PERCEPTION

Every visual form, regardless of whether it is concrete or abstract, explains itself in relation to what we have seen before. Every person creates the meaning of a visual form through associations with earlier visual experiences. Without these associations, the object of focus remains as obscure as reading a text in a foreign language. The visual impression a student receives when looking at an object or scene depends on a variety of personal factors. These factors range from the characteristics of the place she grew up and the movies she has watched through to the skin design of the applications on her smartphone. It is this subjectivity of individual perception that nurtures creative diversity and mutual inspiration.

Design education aims to broaden the horizon through creating awareness of many different factors that inform visual perception. A designer needs to understand the expectations of the people who are going to use her products or she will not be able to create a successful solution. A designer has to analyse and study the circumstances under which her products will be used, regardless of whether the product is a physical object, a communication strategy or a virtual application. No matter whether she designs a car, a toy, or the graphical user interface for a social media platform, there is always a human who is going to interact with this design. The design must therefore speak with a universal language, a language that is understandable to everyone within the target user group. To become able to create such design solutions a student has to learn to rec-

ognise things that are possibly beyond her personal (original) awareness.

Perception influences creation. The functionality of a design is related to the designer's perception and empathy of user behaviours, expectations and needs (I call these the substantial factors). In the learning process, creative work by students may be lacking some important aspects, such as aesthetical, functional or information-related aspects, as a student is unable to perceive all of these substantial factors. Any creative idea can be limited by this lack of awareness as the idea is directly related to an individual horizon of perception. The duty of the teacher is to expand a students' horizons and to encourage them to question their current beliefs. Moreover, in the field of art and design, this receptivity of a student's scope of perception has to change dynamically according to different circumstances. In every project an analysis of these changing factors is essential. Although this step often comes before the actual development of a creative solution, it deeply affects the creative process and the final result.

The modules in this chapter are related to questions about how we perceive and interpret information or how multiple interpretations of the same information can occur. Every student has a different background, character, talent and preference. This already creates a huge variety of perceptions or points of view within a single class. It is in fact this variety that can be used to contribute to the learning experience of each individual student. In teams, stu-

"Our life and living environment are complicated and complex, the course on visual practice brings back my awareness of beauty – toward simpler forms and relationships. It really guides my vision on de-sign (a decomposed symbol) of things surrounding us."
Kong Siu Fung (student)

dents learn how their classmates see things. They learn that information, either in the form of text or in the form of an image, can be seen in different ways. To understand that an individual interpretation may be only one of a dozen possible points of view creates an awareness of diversity and the range of possible interpretations.

Interpreting perceived information necessarily involves creative processing and, in cases where the information is incomplete or unclear, the potential for interpretation increases. For a creative person, unclear or incomplete information stimulates potential creative responses. A creative person starts to imagine or invent missing elements, allowing him to complete the information in a meaningful way. The ability to deal with unclear information is strongly related to the individual's potential for imagination; interpreting unclear information with the aid of imagination is a crucial factor in the professional work of a designer or artist. This process can even be seen as a metaphor for the creative process as a whole. A creative habitat is always unfinished or unclear. In a world that emphasises the unambiguous, nothing is left for a designer or artist to do. Luckily, we are not living in such a world. There are a lot of things left to explore, to question and to understand.

01 QUESTIONS

Asking the right question is an essential foundation for developing ideas and creative concepts, no matter whether the question is addressed to a collaboration partner, a client or oneself. A good question can lead to new insights and affect the conceptual and creative quality of a work. The scope of a question sometimes also defines its limitations and the boundaries in which one is seeking a solution. As Albert Einstein once pointed out in a conversation with the physicist Werner Heisenberg: "The theory will decide what can be observed". If one strongly assumes a certain result, she might be trapped by the questions she is trying to answer. Sometimes, reinventing the question can help solve a problem.

A good teacher is able to give students hints in such situations, helping them to broaden their spectrum of questioning in order to discover new potential design solutions and opportunities for creative response. In the long term, a student has to be able to develop her own method of targeting her questions and research within a correct conceptual frame. There are situations in which the framing of a question has to be narrowed in order to focus on a specific issue in detail, and there are situations in which it becomes necessary to widen the angle in order to question general circumstances.

This module is designed to provide valuable insights into students' interests, expectations, concerns and intellectual capacity. These factors are especially useful if the teacher has limited information on a student's background. After executing the module the teacher should be able to identify these limitations and address specific needs and concerns within the class.

Module

1 Ask each student to write down three questions on a blank sheet of paper and leave some space between the questions. The questions should reflect a scope of interests rather than address a person.

2 Collect the papers from the students, mix them randomly and pass them back to the students so that every student holds a sheet of paper with questions written by someone else.

3 Ask students to write down their answers to the three questions on the paper they have been given.

4 Collect the papers, mix them randomly and pass them back to the students.

5 Each student should study the questions and answers she receives and selects one of them. One after another, each student should read aloud the selected question and the related answer.

Review

• After a student has recited one question and answer, the author of the question should be identified and asked if she is satisfied with the answer. At this point, a discussion between the asker and the answerer of the question emerges and other students can contribute their opinions.

• The teacher should moderate the discussion among the students rather than answer the questions himself.

• Relevant conclusions can be summarised and commented on by the teacher at the end of the module.

Material

Paper
Pen

make you touch in art?

① what is meant by

Pleasing Audience?

② Do you like John Cage?

Is What is truth?

good examples of using projections?

IS I COME FROM / NON ... RESPECT

1. Do you real mean what you are saying

2. What ... time Questions art.

The last word is...RESPECT

eating & sleeping

How you facing communication difficulty?

to value

you can fly!

02 PERCEPTION AND INTERPRETATION

In this module, students are going to experience how communication depends on interpretation and perception. As described in the introduction to this chapter, we know that a text or image gains its meaning from the interpretation of the recipient through the act of perception. During the process of interpreting words with images and vice versa, followed by a discussion, students achieve awareness of how their own drawings and texts are perceived by others and how personal interpretations can vary.

The accuracy of an interpretation is secondary for this exercise; even a misinterpretation can be considered as an inspiring contribution to the discussion. The primary aim of this module is to stimulate awareness of subjective interpretation and imagination.

Module

1 The teacher prepares sheets of paper by dividing each sheet into three segments. Students write a word in the first segment of the paper. The word should express an individual feeling or condition.

2 The papers are collected, mixed randomly and redistributed to the students. Each student should have a different sheet of paper than before. The students have 10 minutes to draw an image in the second segment of the paper that illustrates the word above.

3 The teacher should collect all the papers again, cut off the first segment of each sheet that shows the written word, and distribute the remaining segments of paper with the drawing randomly among the students. Now the drawing has to be interpreted by a word written in the third segment of the paper.

4 Collect all papers and stick the original upper and lower parts together (by matching the numbers on the left side). The papers can be pinned on the wall for the review.

Review

• The teacher initiates a critical discussion on the changing interpretations seen across the three segments of each paper. The three students who contribute to one of these papers are invited to share their opinions. The one who initiates the word can comment on the visual interpretation and vice versa. The student who translates the visualisation back to a word can reflect upon how much the meaning of the initial word contributed. This scenario can be repeated for other papers. Overall the process should lead to an open review and discussion on various angles of perception and interpretation.
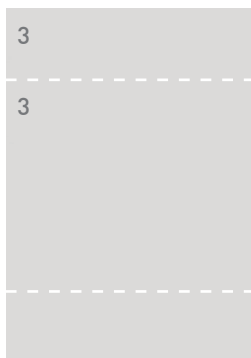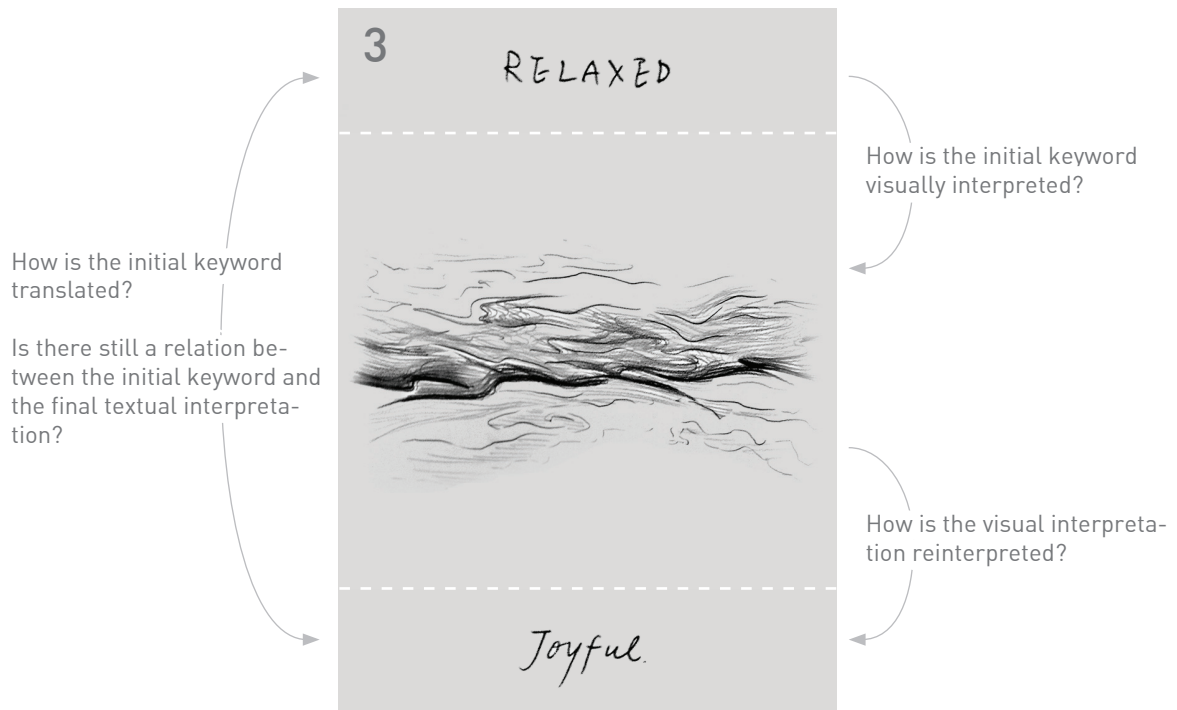
Material

White paper
The sheets of paper must be divided horizontally into three segments. An individual ID number should be written in the left corner of the first and second segments of each sheet.

Pen

Scissors

3

RELAXED

Joyful.

How is the initial keyword
translated?

Is there still a relation be-
tween the initial keyword and
the final textual interpreta-
tion?

How is the initial keyword
visually interpreted?

How is the visual interpreta-
tion reinterpreted?

03 CHAOS AND ORDER

There are aesthetic and structural qualities in every observable surrounding, and artists and designers are influenced by these environmental settings. The richness that can be discovered in any environment is limited only by the sensitivity of our perception.

To train this sensitivity, it is important to be confronted with raw images rather than images of accomplished artwork. By 'raw' I am referring to something that has not already been interpreted by someone else. Students tend to process second-hand information rather than draw new conclusions from first-hand information derived directly from the source of study. For foundation courses, it is important that students learn to interpret something from scratch rather than browse the web or look for completed artwork or designs. Although it is very inspiring to study historical or contemporary artwork, the completeness of such artwork can possibly distract an individual from his own creative development. It should be the raw that triggers a creative impulse, and the incompleteness of this raw image that allows space for creative interpretation.

The process of observation is crucial in every creative process. It starts with the observation of a certain situation or environment and it ends with the observation of and reflection on the final artwork. By taking photographs related to topics like 'order', 'chaos', 'evenness' and so on, students learn to see their environments in different contexts.
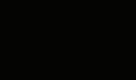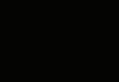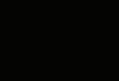
Module

1 Each student takes three photographs representing chaos and three photographs representing order. Choose different scenes and motifs for each representation.

Review

- All the photographs should be printed out and pinned on the wall, shown on a computer screen or projected. It is beneficial to look at all students' photographs simultaneously and compare them to give an overall impression.

- The student photographer can briefly explain each photograph by answering questions such as "Why did you choose this particular motif?" or "Can you identify a certain order in the chaotic arrangement?". To encourage group-based discussion, students can be asked to identify photographs with similar qualities and discuss the similarities or differences between them.

Material

Camera
Printer

FROM THE REAL TO ABSTRACTION

With the invention of photography, it could be argued that the realistic painted reproduction of scenery became widely obsolete. Since the nineteenth century, contemporary art has shifted to more experimental and abstract forms of representation. In these new processes important aspects or signature qualities of objects and landscapes are extracted and amplified by the artist, while irrelevant properties are ignored. This definition of what is important and what is unimportant relies on individual artistic preferences or on the intention of a specific design. The process of segregating and extracting certain information can be seen as a comprehensive method, applicable in a huge variety of situations. The method itself preserves neutrality, whether it is introduced to achieve aesthetic qualities, communicate a message or ensure functionality.

In this module, such a method of abstraction is introduced in the form of translating a photograph into an arrangement of lines.
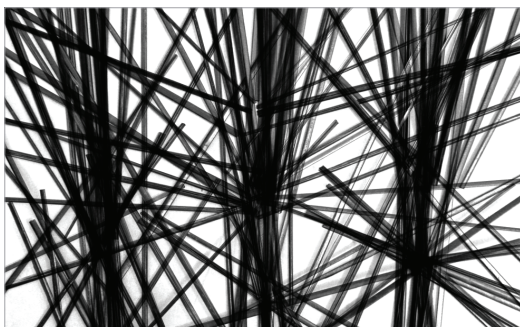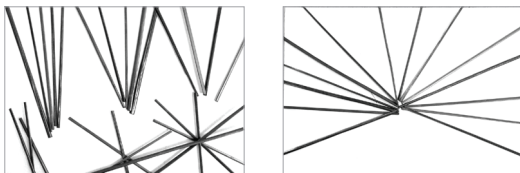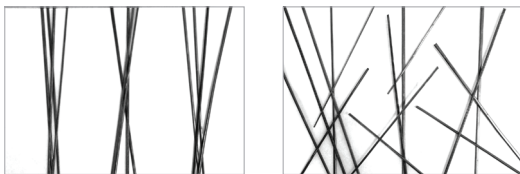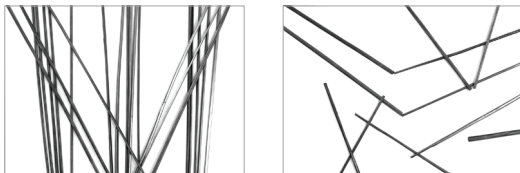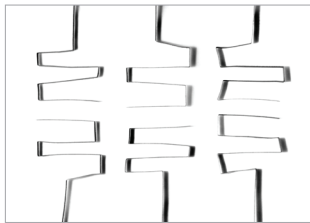
Module

1   The teacher selects a suitable photograph from Module 3 (depicting chaos and order) and prints it.

2   Transparent paper should be laid on top of each photograph and stickers or paper strips with a predefined length should be arranged on top to emphasise the visual characteristics of the photograph. The predefined lengths of the lines are important in order to prevent the student from creating an accurate copy of the image. The characteristics of the image are translated only through the alignment, distribution and rotation of lines.

3   The original photograph below the transparent paper should be removed so that the composition of lines becomes visible.

4   The line composition can then be modified and adjusted by the students (this is a process of further improvisation with the visual patterns that are extracted from the photograph).

5   These steps can be repeated with other photographs.

6   The paper strip may be creased to adapt to more detailed structures.
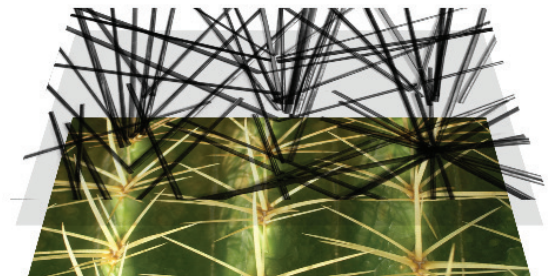
Review

- The resulting line compositions should be discussed based on the level of abstraction, uniqueness and recognisability.
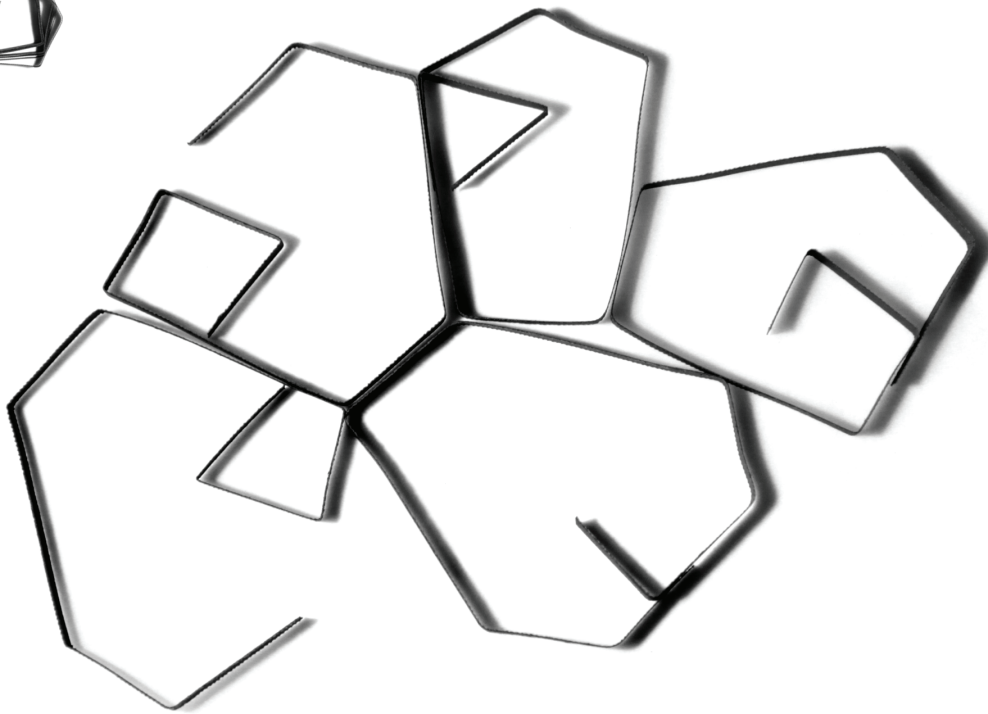

Material

A4 photographic prints (previous module)
A4 tracing paper
White or black paper
Paper shredder (optional: cutter and ruler)

PATTERN RECOGNITION

This module is an extension of the previous module but also serves as a preparation for some modules in chapter two, particularly module 2.04 (Pattern, Replication, Intersection), module 2.07 (Geometric Forms) and module 2.01 (Modular Systems). While new patterns and forms are created from scratch in later chapters, the pattern in this module is extracted from an already existing form. The extraction process is based on the study of structural qualities of an object and its translation into schematic drawings. The analysis of the pattern and its formation should be done in an objective manner, and in contrast to the previous modules in this chapter, subjective interpretations should be avoided.

Most of the patterns in nature evolved due to complex biological or chemical processes or natural forces. If the teacher has a background in natural science, an explanation on how different patterns emerge in nature can be given during the review session although the priority of this module lies in the structural analysis and extraction of a repeatable formation. There is a certain coherence between the geometry of some natural patterns and our aesthetic preferences. For instance, the proportion of the golden ratio, which is often used in design, paintings and architecture, can be found in many natural formations such as the spiral of a snail's shell.
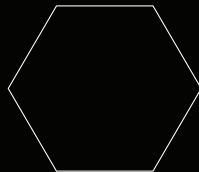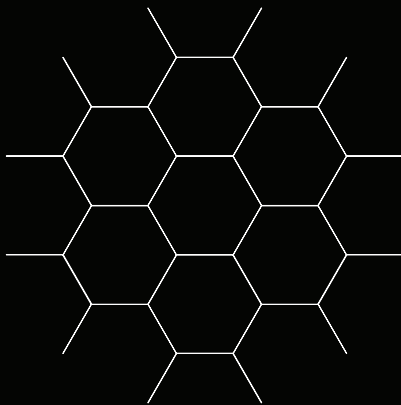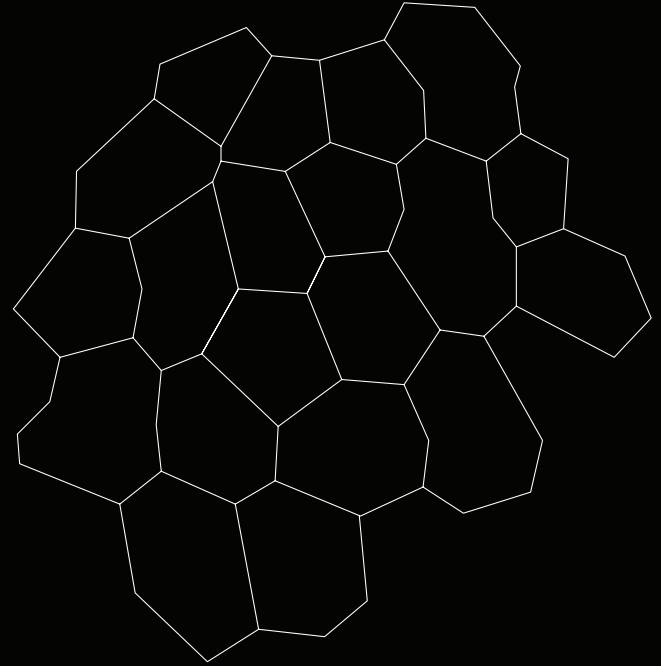
Module

1 Either the teacher prepares different natural objects and passes it to students or the students collect the objects in advance. The objects should exhibit significant patterns. Such patterns can be found in corals, nutshells, leaves, wood or stones.

2 Each student chooses an object and extracts its pattern by drawing on a piece of paper. Instead of portraying a photo-realistic object, the drawing should only focus on the geometry of the pattern.

3 The drawn pattern should be refined in the second drawing, which aims to purify the extracted pattern and strengthen its structural characteristic.

4 Analyse the geometrical building blocks of the pattern. A building block consists of one or more characteristic repeated shape. This basic form should be extracted in the third drawing.

5 Repeat steps 2 to 4 with different objects.
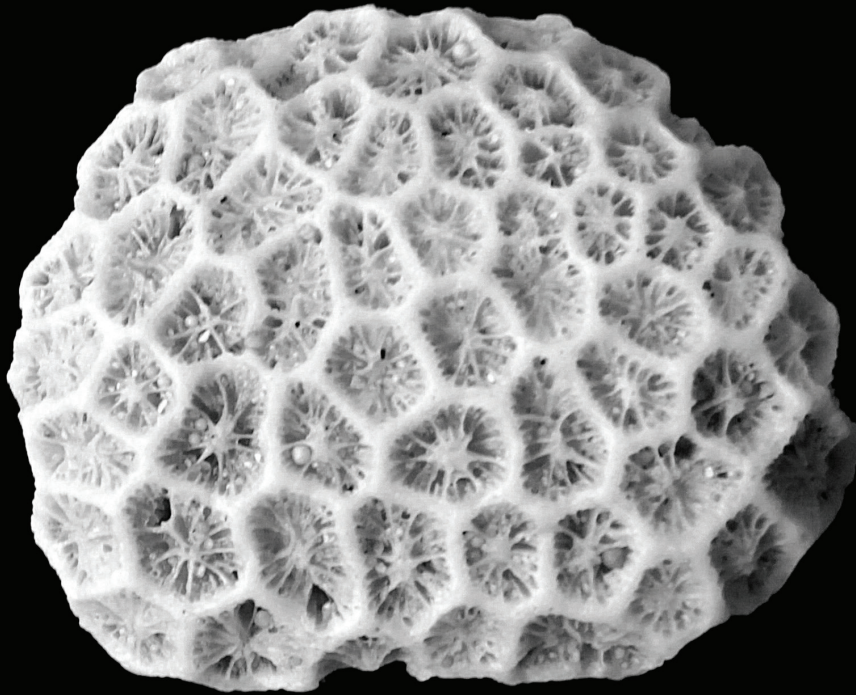
Review

- Review of selected objects and drawings based on aesthetic qualities.

- Discuss the functional aspects of patterns in nature and its possible applications in design or art related work. The discussion can be about issues like spatial segmentation, distribution and replication as well as statical and formative aspects. Possible areas of application: Architecture, product or interior design, art.

Material

Natural objects (corals, nutshells, leaves, wood or stones)
Pen
Paper

VISUAL PERCEPTION
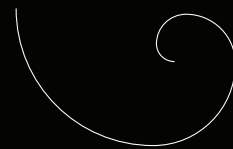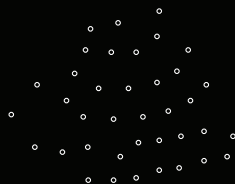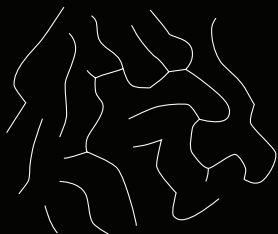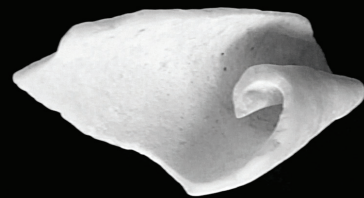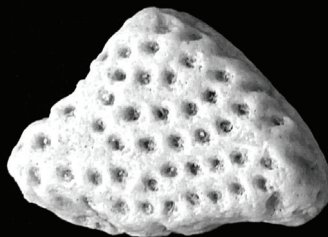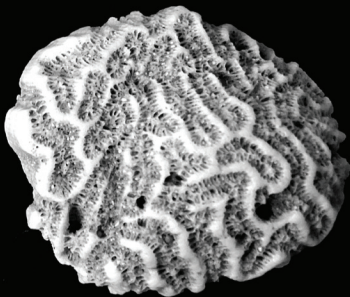
The image on the right shows the gaze trails of a person who is studying the picture of a human face. The blue dots indicate hot spots, which were observed for a short time, while the black lines show the order in which the eye jumped from spot to spot. It is easily recognisable that the observation of a face is done through a fragmentary 'reading' processes rather than assimilation of the whole. The eye scans the observed face section-by-section, usually starting with the eyes and then moving to the mouth, the nose and finally the contours of the face. If there were a significant feature like a birthmark on the cheek of the face, it would be appear in the trail of the gaze visualisation as well. The gaze trail traces significant features, while areas with less visual information remain ignored.

Humans tend to perceive visual information in fragments. This process provides flexibility for comparisons; interlinking and continuously associating even the smallest details independently of their original context occurs when humans look at an object. Simultaneously the composition and proportion of all these details are combined in our perception.