



Air quality and air conditioning

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Not long ago, the 'sick building syndrome' was introduced as a term for climate installations with a high percentage of recirculation, often combined with dirty air ducts and old-fashioned air humidifiers.

In fact, the most popular office installations are still based on 60-70% recirculation, but instead of the air being recirculated remotely at the air-handling unit, it's now recirculated locally (in the office), most of the time without being filtered.

The only reason for recirculating this air is to ensure that enough air passes over the cooling coil to push the room temperature down.

The effect of these systems is that office air is continuously moved around, picking up dust and holding it there without filtering it out.

This leads to complaints about red eyes, sore throats and headaches from air which people think is too dry, but in fact is too dusty.

The air conditioning world focuses on energy savings and cheap installation methods, but does nothing to improve internal air quality.

In fact, systems which recirculate less air, like cooled ceilings, cooled floors and variable volume systems, are better than induction systems and fan coil solutions.

Nevertheless, the issue of filtering or cleaning the office air remains a problem.

Central Hoover installations didn't take off, so we keep on throwing 80% of our dust into the air and letting our bodies be the filter.

The limits of our knowledge

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Pretending to be 'leaders' in the design of healthy environments puts pressure on D/DOCK, as it turns out that research on this subject is not only limited, but is carried out in an alternative circuit.

What do we really know about the air we breathe and the water we drink? Why do we still manufacture unhealthy air conditioning systems?

What is the real influence of radiation and electro-magnetic fields on our systems and our health?

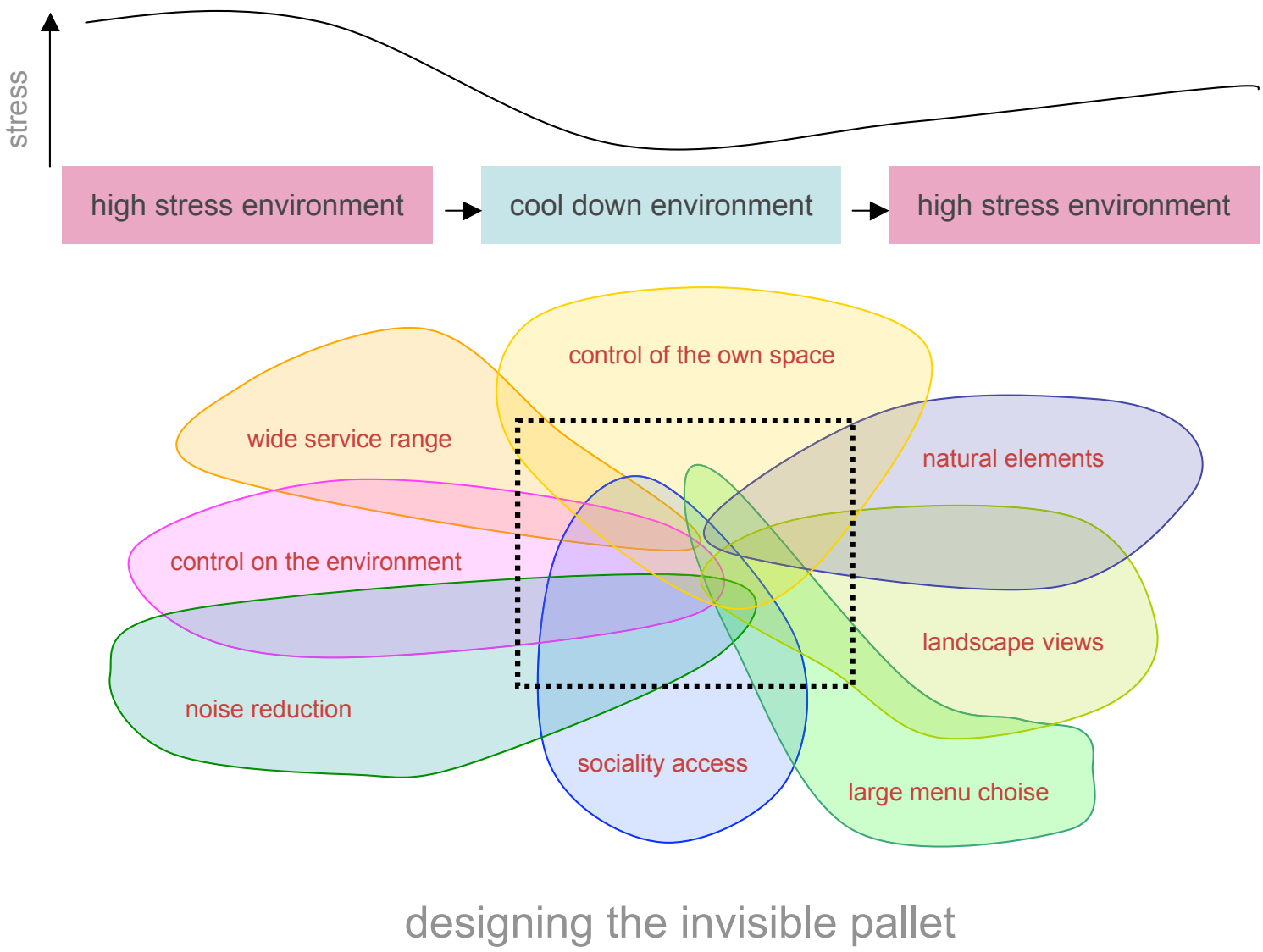
Do we need 400 lux, 500 lux, 3000 lux or variable lux levels to function at our best?

Why are autoimmune diseases and allergies becoming a growing problem and what can we do about it?

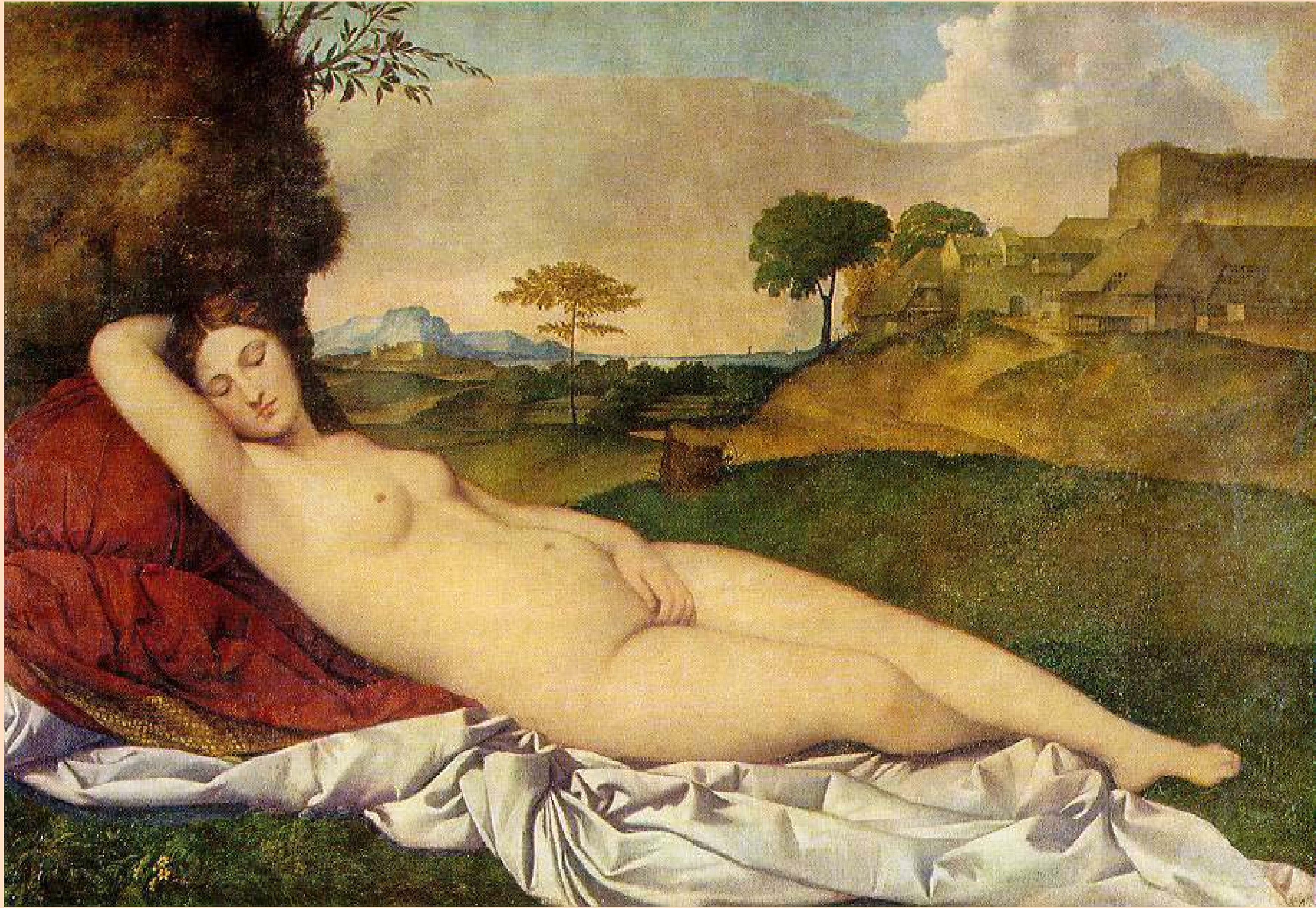
The ARBO regulations are based on old standards which don't cover these issues, so all these questions relating to offices and workspaces are still up in the air.

To be at the forefront of research into healthy environments and durable solutions, D/DOCK has joined Group 4Wellness, which is supported by the Dutch Institute of Building Biology and Ecology.

This has provided D/DOCK with the reliable source of research and technical expertise which it needs in order to make the next step towards developing energising spaces and healing design.



Group4Wellness



D/DOCK and Group4Wellness are currently experimenting with ionising methods which not only clean the air without filtering, but also create an air quality much closer to the natural air we breathe in the forest or at the seaside. We hope to implement this method in the new VUmc Cancer Center, but it might well be used earlier in other projects for testing purposes.

Electro-magnetic fields

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We are becoming increasingly aware that electro-magnetic fields can harm our health and energy levels. Even telecom providers are admitting that there are side effects from radiation and phone use, so we need to take this problem more seriously.

In environments where people recuperate, not only in hospitals but also in normal sleeping rooms, we need to start looking at radiation from hand phones, Dect stations, automatic alarm clocks, electrically adjustable beds and water beds.

In most cases, the solution is simple: we just need to be aware of the problem and maybe do some simple measurements to detect them.

Water quality

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Although the quality of our drinking water is considered as good, it will still turn a simple rough filter black after only a few weeks .

Water is an essential part of our body and health systems and the amount of medicine residues and bad coppers in our drinking water is quite alarming.

The good news is that, with the right filter system, the water will be considerably cleaner.

It can be improved even more by unclustering it to make it more accessible for the body.

Many people claim to have seen enormous health benefits from drinking alcalic water.

In conclusion, water is such an essential part of the body that developing better quality drinking water is bound to reap health benefits in the future.

D/DOCK is working closely with Group4Wellness in following up any new developments.

D/DOCK and Group4Wellness

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You might ask yourself why a design company would want to work with a group which is building up expertise in these areas.

The reason is that D/DOCK and Group4Wellness both aim to improve the vitality (= productivity) of people in their daily life.

We believe that soon we will be able to not only guarantee improvements in the energy and productivity of employees in their working environments, but also reduce the percentage of sick leave by changing environmental qualities, both visible and invisible, and improving the quality of food and water in the daily routine of working and living.

