Lost in Translation?: An Investigation of the Interpretative Process Via the Creation of a Memento Based on Dream Analysis

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ABSTRACT
In this paper issues related to communication and interpretation are explored in the context of dream analysis. In an attempt to understand the complexities of communicating visual ideas, as used in fields related to visual expression such as art or design, a simple experiment was conducted. The process included the collection of dream data from 6 individuals, the interpretation of those dreams in order to create 6 small representative objects and then a final review of those objects by the original participants. Through this process the researcher hopes to uncover both the limitations and successes of communication of visual ideas through strictly verbal means, as well as insight into future methods for conducting similar experiments or additional testing to be done with this set of data.

Author Keywords
Dreams, interpretation, 3D modeling, translation, communication, visual communication, and design.

ACM Classification Keywords
Design and Experimentation.

INTRODUCTION
Due to the infinite ability for humans to create visual images within their minds and in the physical world, the process of translating one individual’s vision to another individual can often create a problem of translation. We can see issues related to translation in the verbal language, when often one word or phrase in one language does not have an equivalent in another language. How do issues of translation affect our ability to clearly communicate visual ideas, such as in the design field when working with clients. The impetus for the project is the notion that although we have many forms of communication, there is always an issue of translation or perception between those communicating. I am interested in how we convey meaning to others through the process of creation. How do we communicate a message to another person without the meaning getting lost in translation? Can a person ever really fully explain their creative intent? Can we ever fully understand someone else’s vision?

This project focuses on the interpretation of a dream as a vehicle for understanding how we communicate and understand visual ideas. Through this process I want to explore how we communicate ideas to one another, and the ability to replicate what believe is being shown or told to us. What are the implications for this in terms of general human communication? What are the implications in terms of the client-designer relationship? Our job as designers is to interpret the vision, desires and needs of our clients. Is it possible to “see” what’s in another person’s mind to create what they imagine? This project addresses some of these issues and serves as a case study for future research models.

BACKGROUND
Michael Baxandall in The Period Eye suggests that after the common mechanics of human vision, there ceases to be uniformity from one person to the next. [1] Thus each individual has a unique experience of the same image or visual representation. This leads to different scopes of knowledge and skills of interpretation. Baxandall says that “some of the mental equipment a person orders his visual experience with is variable…and culturally relative…being determined by the society which has influenced his experience.” [1] Essentially perception is subjective and based upon previous experiences. There is some universal understandings of representations in that “understanding the picture depends on acknowledging a representational convention, of which the central part if that a man is disposing pigments of a two-dimensional ground in order to refer to something that is three-dimensional: one must enter into the spirit of the game…” [1] Although there is variance in the understanding of the image, there is some sort of agreed upon convention for how images and meaning are conveyed. Nietzsche would argue that the underlying subjectivity of perception would deny the possibility of a universality but the ability for individuals to agree that something is a representation of something else points to some sort of universal way to communicate. [2] It is within
the exact translation of that image where subjectivity resides.

Roland Barthes addresses the issue of semiotics and questions whether the image can ever really represent its original counterpart. The image is not the thing itself but rather “the image is re-presentation, which is to say ultimately resurrection.” [3] Because the image is a representation of the original, can it ever fully evoke the same meaning, emotion or context of the original? Can the re-presentation capture the original intent? It essentially functions as an interpretation of the original as fully replication is almost impossible. As the translation and interpretation passes from one individual to the next the complexities become even more abundant. Additional issues include the many ways in which an idea or image can be represented, i.e. text, paint, digital, analog, auditory, material etc. Because the ways in which something can be translated are so vast the occurrence of mis-representation or faulty translation seems inevitable. Should the image be replicated exactly or is abstraction preferable and valuable? Can the same meaning be conveyed by both methods? How does material and media affect the meaning, intent and conception? Cezanne pushed the limits of representation when “he loosened the perspective system of traditional art and gave to the space of the image the aspect of a world created free-hand and put together piecemeal from successive perceptions, rather than offered complete to the eye in one coordinating glance as in the ready-made geometrical perspective of Renaissance art.” [4] Did this translation of the visual add or detract from the original? Is the artist supplementing their own meaning for the original? What are the implications when the creative person transcribes the original within their own set of rules and skill sets?

METHODS
Methods for this project focused heavily on participation from volunteers, data collection and interpretation, and digital modeling.

Attracting Participants
Participants for this study were gathered via an email invitation to participate. In order to collect data to work from, several individuals were sent the following request and six responses were received and moved forward with the project:

Think about a dream you have had - you can narrow it down to one moment of the dream, part of the dream or the overall dream. I want you to think about how it made you feel during the dream and after. Its impact on you. The shapes, colors, forms, textures, etc. I am more interested in the visual and emotive aspects than the story line. Please give me a description of this dream using only words, no images please (paragraph or so) - remember this is more about visual aspects and emotions than plot. I will use this information to create a single, small object that tries to capture what you have described. A sort of memento of the experience of that dream. I will serve as the interpreter of the content you have given me. My goal is to establish an object that you are able to find connection to or can see/feel what you have described to me in this object. The objects will all be small, something you could hold in your hand(s) and all made of the same material so as to create a series of objects that form a family via this material and their inspiration. The material choice is most likely going to be either glass or plastic (3Dprint). Once I have completed your object I will either show it to you in person or email you an image. It is then my hope to get your feedback on how successful (or not) the translation is. Honesty will be greatly appreciated at this stage.

Collecting Data
Data was collected from six participants. This data included a detailed description of a dream(s) the respondent had at any time and was willing to share openly. The text was then coded for various terms in order to break apart the dream into visual, emotional and other descriptive language. All data collected was purely text-based, no imagery was included. The categories used for coding were: color/hue, form/description, object/place, action, emotion/feeling.

Translation and Interpretation
Translation and interpretation was an iterative process stemming directly from the descriptions of the dreams given by the individuals and the coded data set. The data was then translated from a text format into a visual representation. The first phase included attempts to use watercolor paints to represent the dreams. The second phase focused on the use of digital 3D modeling software (Rhinoceros 4.0) as a tool for representation. The final stage of translation utilized 3D printing (Z-Corp) for the physical output of the representational dream object.

Feedback
In order to determine the success or failure of the interpretation and translation, images of the 3D digital model and the physical output were emailed to the participants. The researcher requested that the participants respond to the object as honestly as possible. The following information was sent to each participant:

I am writing to ask for your feedback on the object I designed for you as a "dream memento". I have included some images of the 3D model and the actual physical model. Please give me your feedback. No feelings will be hurt so be as honest as possible. Try to think about whether you feel or see any connection to the dream you described and why or why not. Does it have some qualities but lack others you wish it had. Honesty will be best! Let me know if you have any questions. Also, because of all the information I received from everyone about their dreams I took a more abstract approach to the object. You can vocalize whether you like that or not, if it makes sense or not, etc.
RESULTS
Dream data was collected from six respondents and then analyzed, coded and translated. The translation process focused heavily on using digital software to create 3D models that would function as “mementos” of the dream. The goal was to encapsulate visual and emotional elements of the dream in a small, hand-held object.

Data Collected
Dream narrations from six individuals was collected for use in this study. An example of such a narration is as follows:

My recurring zombie dreams: I’m back at my parents’ house in Tupelo which is a couple of acres in the middle of town with a small lake and usually (in the summer anyway) high grasses. I’m walking through the grass, the grass is brown and soft, tall and waving in the wind. I’m cautious because I know zombies are around, and I’m anxious to get to my parents’ house to see if they’re OK. All of a sudden, the grass moves around me and four zombies pop up. I have a machete and a staff, so I swing the staff to fight them off and chop them up with the machete. There’s black ooze and blood, flashes of red flannel and denim tatters from the clothes the zombies wear. The time of day is around sunset, so the colors have that late afternoon brightness. I start running, out of fear from more zombies, but also concern about my family. I know the zombies are after me, so I’m running hard, out of breath, a little panicky, and stressed. Usually I wake up then. Sometimes I get to the house, and the doors are locked, and I’m beating on the doors trying to get in, but I can’t. Overall, a pretty devastating dream.

Dream narrations varied from reoccurring dreams from childhood to singularly experienced dreams in adulthood. Themes ranged from nightmarish to elation. The researcher was careful to not pull words, meanings or emotions that were not explicitly used or described by the dreamer.

Translations and Interpretations
Data coding resulted in five specific categories of descriptive groupings. These categories allowed the researcher to define visual and emotional aspects of the dream to use for the translation of the verbal description into a visual representation. The words used in coding were pulled directly from the narration provided by the participant – no additional language, terms, or verbage was added.

<table>
<thead>
<tr>
<th>COLOR</th>
<th>FORM</th>
<th>OBJECT</th>
<th>ACTION</th>
<th>EMOTION</th>
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<tbody>
<tr>
<td>brown</td>
<td>tall</td>
<td>zombies</td>
<td>waving</td>
<td>cautious</td>
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<tr>
<td>black</td>
<td>soft</td>
<td>house</td>
<td>running</td>
<td>anxious</td>
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<tr>
<td>red</td>
<td>ooze</td>
<td>lake</td>
<td>chop</td>
<td>fear</td>
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Table 1. Example of data coding.

The first method of translation involved the use of sketching and watercolors to transcribe the visual and emotional aspects of the dreams into a visual and physical representation. This first stage was determined to be quite difficult due to the wealth of information provided by the participants. To include all aspects would have created an amalgamation that had visual cues for all coded words but reduced the emotive descriptors to almost nothing visually. The researchers first approach was to literally translate the material into the visual representation but the outcome seemed clichéd and insignificant in terms of evoking the emotional aspects of the dream. The researcher decided to take an abstract approach to the representation model to determine if this could still invoke as much meaning and emotive response as a literal translation.

The second approach was to begin designing directly in the 3D modeling software after a series of simple line drawings that depicted simplified forms of the descriptor words. The line drawings also tried to capture the emotive aspects through form. While in the process of designing the objects a pattern of approach emerged. Utilizing the unique abilities of the 3D modeling program, the researcher focused on surfaces as mode for translating the information. Rather than creating a literal translation of the material, an abstracted form was created, focusing specifically on manipulating carefully created surfaces. The abstraction method felt to the researcher like it could have a more impactful affect on the dreamer in terms of capturing the emotional components of the dream in conjunction with the physical and visual components.

Figure 2. 3D digital model and physical model of all six dreams.

Once digital models were completed, all six were printed on a 3D printer (Z-Corps). The 3D printer allows for one color, white and is made from a corn starch material. This gives the models an appearance of being made from something similar to ceramics or plaster. Images of both the 3D modeling and the physical model were captured.

Feedback
Images of the digital and physical model were sent to each participant for their corresponding dream and asked to respond honestly. The following are highlights from five of the volunteers responses (one participant did not give final input):

J: When I look at the objects that were designed as part of my "dream memento," I definitely conjure up visions of the
DISCUSSION

Overall it seems that this method of translation and analysis succeeded at providing a meaningful representation of the original. However in at least three instances, the objects did fail in some way. It was valuable to receive feedback from the participants about how the object felt to them, but specifically to get feedback on how the object could have been better. The material choice definitely hindered the translation as well as the inability for the participants to see the object in person. It is very interesting to see that with minimal verbal description a visual object could be created that was at least somewhat successful at representing the original visual scenario. Does this mean we are capable of communicating fully despite the problem of translation? Or is it that even though are visual experiences are subjective some forms, shapes, colors, etc have universal meaning? All participants were of similar nationality and background. Would the forms, shapes, colors, etc have different meanings if this was not the case?

Valuable feedback was also received from an initial poster session of the project. Most individuals found the project intriguing and were willing to give feedback on the translations themselves. Most objects were seen as good translations but advice on what could be better was always suggested.

FUTURE WORK

Future work for this project would include a few different approaches. First, rather than showing the participants the object created for the dream, they would be shown all the objects for all the dreams in the study and then asked to pair them up. It seems possible that by initially letting them know an object was “theirs” they might see meaning in it purely because of the association. Another approach to test the success of the translation would be to show non-dream participants the objects and the dream sequences and ask them to match the objects with the corresponding dream. A third approach would simplify the process of translation. Rather than approaching the problem via dream analysis, individuals would be asked to describe a 3D object that could fit in their hand, and of their own “design”. This description would be purely verbal/text with no images. The participant would draw the object as well but not show the researcher. The researcher would then try to create that object from a purely verbal description. This approach may allow for a more direct translation rather than needing to abstract the information as in the case of the dreams. The abstraction was needed in the case of the dream because so many objects and actions were part of the description. This translation may allow for a more direct distillation of the information and a more direct link between the original and the representation. Also, it may be necessary to use a variety of materials rather than limiting to one. One material was used in this study to avoid over complicating the process and losing focus.

dream I described. Actually, it is pretty incredible. The boxed pattern in the object accurately reflects the way the floors felt throughout the dream sequence. The curvature of the object gives it a whimsical nature which reminds me of the way I felt like I was floating through this dream in a daze.

B: It’s awesome. Not what I initially would have thought it could be represented by, but it’s so right on! It has that feeling of - it’s hard to put into words, so I’ll just say something again like ‘burst/shooting out’ or expansion and it’s just soft enough to relay that feeling of comfort too. And I love the view where it looks like a flower - so fitting! Abstract, yes, but I guess so was the dream

V: At first I was little no, no this is a vase but I started looking at it again. And I get it a little better. I think some of the things I would change is that the model is so light for such a dark dream but as a physical model of the spaces I described it’s pretty right on. I also would have made the rings and profile of the shape less uniform since the dream was always so random but I really like the possibility that the pattern could go on and on so maybe I’m wrong about that.

A: I like the first image the best. It looks sort of crackly and fragile, which is perfect. Although I think it would be cool if it looked sort of dirty - there was a lot of brown in the dream. Something about the modern edge of the second and third image don’t completely capture the feel of the dream (isolation, brokenness, abandonment, and a generally wrecked feel, like a ghost town).

T: My major question - I am unsure how you derived the form. When I look at it, I am looking for a sequence or a pattern in order to connect it to my dream. The only one I can see (and maybe this is me projecting my dream onto this form, which is an interesting result if that’s what you’re testing :(- ) is the ‘plot’ of the story starts at a heightened state and slowly resolves itself into a low, calm form. There are also two ‘figures’ or high points in the form, however my dream had about 3 main characters, so I would have wanted to see that represented I suppose.

The feedback was overall positive in that people enjoyed the forms. In terms of actually successfully representing the dream the objects seemed somewhat successful but also had failures. The material itself, the color and texture tended to be off-putting and not correctly portray the feel of some dreams. In other cases the material and color were not addressed. The form themselves were fairly successful at making some connection for the participant although usually in an unexpected way. The abstraction of the original terms did not seem to be an issue for most. For one participant (“T”) the object became more meaningful with some clarification of aspects of the objects. Because all objects were only viewed via images and not in person, there was some barrier to the viewer to get a full comprehension of the object.
CONCLUSION
In conclusion, this study serves as a valuable pilot study for addressing the problem of translation. With further and larger studies much more could be learned about what gets lost or misinterpreted in the process of translation. Overall this process of translation proved to be fairly successful with the major drawbacks being related to material choice and lack of tangible interface with the dreamers after the object was created. It was quite interesting to see how something seen purely in one’s mind was able to be brought into the tangible world and that one small object could embody so many of the elements within a dream, from texture to emotion.

ACKNOWLEDGMENTS
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REFERENCES

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