

Module 8: Biased attention and biased cognitive networks

Biased attention

We tend to pay more attention to things that are of personal importance

"OCD glasses"

- ▶ People with OCD are more likely to, and more quickly, perceive OCD-relevant stimuli/information and have difficulty detaching their attention from it
- ▶ Often the environment is literally "scanned" for stimuli related to their fears
- ▶ Examples:
 - Sharp objects, splinters, shards, knives
 - Dirt, sticky residue, sweaty hands, stains
 - Locks, sockets, electric switches
 - Noises in the car, bumpy roads, objects, lying next to the road

Focus of attention

- ▶ Try shifting your attention to another stimulus of the same sensory modality
 - Shift your attention to another visual stimulus, when you find yourself compulsively scanning for dirt or dangerous objects
 - Or to some other acoustic stimulus, when you find yourself compulsively listening for threatening noises like a car rattling
 - Or to some other olfactory (i.e., smell) stimulus, when you find yourself sniffing for odors, smoke, or burned cables

Examples:

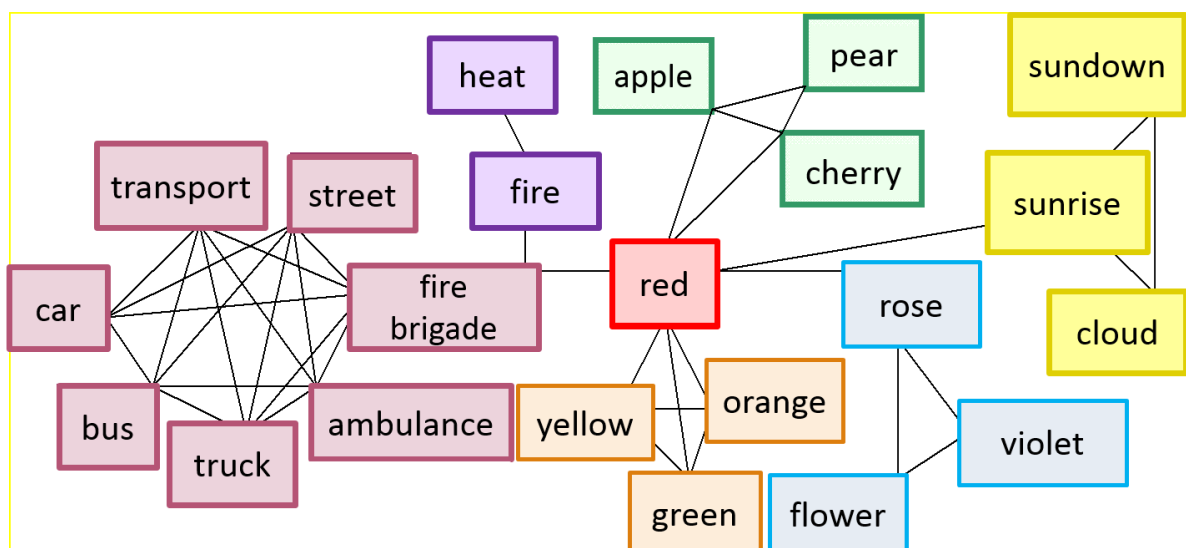
Visual	Acoustic	Olfactory
Look for:	Listen for:	Smell:
<ul style="list-style-type: none"> ▪ All blue things in the room 	<ul style="list-style-type: none"> ▪ The breeze in the car 	<ul style="list-style-type: none"> ▪ Flowers
<ul style="list-style-type: none"> ▪ The number of black cars 	<ul style="list-style-type: none"> ▪ Child's laughter 	<ul style="list-style-type: none"> ▪ Perfume
<ul style="list-style-type: none"> ▪ The color of people's eyes 	<ul style="list-style-type: none"> ▪ Radio 	<ul style="list-style-type: none"> ▪ Cigarette smoke
<ul style="list-style-type: none"> ▪ Happy or annoyed faces 	<ul style="list-style-type: none"> ▪ Male, then female voices 	<ul style="list-style-type: none"> ▪ Rain wet clothes
<ul style="list-style-type: none"> ▪ Blonde or black hair 	<ul style="list-style-type: none"> ▪ Rustle of the wind 	<ul style="list-style-type: none"> ▪ Food smells

Exercise 1:

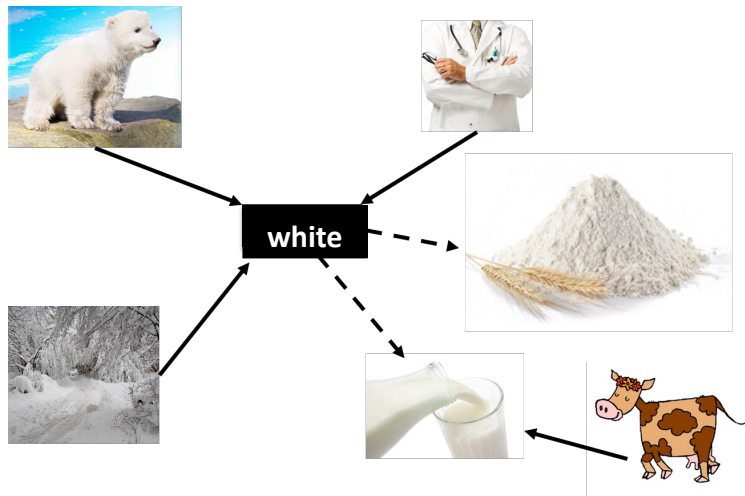
Choose a sensory modality (visual, acoustic or olfactory) and for the next 30 seconds, try to focus on this modality and direct attention to a specific stimulus. What was your experience like?

Biased cognitive networks**Cognitive network**

- All our thoughts (cognitions) are linked together "associatively". Besides words, cognitions can also be memories, feelings, ideas or even impulses to act



- If a cognition (in this case **“white”**) is activated, the "associated" cognitions are also activated and may be recalled more quickly



Strength of association

- ▶ The strength of association between 2 cognitions can be mutually different. Thus, the strength of the association depends, among other things, on the number of existing associations in total. The more different associations there are to and from a cognition, the lower is the individual link strength (*fan effect*)
 - The biased networks can be expanded through practice!
- ▶ The strength of the association between two cognitions also depends on how often they occur together: The more frequently cognitions are thought or imagined together, the stronger the linkage is

Biased cognitive networks

- ▶ Cognitions that occur together very often are particularly strongly associated. When one is activated, the other comes to mind quickly
- ▶ Individuals who suffer from OCD often exhibit one-sided associations
 - Example: red → blood, red → danger, red → aids
 - Biased toward obsessive fear
 - Decreased access to alternative associations (e.g. red → roses, red → apple, red → love, red → robin)
- ▶ Cognitive networks may be biased toward OCD-relevant information in individuals with OCD. No surprise that obsessions are very quickly retrievable and become more and more intrusive
- ▶ However, the networks can be expanded by finding new associations or reactivating and training old ones

- For this purpose, a technique called "**association splitting**" was developed

Association splitting

- ▶ The aim of association splitting is to detach oneself from the entrenched OCD focused thoughts and weaken the associations so that it is easier to move thoughts away from the subject of OCD and expand in other directions
- ▶ For this purpose, new OCD-irrelevant associations have to be made, or old/dormant OCD-irrelevant associations have to be reactivated
 - In the long term, this should lead to a decrease in OCD symptomatology

Exercise 2:

- ▶ Go to a **quiet place** where you will not be interrupted. You should do the exercises in a relaxed atmosphere, i.e. when you do **not have any obsessions** at the moment
- ▶ Write down **individual terms** that are crucial components of your personal OCD network. Therefore, words or thoughts that are always part of your worrying and that immediately make you think of your obsessions. Choose **at least 2** terms relevant to your OCD
 1. _____
 2. _____
 3. _____
- ▶ Write down at least **3 alternative associations** for this term. These should be **neutral or positive** and have nothing to do with the OCD fears and thus, redirect out of the OCD network
 - You can create all kinds of associations: **contextual connections**, or **rhymes** or ones that are of **unique significance to you** (What is important is the direction of the association, that is: *knife* → *spoon*; *knife* → *fork*; *knife* → *jam* and not the other way around!)
 1. _____
Association 1: _____
 - Association 2: _____
 - Association 3: _____
 - Association 4: _____

2. _____

Association 1: _____

Association 2: _____

Association 3: _____

Association 4: _____

3. _____

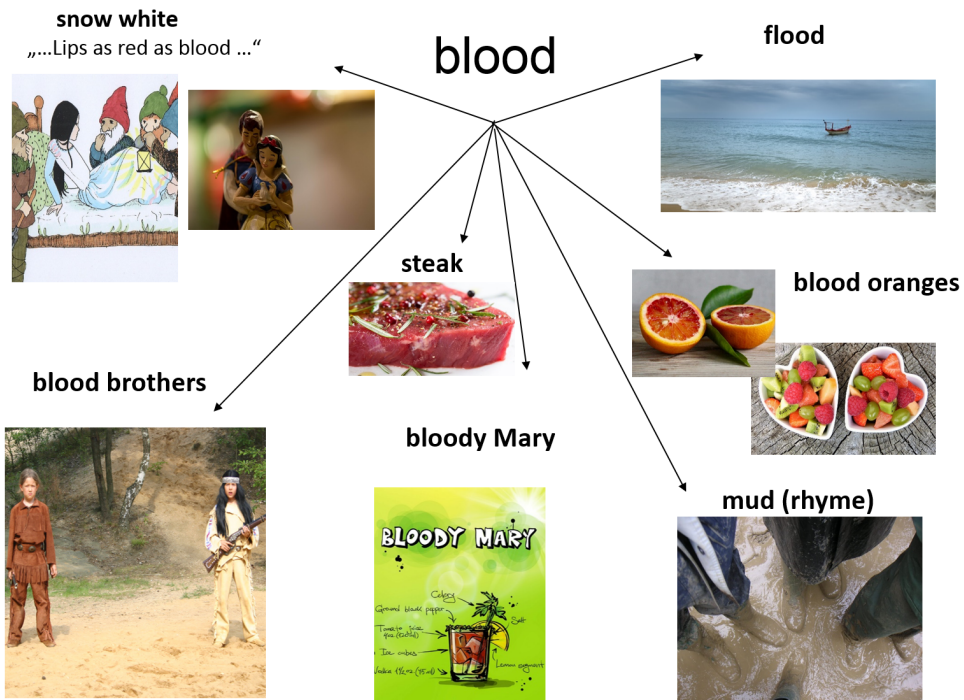
Association 1: _____

Association 2: _____

Association 3: _____

Association 4: _____

- ▶ Make an **exercise sheet** for yourself, to help you practice the new associations
- ▶ Practice for **10 minutes a day**, looping in the new associations. For this, repeat to yourself the new associations to the OCD-relevant term
- ▶ What is important is the **direction of the association**, i.e. always away from OCD terms, towards the neutral or positive association, never the other way around. Try to **imagine** the new term **as accurately as possible**. The more **senses** you incorporate into your imagination of the new term, the stronger the new link gets anchored. If you like, you can design your exercise sheet with pictures
- ▶ Perform the exercises **not while you're actively having obsessions**. This prevents the new associations from being used as a distraction or compulsion in response to your obsessions



Notes

Space for unanswered questions or problems that have come up or experiences that you would like to talk about in the next session:

Other notes:
