

FUTURE SYNERGIES



PROJECT TERMINOLOGY

NATURE ECOSYSTEM

A nature ecosystem is an area untouched by human alteration, where ecosystems operate under nature's reign. However, in the 21st century, landscapes that are totally untouched by human activity is rare.

The audio-visual and other sensory combinations of being in natural ecosystems have restorative qualities on our overall health.

NATURAL ENVIRONMENT

Natural environments (natural landscaping), should not be confused with nature. It is an imitation created by humans.

However, while it is an imitation, adjusted sensorial combinations can create restorative atmospheres that are found in nature environments.

BIODIVERSITY CORRIDORS

In general terms, biodiversity corridors unite forest fragments or conservation units divided by human interference, such as cities, roads, crops or logging activities.

Their main objective is to allow the free movement of animals, facilitate seed dispersal and expand vegetation cover.

EVERYDAY GREEN SPACE

Vegetation and greenery scattered around the urban landscape. Space that you visually interact with throughout the day, but that you not physically engage with.

Examples are grass and trees in traffic islands, and median strips of the road. Vegetation in front of houses and otherwise empty space surrounded by or close to pavement and roads.

RESTORATIVE SPACE

A restorative space can be described as sensorially pleasant, catering to isolated or multiple senses. It is predominantly restorative due to the positive physical and psychological effect it has on human health.

Restorative spaces relies on natural surroundings, temporal changes and biodiversity.

RECREATIONAL SPACE

Recreation can be described as any activity that amuses, diverts or stimulates.

Recreational space can be categorised as spaces designed for specific activities, or any other suitable space that facilitate spontaneous activity.

URBAN GREEN SPACE

Urban green spaces can be defined as larger natural environments in a urban setting. Green space mainly consists of unsealed, permeable, biologically active areas and includes spaces directly or indirectly accessible to the public.

However, it can also be privately owned, this includes university campuses, neighbourhood- and community parks, and institutional/ corporate grounds.

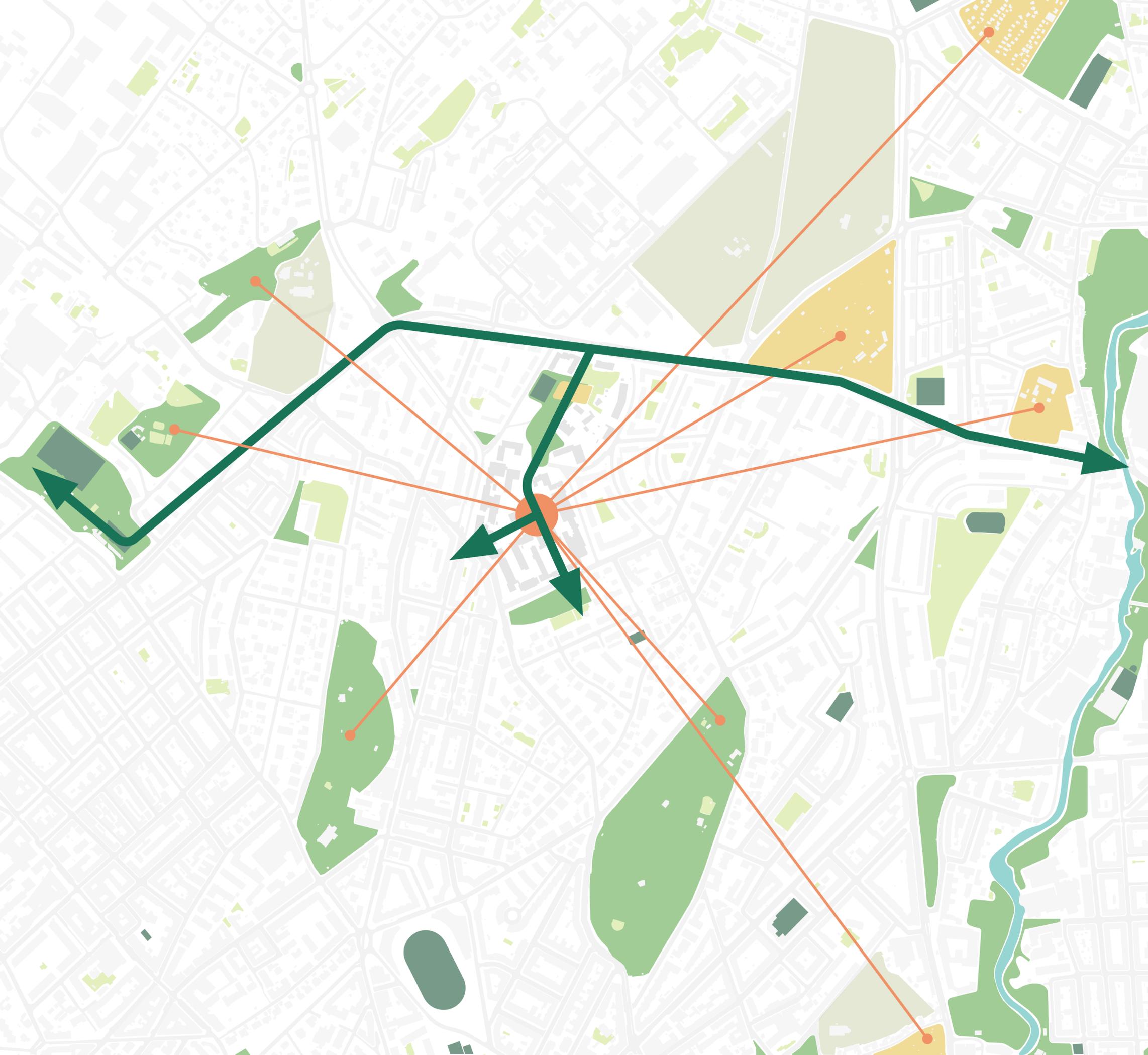
GREY SPACE

Urban environments that cover landmass without the presence of greenery. Predominantly sealed, impermeable, hard surfaces consisting of concrete or tarmac. The space is controlled, and often commercialized.

Unfortunately, the intensification of cities increases grey space development and decreases the amount of green and blue spaces available for urban dwellers.

BLUE SPACE

Urban areas are also filled with blue space, encompassing water areas (rivers, lakes, artificial reservoirs, and seas). Urban water bodies and open green spaces are indispensable for building urban sustainability and creating human well-being.



PROGRAM

ABSTRACT

The project investigates the restorative (health beneficial) qualities in exposure to nature environments, and how these can be implemented in urban settings.

It must be said that it is not viable to directly place a nature environment into an urban one. This is due to the complex ecosystems that requires time to develop and that nature will be too fragile for the high human circulation in urban public places.

Rather, the project focuses on restorative spaces that are informed by factors of nature environments and our five senses.

WHERE

The project will be situated on the grounds of the former Veterinary College at Adamstuen, Oslo.

The relocation of the old Veterinary College follows a lasting pattern where central institutions and industries move out of the city. This occurs due to their scope, land use, transportation, or other operational needs/consequences that are incompatible with an accessible and human-friendly city.

They leave behind large pockets within the city, where conditions are present for the transformation of these properties into lively areas to the benefit of citizens in Oslo.

WHAT

The program is set within and around the transformation of the existing boiler building. The building is extended vertically with two new floors, and connected with the old veterinary college building.

The building intends to set the stage for a greener urban space by joining existing and new programs with sensoric gardens. The project introduces a new library and educational facilities that revolves around gardening. It also includes social venues such as cafes and restaurants.

The Gardening program can be connected with the many parcel gardening communities in Oslo, and sell produce to the social venues on the old Veterinary College.

The introduced programs are connected with a municipality-planned elementary school, a new shopping street, and market street.

WHY

It is an established fact that being in nature is beneficial to our overall health. In Oslo, there are several nature - and natural environments in, and around the periphery of the city. However, the natural environments inside the city are few compared to the grey urban surroundings.

There are strong statistics indicating that the largest demographic not engaging in nature environments are represented in high density urban areas.

The initiative will emphasize minimal barriers for participation to engage groups that are not currently engaging in physical activities and appreciation of nature.

ADDRESS PROBLEM

ABSTRACT

With the rise in urbanization, there is a growing interest in understanding environmental stress, supported by a rapid accumulation of evidence highlighting the significant stress experienced by individuals in urban settings.

Oslo, in particular, faces numerous challenges contributing to heightened environmental stress, ⁽¹⁾ including urban soundscape, grey spaces, economic stagnation, housing shortages, air pollution, the impacts of climate change, social segregation, an aging population, and increasing urban density.

DIMINISHING CONNECTION

Amidst these urban challenges, this project aims to spotlight the diminishing connection between humans and nature, declining biodiversity, and their subsequent effects on urban public health.

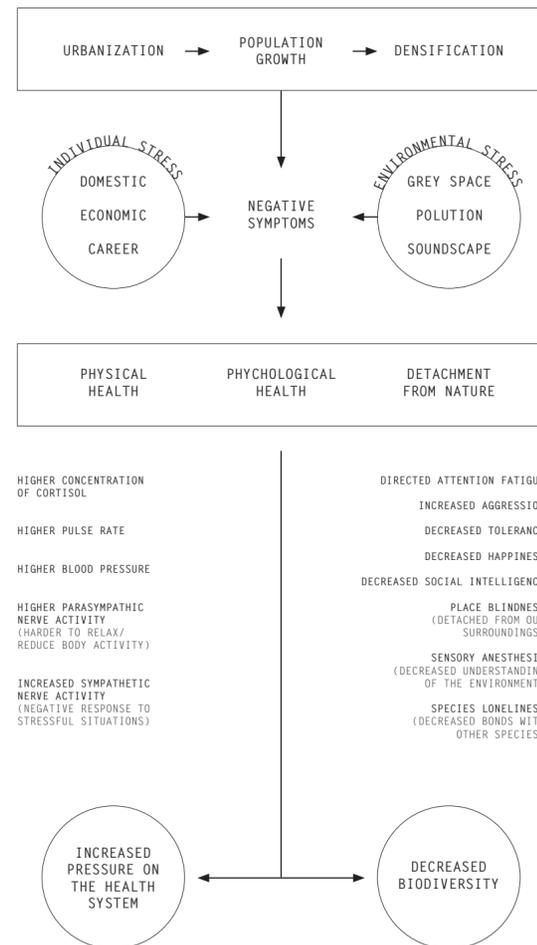
Research in the field of environmental stress yields promising data indicating that the natural environment can positively impact human health. For instance, ⁽²⁾ questionnaire studies on the psychological effects of forest environments have demonstrated positive outcomes. Additionally, research has shown an enhancement of positive emotions in individuals exposed to pictures of natural environments. ⁽³⁾ Short-term stays in natural settings have also been associated with improved mental health and stress reduction.

RESTORATIVE ENVIRONMENTS

The results of these studies indicate that natural environments ⁽²⁾ contribute to lower concentrations of cortisol, reduced pulse rates, lower blood pressure, increased parasympathetic nerve activity, and decreased sympathetic nerve activity compared to urban environments.

Consequently, ⁽³⁾ restorative environments are gaining increased attention in urban environment research. This project aims to investigate these positive effects and explore their potential for designing restorative spaces in urban contexts.

21st CENTURY URBAN CHALLENGES



PROJECT FRAMEWORK

ABSTRACT

When searching for potential sites for creating restorative spaces, a pattern of relocated and planned relocation of central institutions emerged. Their relocation is a result of their scope, land use, transportation, or other operational needs/consequences that are incompatible with an accessible and human-friendly city. They leave behind large pockets within the city, whereby conditions are present for development. One of these previously institutional sites is The old veterinary College located at Adamstuen.

EXISTING BRIEF

Oslo municipality together with Linstow AS acquired the property of The old veterinary College grounds (DGV) at Adamstuen. The purpose of the purchase is to develop a new residential, commercial and cultural district, which will reintegrate the previously closed off grounds with the surrounding neighbourhoods and Oslo. With this in mind, Oslo municipality followed up with an architectural contest.

Three teams were picked out to further develop their proposals for the grounds. The teams are Dronninga, Tredje natur and Ghilardi + Hellsten.

SUBMITTED PROPOSALS

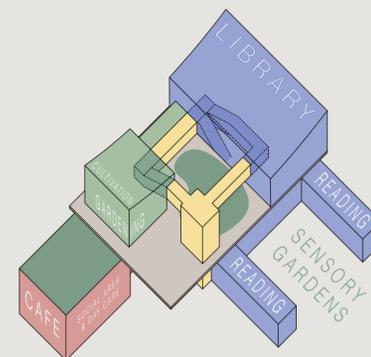
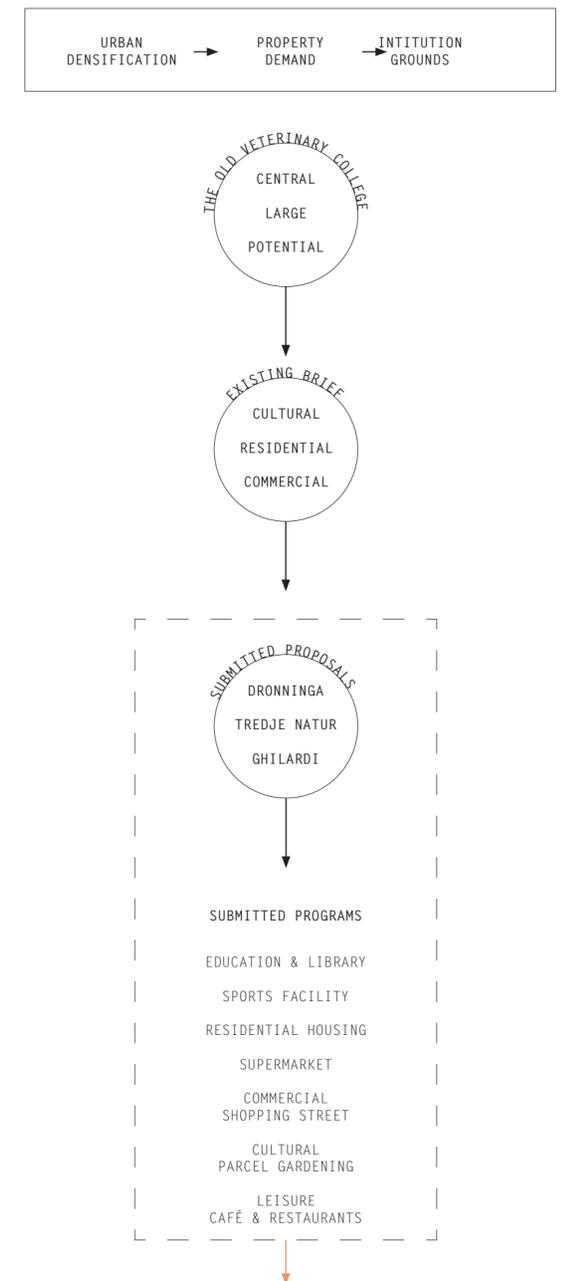
Due to this project's focus on investigating restorative spaces, the three submitted proposals will be used to inform on potential programs and new buildings that could be introduced to the grounds. The intention is to anchor the project to a probable outcome for the site, without overreaching on the amount of work.

THE FIVE SENSES

Sound, smell, taste, touch. Natural sounds and smells underpin experiences of nature for many people. Tactile experiences of nature are understudied yet potentially fundamentally important. Tastes of nature, through growing and consuming natural foods, have been linked with a range of health and well-being benefits.

Humans are multisensory, and it seems likely that many benefits are delivered through the non-visual senses and these are potentially avenues through which a physiological mechanism could occur.

URBAN DEVELOPMENT THE OLD VETERINARY COLLEGE



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(4) Franco LS, Shanahan DF, Micah Mortali (2022) 'Five symptoms of nature deficit disorder, and how mindfulness can help'. *Kripalu Center for Yoga & Health*. Available at: <https://kripalu.org/resources/five-symptoms-nature-deficit-disorder-and-how-mindfulness-can-help>

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