

Social Interactive Dinner Event

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Abstract—Through research of social interaction, interaction methods and how to design for an interactive dinner, as well as researching state of the art experiences within interactions and dinners, it was found that little research was done on how to steer the conversations of the diners. Through iterative design and implementations an interactive dinner was created to test whether visual elements could steer the conversation into a wanted topic. The dinner event included priming, both physical and visual elements, an acting waitress and a theme-based menu. Due to long testing time, limited space in the setup and sponsored food, the collected data was mainly qualitative. A total of 8 participants were present at the test, and the results showed that changes in the visual elements also changed the conversations around the table. Though it should be noted that not all the different conversation topics can be connected to a specific visual element, as it was a combination of the different elements that created a change in conversation.

Keywords—social, interactive, dinner, plastic (pollution)

I. INTRODUCTION

For a long time, the audio-visual medium, especially documentaries, has been used to convey important information to the public. In the later years, a rising number of art installations focusing on the result of the public's actions have emerged. The desire is often to change the habits of the people as well as enlighten the individuals on the actual, or soon to be, reality of the world. Installations such as *The Last Ocean* [1], *Politicophobia* [2] [3], and *Washed Ashore* [4] use actual plastic waste to set focus on ocean pollution and its consequences.

As a new visual medium, dinner events are being created, where there is being projected a story surrounding the dinner menu. For these events, visuals are created to accompany the food being served, e.g. in *le petit chef*, created by skull mapping [5], they project on the table a video of a mini chef making the dish, before the dish is served, to entertain the guests between and during servings [6]. Or similar to *le petit chef* there is table mapping [7], who create gourmet food, and show a video of a small chef going on an adventure to create the dish. These examples given the experience is created solemnly to entertain the guests, similar to going to a movie theater.

The more social aspect of dining is lost in the theatrical shows mentioned above, as they present a chef-centric model [8] where the diners are passive and observative. But what if an experience was created that gives information through visuals, similar to documentaries, but also encourage conversation during the dinner? This is a topic which has not been explored much. One example is the restaurant *Alchemist* in Copenhagen, where the guests get a holistic multisensorial dining

experience presented in different settings around the restaurant [9] [10]. *Alchemist* is a world-class restaurant, with focus on innovating food experiences [9]. To further explore the effect of visuals on conversation topics, this project aims at creating a social interactive dinner, where the visuals should be made to encourage conversation, and study whether and which visual elements can be used to steer the conversation to a specific topic, water pollution.

II. RESEARCH

Through this chapter different topics within dinner and social interaction will be explored. Furthermore, nudging will be explored to see whether any techniques from this can be used to alter a conversation. At last, the topic water pollution will be explained.

A. Interactions in a social setting

This part of the research aims at finding the best way to design and evaluate interactions in a social setting.

1) Social interaction

Social interaction is the interaction between people. It is mostly studied within dyadic interaction (in pairs) [11] [12], but also for triads or larger groups [12]. In a social setting with multiple people, it is important to understand the relationship between the individuals in the group. Whether the setting is meant to analyze one person and their relationship with the individuals in the group; multiple persons within the group; or if all the individuals within the group are important for the evaluation. [12]

Consumer-to-consumer interaction (CCI) is a form of social interaction, where the consumer's influence on other consumers' experience within a service environment is in focus [13]. Within social interaction and CCI the interaction itself is affected by the characteristics of the individual and the group [12] [13]. Where in CCI it is also affected by the service environment [13]. Studies have found both positive effects, such as increased satisfaction and enjoyment, and negative effects, such as experiencing undesired behavior, associated with CCI [13]. Social interaction is based on oral interaction, as well as bodily- [14] and affective behaviors [15]. The implicit social cues shown with posture, actions, emotions and so on are used to define the future interactions between individuals [14] [15].

In any case the relationship between the individuals is important for the evaluation. An important factor is the dyadic partner's effect on the individual's behavior. Depending on the nature of the actor-partner relationship, an example could be parent-child or peer-peer relationship, the behavior of the

All the food was sponsored and made by TopTaste.dk.

individual might differ. All types of interaction-relationships should be considered when collecting data. [12]

An example of creating a social setting for multiple people is the interactive digital installation “*Flowers and People, Cannot be Controlled but Live Together – A Whole Year per Hour*” (see Figure 1) created by teamLab [16]. This installation projects the visuals and reacts through sensors to the viewers’ actions [17]: when they stand still, flowers will bloom, and if they touch the flower it will die. This generative art changes according to the individuals, however each individual will bring a new experience for the whole group present at the installation. [16]

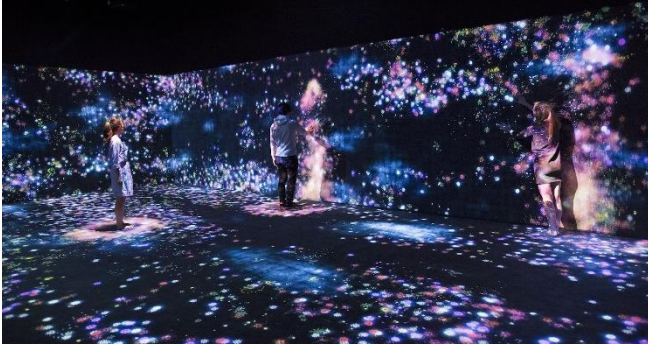


Figure 1 Image from the teamLab “*Flowers and People, Cannot be Controlled but Live Together – A Whole Year per Hour*” exhibition. [16]

2) Designing for interactions in a social setting

When designing these interactive social settings, different perspectives should be considered. In their study, Benford et al. [18] describe how discomfort can help with engaging people in themes that can be challenging, to create memorable interactions, and drive social bonding. They stress that the uncomfortable element should not be the goal, but a matter of making the experience more intense and memorable. They also mention important ethical considerations when putting people in an uncomfortable environment, especially when they are unaware of the forthcoming discomfort. This includes the right to withdraw at any point of the experience, or before a key point has passed; their privacy and anonymity in the data is held, and only the other participants involved in the experience can be aware of these; and to ensure safety both physically and emotionally. If these considerations are taken into account, it can be argued that the outcome of using short-term uncomfortable interactions can benefit enlightenment and sociality in the long-term, as well as increasing important knowledge through memorability. [18]

When designing an experience revolved around a specific topic, it can be an advantage to present the topic without connotations to let the participants relate to it in any way they see fit. This way of ambiguity in interpretations can produce more personal and meaningful interpretations, than what could be achieved by presenting the topic with an explicitly modeled message. It is also mentioned that blocking expected interpretations can open the mind to new interpretations. [19] Within CCI the most common motivation for attending events is known-group socialization, such as family and friends. Though other factors, such as meeting new people and experiencing a specific atmosphere is also a motivational factor. When designing events and CCI, Getz [20] [13] pro-

pose to follow the event design categories ‘theme and program’, ‘setting’, ‘services’, and ‘consumables’. These categories include considerations for activities, atmosphere, service quality, code of behavior, gastronomy, and staff. With these considerations, the participants’ desired social interactions should be identified, as well as it can be beneficial to communicate the code of behavior before the event, to align expectations. [13]

3) Human-food interaction (HFI)

Human-food interaction is a growing research field [21] [22]. The research is mostly focused on functionality and degustation, and less on socialization [21] [8], that is despite socialization being one of the key motivators for eating [8]. Wilde and Bertran [8] have researched playful gastronomy and found that ‘play’ is found in all social life. Play can also be used to educate people and can “help us make sense of the world we live in” [8]. Play is ambiguous, fun, self-rewarding, empowers criticism and imagination, and is found to be important even though adults often overpass it. Although socialization is closely connected to dining, and playfulness which could further enrich the experience. The gastronomic world often follows a chef-centric model, where the diners are passive, and the chef is taking the lead. Though there are some exceptions to this model, such as *Las especias* by ElBulli [23], where the guests have to guess spices, and *Balloon* by Alinea [24], where the dish is a floating sugar bubble. It is also proposed to engage the guests before the dinner, for example by mailing secret codes. [8]

The guests’ perception and enjoyment of the dining experience is affected by the food and drink itself, how they are presented and digested, as well as choice of colors, textures, sound etc. [22]. In the study, Velasco et al. [22] mentions research examples such as using food-related cues to evoke self-defining memories and using connotated audio-visual cues to change the perception of a given food or drink. These elements should be considered when designing a dinner event.

4) Interactive exhibitions

In museums and tourist attractions in general, technologies are being used to make the experience more interactive [25]. Having interactive experiences in museums seem to heighten the engagement in the exhibition for the guests [26] [25]. The interactive element can be done in different ways, such as having a tablet guiding the guests through the tour or manipulating the displayed items [25]. Though, the way the interaction is being designed it can also have impact on the social interaction among the guests. By having a tablet or wearing VR headset during the exhibit, might remove some of the social interaction as the experience will be more personalized and there will not be the urge to share the experience with others [26] [27] [28]. Often when there is the possibility to interact with the elements displayed by having a game related to the exhibition, through i.e., embodied interaction or having a big touch screen to interact with, often only allow one person to interact at a time which might not encourage interaction with other guests [28]. When being able to interact with the installations it is often also shown on a big screen, or being projected on the displayed elements, which might encourage interaction with other guests, or observation

of the other guests using the interactive elements [29] [28] [26]. A study, conducted in 2020, which researched the social interaction in different interactive settings, at a wine museum in Bordeaux [26]. At the museum they had different modules, where they had different kind of activities and interaction. Some of the modules consisted of having big screens showing video content, being activated by sensors, or being able to choose the content which should be shown on a big screen through a tablet. In the study they divided the different modules into four categories of experience: education-oriented, entertainment-oriented, aesthetics-oriented, and escapism-oriented modules. In the study they found that the guests shared their thoughts and ideas more with each other during the education-oriented and escapism-oriented modules. In these modules there were different interactive activities, where the guests could interact through big touch screens, or tactile activities. In the entertainment-oriented and the aesthetics-oriented modules the guest did not share their thoughts as much, as they felt these modules were better enjoyed in silence, as they were being more contemplative. These modules consisted of having large videos displayed or having audio. [26]

When designing an interactive experience which encourages social interaction, there should be focus on the possibility to share the experience with the other guests, e.g., by having big screens which show content that can be chosen by the guest through a touch screen, or making activities which is made for multiple people to interact at the same time.

5) Summary

The social interaction between the participants is meant to focus on a specific topic, and not specifically whether this topic means something definitive, positive, negative etc. It should therefore be considered to design with ambiguity and open interpretations in mind. Additionally, the topic in question, as well as the experience as a whole, should be memorable and hopefully enlighten the participants, thus introducing uncomfortable interactions within the design. When including interactive elements, these should have the possibility to have multiple people interacting at a time and having big screens showing the content to engage more people. The design should be built on CCI and event design, to ensure that the participants affect each other positively, and to create an event where the experience is positively influenced by the common motivators: known-group socialization and meeting new people. When choosing the food, textures and colors should be considered, as well as how the visuals and audio will affect how the food is perceived.

B. Nudging

This section will go through the definition of nudging based on R. H. Thaler and C. R. Sunstein's book *Nudge Improving decisions about health, wealth and happiness* from 2008 [30].

The human way of thinking and behaving can be divided into two systems: the automatic system and the reflective system. The automatic system is the lizard brain, the human acts without actively thinking of their action, an unconscious action. For example, if a ball is thrown at you, you act instinctively

to avoid or catch the ball, you do not have to make a conscious decision of whether to catch the ball or to avoid it. The other system, the reflective system, is the opposite of the automatic system. The reflective system is where you consciously think of an action to do or an answer to a question, e.g. when speaking in your non-native language your response time when speaking is slower, because you use your reflective brain to think of how to formulate the answer, whereas when speaking in your native language, the response time is faster as you are using the automatic system to answer. The reflective system is also the system that plans ahead. In daily life the reflective and the automatic system have a fight of what to do, do the smart thing which was planned or do the thing you want here and now.

Figure 2 Two cognitive systems [30].

<i>Automatic System</i>	<i>Reflective System</i>
Uncontrolled	Controlled
Effortless	Effortful
Associative	Deductive
Fast	Slow
Unconscious	Self-aware
Skilled	Rule-following

Figure 2 Two cognitive systems [30].

Nudging can be defined as changing people's behavior without them noticing or being aware of being changed, though still having options to choose from. The most optimal options are being made more compelling for the automatic system, through different techniques depending on the context of the wanted changed behavior. There are many different methods which can be used (see Figure 3 [31]), though as nudging is designed for social economics (marketing, selling products) only methods which can be applicable for this project will be explained. The methods which will be described are simplification, just-in-time-prompts, visual cues and priming.

Simplification is used to make decision making easier by removing some options or making the wanted option more available. This can be done by making simple text, highlighting important information, or making the wanted visuals in the eye movement [31] [32] [33].

Just-in-time-prompts also called JIT are notifications or a change in action when a certain action is, or is not, performed by the user/buyer to change their behavior, e.g. when a person has just scanned the barcode for unhealthy food, and a healthier alternative is shown [31] [32].

visual cues are used to get people's attention. A visual cue can be the color of a product, e.g., a healthier product has a light green label [31] [32].

priming is when you are exposed to subliminal stimuli that affect your response in a given situation. Example: exposure to seemingly unrelated words can get people to act in a certain way. Priming is when you expose the automatic system to

some words or questions, to get people to act in a certain way [30] [31].

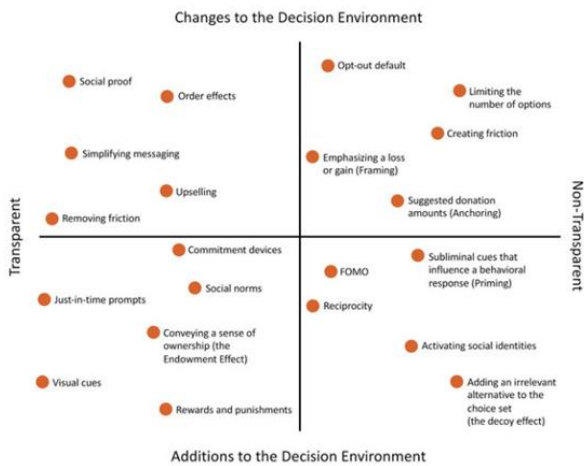


Figure 3 Matrix of nudging methods [31]

For artistic purposes nudging can be used to make people focus on the important elements in an installation, by e.g., using colors in different nuances to make attention go to this.

C. Theme

The theme is chosen from the FN 17 Global Goals [34], as these are topics which are important for the world. Also, the topic chosen should be something everybody has heard of, has an opinion about, and can impact by their actions. Therefore, this project will be focusing on a dinner event, the chosen theme for the project will be Life Below the Sea, and specifically focus on the targeted goal of reducing water pollution [35].

Water pollution has been a problem for many years. The consequences of water pollution are seen by having fish and other animals of the sea caught in different plastic, which can cause their death. The pollution also causes lower number of fish, as the waters become inhabitable for most sea creatures. Though, there have been some initiatives to reduce pollution e.g., by having the 3 R's, reuse, recycle, and reduction. One of the important initiatives is reducing plastic for packaging food, and it is made clearer for consumers which food has an eco-friendly packaging. [36]

D. Conclusion

Through research it is found that having to design for social interaction the feeling of being uncomfortable, can help make an experience more memorable. Having uncomfortable events happen in short bursts can help the social connection among the people but also help the memorability in long term. When designing the event, the story should not have connotation, to have people be able to interpret the story in their own way. Also, when wanting to create focus around a specific topic, nudging techniques could be utilized, such as priming, to plant small elements, before entering the event, to make people already think of the theme without being fully aware of it. Or using brighter colors for elements which should be in focus. When having to design for interactivity and still having socializing in focus, the interactive elements should engage multiple people at once.

When analyzing data from social events it is important to consider the relationship among the guests, as their behavior may differ depending on their relationship.

Based on the findings above, the following primary research question is proposed:

1. How can visual elements be used in a social interaction setting to change people's conversation to a specific topic?

And secondary research question:

2. How can bodily and affective behavior be used to support the multimedia experience, to have an impact on the conversation?

III. DESIGN

Through this chapter the design choices and how they were made to life in this project will be discussed.

A. The idea

The idea for the story was to make people think about the topic, while not making our intentions too obvious. The visuals were made to be semi abstract to make people think and have the possibility for people to make their own interpretation of the visuals. The story for the dinner is formed as the Freytag pyramid [37], not telling a completed story where people will feel a release at the end, but instead making people feel uneasy, to have them reflect on the experience. The acting of the waitress and how the visuals should unfold was created by Ani Kreyer. The story of the dinner can be divided into 8 phases, see Table 1 for an overview of what happens in the story and which visuals should be shown in the specific phase. At the beginning of the dinner the audio and the visuals will be calm, to make the guests feel at ease with both each other and the setting. The waitress will act as a professional waitress and present the menu for the evening. For the second dish, there will be spotlights on the plates, and ink will start falling on the plates, to create a feeling of unease. As the ink starts falling, plastic will also begin to fall on the background walls. At the same time the music will start to get weird. The actress will start to behave weird too and starts taking their plates with food still on it, and replace their glasses with plastic, to insinuate that there is being used a lot of plastic for dinners without thinking about it. In between the second and the third dish the table will become interactable. Spots will begin to grow from where the guests touch the table, and the table will be filled with spots where they move their hands over the table. While on the background there will be water foam. This is to make them feel uncomfortable. The third dish is made to look like there is plastic on it and is served on plastic plates. When the dish is served, a stripe will appear on both sides of the table to draw attention to the dish itself. The third dish will not be served with cutlery, but the waitress will come and throw them on the table, to make them again at unease. On the walls there will be shown plastic creatures floating around. After the third dish a video will be shown, covering both the table and the walls, with rapid images, and loud audio, to make the guests feel overwhelmed of the experience. See appendix A for images of the visuals throughout the dinner.

Table 1 Overview of the phases of the dinner

Phase	Story	Visuals
0	Guests being seated	Abstract colors
1	Waitress coming in and introducing the menu	underwater
2	The first dish is served	Fish coming
3	2 nd dish is served	Spotlight
4	2 nd dish taken halfway through	Interactive
5	3 rd dish is served	plastic creatures
6	3 rd dish is finished	video
7	After video	Calm sunset

1) Physical setup

The dinner needed to be held at a venue with limited external distractions, with room for back-projected screens around the table, as well as a projector hung from the ceiling, and space for the food to be cooked and arranged. The setup for the dinner was made in the lab Base.M at Aalborg University Copenhagen. The setup was made on a platform, enclosed by Molton on the sides and above. The table was placed in the middle of the platform, with a Samsung Free-style (LSP3B) projector hanging on the truss over it. Visuals were projected on three sides of the wall (the two long sides and one short side). For the projection on two of the walls there were used short throw Epson LS500 3D projectors, using back projection. For the last wall an Epson EB-PU2010B was used. The two short throw projectors were chosen to get a large image within limited space, whereas the EB-PU2010B was chosen due to availability and space on one side of the room. For all the walls there were used the same type of projection screen. All the screens had different sizes, the big screen on one of the long sides being 6.6m. X 3.25m. and going to the ground. The opposite wall was raised a half meter above the ground and was 3.2m. X 2.1m. The last wall, at the end of the table, was 2.2m X 3.1m. Ideally, the projection screens across from each other should be the same size but were chosen as is due to availability. See Figure 4 for visualization of the setup.

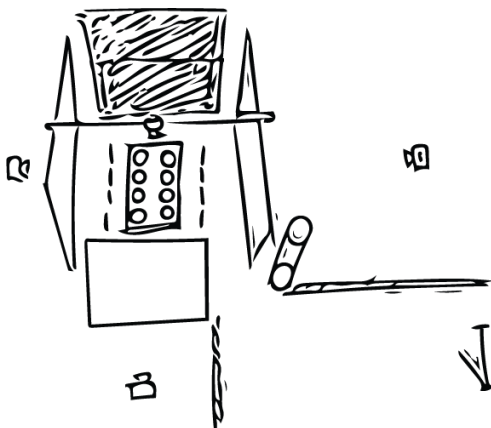


Figure 4 Illustration of setup

B. Implementation

This project has been mostly built and put together in the interactive design program TouchDesigner (TD). This program was used as it has a high diversity in opportunities for shaping projects, whether it be interactive or projection mapping, or just creating generative art.

The implementation of the visuals was made on two different computers, one computer for the visuals on the wall and one for the table.

1) *The visuals on the table* are divided into 8 different phases depending on the proceeding of the story. The visuals are being mapped to fit the size of the table, to not have the visuals projected beyond the table itself.

The visuals for phase null are abstract colors floating around, this is both projected on the table and the walls. The abstract colors were made with a shape moving around in feedback loops to create the feeling of the shape floating around.

The visuals for phases 1 and 2 are made to look like caustics with shadows of fish swimming across the table. The caustics were made in TD by having a normal map of noise, where the equation for calculating a refracted ray's intersection point is being applied in GLSL (see Figure 5). The white pattern for caustics is created by having multiple refracted rays with the same intersection point, creating brighter spots.

```

6 out vec4 fragColor;
7 void main()
8 {
9     vec3 surfaceNormal = texture(sTD2DInputs[0], vuv.st).rgb;
10    vec3 lightDir = vec3(0,-1,0);
11    vec3 refracted = refract(lightDir, surfaceNormal, 1.0 / 1.33);
12    refracted = normalize(refracted);
13
14    //build our intersection plane
15    vec3 planeNormal = vec3(0,1,0);
16    vec3 p0 = vec3(0,-0.5, 0);
17
18    //build our ray
19    vec3 ro = vec3(vuv.s, 0., vuv.t);
20    vec3 rd = refracted;
21
22    float t = -dot(ro - p0, planeNormal) / dot(rd, planeNormal);
23
24    vec3 pIntersect = ro + t * rd;
25    vec4 color = vec4(pIntersect, 1.0);
26    fragColor = TDOutputSwizzle(color);
27 }

```

Figure 5 Refraction point of ray

The calculation done in GLSL is applied to a box in a render. The fish were made in Unity, where 2d drawings of fish have been put into a particle system and made to cycle through the drawings to make it look like swimming fish. The fish swimming in Unity has been recorded as a video and put into TD, to be placed on top of the caustics. See Appendix A, 3) for the visuals of the caustics with the fish.

The visuals for phase 3, the table has been made all black with white spotlights where the plate is placed. Halfway through the dish, a video starts with ink splattering on the plate. The fourth phase is happening while nothing else is on the table to create focus around the interaction. The interaction happens when the guests touch the table and there will start to grow circles from the point being detected. This phase is made by having a video feed input (from a web-camera placed above the table) where there is being applied the Harris corner detection. The corner detection is made with a Python TOP script using OpenCV, see Figure 6. Harris Corner detection consists of finding large variation in intensity in all directions of an image to find a corner. The function requires an input of a grayscale image in 32 float. There is being applied a Sobel filter (with 3X3 matrix) on the image to find the gradient values in each pixel in the input image. This is run through the image with a neighborhood with the size of 2X2. The results of the Sobel filter are run through an equation to determine whether the neighborhood contains a corner.

$$R = \det M - k(\text{trace } M)^2$$

$$\det M = \lambda_1 \lambda_2$$

$$\text{trace } M = \lambda_1 + \lambda_2$$

If the result for R is small it is a flat area, if R is below 0 it is an edge, and if R is large, it is a corner. The k -value is a constant between 0.04 and 0.06. The results of the Harris Corner detection will be a grayscale image with spots on it to represent the corners found, the stronger the certainty for a corner the brighter the spot. The result is applied to a `cornerSubPixel` function to get more precise results for corners. This function takes the centroids for each found corner and iterates through the image until a certain iteration or if the precision has been reached.

```

4 import numpy as np
5 import cv2 as cv
6
7 # press 'Setup Parameters' in the OP to call this function to re-create the parameters.
8 def onSetupParameters(scripTop):
9     return
10
11 # called whenever custom pulse parameter is pushed
12 def onPulse(par):
13     return
14
15
16 def onCook(scripTop):
17     img = op('null17').numpyarray(delayed=True)
18     gray = cv.cvtColor(img, cv.COLOR_BGR2GRAY)
19     # find Harris corners
20     gray = np.float32(gray)
21     dst = cv.cornerHarris(gray, 2, 3, 0.04)
22     dst = cv.dilate(dst, None)
23     ret, dst = cv.threshold(dst, 0.01*dst.max(), 255, 0)
24     dst = np.uint8(dst)
25     # find centroids
26     ret, labels, stats, centroids = cv.connectedComponentsWithStats(dst)
27     # define the criteria to stop and refine the corners
28     criteria = (cv.TERM_CRITERIA_EPS + cv.TERM_CRITERIA_MAX_ITER, 100, 0.001)
29     corners = cv.cornerSubPix(gray, np.float32(centroids), (5, 5), (-1, -1), criteria)
30
31     #scripTop.store('corners', corners)
32     #print(corners)
33     op('table1').clear()
34     for i in corners:
35         op('table1').appendRow(i)
36
37     img[dst>0.01*dst.max()]=[0,0,255,255]
38     scripTop.copynumpyarray(img)
39     return

```

Figure 6 OpenCV Harris corner detection

The points which are found are being made into a SOP particle system, by transferring the points found into a DAT list with x and y points. The points in the list are converted into a SOP node, which can be read by the particle system. The particle system is then applied to a TOP feedback loop to create the effect of the growing circles.

For the 5th phase the table is made all black, and when the first plate has been placed on the table a stripe appears on each side of the table to create focus on the dish.

The sixth phase, when the plates have been removed, a video starts both on the table and the walls.

2) *The visuals on the walls* are mapped to fit the three back-projected screens by dividing the output into three parts based on the pixel size of the projected screens. The information is taken from the monitor node, which provide resolution, screen position etc. for all detected monitors. This data is used in the container node, as shown in Figure 7.

```

X 0
Y 0
Width 1920
Height 1080
op('monitors1')[1,'left']-op('monitors1')['bounds','left']
op('monitors1')[1,'bottom']-op('monitors1')['bounds','bottom']
op('monitors1')[1,'width']
op('monitors1')[1,'height']

```

Figure 7 Adjusting the size of the container to fit monitor 1 in TD.

As phase 0 and 6 are described above, these are omitted here. In phase 1 a 4K video is played, the video is stretched to fit the 5760x1200 pixel width and height of the projected screens. This was not noticeable, and it was chosen to be kept

as it is. In phase 2 a pre-rendered video of different underwater landscapes is played. The video is in 4K and fitted to cover two screens (screen 2 and 3), and a part of the same video is repeated on screen 1.

In the third phase a visual shift is made, and a 5760x1200px pre-rendered video is shown. The video is made with still images of real plastic objects, such as bottles, straws, and a basket. These images are edited in photoshop to remove the background, then put into unity where 'bones' are placed on the image to create a wobbly effect when it is dropped to hit the bottom of the screen as well as other plastic elements in the scene. A video of the plastic falling is rendered inside unity, and then placed on top of an underwater background video in Premiere Pro in the right measurements (5760x1200px). This was done to get the feeling of plastic falling under water and building up on top of each other, creating a feeling of confined space.

In the fourth phase, the walls showed a simple pre-rendered video of ocean foam moving, and it was the same video on each of the three screens. This was done to move focus towards the table and the interactive part. In phase 5, a pre-rendered video of plastic creatures moving in the water is shown. The creatures are made from plastic bags and filmed from above, while being dragged through the water with a fishing line. This is masked on top of a video of water, recorded in the same place as the creatures, to get the same lighting and colors. In the final phase, phase 7, a 4K video, similar to the one in phase 1 is played.

All the visuals were put together in two TD files, where there could be switched between the different phases with either a button or a keyboard input. For the walls there were used the keyboard input to change as it was not possible to have the TD file visible while running the visuals. For the table there was used a button to change between phases, as the computer was placed too far away to use keyboard input. When one phase was running all the other visuals were set not to cook, for optimization to get a higher framerate. The switching between phases was made by having all the visuals put into a switch Top, which was controlled with a button through a script. The script controlled which inputs should be cooking and which index, for the switch Top, there should be changed to. See Figure 8 for a simple version of the node setup for changing between phases.

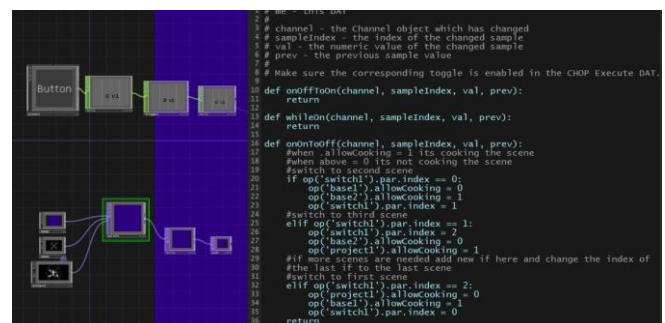


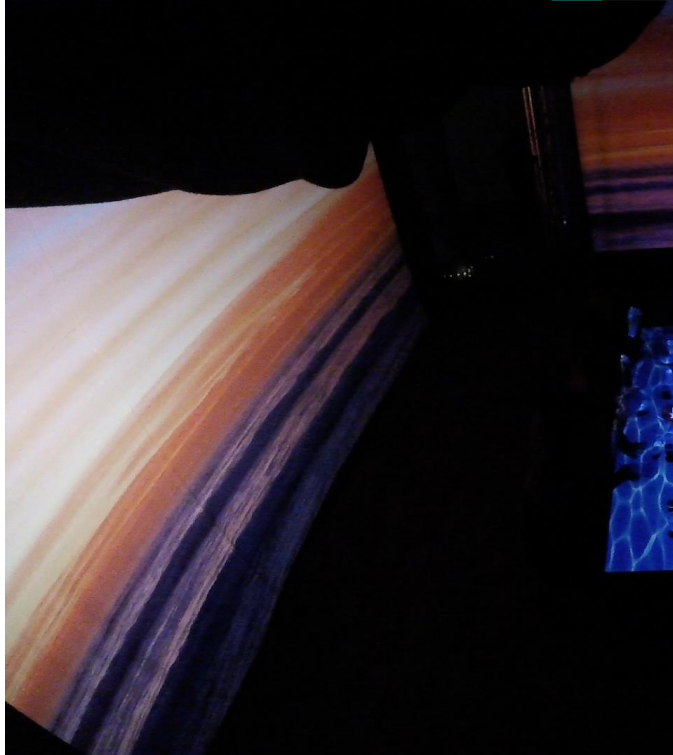
Figure 8 node setup for changing switch index

IV. THE DINNER

In this chapter, the dinner event based on the design and implementation mentioned above will be described. The methods, gathered data, and results from the event will be presented.

A. Method

To answer the RQ the data is collected through qualitative methods. The methods are inspired by the approach in [7] because of the focus on known group as well as unknown group socialization, during an event. First the participants are asked to consent and provide relevant personal information through an invite questionnaire (appendix B



) prior to the event. The chosen participants are provided with further information about the event, including date and time, as well as the overall test procedure. Second, the participants are asked to answer a pre-questionnaire (appendix D) when they arrive for the dinner. The intent is to get their initial thoughts on the research focus areas, and to use priming to affect the participants. Third, video and audio recording as well as observations are done throughout the dinner experience. At last, the participants partake in a semi-structured group interview (appendix F), with the intent to get their insights on the research focus areas after the experience. One conductor and one notetaker are present for the interview.

For the dinner a total of 8 participants were present, 4 known-group pairs. The known-group relationships included two couples and two sets of colleagues. These relationship types might bias the behavior of the individuals.

The participants were chosen based on non-probability self-selection sampling. The invite was shared on Facebook and physical posters were placed around Aalborg University CPH campus, letting the participants choose to volunteer. If they matched the pre-defined criteria (consent to video and audio recordings, and no problematic food allergies or intolerances) they would be chosen to participate in the study.

B. Data

1) Invite

The invite questionnaire was posted on the 30th of March with rsvp on the 17th of April. The planned participants (8 out of 8) had filled out the questionnaire beforehand, but due to illness on the day of the event, two of the participants had to cancel. A replacement pair was found, and because of the limited time they did not answer the questionnaire but provided oral consent instead.

All the participants (8/8) consented to the project requirements and have no food allergies or intolerances.

2) Pre-questionnaire

The participants were an equal mix of male (4/8) and female (4/8), within the age ranges 18-24 (1/8), 30-34 (1/8), 35-39 (1/8), 45-49 (1/8), 50-54 (1/8), and 60+ (3/8). Most of the participants (6/8) were motivated to participate because of curiosity and interest, whereas the rest (2/8) were motivated by others, e.g., a friend or wife suggesting it.

None of the participants (8/8) had tried an interactive or audio-visual dinner before, but most expected the dinner to be inspiring (1/8), exciting (2/8), and different (3/8) than what they had experienced before. The participants felt *fine* (6/8), *Nervous* (3/6), and *Looking forward to it* (1/8) to the social aspect of being seated with people that they do not know.

Most of the participants associated the ocean with neutral or positive words, such as beach (8/8), summer (7/8), blue (7/8), peaceful (7/8), and fish (6/8), whereas under half chose negative descriptions, such as pollution (3/8), plastic (2/8), dangerous (2/8), and rough (1/8). In general people chose a combination with 3 positive words and 1-2 negative words such as plastic or pollution. See appendix D and E for the questionnaire and answers of the questionnaire before the dinner.

3) Conversations during the dinner

The participants' conversations are analyzed from audio and video recordings taken during the dinner.

In phase 0 to 3 the participants talked about everyday things, such as: "*Are you English speaking or Danish*" ([38], 07M:12S), "*Where are you living?*" ([38], 17M:00S), "[...] *what are you doing?*" ([38], 22M:33S). The conversations were as expected about getting to know each other. The visuals were also mentioned, for example: "*They are so cool the fishes. I need it for my own table*" ([38], 21M:20S).

All the participants (8/8) talked less during phase 4 compared to the first phases. In this phase the participants got more uncertain about the following events of the dinner, one stated: "*I have... I suspect something. As soon as she came in, I saw it coming*" ([38], 53M:33S), another participant asked whether the others knew what to do now: "**translated* does it make sense, can you figure it out?*" ([38], 59M:47S). Also, the conversation was steered towards plastic pollution. One participant mentioned a program about the topic: "*I saw a program on this [...] deserted island, how much plastic. They found a shampoo they could use [...] and plastic bottles, eh, so they could boil their water and drink it and so on [...]. It was crazy to see how much*" ([38], 54M:14S). Another mentioned, while the waiters were changing their glasses to plastic cups: "**translated* You would die if you knew how many of those cups are being used a day*" ([38], 54M:08S). Some

of the participants commented on the visuals: *"I prefer the fish [...], it's not as nice (pointing at the table)"* ([38], 57M:15S), *"the landscape there, its strange [...], we have a pizza with, eh, foam on it"* ([38], 57M:20S), *"*translated* the picture is moving so [...] is moving so fast"* ([38], 57M:34S).

In phase 5 the participants were directly affected by the previous event of removing their plates, as one mentioned that they now have to eat fast, and all of the others (7/8) laughs and agrees ([38], 01H:00M:42S). The conversation topic was still focused on plastic pollution, but it was now more concentrated on the plastic used in the dinner, both physically and visually. One participant stated: *"do we want to use it isn't it that what all this is about"* ([38], 01H:01M:28S) when one of the other participants took a plastic knife from the middle of the table. Other statements included: *"[...] the screens, it shows plastic. Everything is plastic"* ([38], 01H:05M:38S), *"that's some interesting bite. Some sugar thing [...] and some plastic."* ([38], 01H:02M:54S), and one of the participants using the plastic cutlery stated: *"I guess it's easier for me because the plastic is going in the lower part."* ([38], 01H:05M:00S), referring to the wall. The plastic creatures on the walls were mentioned too: *"*translated* with some good will, can it look like a jellyfish"* ([38], 01H:05M:56S).

In phase 6 the participants mostly talked at the end while the visuals showed a video of waves, and the soundscape was lower and calmer. Here the conversations were about calm sounds and stress. In the final phase before the interview, the conversation was steered towards the sea, coasts, and boats.

4) Observations

The observations were done by analyzing the video recordings from the dinner, as well as from what is heard and noted from behind the scenes during the dinner.

In the beginning, only one participant is leading the conversation. After a while, more of the participants get comfortable starting conversations. They mostly talk together as a whole group of 8, though at times the participants talk in groups of four, in pairs across from each other, or they talk with who they came with.

In phase 4, when taking the plate, all participants (8/8) laugh nervously, looking confused and interested at what is happening. At the interactive part the participants look confused, looking around the room, trying to figure out what they should do. The waitress tried to move two of the participants arms across the table to show what to do. After this, more of the participants (5/8) tried to interact on their own. They did not understand it was interactive, and after the dinner they commented on discussing whether it was interactive.

After phase 4, where the waitress has taken the plate, the participants become more observant and silent when she enters the room. The first example is when she touches the table, to show the interactive elements on the table, all the participants watch her closely.

When the final dish is served, before any cutlery is given, some of the participants (3/8) start to eat with their hands. When both plastic knives and forks are given, two are using the cutlery, the rest (6/8) are eating the full dish with their hands.

At the fast-paced video, most of the participants (6/8) are quiet and look at the visuals. Two of the participants are talking until halfway through the video, then stop talking and join the rest in looking at the visuals. They are all looking at the walls, not the table.

5) Semi-structured group interview

Through the interview the participants were asked different questions about their experience with the dinner, see appendix F for transcription of group interview. It was observed, and noted by the participants, that most of them did not use the cutlery for the last dish. For this they were asked why they chose to use or why not to use. Two of the participants (2/8) chose to use it, one of them said they used it because they do not like to get their fingers dirty. All the other participants (6/8) did not use the cutlery, because they felt it was wrong to use partly because of how the waitress slammed the cutlery on the table, and partly because of the pictures that came up. One of the participants also noted that: *"It makes you notice how much plastic is like on the table now, and like a lot of people would just set a table like this. That makes you think."* (appendix F). They were also asked what visual elements they noticed and how it affected the conversation together with the audio. The participants answered they noticed the fish swimming on the walls and on the table. And they felt the conversation was steered by the visuals. The topics they felt they talked about during the dinner were each other's personal life, and in general they talked about topics concerning the ocean. The participants also felt that having the visuals and the audio during the dinner helped them get started in the conversation, and they felt they got more topics to talk about. One said: *"But I also think we talked more and quicker about things than if it just have been Celine Dion going"* (appendix F). When the participants were asked how the waitress actions affected the experience, they all felt that when she had a negative attitude it affected how they acted around the table, e.g., when she slammed the cutlery on the table it signaled that they should not use it. At the end of the interview, they were asked again what they now thought of when they thought of the ocean. They all answered with negative semantics. Some answered they would appreciate the ocean more, because of the pollution, and some answered that we are abusing the ocean with pollution. One said, *"you asked in the first questionnaire we got if we thought the ocean was infinite, it's really not we are polluting it and its not... it can't take all the pollution"* (appendix F).

C. Discussion of data

The actions of the participants were as expected guided by the known-group relationships. The participants chose to sit beside the ones they knew, and most times the known pair were included in the same conversations. One of the pairs were invited on the day, as described earlier, but the bias of missing early priming was thought to be limited, as most was planned to occur at the event. One of the pairs was known by the research group which might influence the way they acted and responded to questions. Though it can be argued that since they were both teachers and used to these kinds of tests, the bias is limited. The group of participants was mixed in

both age and gender. The group was also mixed in how outgoing they were. If it had been a group of people who in general don't talk much there might not have been as much conversation.

After the second dish was taken from the participants, they were getting more attentive to the surroundings. They were affected by the waitress, and each time she entered they would silence and observe her actions. They would start to second guess the meanings of the physical elements as well. For the last dish they chose not to use the cutlery, which was not anticipated by the research group. The reason for them not ending up using the cutlery, might be that it ended up being an ethical question whether to use the plastic cutlery or not, as both the waitress attitude and the visuals in the background had an impact on their choice.

The participants were having conversations for most of the time, the exceptions being while they were eating, when the waitress entered as explained above, and during the fast-paced video. The fast-paced video was accompanied with higher volume sound and thus made to stop the conversations, though two of the participants kept talking until halfway through the video. The reasons could be many, either they felt the conversation needed to be finished, the sound was not loud enough to stop them, or a whole other reason. This was not followed up and cannot be concluded further. The conversations in general were steered by the visuals, evoking memories, feelings, or thoughts about what is shown. Beyond this, it was reported that the visuals helped the conversation between them as strangers. The visuals are shown to directly affect the conversation, as well as create an environment where strangers can use the direct and indirect topics provided by their surroundings to have a basis common ground. The conversations evolved throughout the dinner to be more and more focused on plastic pollution. It is clear to see that as the intensity of plastic is growing, as well as more intense sounds are played, the participants focus on the negative effects of plastic. In the questionnaire before the dinner the participants all answered a combination of more positive words than negative (in general if 3 was chosen 2/3 were positive words). After the dinner all the participants answered that we had to take better care of the ocean because of pollution. The reason for this change might be because right before the group interview there was shown a video showing the pollution in the ocean, which might have affected their answer.

V. DISCUSSION

The intention was to introduce the theme in an ambiguous way to the guests, though this was not achieved. Some of the visual design was changed last minute without the time to test the effect, whether it would work as intended etc. The changes were made because of needed coherence, dislike of visuals, or missing elements. The visuals with the plastic were more negative than wanted, and thus also affected the participants to have a negative view on it. It is not known if they would have the same negative view if it was presented ambiguously as intended. It would be interesting to test this in the future.

For testing this project there could have been used a control group, where they did not have any visuals for the dinner.

This could have been done, to see whether there is a difference in conversation topics from having visuals on the table and walls, to not having any visuals. But, as there was a lack of time, as the location was also being used by other people, and funding for food, this was not possible to do.

The dinner contained different music and sounds to accompany the visuals. This was not further researched due to the focus on the impact of visual elements. Some considerations were put into the auditory space, though it was only shallow, focusing on the overall feeling, e.g., intense music for the fast-paced visuals. Only a few sound effects were added to the music. The group discussed other sound effects, though it did not become a reality due to time limit and focus priorities. It should be considered to involve music and sound at a greater level in future explorations of the subject.

Unlike the 'le petit chef' this dinner explored a more abstract approach to storytelling. Also, the visuals in 'le petit chef' are focused on the dishes, whereas in this project the visuals and the dishes are made to support each other. While both projects maintain the connection between the digital and physical, this project shows that it is possible to convey a heavy topic to the guests while they are having fun. Similar to restaurant Alchemist, this dinner was created with a holistic approach, where the visuals, dishes and the physical presentation support each other. Utilizing these factors can affect the conversation topics around the table, as proven through this project and at Alchemist [10]. This also shows that the holistic experience can be created in different ways and within different budgets. The most important overall factors are, according to this project, a comfortable physical setup, relevant visuals, an actress-waiter, and a suitable menu.

VI. CONCLUSION

For this project there was made a dinner experience having the social aspect, and the conversation topics in this, at focus. For the project there was found, through research, to get people to have a long-term memory of the topic, the dinner should include some discomfort. And, when creating a story for a social event the theme should be ambiguous to let people create their own interpretation of the event. Though for this project, the story ended up having a negative approach, which might have affected people of how they interpreted the event, as seen in the discussion.

Furthermore, it was found, that when wanting to make people aware of a topic without them being aware of it, there can be used nudging tools, for the visuals, such as priming, visual cues and JIT.

For the project there was created an eight phased story, which included both visuals on the table, similar to 'le petit chef' and 'table mapping', and visuals around the guests, similar to 'Alchemist'. Furthermore, the story also included having the waitress to act weird during the dinner, to make people confused and uncomfortable.

The test for the project was made with having 8 guests in 4 pairs, to have a mix of people who know each other and people they did not know. There was an equal mix in both gender and age for the test. During the dinner the conversation topics changed according to the visuals being shown, as expected.

Though, as mentioned, the story had a negative connotation this might have confined how the guests were interpreting the story, and their conversation topics. At the end of the dinner there ended up being an ethical dilemma of whether they would use plastic cutlery for the last dish. This was not an element which was foreseen by the group.

To answer the primary research question: *How can visual elements be used in a social interaction setting to change people's conversation to a specific topic?*

Visual elements can be used to steer people's conversation in a dinner situation. As the guests from the test said, the conversations came easier in this setting than compared to a 'normal' dinner setting with only music in the background. And, although the conversation topics were not explicitly about water pollution, a lot of the conversations they had were about memories or things associated with the topic. When making visuals to steer a conversation, there should be kept in mind, not to create visuals with explicit connotation, but having visuals open for interpretation, by e.g., having some of the visuals being abstract. This project also indicates that the visual physical elements such as how the tableware is presented, what kind is used, and how the setting for the room is, is important to help steer the conversation. Also, the way the waiter/waitress is acting towards the guests have impact on the conversation. See Table 2 for how each phase impacted the conversation during the dinner.

Table 2 The visuals impact on the conversation during dinner

Phase	Visuals	Pros/cons
0	Placed plastic bottles by the entrance. Abstract visuals on wall and table	Priming helped as it was mentioned after the dinner that the bottles was placed to prime them
1	Under water visuals on the walls, and caustics with fish swimming on the table	The guests mostly talked about each other's everyday life. Can conclude these visuals did not steer the conversation as wanted
2	Take their food and change cutlery and glasses to plastic halfway through the second dish. Visuals of falling plastic on walls, and spots with ink falling on the plates on the table	By replacing the guests' glasses to plastic, the conversation was steered toward plastic pollution, which means the physical visuals helped steering the conversation.
3	Visuals of moving water foam on the walls, and growing spots coming where the guest touch the table	The guest felt uncomfortable with the visuals of foam, and seemed like they remembered the foam after the dinner too. This indicates that by having uncomfortable elements helps to memorize the visuals. The guests did not understand the interactive table, this should either have been done in a more intuitive way or not be a part of the experience, as it did not encourage any conversation.
4	The third dish is served on plastic plates, and the cutlery of plastic is slammed down on the table. The visuals on the walls were plastic creatures floating around in water. The visuals on the table were a stripe on	Most of the guests chose not to use the plastic cutlery to eat with. And the guests were talking about plastic, both from the visuals on the walls and the dish itself. This seems to indicate by having the waitress behave badly with the plastic helped steering the conversation.

	each side of the table lighting up the plates	Creating spot on the dish, helped steering the conversation towards the dish itself, as it was mentioned by the guests it seemed like there was plastic on the food.
5	After the third dish, the guests were shown a fast-paced video of plastic pollution, both on the walls and the table	As the guest was not encouraged to talk during the video, it cannot be concluded whether this helps steering the conversation. But as the guests did not talk about plastic pollution after the video it does not seem to steer the conversation.
6	After the video there was shown a sunset by the ocean on the walls. On the table there was shown caustics	The guests started talking about the ocean in general and their experiences with it. This indicates that as the guests already are comfortable with each other, and have gotten to know each other in phase 1, they are more likely to talk about what comes to mind in regard to memories and stories, as you would sitting with a familiar group.

To answer the secondary question: *How can bodily and affective behavior be used to support the multimedia experience, to have an impact on the conversation?*

As mentioned above, it is important to consider using body-language to tell the story. It can be used both positively and negatively to affect how the guests perceive the food as well as the visual storytelling.

It can be concluded that a holistic approach also means that it can be hard to differentiate what specific visual element is the best to use, as they in combination have a powerful effect on changing the conversation in a desired way.

ACKNOWLEDGMENT

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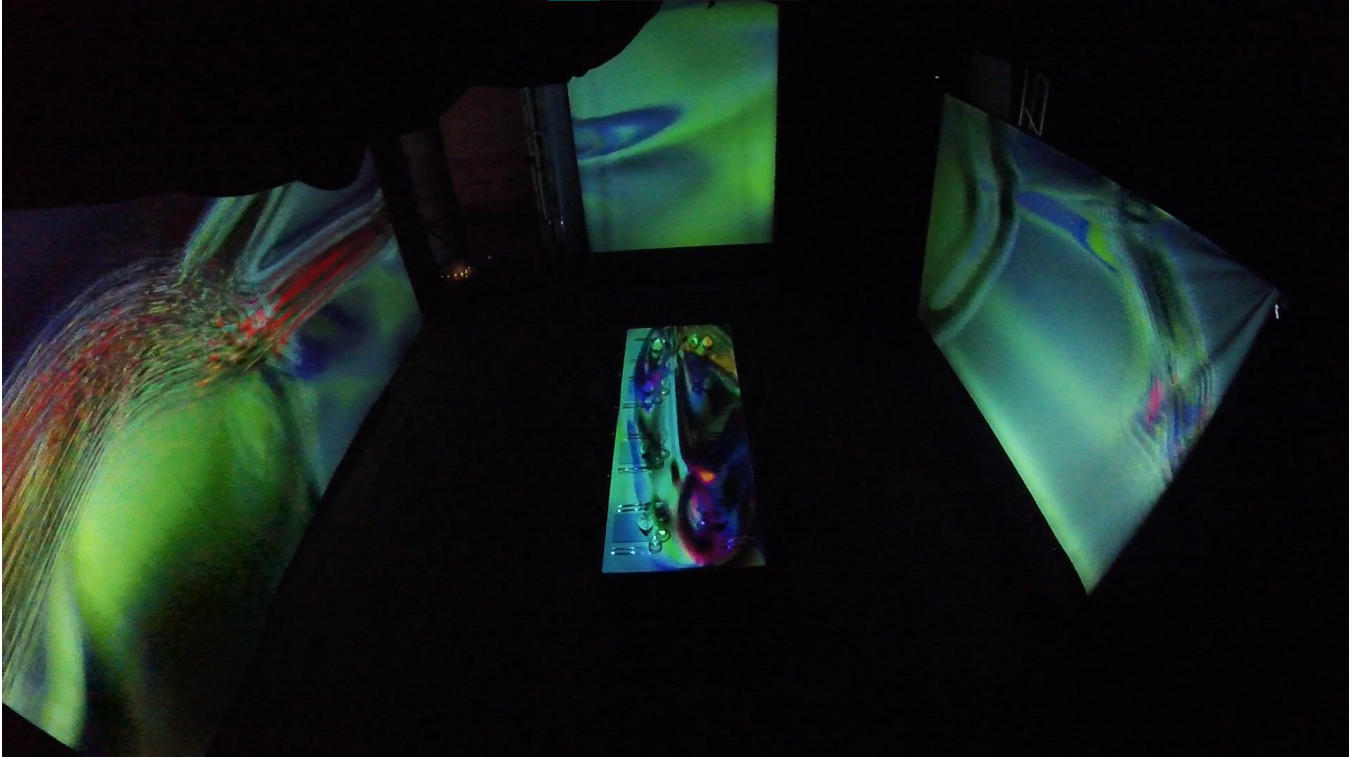
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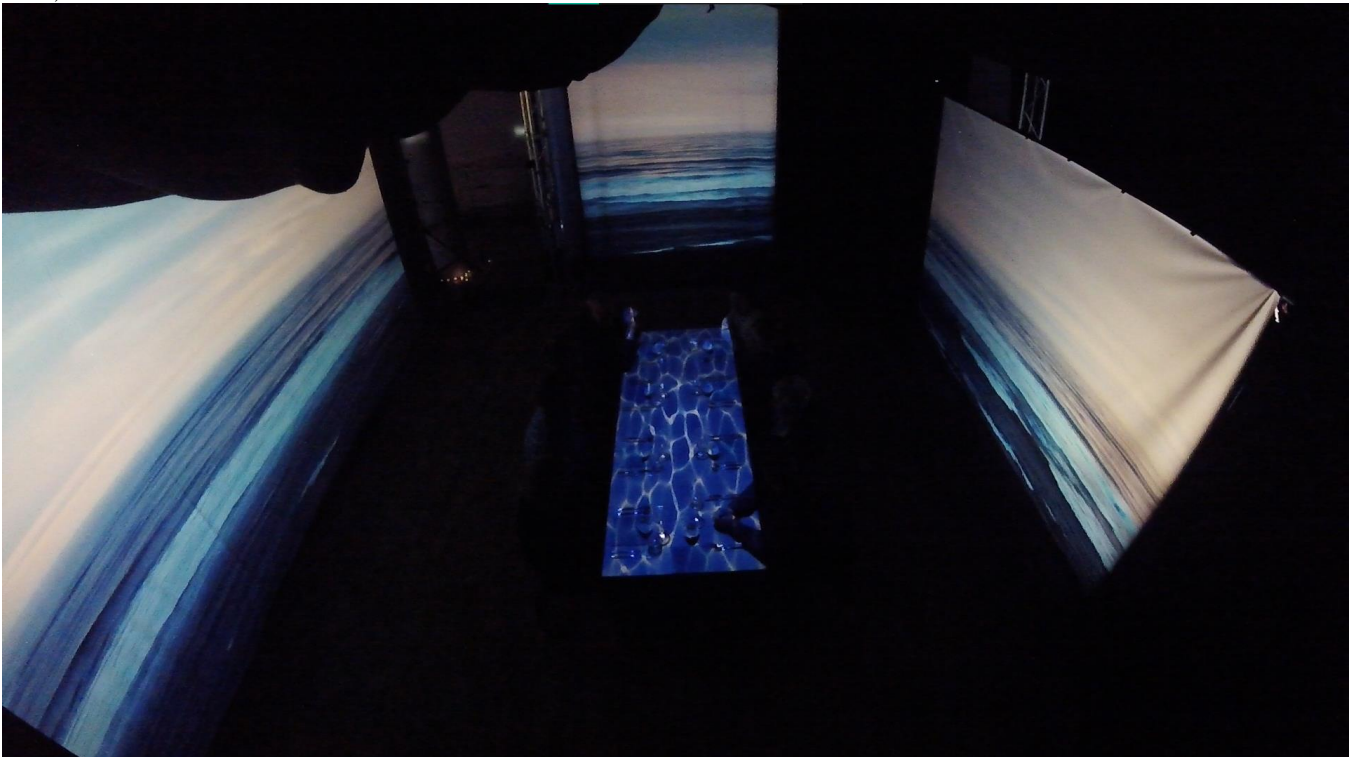
VII. APPENDIX

A. Visuals used throughout the dinner

1) Phase 0 – colors on table and walls



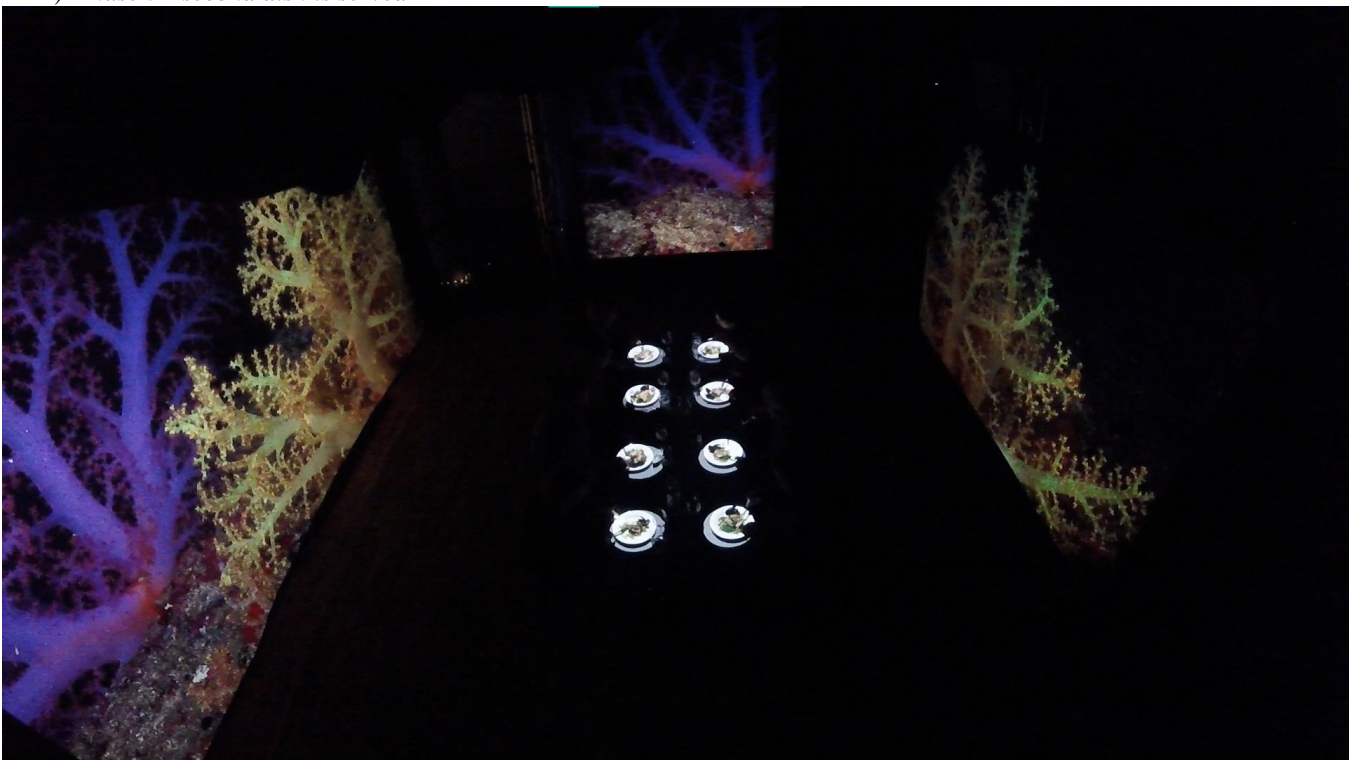
2) Phase 1 – calm and nice



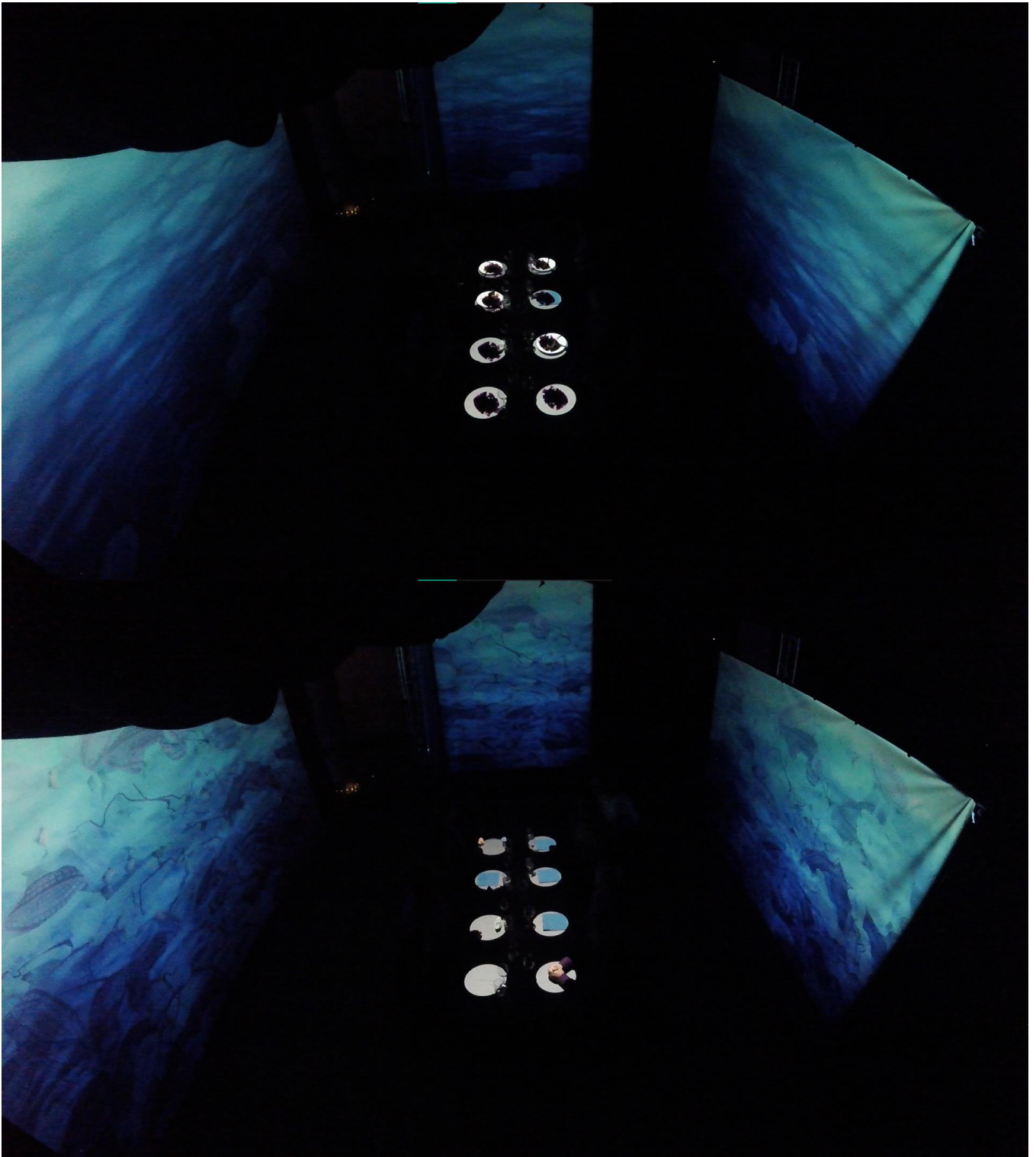
3) Phase 2 – first dish is served

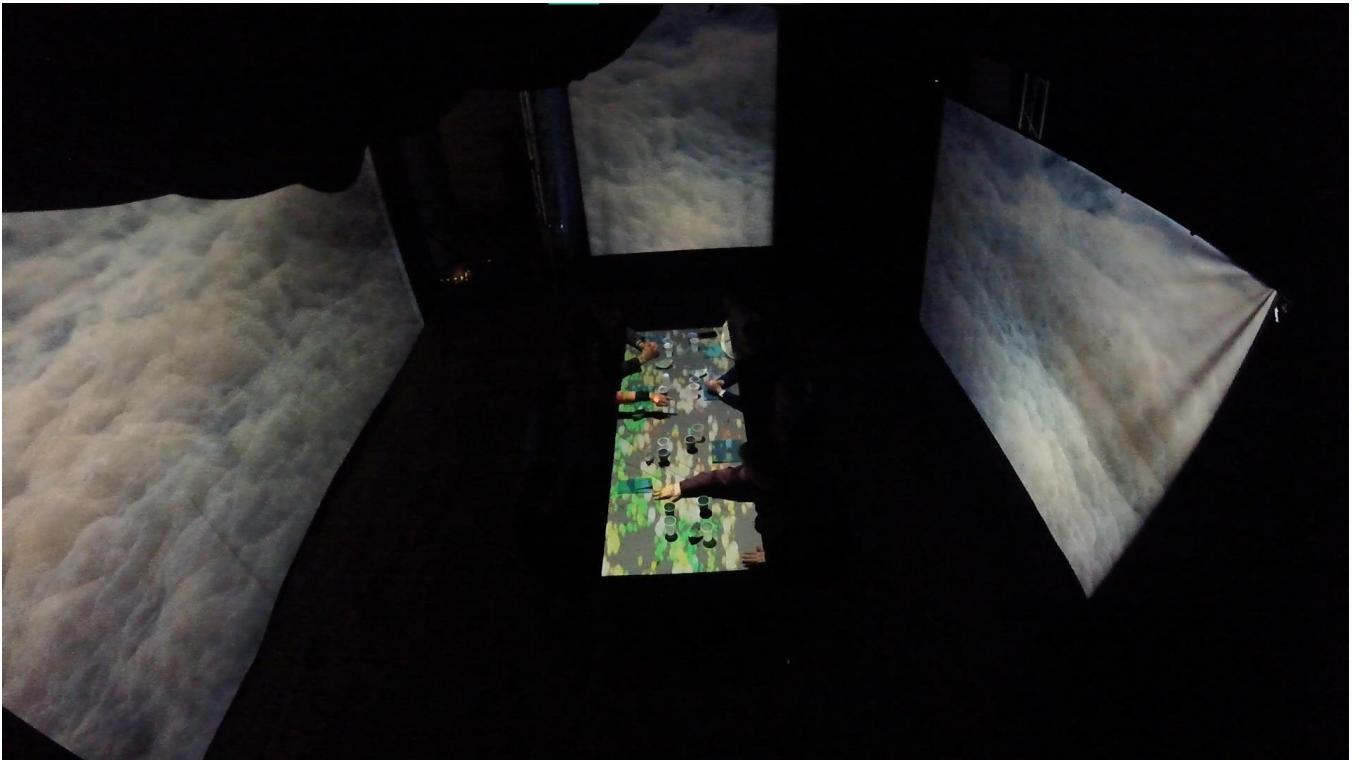


4) Phase 3 - second dish is served

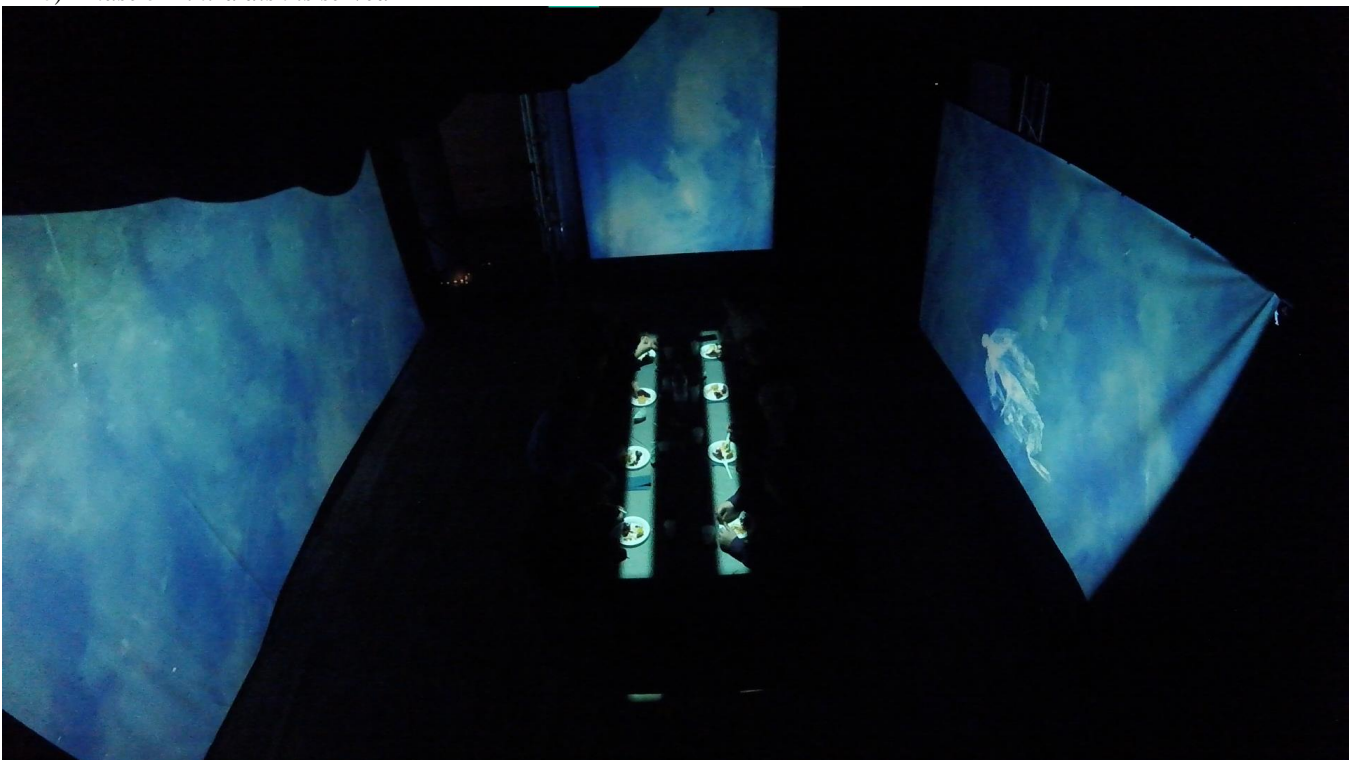


5) Phase 4 – second dish is taken

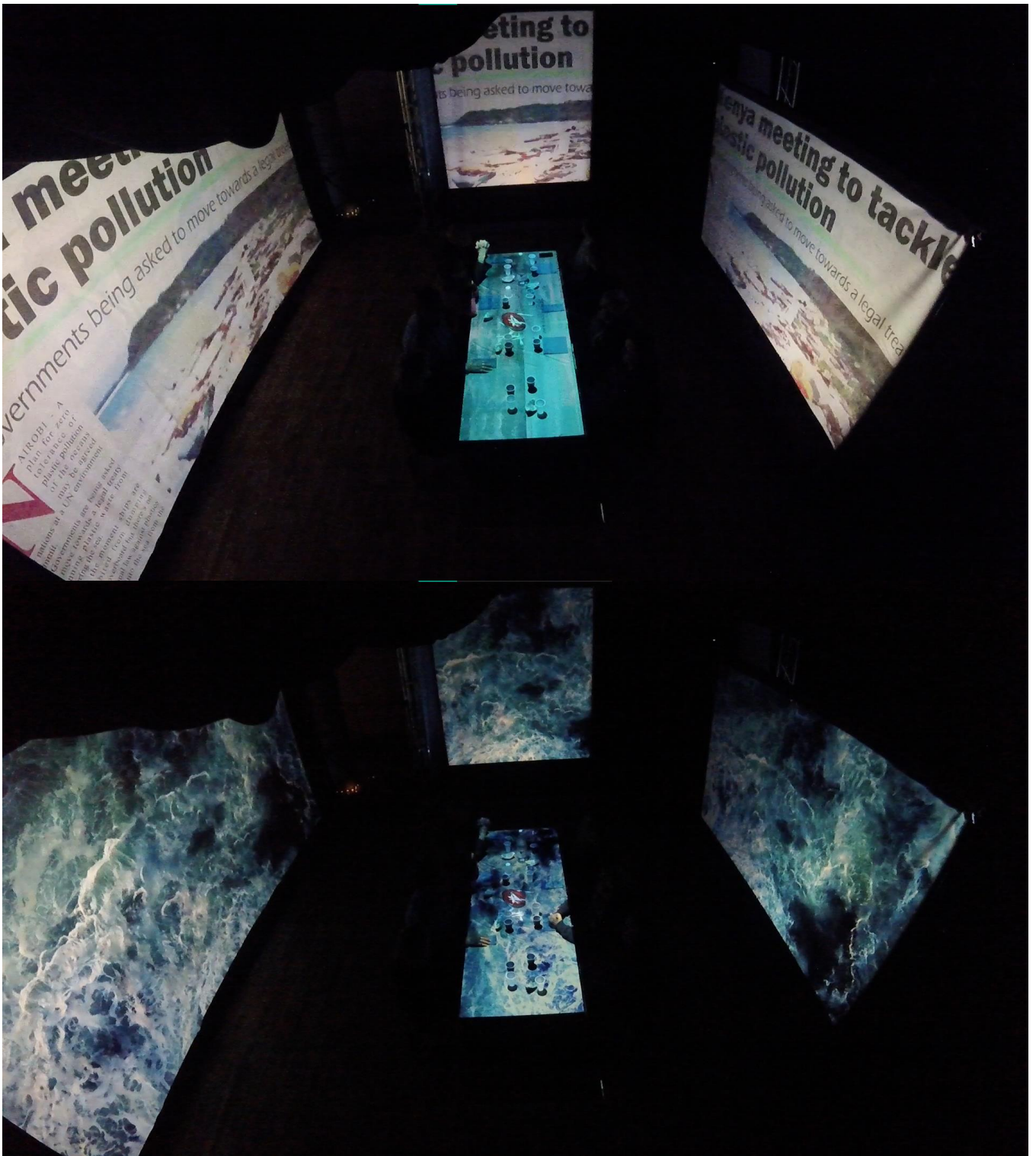




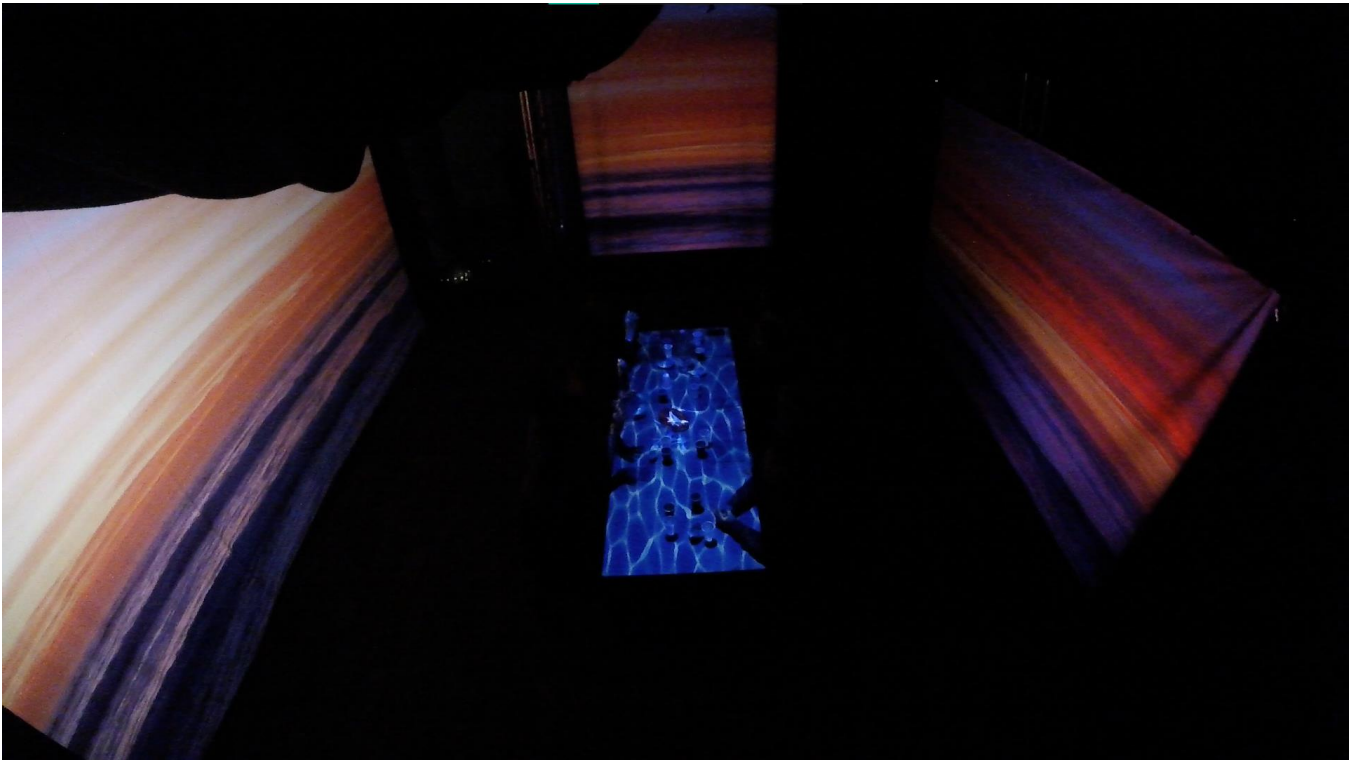
6) Phase 5 – third dish is served



7) Phase 6 – fast-paced video



8) Phase 7 – calm sunset, interview environment



B. Questionnaire for invitation for the dinner



Invite to Interactive Dinner Experience

When filling out this form you are signing up as a guest +1, to our interactive dinner experience. You need to provide the information asked below for yourself and your +1, this is to ensure that you are a good fit for the experience and to account for potential food allergies/intolerance.

It is FREE to participate, we only ask for your opinion to evaluate our project.

Practical information:

Venue: A.C. Meyers Vænge 15, 2450 Copenhagen.

Date: 28th of April 2023

Time: 18:00

If you are chosen to be our guest we will contact you through email or phone depending on your preferences.

Consent form

The purpose of the study is to test an interactive under water dinner with focus on pollution.

By consenting to participate in this interactive dinner event you agree to the following:

- Processing your personal data in connection with your participation in the testing of this project. This personal data is guaranteed to be processed anonymously and will only be used in context of this project, which will result in a report and possibly a scientific publication.
- We collect and process the following personal data: Age and gender. Video and audio recording and observational notes taken during the test. Audio and video recording of focus group interview. Questionnaire answers.
- The collected data will be stored until 3 months after the exam date, ultimo September 2023.

You can change or withdraw your consent at any time. If you request to change or withdraw your consent, we will inform you of the possible consequences of this. You cannot withdraw consent retrospectively.

If you wish to change or withdraw your consent, please contact:
maicat.tracking@gmail.com

If you wish to make a complaint about how we processes your personal data, please contact the Danish Data Protection Agency, Borgergade 28, 5, 1300 Copenhagen K. The Danish Data Protection Agency is the Danish supervisory authority responsible for monitoring the application of the General Data Protection Regulation.

Whether you consent to us processing your personal data is voluntary; however, if you do not give your consent, we cannot use any of your information and you cannot participate in the dinner event.

I consent *

- ☐ Yes
- ☐ No

My +1 consent *

- ☐ Yes
- ☐ No

Your information

Please provide your information here, and your +1 in the next section.

Name *

Dit svar

Age *

- ☐ 18-24
- ☐ 25-29
- ☐ 30-34
- ☐ 35-39
- ☐ 40-44
- ☐ 45-49
- ☐ 50-54
- ☐ 55-59
- ☐ 60+

Gender *

- ☐ Male
- ☐ Female
- ☐ Andet: _____

Please state any food allergies/intolerance you have *

Dit svar

Contact information (Email and/or Phone number) *

Dit svar

Information about your +1

Please provide information about your +1 in this section.

Name *

Dit svar

Age *

- ☐ 18-24
- ☐ 25-29
- ☐ 30-34
- ☐ 35-39
- ☐ 40-44
- ☐ 45-49
- ☐ 50-54
- ☐ 55-59
- ☐ 60+

Gender *

- ☐ Male
- ☐ Female
- ☐ Andet: _____

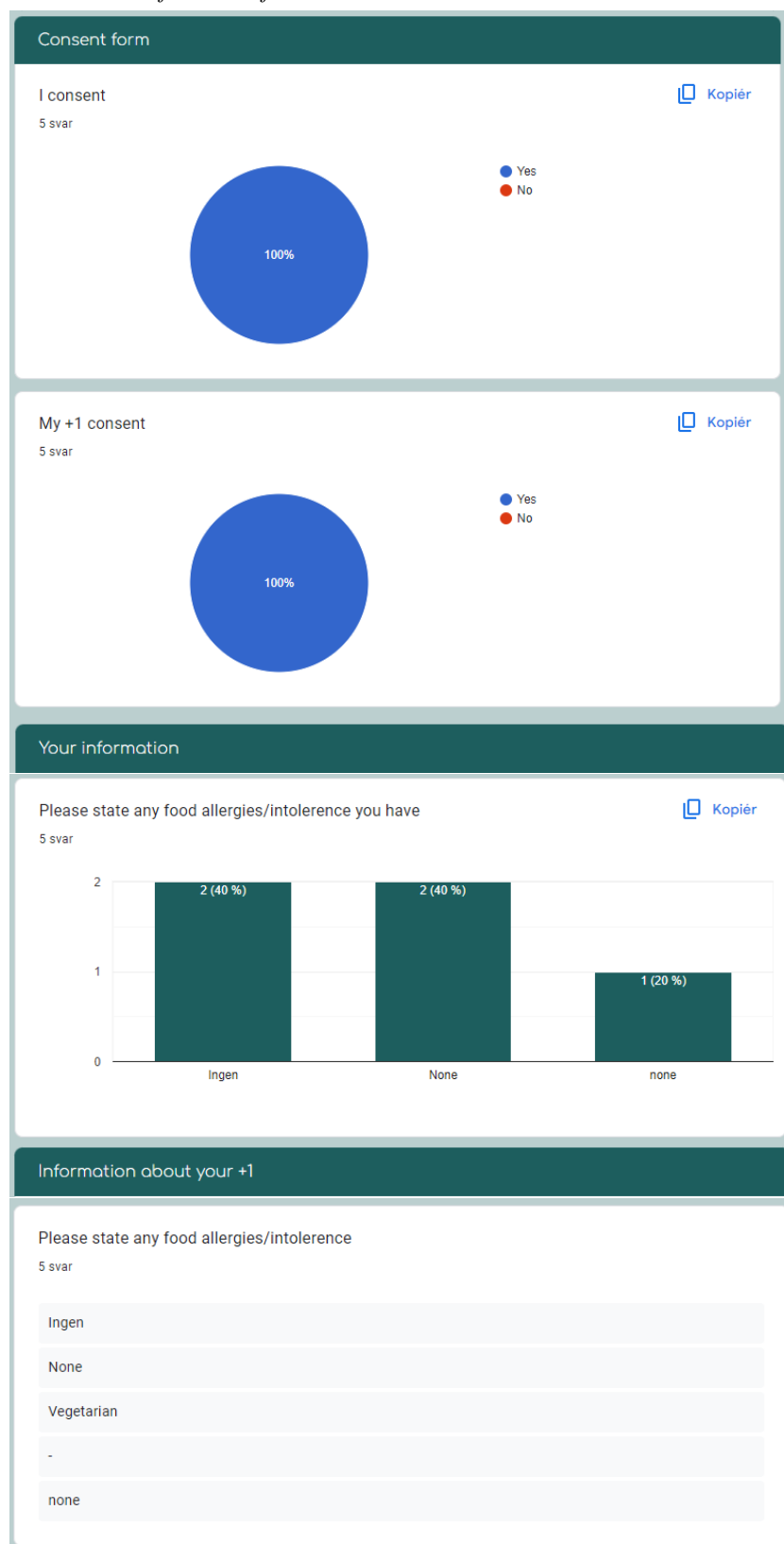
Please state any food allergies/intolerance *

Dit svar

Contact information (Email and/or Phone number) *

Dit svar

C. Overview of answers for invitation



D. Questionnaire before the dinner



Pre dinner questionnaire

This questionnaire should be filled out before being seated at the table

OBS! you have the right to withdraw your consent through the whole dinner. Though if the consent is withdrawn you will be asked to leave the table, and your data will not be used.

Demographics

Everything used for analysis will be made anonymous. Your name will only be used to compare answers before and after the dinner.

Name (only first name) *

Dit svar

Gender *

- ☐ Male
- ☐ Female
- ☐ Other

Age *

- ☐ 18 - 24
- ☐ 25 - 29
- ☐ 30 - 34
- ☐ 35 - 39
- ☐ 40 - 44
- ☐ 45 - 49
- ☐ 50-54
- ☐ 55 - 59
- ☐ 60+

Interactive dinner experience and expectations

What was your motivation for signing up for this dinner?

Dit svar

Have you tried an interactive dinner before? *

☐ Yes

☐ No

If you answered yes above please explain the experience

Dit svar

Have you tried a dinner with audio-visuals before? *

☐ Yes

☐ No

If you answered yes above please explain the experience

Dit svar

What comes to mind when you think of the ocean? (mark all that apply) *

☐ Peaceful

☐ Infinite

☐ Blue

☐ Salty

☐ Pollution

☐ Dangerous

☐ Plastic

☐ Fish

☐ Beach

☐ Summer

☐ The reef

☐ Andet: _____

What are your expectations for what you will experience during this dinner *

Dit svar

How do you feel about being seated with people you don't know? (mark all that apply) *

☐ Fine

☐ Nervous

☐ Intimidated

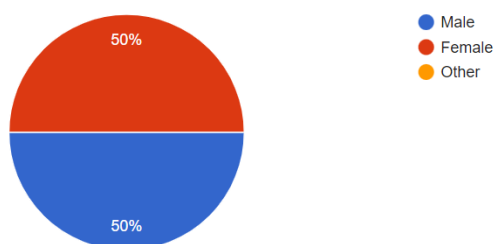
☐ Looking forward to it

☐ Andet: _____

E. Answers from pre-dinner questionnaire

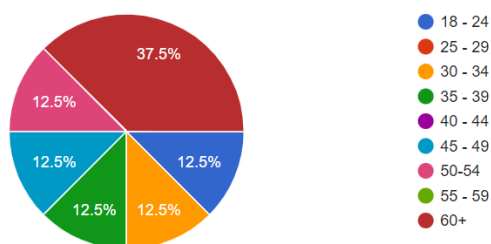
Gender

8 responses



Age

8 responses



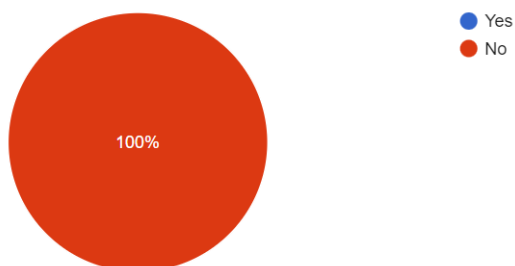
What was your motivation for signing up for this dinner?

8 responses

Friend of mine suggested it
Curious
Min kone syntes det kunne være sjovt at prøve.
Er altid nysgerrig på nye oplevelser og det lød som et meget spændende setup.
For spændingens skyld
Nysgerrig
Interested in what is going to happen
Sounded very interesting

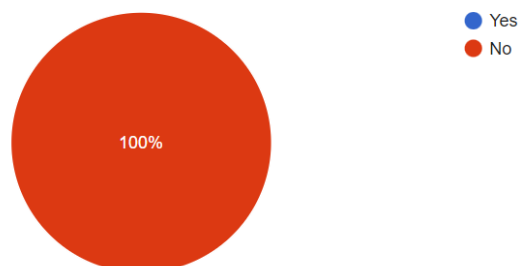
Have you tried an interactive dinner before?

8 responses



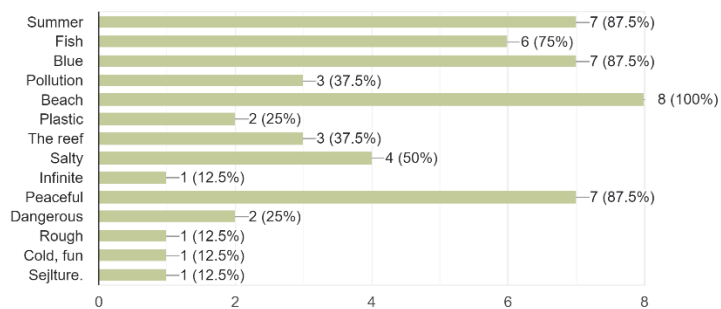
Have you tried a dinner with audio-visuals before?

8 responses



What comes to mind when you think of the ocean? (mark all that apply)

8 responses



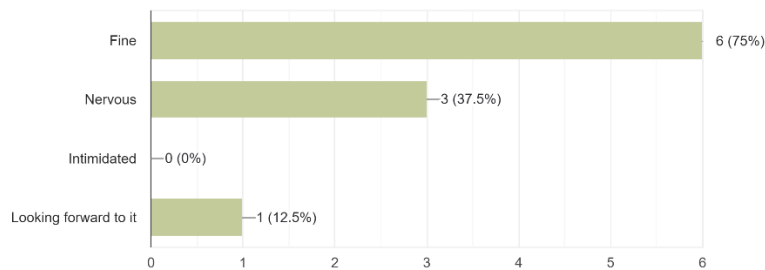
What are your expectations for what you will experience during this dinner

8 responses

To survive
Something exciting new
Meget nysgerrig da jeg ikke ved hvad det helt præcist går ud på.
Jeg forventer at der vil blive brugt flere sanser end blot smags sansen og at man vil komme til at bruge fantasien. Da jeg aldrig har prøvet det før er det svært at vide hvad man skal forvente - men håber på inspiration til selv at kan byde på og turde lave anderledes oplevelser.
Spændende at se hvad der vil ske
Store
To have a different experience to anything I've tried
Something different

How do you feel about being seated with people you don't know? (mark all that apply)

8 responses



F. Transcription of open group interview

C : so I'm just gonna place it here, cause we gonna have the interview here. You are done, you can relax. And just have some coffee or tea or cookies or stuff like that..

1 : Or my fish dish..

People laughing

2: yeah we have not forgiven you for stealing our fish

3 : yeah that's been traumatic

C: So, the first question is how was it? What do you feel?

2 : The first part was very good

3 : until the fish dish it was good

People laughing

C: Anything to add?

3 : the end of the fish dish

People laughing

2 : no okay, so when we got all the foam we looked at that then it was not as nice eating with the foam here, that was not pleasant

Other people in the background agreeing.

3: yeah, and also the music was a bit obsessive of course at the time

C : yeah okay. So, did the experience live up to what you expected it to be?

Everyone saying yeah.

C: and why? Like how did it live up to it?

3: we knew it was an experiment sort of test. So, we were too good to be true in the beginning.

4: Kind of expecting something to happen.

3: if it was an experiment like that I say okay, we can do an experiment like that many other times

1: But I think it was funny because I... jeg kan simpelthen ikke sige det på engelsk. Jeg lagde mærke til. I'm sorry i have to say it in danish. Jeg lagde mærke til hvor hurtigt vores samtale emner omkring bordet de bare ændrede sig i takt med hvad der foregik. Også selvom det ikke havde direkte forbindelse, men så var der lige nogle der kom i tanke om et eller andet de lige havde oplevet, det gik så stærkt. Og det lagde jeg mærke til. Og på et tidspunkt så sad jeg bare helt stille og observerede lige i starten og tænkte det er simpelthen sjovt, hvordan at det bare kan ændre sig på den måde.

5: she was talking about the subjects continuing..

3: The subject change.

5: ... following the screen

1: Subject change was so fast, according to the pictures and the sound.

6: oh yeah

3: the experiment should be finished now, coffee should be coffee

4: But also the fact that no one used the plastic cutlery.

3: I did

C: yes and why didn't you use it? And why did you use it? (the cutlery)

5 : Why do you think

C: I don't know tell me

2: it felt wrong looking at all the plastic

5: yeah it felt wrong to use the plastic after the pictures came up.

4: like the context made it wrong in the way it was presented. Like slammed down on the table, makes it sort of a bit more not approved

People agreeing in the background

5: she threw it down and then.. I won't touch it

7: I can tell you when we have our.. for the dessert I don't use this (the spoon) because I saw the picture what problem it is for the world, I eat on my fingers.

6: It makes you notice how much plastic is like on the table now, and like a lot of people would just set a table like this. That makes you think.

People agreeing in the background

C: good

3: I used the plastic

People laughing

7: haha yeah you are a bad guy

1: he is mafia

5: you are also the mafia

C: you used it why?

3: I hate getting my fingers dirty, when I eat the cakes, and then I have to do this

C: yes okay that's a valid point.

C: what visual elements did you notice?

1 : all of them

3:visual elements?

C: yes just visual elements

7: the fish, that was swimming on the table

People agreeing in the background

3: from the fish to the foam and plastic on the screen.. and the whales, the jellyfish

5: the turtles

1: clownfish

3: clownfish yes

2: the clownfish yeah we saw nemo we found him

6: the change in speed, like the different elements

3: this sea too

5: also the pollution, or what it should.. or think it should pretend to be like pollution the colors (think he is referring to the table)

2: and of course whatever ink, whatever it was, on our fish dish, just before we lost it. We are going to wake up screaming at night about that

People laughing

C: what did you think when it came on? Like what was your thoughts? (the ink splatter)

3: that we should have told less

2: so the first thoughts was oh that's a funny face, and then I cant see my fish cause its dark now then it went away and I tried to eat and then it came back, it said okay I'm gonna catch my fish and then I lost my fish.. (people laughing) Sophia stole my fish.

C: anybody else wants to say something to that? You don't have to, just if you have something

5: he described it quite right

3: I feel sorry for her (1)

1: yeah.

4: is it still recording it just went out

C: ja det tror jeg

1: yeah it usually still records

4: okay technology

C: what conversation topics did you come up and talk about?

5: each person what we are doing at the.. in life and so on

3: she(1) had the most interesting

6: haha yeah

1: it depends on the eyes who are looking at it

6: we talked about a show he(5) had seen with all the plastic in the sea

5: yeah I don't know if you have seen it, a reality show with

1: the island, its called the island, its crazy

5: I don't know MotorMille

1: MotorMille is in

5: one of those Oliver Bjerghus, where they were on a stranded island dessert island, where they are talking about all the plastic that were on that island. That came out because of all the plastic.

4: we talked a lot about the ocean in general, the stuff we saw and how it relates to this

People agreeing

6: and the food, talked a lot about the food

C: did you like it?

People saying yes

4: want more

1: maybe, I dint get to taste it

2: they are not leaving until you bring the fish back

3: it's a mixed dinner

2: yeah I know we want a new one

C: So you already talked a bit about it, but how did the visual and auditory elements affect your conversation?

5: quite a lot

3: the conversation was fitting

4: it was like steered by the visuals

1: very much

People agreeing

C: and how did the waitress actions affect the experience?

1: stressful

People laughing and agreeing

5: good in the start

C: just stressful?

3: She, I mean even in the start the presence was very mmm

2: intense?

3: intense yes, when she was coming in we were stopping talking, or the first time not but then yeah

C: Okay so not more than that

1: she made herself aware when she was in the room

4: No but she also had positive attitude

People agreeing

4: and negative attitude that kinda of affects how you like with the cutlery, how she slams it down. Her attitude affects the way that we are not using the cutlery anymore, cause she signals that.

1: But also that these exact baskets (the plastic ones on the table) was on the images

3: oh I didn't see it. That's why I use it

C: so the next question is how was the experience of sharing the table with people that you don't necessarily know?

Everybody: it was nice, good, interesting people. Get to know some new people

2: even though we were invaded by the Irish

People laughing

C: And how did the visual and the sound affect that you shared it with people that you don't know? Was it positive to have all of this instead of having nothing?

4: yeah

3: of course

2: in the beginning the thing with the coral reefs was very I think nice and calm. We talked about it's a fun experience

1: But I also think we talked more and quicker about thing than if it just have been Celine Dion going

People agreeing

4: it gives subjects to talk about

People agreeing

4: so like starts the conversations

C: any negative things about sharing the table and the visuals and...? you can be honest

Everybody: no, not at all

C: Only the food taken away

People laughing

4: I think the visuals when we started were a bit psychedelic, like they kind of messed with my head. Like the changing of the colors and the shape forms and stuff. But as soon as the ocean theme came on it worked fine

1: I was happy when the ocean theme came because, I thought this LSD restaurant... Oh My God I was so afraid.

C: And what comes to mind now when you think about the ocean?

1: the redfish.. I'm so hungry, I'm sorry

4: I think for me its appreciation of the ocean, cause we ended with this scenery

1: And how we abuse the ocean

3: for me the ocean is still that one thing that.. it is something relaxing and I can not still, probably because I'm old, but I can still not get used to that the ocean is getting polluted. I go to a place that every time I arrive to this place it is beautiful like that, and in the morning when I jump in the water I discover that its completely polluted for an hour, one hour, then it goes, and I get so nervous because for me this is the ocean this is the sea (referring to the background)

2: you asked in the first questionnaire we got if we thought the ocean was infinite, its really not we are polluting it and its not.. it cant take all the pollution .

5: I also see it wasn't like on the picture but in the back of the head I also that its false

C: so is there anything, one thing, that you would remember from this experience what would it be?

2: the fish

People laughing and saying yeah

2: I think it was the whole stealing the fish getting all the plastic, because until then it was just for me at least super pleasant and then suddenly okay this is.. now they are gonna mess with us

People agreeing

3: the change of settings

1: I agree. The whole atmosphere was changing in the room

People agreeing

C: would you invite other people to try this experience again

Everybody: hell yeah, yes

5: I think I will but I think I will say to them eat quick

3: I would actually come again but this time I know what to do

1: I want it in the Christmas setting with elves running on the table

3: do you have the video we can borrow once the video to make a dinner with ..

1: fish on the table, yeah

3: yeah fish on the table. We have to find a projector

4: very nice

6: very interesting

C: thank you

2: can I ask you a question now its over?

C: yes you can ask anything you want

2 : is the experience responding to what we are doing in any way

C: in one part it is

3: you are making some hypothesis about our behavior

C: no we were controlling it based on when we thought it should be done

2: okay so not a system but you watching us

C: yes but there was one thing that were interactive, when she was doing this (making motion on the table) on the table

1 : with the black dots

C. with the dots it was interactive

1: I said it