Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction

- 1. Introduction
- 2. Visual Order
- 3. Design Exercise
- **4. Explorations**
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

But, to her surprise, unlike the bird had mentioned, her corner was a vast lake and it shimmered.

Her eyes gleamed as she looked at the shimmering beautiful lake.

To her surprise, her new found corner reflected whatever little light that came from the same dark world she



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/introduction

1. Introduction

- 2. Visual Order
- 3. Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Introduction

This is an exercise in exploring how one can transform a visual through graphically abstracting the forms.

Abstraction:

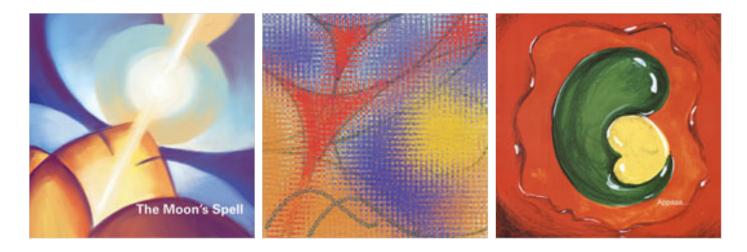
Abstraction is often defined as an operation that extracts elements or constituents common to a number of particular cases and presents them as a new sum or configuration. *Rudolf Arnheim*

Visual Abstraction:

Visual Abstraction refers to the ability to transform a visual into its essential features - this could be achieved by transformation of any one or more of the visual elements such as shape, colour and texture. There is also the degree of abstraction from being very abstract to being less abstract (or being closer to realistic representation).

Visual Abstraction leads to the following:

- Higher level of visual order
- Reduction of information content
- Generality in the representation.



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/visual-order

1. Introduction

- 2. Visual Order
- 3. Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Visual Order

'Order refers to the degree and the kind of lawfulness governing the relations among parts of the representations. It applies to the makeup of each part within itself' Maldanado Y and Bonseipe G

Higher Level of Order:

A relatively high degree of order seems to be the key factor underlying the characteristics inherent in the abstraction of representation.

'Order refers to the degree and the kind of lawfulness governing the relations among parts of the representations. It applies to the makeup of each part within itself'

____Maldanado Y and Bonseipe G

It applies to the over-all theme or structure, to which the relationship of all parts must confirm; it also applies to the makeup of each part within itself.

The visual principles that need to be explored to achieve a relatively high level of order are factors such as:

- Less visual details
- Simplicity of forms
- Recurrence of forms
- Alignment to grids
- Symmetry
- Balance of figure and ground.

At the next level, the order is influenced by visual features such as:

- the use of shapes that are simple, smoothened, geometric;
- textures that are even;
- tonal variations that are minimal;
- orientations along the horizontal, the vertical and diagonal axis;
- and size variations that are modular.

At the third level, elements such as lines that are used as outlines and in turn act as efficient containers of information, are treated in manner of having an orderly even thickness, a geometric linearity or circularity and are constrained in its direction to the major axis or the diagonal.

In Arnheim's opinion 'Order tends to reduce complexity and requires elimination of details that do not fit the

Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/visual-order

Introduction
 Visual Order
 Design Exercise
 Explorations
 Abstraction
 Further Links
 Contact Details

principles determining the order'(1966).

The above-mentioned attributes that modify order bring about visual uniformity within and across images apart from restricting the information to the necessary details alone, as well as increasing the graphic quality of the representation.



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source:

https://www.dsource.in/course/visual-syntactics-4-abstraction/design-exercise

1. Introduction

- 2. Visual Order
- 3. Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Design Exercise

Graphically abstracting the forms:

Exercise:

- Make a storyboard of five visuals (like comic strips) of your chosen story.
- Each frame represents a specific event, which document five continuous points in time (diachronic). In this exercise, you'll try to depict these visuals in abstract form.
- Abstract, graphicalise and simplify the forms or shapes of the elements in your visual (both the characters and the background environment) so as to represent a higher level of order.
- The visuals should make use of forms, textures, colours to express your story.

• Visual Communication Students:

- Task is to make a book of dimension 21cm x 21cm with 5 open page spreads of dimension 21cm x 42cm.
- You should represent your original story of 5 key frames as abstractions on the right half of book.
- Express your story using appropriate typeface on the left side of your book.
- Do a cover and then print and bind the book.

• Animation Design Students:

- Task is to make a Stop Motion presentation of your story.
- You should represent your original story of 5 key frames as animated abstractions making use of cut-outs.
- Use audio to narrate your story. You need to submit this as a movie file.

• Interaction Design Students:

- Task is to make an interactive presentation of your story.
- You should represent your original story of 5 key frames as abstractions with interactive features. Either use online text or audio to narrate your story.
- You can make use of flash or any other similar program to execute the exercise.

Total Time Duration: 15 hours of studio time.

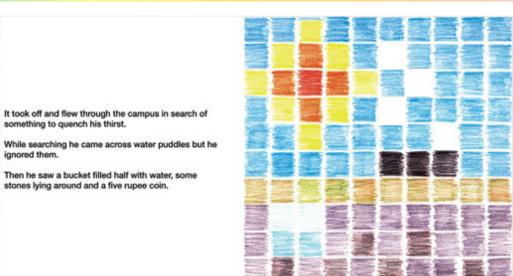
Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/design-exercise

- 1. Introduction
- 2. Visual Order
- 3. Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

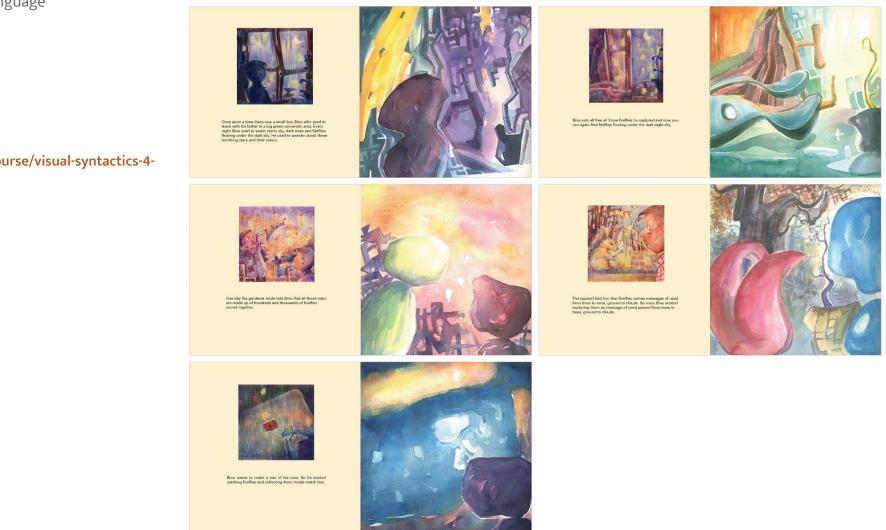
Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/explorations

- 1. Introduction 2. Visual Order
- 3. Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Explorations

These are sample explorations done by M. Des. student.



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

- 1. Introduction 2. Visual Order
- 3. Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Abstraction

Here are examples of visuals of the story represented through visual abstraction:

Cycle Friends:

A Group of old and new cycles in the campus. Old cycles: Helpful and friendly in nature. New cycles: Egoistic and fast. They feel superior and never talk to the older ones.

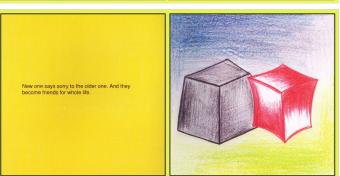
One day new cycle overtakes the older one and proudly laughs. The old cycle feels bad because he can't run fast.



One old cycle tries to talk to new one and wishes to become friends but new one doesn't respond prope

But suddenly some distance ahead, new cycle got puncture. The older one helped him. The new one feels shamed.





Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

- 1. Introduction
- 2. Visual Order
- 3. Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Kaka the Crow:



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

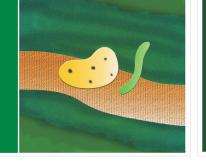
Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

- 1. Introduction 2. Visual Order 3. Design Exercise **4. Explorations** 5. Abstraction
- 6. Further Links
- 7. Contact Details

Ghost at IIT:

"Kalia, the snake and Cheetu, the leopard are best friends, who stay in IIT jungles. One day they decide to walk into IIT campus & come across IIT grounds."



enjoying around a campfire . Students soon start sharing ghost stories among them Cheetu & Kalia get engrossed in the stories & lister them carefully from across bushes."



"One of the students looks into the bush $\ensuremath{\mathtt{\&}}$ sees four eyes staring at them...*



"Next day morning news at IIT "Ghost in IIT grounds with four eyes and growling & hissing noise"



"The student scares & shouts "A ghost in the bush! Run!". Cheetu & Kalia wonder where the ghost is but they too are scared and run anyway."



Digital Learning Environment for Design - www.dsource.in

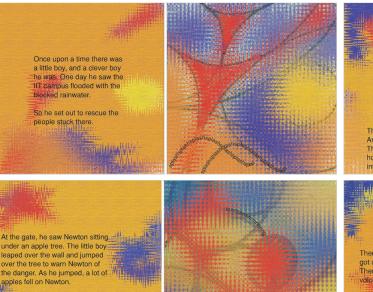
Design Course Visual Syntactics 4 -Abstraction

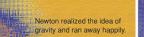
Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

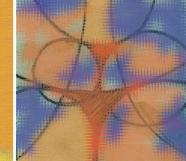
- Introduction
 Visual Order
 Design Exercise
 Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

The Rescue:

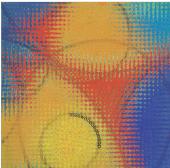
















Digital Learning Environment for Design - www.dsource.in

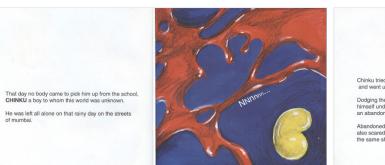
Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

- Introduction
 Visual Order
- 3. Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Chinku:



Chinku saw the puppies condition and covered him with his hankerchief and while these things were happening a man was watching this.

Chinku was hungry so he took out one of the left over sandwich from his tiffin and started eating but he heard the little puppy squealing so he gave his sandwich to the puppy.

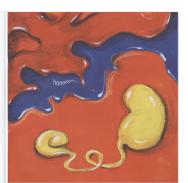
That strange man was continuosly watching this.



Chinku tried to shelter himself from the rain and went under a small shed.

Dodging the tiny water crystals he squeezed himself underthe shed and what he saw was an abandoned little puppy right beside him.

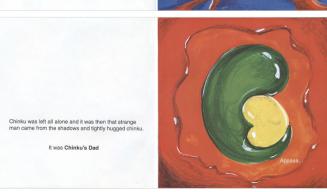
Abandoned and lost like chinku the puppy was also scared shivering from cold and hiding under the same shed.



The rain stopped, so chinku left the shed and started walking along the foot path .

He looked back but this time the puppy was not there, the puppy was on the other side of the road with his mother and they left.





12

Digital Learning Environment for Design - www.dsource.in

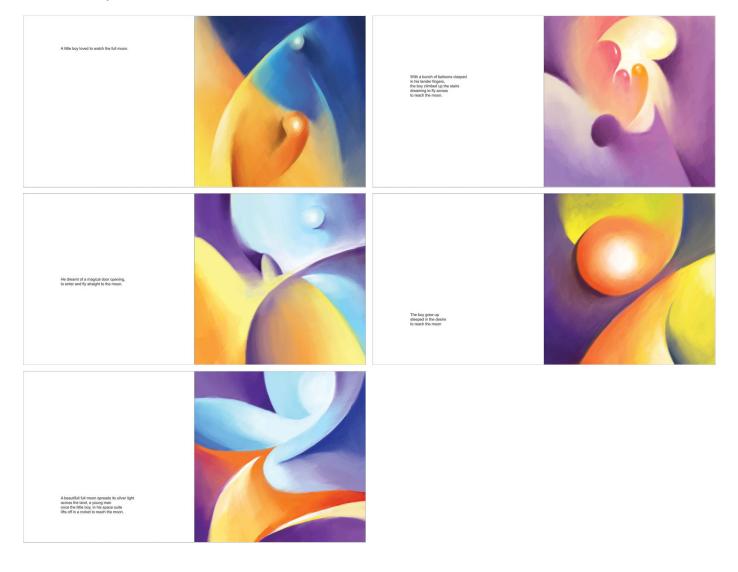
Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

Introduction
 Visual Order
 Design Exercise
 Explorations
 Abstraction
 Further Links
 Contact Details

The Moon's Spell:



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

- Introduction
 Visual Order
 Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Binu and Fireflies:



Once upon a time there was a small boy Binu who used to leave with his father in a big green university area. Every night Binu used to watch starry sky, dark trees and fireflies floating under the dark sky, he used to wonder about those twinkling stars and their colors.





Binu sets all free all those fireflies he captured and now yo can again find fireflies floating under the dark night sky.







One day the gardener uncle told Binu that all those star are made up of hundreds and thousands of fireflies stored together.





Binu wants to make a star of his own. So he started catching fireflies and collecting them inside match box.





Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

Introduction
 Visual Order
 Design Exercise
 Explorations
 Abstraction
 Further Links
 Contact Details

Hero Cycle:



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay The story is about Rahul:

Rahul stays in IIT campus with his mom and papa. He is a carefree boy who loves to play all day but hates to study.



Rahul goes to school everyday and walks home with his mom. One day on his way back, he saw a row of ants carrying something on their heads. He asked his mom "What are the ants carrying?"



Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

- 1. Introduction 2. Visual Order
- 3. Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Mom replied, "We have much to learn from these ants. They work hard in summer, carry loads of food on their heads. The food that the ants collect today will be useful to them in winter."



Rahul understood his mom well and from that day onwards he worked hard and never complained about studies.



Digital Learning Environment for Design - www.dsource.in

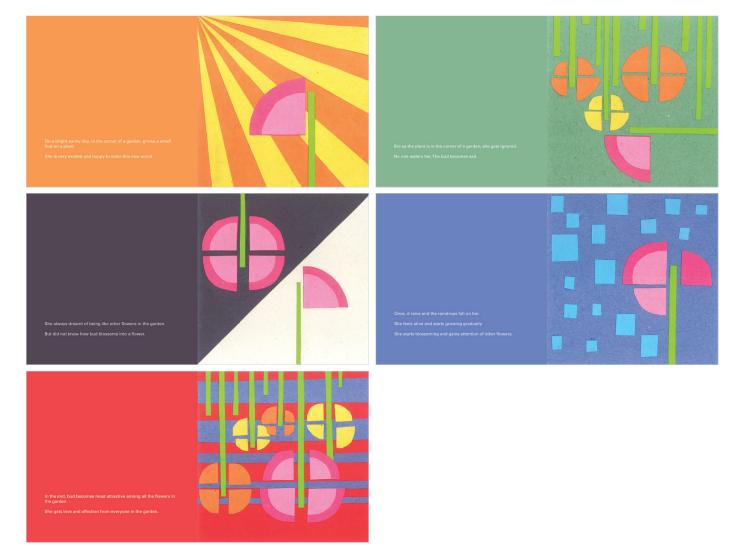
Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

Introduction
 Visual Order
 Design Exercise
 Explorations
 Abstraction
 Further Links
 Contact Details

A Bud's Life:



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

- Introduction
 Visual Order
 Design Exercise
 Explorations
 Abstraction
 Further Links
- 7. Contact Details

Abha's Imaginary Friend:



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

- 1. Introduction
- 2. Visual Order
- 3. Design Exercise
- **4. Explorations**
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Dancing Lights:

Unaiza, always asked a lot of questions and liked her world colourful and vibrant. She wanted to chase butterfiles and follow beetles and unlike most her age dared to wander. But often grown ups told her what is right and what is wrong. This would make her vibrant world turn dark and dull and leave her sad.



One of the days when she was sad she recalled a dream in which a brig blue beautiful bird said... "For when you are grim, past the brim. ough halt when a corner is found

But, to her surprise, unlike the bird had mentioned, her corner was a vast lake and it shimmered.

Her eyes glearned as she looked at the shimmering beautiful lake.

To her surprise, her new found corner reflected whatever little light that came from the same dark world she ran from.





Unaiza began to run... run away from this dark and grim world until she



In that moment, she decided to follow all her dreams.

Also each time she wanted to paint her own vibrant new world she would walk up to *her* corner and gaze at the dancing lights.



Digital Learning Environment for Design - www.dsource.in

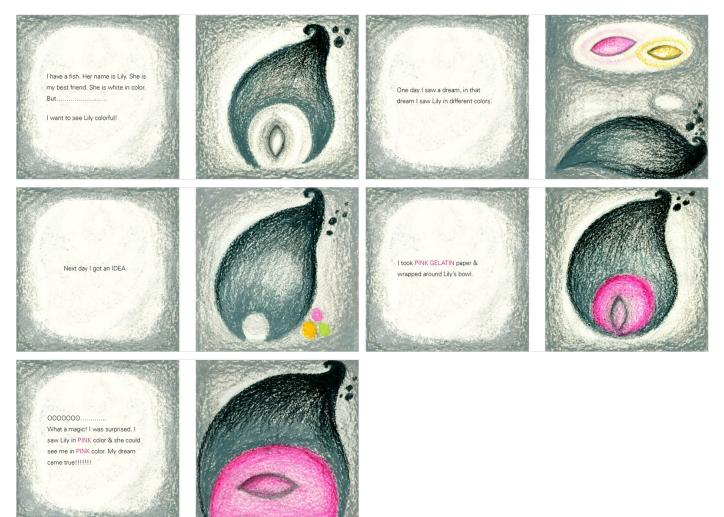
Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

Introduction
 Visual Order
 Design Exercise
 Explorations
 Abstraction
 Further Links
 Contact Details

Lily My Friend:



Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

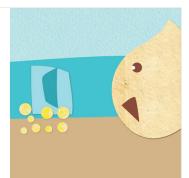
Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Sitha School Uniform:

Everyday Sitha and her father go to the riverside, to wash the clothes. There she always sees a primary school, where the kids of her age group used to study, play and do many activities.

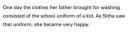


That makes a strong feeling inside her to be the same as those kids. And as she keeps on seeing again and again, the desire of getting into the school gets stronger.



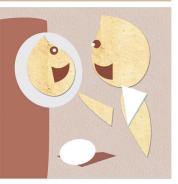
Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

- 1. Introduction
- 2. Visual Order
- 3. Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details





And soon Sitha wore that uniform and stood in front of the mirror. She started acting like the dids ahe used to see everyday while passing by the school. And she started dreaming about the school, playground, lunch break, parade and many more things she used to see.



SUDDENLY!!!! Her father entered. Siths somehow managed to cover herself, mainly the uniform with an old curain. Ranga aproached and grabbed the curtain out. A truth revealed.... Sitha in school uniform. Ranga realised that it was school she wanted to have. This incident opened his eyes.



Digital Learning Environment for Design - www.dsource.in

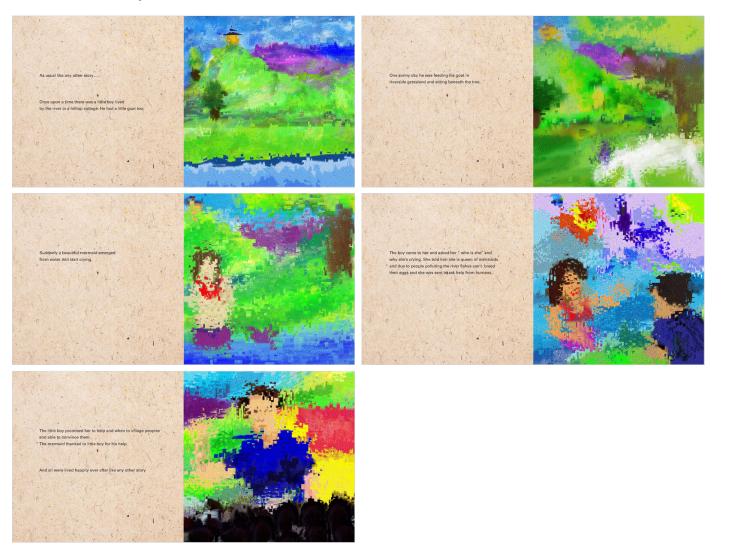
Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

Introduction
 Visual Order
 Design Exercise
 Explorations
 Abstraction
 Further Links
 Contact Details

Mermaid & Little Boy:



Digital Learning Environment for Design - www.dsource.in

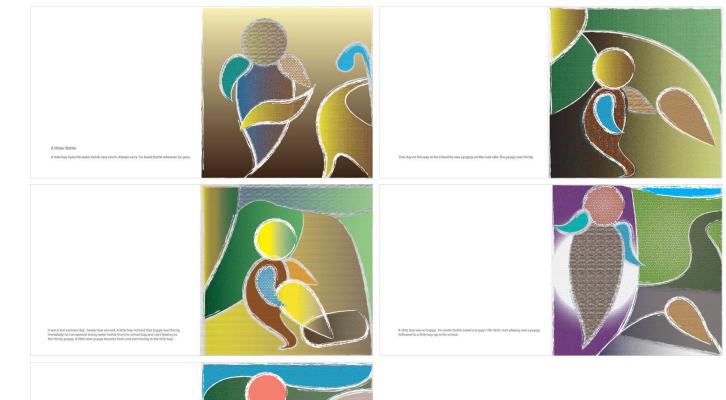
Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/abstraction

Introduction
 Visual Order
 Design Exercise
 Explorations
 Abstraction
 Further Links
 Contact Details

A Water Bottle:





A little boy and the puppy become a good friends. A little boy understood the value of and he got a good friend because his water bottle.

Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

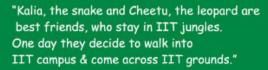
Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

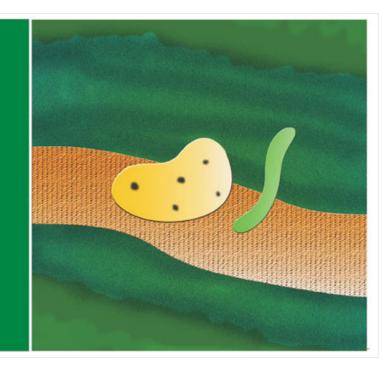
Source: https://www.dsource.in/course/visual-syntactics-4abstraction/further-links

- Introduction
 Visual Order
 Design Exercise
- 4. Explorations
- 5. Abstraction
- 6. Further Links
- 7. Contact Details

Further Links

- Identity programme at designofsignagesystems.com
- Useful resource e-links related to 'Graphic Design' in India includes Communication Design, Publication Design and Packaging Design
- International resource related to 'Graphic Design'
- Visual Communication Design at IDC IIT Bombay





Digital Learning Environment for Design - www.dsource.in

Design Course Visual Syntactics 4 -Abstraction

Understanding Visual Language by Prof. Ravi Poovaiah IDC, IIT Bombay

Source: https://www.dsource.in/course/visual-syntactics-4abstraction/contact-details

- Introduction
 Visual Order
 Design Exercise
 Explorations
 Abstraction
 Further Links
- 6. Further Links
- 7. Contact Details

Contact Details

This documentation for the course was done by Professor Ravi Poovaiah, faculty at IDC, IIT Bombay.

You can get in touch with him at ravi[at]iitb.ac.in

You can write to the following address regarding suggestions and clarifications:

Helpdesk Details: Co-ordinator Project e-kalpa Industrial Design Centre IIT Bombay Powai Mumbai 4000 076 India

Phone: 091-22-2159 6805/ 091-22-2576 7802 Email: dsource.in[at]gmail.com