



Cumulus Mumbai 2015:

In a planet of our own - a vision of sustainability with focus on water

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Wellness Country Iceland - Water as Locus

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Abstract: This paper will address issues of sustainable development within the context of Iceland's escalating tourism, exploring how design thinking and scenario building can be used as a reflective tool to address complex problems. This will be discussed in relation to the project *Wellness Country Iceland*. The project by the multi-disciplinary collective Vatnavinir addresses how a scenario for the growing tourism industry can be developed by focusing on wellness, water and Iceland's bathing culture to promote health related tourism for the whole of the country. The aim being to develop a network of local geothermal health localities providing benefits to the local communities.

Key words: *Sustainable tourism, wellness, geothermal pools, bathing culture, participative processes.*

1. Introduction

How do we design change? How can we act otherwise in developing our environment?

In Iceland, as the world over governments have sought large scale industrial solutions for generating economic prosperity. In Iceland this is largely manifested in building hydroelectric or geothermal powerplants for the provision of energy for a few internationally owned aluminium smelters. Instead of imposing irreversible ecological transformation on nature for an indeterminate future growth, the project *Wellness Country Iceland* projects a vision celebrating the found qualities in the environment. Thus, the method of responding to a problem with a singular grand act is reversed with a scenario of interlinked small initiatives. The aim being to nurture and support self-sufficient and sustainable localities of geothermal pools through which different aspects of

society can be interlinked and networked promoting sustainable practice on a social, economic and environmental level. The project Wellness Country Iceland is both a conceptual and a critical design proposition. It inherently embodies a critique of the lack of coherent vision by public institutions to address the growing sector of tourism in relation to regional and urban strategies, nature conservation and local economic growth.

In giving form to the dominant socio-political landscape, design affirms the predominant paradigm of development. But by counteracting the mainstream model of progress the project aims to propose a counter-narrative exploring other ways of acting to bring forth societal change and transformation. Thus the work can be positioned within a realm of design activism, a design-led way of addressing larger issues of sustainability focusing on contemporary social, environmental and political issues.

Design activism is design thinking, imagination and practice applied knowingly or unknowingly to create a counter-narrative aimed at generating and balancing positive social, environmental and/or economic change (Fuad-Luke A., 2009).

Questions are raised on how one can with the tools and methodology of design address and act upon challenging issues of our times. When public institutions struggle to define policies and strategies that may contribute to sustainable economic patterns how can these issues be addressed with the agency of design? How does the language of design become a medium to engage with policy makers and community forums? How can one enact change without a mandate?

2. Design as an agent of change

To design is to ask about context, to ask from which perspective we view the landscape of ideas, and how we choose to have an impact on it to create meaningful change. With design we explore the world and with a range of different methodological approaches we design actions to transform the existing and by doing so deepen our understanding of cultural contexts. Thus design always includes a vision and a cultural stance, and through the agency of design we can challenge the implicit ethics of the materialized world.

This project sets out to define the challenges, establish a critical stance and to develop methods and tools in an attempt to conceive actions based on a particular contextual

condition. The aim of the process is to allow for the development of diverse interventions to take place within a defined conceptual framework.

2.1 Context

The extremity of scale is of a central issue in Iceland, affecting all aspects of the fundamental three pillars of sustainability, the social, the economic and the environmental. The small population of Icelanders inhabits an expansive terrain. The whole nation consists of only 330.000 people within 103.000 km² of largely unspoilt nature. Two-thirds of the population live in the principal metropolitan area with a few coastal villages and towns encircling the island. The main urban infrastructure is dispersed along the coast leaving large uninhabited areas of landscapes in the interior of the island.

The volcanic and extreme landscape is the primary attraction for visitors drawing an escalating number of tourists to Iceland every year. Twenty years ago only 190,000 tourists arrived in Iceland, ten years ago 370,000 visitors came to Iceland and in 2015 a million tourists arrived in Iceland. With one million tourists yearly, currently the tourist population is triple the local population. It is predicted that this figure could triple within the foreseeable future. This is an extreme ratio of tourists per capita and rarely seen anywhere in the world.

The highlands boast a unique and fragile landscape. This is the largest area of untouched nature in Europe, yet is under threat of industrialization due to plans for over 50 powerplants due to speculation of connecting Iceland's energy grid with Britain's via a submarine cable. This would challenge the growing tourism sector and instigates discourse on how to deal with the dichotomy of access and protection of nature.

Currently the majority of tourists are directed to a few principle locations and routes along the island with these destinations becoming overcrowded, staged and extensively commercialized lacking both infrastructure and adequate amenities.

Lack of coordinated and comprehensive vision for development strategies and nature conservation has led to a fragmented approach to managing this tourist influx nationwide. Yet, tourism is the fastest growing economic sector in Iceland and the primary sector for generating foreign currency. Through critical spatial practice the attempt is made to explore how with the potential of touristic flows a new spatial strategy can be devised.

2.2 Multi-disciplinary collaboration

Designing together calls forth the necessity to bring people together, debate topics, frame issues and through a discursive process collectively bring forth an idea to act on. The act of interaction and debating is inherently political, political in the sense of engaging with the development of society. And in questioning what kind of society we want to live in we evoke issues of design.

The multi-disciplinary collective *Vatnavinir*, (Friends of water) and authors of *Wellness Country Iceland*, was formed around this idea of co-designing. The aim being of collectively defining a challenge and developing alternative design strategies that challenged the mainstream 'top-down' strategies and supporting bottom-up approaches to affecting change. The international collective consists of architects, strategic designers, industrial designers, branding specialists, visual communicators, travel guides, mountain guides and tourism managers and specialists.

2.3 Water

Iceland is an active volcanic island in the north Atlantic. The abundance of water and geothermal heat is a unique resource. Hot pools and warm streams are found in myriad of forms in the landscape. There is a long history of bathing in the waters of Iceland and the culture of bathing is unrivaled due to the extraordinary geology. The therapeutic effect and the physical and sensual quality of being in water and dwelling in nature contributes to an experience of wellbeing.



figure 1. pool in the Westfjords

A range of different pools, both those found in natural settings and those that are manmade, are important to the public realm, being important places of social interaction in any community across the country where a cross-section of society interact and meet. The project revolves around the range of localities of geothermal pools with the relevant stakeholders to develop scenarios to support businesses and attractions.

2.4 Methodology

The challenge chosen, to aim for the betterment of social and economic wellbeing in local communities through the design of inter-dependent alliances, could be identified as a wicked problem. Wicked problem was characterized by Horst Rittel in 1960 as “ a class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision makers with conflicting cause and where the ramifications in the whole system are thoroughly confusing” (Buchanan, R. (1995)). He stated furthermore that most problems addressed by designers are wicked problems. Richard Buchanan has developed this argument further on how designers resolve issues in design. Instead of designers reacting to predefined set of determined problems, those remain only possibilities amongst many. Solving problems through design is a subjective process depending on the point of view taken on the subject. Thus design becomes a process of reiterative reflection on analysis and action in order to provide a framework to understand and to provide a solution in relation to a chosen set of methods and principles.

Hence here, in defining the subject matter and bringing together different issues of interests into the project, the process also involved identifying a set of methods to tackle the challenge of synthesising the different issues at stake. The primary tools and design approaches applied to this process could be described as building a scenario, applying system thinking, designing tactical actions and designing participative processes for the relevant stakeholders.

Scenario

The method of the design scenario developed by the US military intelligence in the 1950 was adopted for this project. The concept of a design scenario is used as a tool to project a future scenario. The scenario for this project establishes a certain set of values such as wellness, reuse and revealing of the existing condition, respecting nature and to work towards a long term vision. Aims are embedded in the scenario such as interlinking collaborations and participative processes to support multiple smaller scenarios, and responding to local conditions in a way to allow for a range of design interventions to take place.

System

Spatial and architectural interventions always intervene through assemblages of ideas and materialisations, and by doing so, the interventions affect systems either by confirming or counteracting the systems.

Architectural critic Irénée Scalbert defines the world of ecology as consisting of the many "small worlds of ecology" (Scalbert I. (2011)) and goes on to describe these ecologies as perfect in their diversity. It is the observation of smallness and complex interrelations of local worlds that form the core of the project *Wellness Country Iceland*. The interdependent qualities of natural and human resources - offers in the words of Irénée Scalbert "a great source from which to build sustainable design". Nothing on earth can exist in isolation and all things give themselves into a co-existence of many dissimilar things and are subjected to continued human maintenance, transformation and improvement.

Tactics

Smaller tactical spatial interventions have pervasively become a preferred mode of action to effect change. Instead of large scale transformation the smaller intervention relating to human scale can be more effective in instigating dynamic change as exemplified in the recent laboratory experiment instigated by MOMA, NY, Uneven Growth, Tactical Urbanism for Expanding Megacities. In this project tactical urbanism is incited as a method that effectively mixes top-down and bottom-up action, and becomes a mode of intervention at a different scale to the prevalent comprehensive planning tools (Gadanh P. (2014)). The idea of tactical intervention is developed here as concept for tactical ruralism. Michel de Certeau describes the shifting of perception of space and tactical interventions as:

A practice of the order constructed by others redistributes its space; it creates at least a certain play in that order, a space for maneuvers of unequal forces and for utopian points of reference. [...] Innumerable ways of playing with the space instituted by others characterize the subtle, stubborn resistant activity of groups which, since they lack their own space, have to get along in a network of already established forms and representations. (de Certeau M. (1984)),

Participation

Participative processes have the potential to transform how places are shaped. How we affect places can in turn influence our economies and human interactions of our everyday lives, as building trust through collaboration can be highly effective in re-producing shared resources.

To begin developing a method for a participative process first the stakeholders are identified. Dialogue was established both with those at grass root level who would benefit directly from the development of sites as well as policy and funding bodies at regional and national level. Aim was to bring together in dialogue and collaboration diverse agents for the shared advancement of the environment.

The study of stakeholders of the diverse natural pools and historical pools brought into question issues of ownership and public access. Many pools have been built by collaborative processes, as is the case with the early swimming pools built in the first decades of the 20th Century when volunteers collective built local pools. Today many pools are maintained by voluntary groups whilst some are in private property although providing access by the public.

To activate a process of development regional and national institutions were brought into the dialogue for the support of the project, such as Ministry of Environment, Innovation Centre Iceland, Promote Iceland and Icelandic Tourist Board.

3. Case study: Wellness Country Iceland

Water is bountiful in Iceland. [...] This unique resource is present in myriad of forms; fresh springs, hot springs, flowing water, falling water, geothermal water, glacial water, oceanic water and in different states from steam, to liquid to glacial.

The concept of Wellness Country Iceland is to promote health related tourism for the whole of the country. The project develops concepts for geothermal wellness centres across the country integrating wellness and nature with the therapeutic effect of thermal bathing. (www.vatnavinir.is)

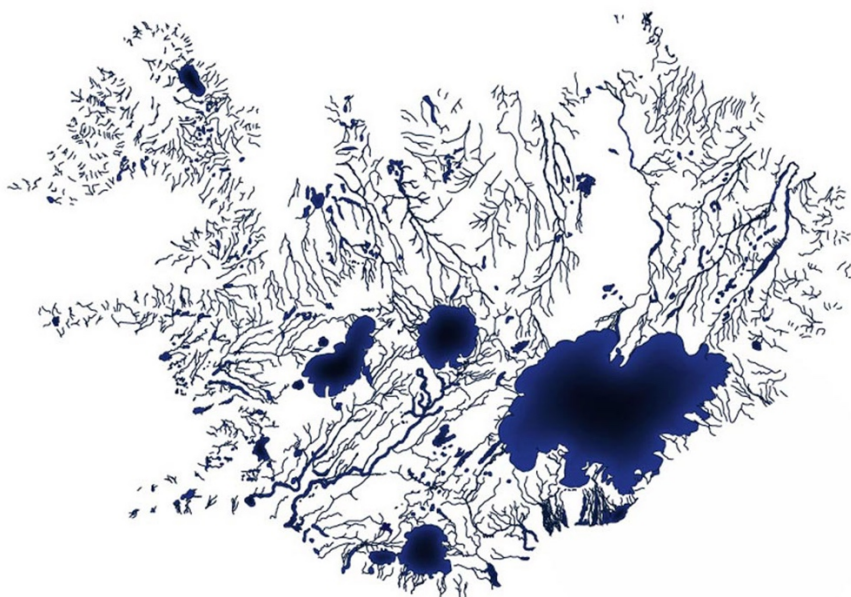


Figure. 2 Asset map of water arteries

In developing the project *Wellness Country Iceland* the water arteries and veins of water offered inspiration to join efforts in creating networks for the support of interrelated initiatives. This fundamental natural resource was recorded and mapped. Both natural resources and man-made facilities were collated cartographically as asset maps, one, of

all surface water and flows, another, of natural geothermal pools along with swimming pools and health related facilities in towns and regions across the country.

The objective is to weave multiple, site specific solutions into existing context, whether existing built fabric, existing landscape or existing local economy, thus instigating the creation of a network consisting of diverse localities and experiences. The intention is to build on uniqueness of each place resulting in wellness centres ranging in scale, type, and services in line with contextual resources and localities.

The scenario encapsulated three potentially different categories of geothermal wellness centres:

Main Stations

Main stations that act as regional attractors such as the well-known Blue Lagoon Spa. Main stations act as regional anchors providing the broadest range of services, attracting largest number of visitors and are principle nodes in distributing flows across the country.

Satellites

Satellites are numerous smaller and regional localities. These are based on historical pools and idiosyncratic localities contributing to the making of a network of diverse regional places for visitors and local businesses.

Hidden gems

The hidden natural gems are places that are not to be promoted to the general public. In an extremely sensitive natural environment the necessity arises to preserve nature by limiting access in or around delicate nature. Thus the overall scenario is hence a tool to direct development and journeys in relation to the relevant resources and amenities.

Travel journey

The distinct and rarefied places in unique natural settings form a larger network, allowing visitors to navigate their own journey across the country from one wellness place to another. The networks offers a potential for common marketing of shared activities for the participating entities allowing for diverse type of travelling patterns for different user groups.

The vision for *Wellness Country Iceland* became a tool in the process of dissemination of a concept and in developing collaboration and participative processes across institutional and public and private entities. Numerous case studies were developed for regions, towns or individual centers.

4. Case Study II: Westfjord Watertrail

The network *Westfjord Watertrail* was established as part of the vision for *Wellness Country Iceland*. This remote geographical area of Iceland hosts the smallest number of tourists, only 3% of all visitors to Iceland make this part of the country their destination. It is an area characterised by deep fjords, steep mountains, small fishing villages and an extended coastline of over 2000 km. It is sparsely populated with only 6500 inhabitants or 2% of the population. The untouched nature made the area attractive for this project as well as the lack of tourism development leaving space for new forms spatial articulation.

The collaborative network consists of twelve different stakeholders, farmers, tour operators, conservation societies, Counties and individual proprietors, all of which share a sense of responsibility towards their local environment and wish to see the natural asset of local geothermal pools become a driving factor in building tourism services with the aim being to create a network supporting multiple destinations across the Westfjords. The model adapted for this network is of a collaborative and competitive cluster as developed by Michael E. Porter and supported by the Innovation Centre Iceland. The cluster is managed by the Local Development Agency.

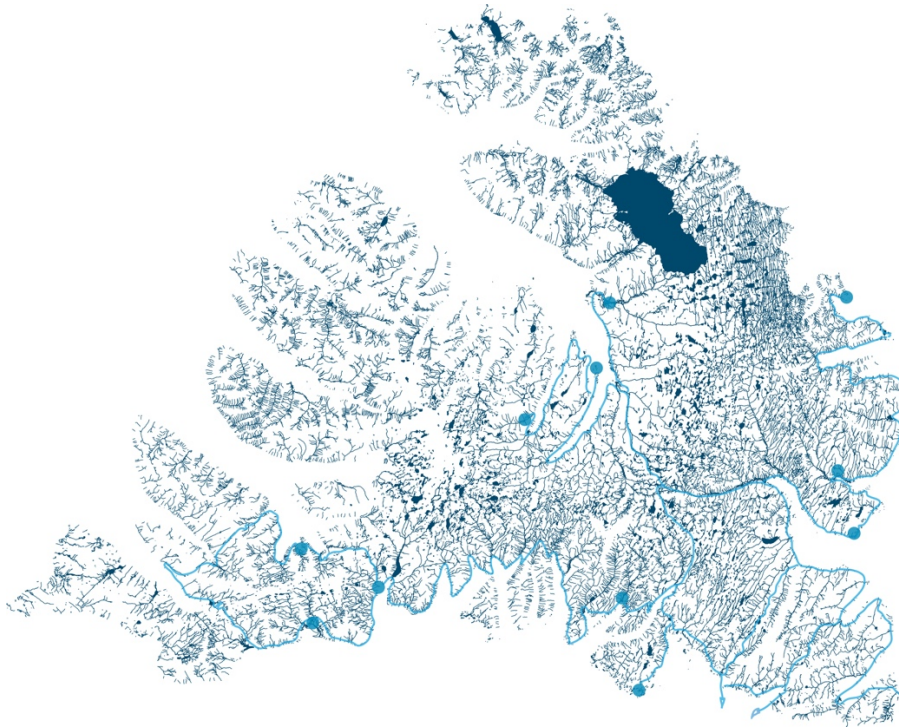


Figure. 3 Westfjord Watertrail

The project, *Westfjord Watertrail*, commenced with providing each and individual stakeholder and with a draft of a feasibility study and a sketch scenario based on a consultative and participative process. The multidisciplinary team of architects and designers of *Vatnavinir* analysed and mapped the existing pools and environs identifying contextual qualities. The uniqueness of each place formed the basis for possible future development and business strategy.

Proposals for the development of individual places in the Westfjord range from the design of small scale interventions to the planning of multi-programmatic environs. Emphasis is placed on reclamation and resourcefulness in all projects. Redundant buildings are readapted for re-use and old ruins are revealed for the re-integration into the landscape experience. Local materials like masonry, turf and driftwood are utilised in construction. Vernacular turf and stone pools are rebuilt and new ones conceived. Old swimming pools are restored. Access to site is improved and simple amenities formulated.

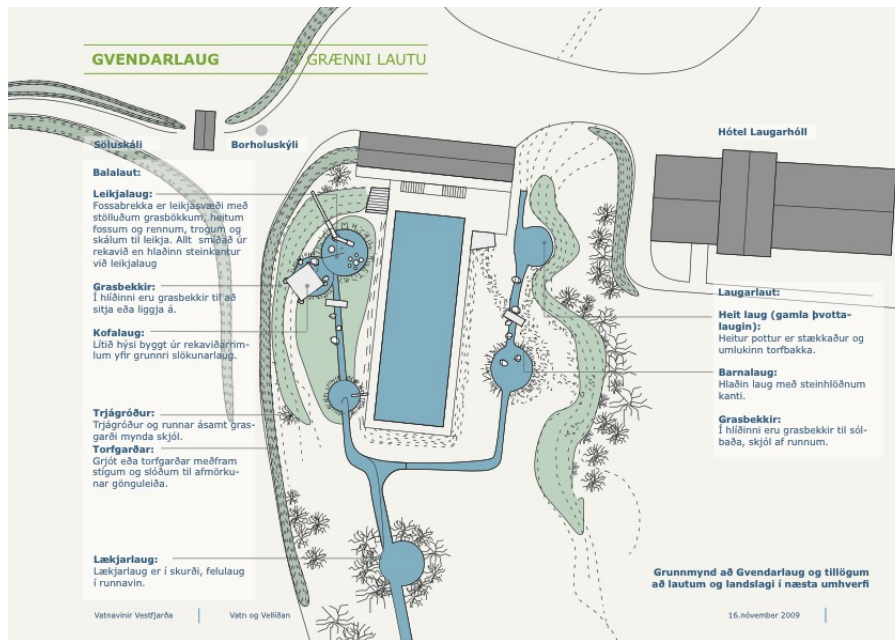


figure. 4 Sketch scenario for Gvendarlaug

The individual sketch scenarios formed a background for the elaboration of the concept of the cluster. On the basis of these initial sketches a longer process of actualisation began. The Icelandic Tourist Board provided a framework of grants for both the design of places and for the actual realization of small projects. Although these are small sums of money, the grants have initiated important processes of actualizations. Smaller projects are continually developing whilst larger projects are underway calling for amendments to some of the larger Masterplans in the area. Other projects are designed to allow for the phasing of projects or are designed to be addressed through different participative processes. As part of a larger strategy the overall project is considered long term and is being realized over a longer period.

5. Conclusion

The project, *Wellness Country Iceland*, was considered a gift, a scenario, open to developing multiple opportunities, projects and collaborations, at a local level, regional and national level. Alliances were made across institutions and networks. A regional network was formed with *Westfjord Watertrail* supported by various public institutions. Ongoing collaboration between local stakeholders and different architects and designers provides multiple scenarios for ongoing local developments.

The project evolved around strengthening existing conditions and contexts. The locus of an existing pool became signifying and unifying place of empowerment. With recycling and reinforcing existing assets, built and/ or social, a process of empowerment was allowed to grow and develop. An emphasis was placed on socio-economic empowerment of local stakeholders with creating common interest alliances. The forming of participative processes are integral to the claiming of space by individuals and community and raises the questions as to how this may affect the various systems, economic and political, that influence the shaping of our environment.

With expanding the parameters, methods and tactics of spatial production the conventional roles of designers and architects was challenged as well as the whole issue of authorship through design. Through the agency of design new opportunities are formed through enabling auto poetic forming of associations, challenging top-down authority on spatial production and moving away from singular authorship to multiple aggregative platforms of decision making.

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