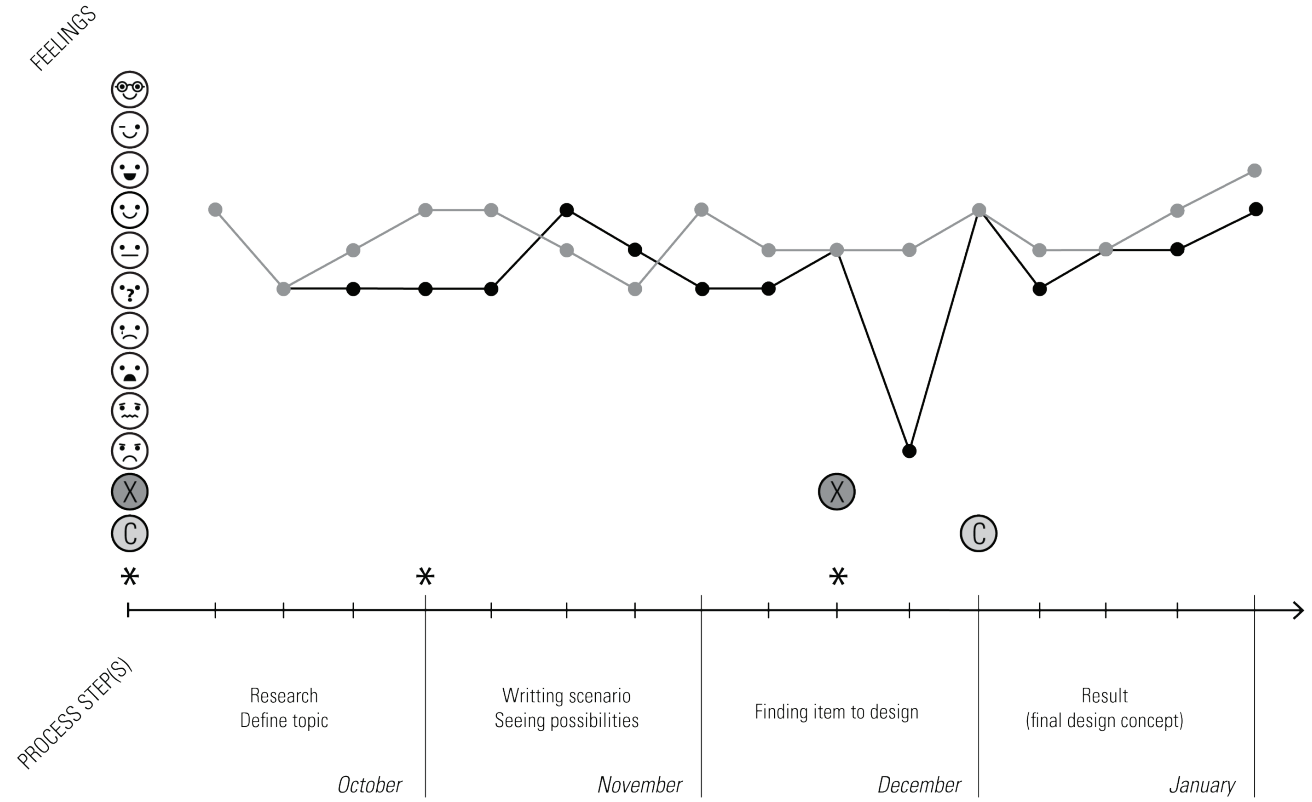


Group 2

fig. 12a - fig. 12b

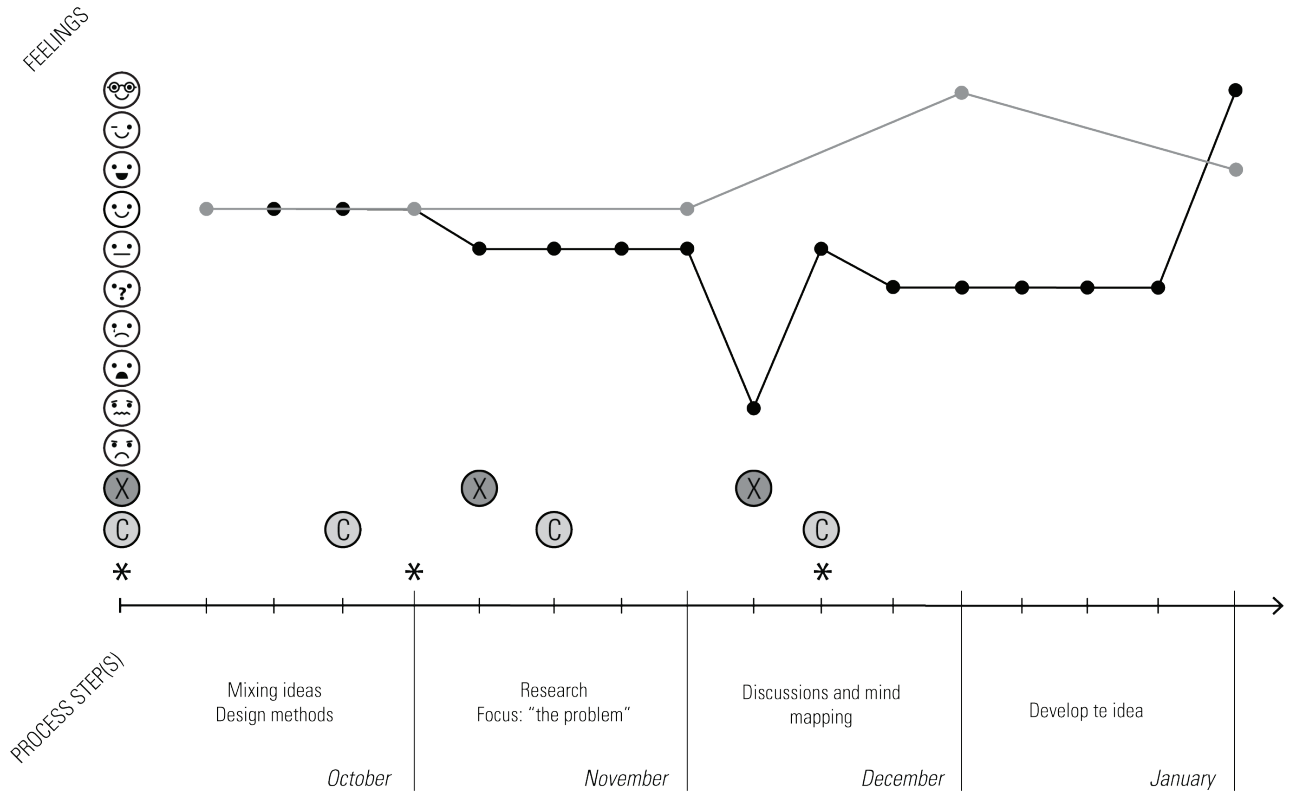


Group 3

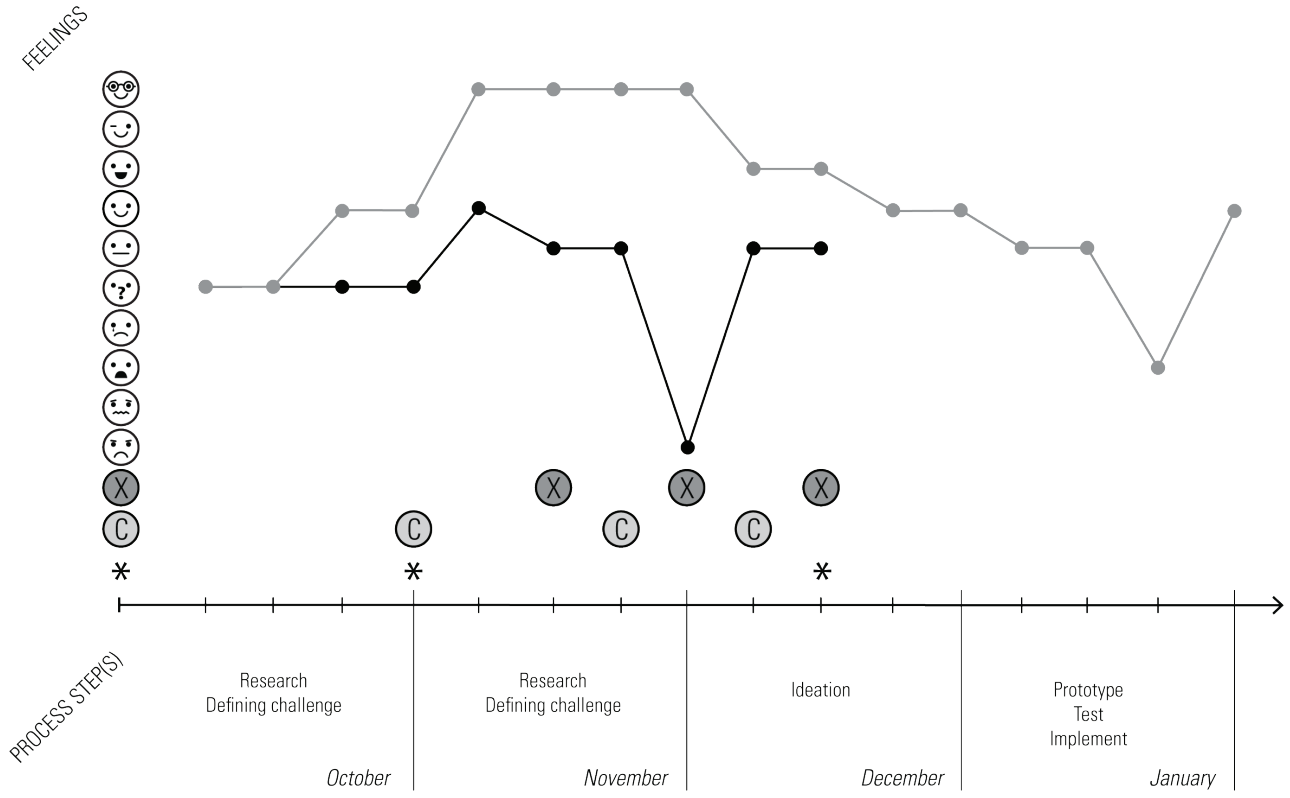


Group 4

fig. 12c - fig. 12d

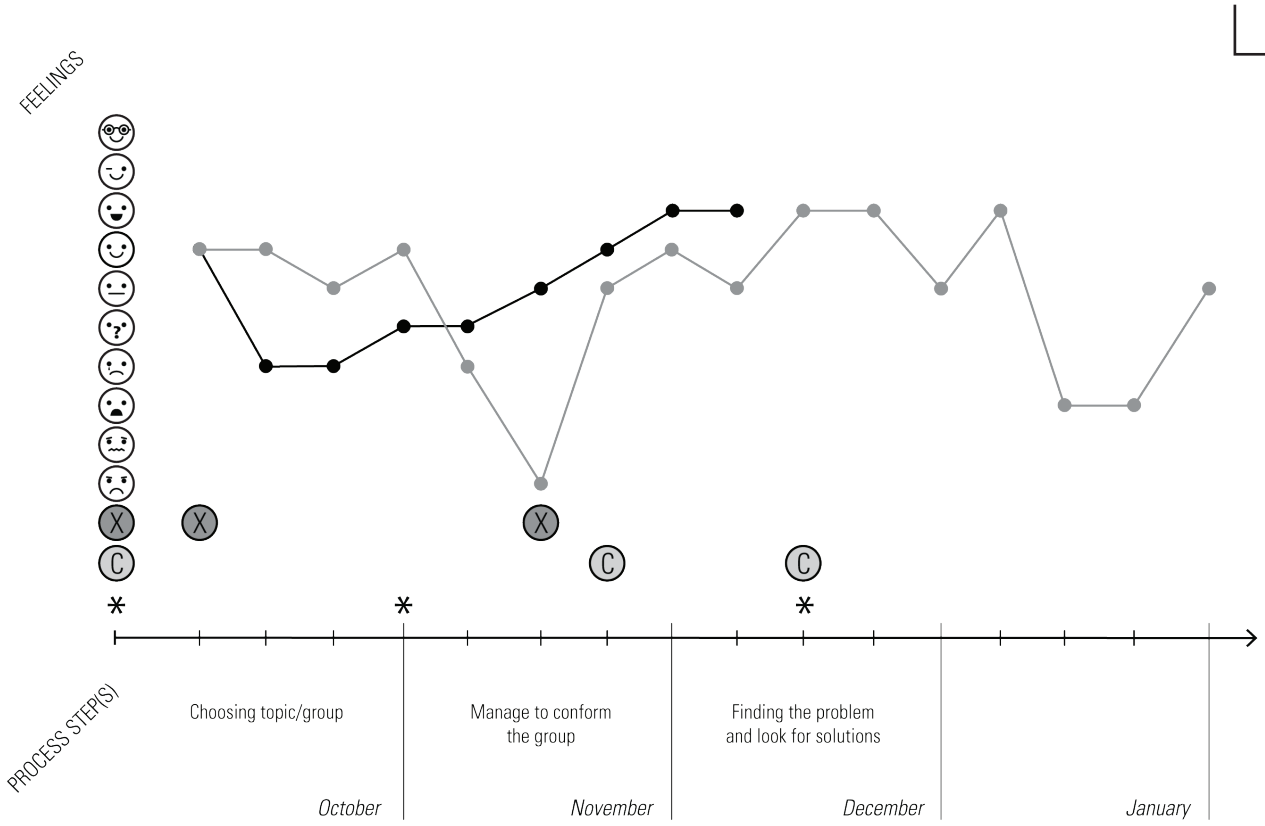


Group 5

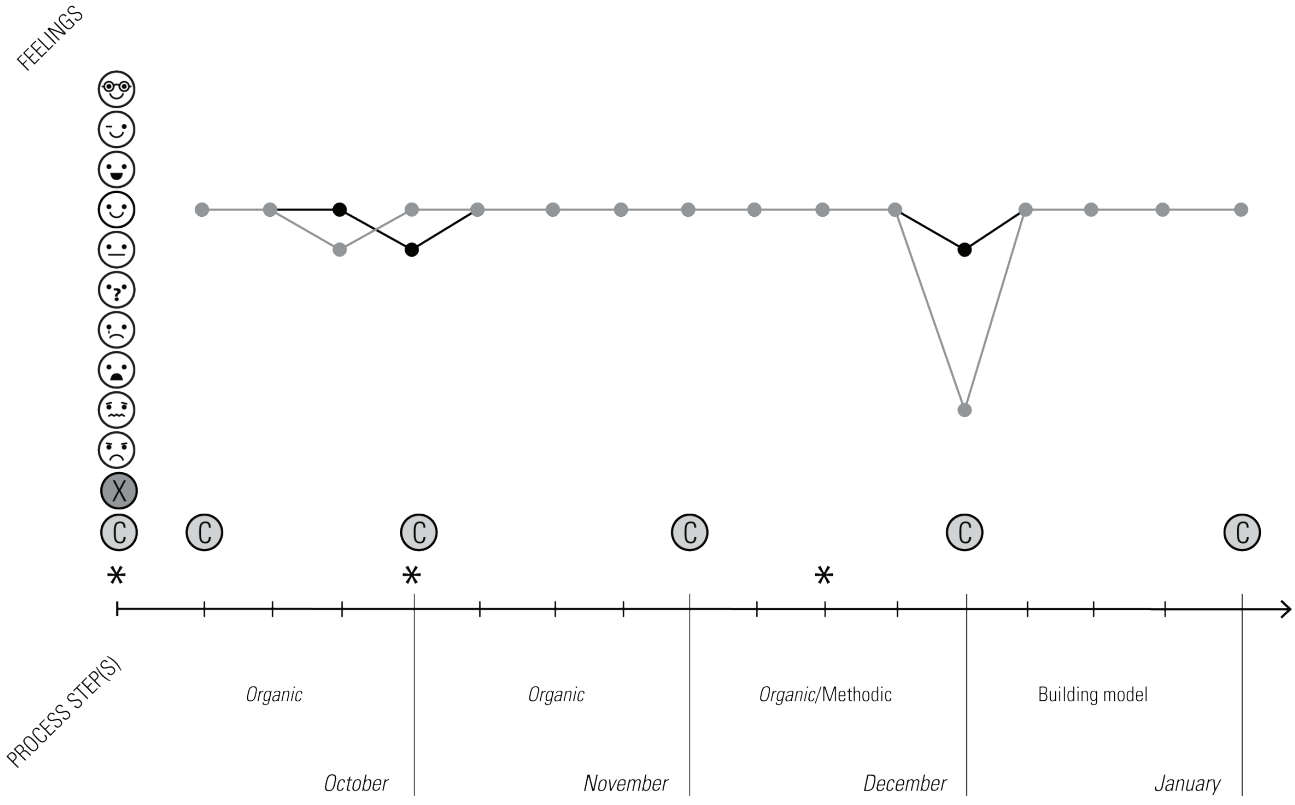


Group 6

fig. 12e - fig. 12f



Group 7



Group 8

fig. 12g - fig. 12h

Researcher Conclusions

Beyond the frame of the research, as conversations (communication) has been topic of my personal interest, through this process I could tell that we designers do a lot of work that, even ourselves, do not consider as “proper” work. We designers do not realize that our labor is not only bigger than we might think, but extensive and impactful, from our personal lives and relationships, to the outside or outcome.

About design conversations there is not much research made, but there is more than I intuited at first. “Zooming in” into design practices is a current concern and, I personally consider, that this particular moment in the world (almost permanent recesions, new kinds of power, people creating all kinds of communities, etc.) might the best moment to go deeper questioning about designers duties, and the possibility to generate shareble knowledge to all parties interested.

However, getting to the point of realizing the need of communicate *better*, it was not easy. For me finding the addequate words, to match with what it has been written about it, took a lot of time. In consequence, there is a tendency for this topic to be easier found into high academical circles, at least so far. At this point my personal interest grows. Because, **Making sense** of the “everyday things” can make a big difference in how we reflect ourselves, as designers, in all stages of the design process. Therefore, I am glad to find that there is a lot to do on design conversations, and that this research is just the beginning, for me.

References

Concepts Map - References (pag. XX)

1. and 2. Littlejohn, S.W. and Foss, K.A., 2010. Theories of human communication. Waveland Press.

3. Mcallister, W., 1995. Are pupils equipped for group work without training or instruction?. British Educational Research Journal, 21(3), pp.395-404. Vancouver.

4. Phillips, L.D. and Phillips, M.C., 1993. Faciliated work groups: theory and practice. Journal of the Operational Research Society, 44(6), pp.533-549. Vancouver.

5. Bartel, C.A. and Saavedra, R., 2000. The collective construction of work group moods. Administrative Science Quarterly, 45(2), pp.197-231.

6. Roberts, A. and Smith, K.I., 2002. Managing emotions in the college classroom: The cultural diversity course as an example. Teaching Sociology, pp.291-301.

7. Mesquita, B. and Karasawa, M., 2004. Self-conscious emotions as dynamic cultural processes. Psychological Inquiry, 15(2), pp.161-166.

8. Sanchez-Burks, J. and Huy, Q.N., 2009. Emotional aperture and strategic change: The accurate recognition of collective emotions. Organization Science, 20(1), pp.22-34.

Document References.

- Manzini, E. and Coad, R., 2015. Design, when everybody designs: An introduction to design for social innovation. MIT Press.

- Henderson, A. and Harris, J., 2011. Conversational alignment. interactions, 18(3), pp.75-79.

- Jones, P.H., 2010. ON MODELING The language/action model of conversation: can conversation perform acts of design?. interactions, 17(1), pp.70-75.

- Pangaro, P., 2016, Designing Conversations for Socially-Conscious Design, OCAD University and MaRS Discovery District, RSD5 Symposium, 13 - 15 October. Available from: https://vimeo.com/189864748. [November 2016].

- Creswell, J.W., 2013. Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications.

- Nigatu, T., 2009, Qualitative Data Analysis, slide presentation. Available from: http://www.slideshare.net/tilahunigatu?utm_campaign=profiletracking&utm_medium=ss-site&utm_ source=ssslideview [24 October 2016].

- Littlejohn, S.W. and Foss, K.A., 2010. Theories of human communication. Waveland Press.

- Bartel, C.A. and Saavedra, R., 2000. The collective construction of work group moods. Administrative Science Quarterly, 45(2), pp.197-231.

- Dictionary, O.E., 2004. Oxford English dictionary online.

- Lawson, B., 2012. What designers know. Routledge.

- Mcallister, W., 1995. Are pupils equipped for group work without training or instruction?. British Educational Research Journal, 21(3), pp.395-404. Vancouver.

- Phillips, L.D. and Phillips, M.C., 1993. Faciliated work groups: theory and practice. Journal of the Operational Research Society, 44(6), pp.533-549. Vancouver.

- Dubberly, H. and Pangaro, P., 2015. Cybernetics and Design: Conversations for Action. Cybernetics & Human Knowing, 22(2-3), pp.73-82.

- Schaefer, H., 2014. My workshop. Guide for designing workshops. [MAID Compact Week, 7 - 11 November 2016].

- Pangaro, P., 2011, Design for Conversations & Conversations for Design, CoThinkTank 2011 Berlin, 6 September. Available from: https://vimeo.com/28929535. [November 2016].

Declaration of Authorship

I hereby certify that this thesis has been composed by me and is based on my own work, unless stated otherwise. No other person's work has been used without due acknowledgement in this thesis. All references and verbatim extracts have been quoted, and all sources of information, including graphs and data sets, have been specifically acknowledged.

Date:

Signature: