

The Enlightenment of Green Infrastructure in a German Health Resort to Chinese Health Care Towns——Take Bad Wörishofen as an Example

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Abstract: In the context of an ecological and healthy era, green infrastructure is one of the important core elements of the health town, which directly affects people's sensory experience and health effects. Bad Wörishofen, Germany, as a health resort and a natural growing town, has outstanding health characteristics, distinctive features and significant health effects in the green landscape. The town's ecological landscapes as forest and farmland are restorative. The natural healing park is rich in sensory experience. The attached green space and landscape sketches convey the concept of health. The practice stations of various health facilities are fully covered the town to guide people to relax, promote cognition, and exercise. Bad Wörishofen's green infrastructure blends with the town, providing the foundation for an immersive health experience. This can provide an important reference for constructing a healthy environment in our country's health care towns, forest towns, and characteristic towns.

Keywords: Green infrastructure, Health care town, Healing landscape; Forest therapy; Natural Health resort.

Existing studies have found that interaction with nature can bring psychological, cognitive, physical and social benefits. Such as increasing self-esteem, improving mood, reducing mental fatigue, restoring attention, lowering blood pressure, reducing cortisol concentration, reducing headaches, reducing cardiovascular, respiratory and chronic diseases, promoting social interaction, increasing social support, etc [1]. For Kangyang towns, nature is an indispensable green infrastructure. As a German town with a history of nearly a hundred years, Bad Wörishofen has the status of a "sacred place" in the field of forest recuperation and forest recuperation, and is a famous natural recuperation site in Germany. Bad Wörishofen's green infrastructure has distinctive features and a strong healthy atmosphere. It gives full play to the health promotion effect of nature and takes into account ecology and development. It can be described as a model of healthy towns and is worthy of reference for health towns in China.

1. Features of Bad Wörishofen's Green Infrastructure

Bad Wörishofen is a small town in the Unterallgäu region of Bayern, Germany. It is located in southern Germany, 80km west of Munich, with an altitude of 603-670m and an area of 57.8km² [2]. 120 years ago, Father Sebastian Kneipp made the town famous for his unique Kneipp therapy [3]. After nearly a hundred years of development and gradual construction, Bad Wörishofen has grown into a well-known natural health resort in modern times.

1.1 Perfect landscape structure, permeable layer by layer

Bad Wörishofen's landscape system is complete and penetrates into people's daily lives layer by layer. From residential courtyards and sanatorium courtyards, to street corner squares, road green spaces, to natural recuperation parks, and surrounding farmland and forests, people can easily access various green landscapes from near to far.

As a small town that grows naturally rather than deliberately planned, it classifies the landscape system of Bad Wörishofen and the green space of towns (townships) in our country [4] Comparing, it can be found that the ecological landscape of Bad Wörishofen area, park landscape and small town subsidiary landscape are complete, and each large The types of classes are very rich.

1.2 Health experience immersion, guide behavior

Bad Wörishofen's health function is outstanding, and it is directly reflected in the landscape in terms of concept implantation and expression, and facility-guided movement.

At the level of expression of the concept of health implantation, in Bad Wörishofen's parks, streets, nursing homes, and museum courtyards, landscape sketches of Sebastian Kneipp's five major health concepts have repeatedly appeared in the parks, streets, nursing homes and museum courtyards, or landscape pillars, or express it with graphic signs, or courtyard facilities, etc., reminding people of the important role of water, sports, plants, nutrition and balance in health. The healthy lifestyle of good water therapy, paying attention to exercise, choosing herbs, healthy eating, and maintaining a balanced and healthy lifestyle is constantly displayed in front of people. Through repeated landscape expressions, the concept of health is implanted into people's cognition to achieve the purpose of health education. Cognition triggers behavior and lays the foundation for changes in behavioral habits.

1.3 The greenway system is diverse and unobstructed

Within the scope of the town, there are two rivers, a number of themed trails and cycling paths, and the greenways formed are intertwined into a network, connecting the center of the town with the surrounding ecological landscape, and facilitating people's communication between the architectural space and nature. Switch.

Two rivers, one is the Wörthbach, running through the town from the south to the northwest, from the south to the northwest, forming a pleasant river landscape in the center of the town. The other is the Studtweidbach, located to the west of the town, flowing from south to north through the Kurpark, along with water walks and Kneipp spa facilities.

1.4 Active landscape intervention, carrying activities

Although unlike the American horticultural therapy, the active intervention of the landscape of the small town of Wörishofen in Germany is still very strong, which is reflected in sensory stimulation and activity guidance.

In terms of sensory stimulation, farmland and forest provide a green background for the town, and the Tulip Path and the Rose Garden provide a feast of colors. On the bird-watching path, people can use the reading pen to point the bird on the sign, listen to the bird's song, and then find which bird is singing in nature; in the tree hole cut out of the 150-year-old beech tree trunk, you can feel the amplified sound. There are smelling herbs and tasting vegetables in the natural health park.

What is particularly prominent in the town is its rich resources of tactile stimulation. Spas throughout the town encourage people to take hand, elbow, and foot baths, that is, soak these parts in water. Take a foot bath as an example. People need to take off their shoes, pull their trouser legs above their knees, go into the water to do a high-leg-like walk, and receive the stimulation of the water. In the natural recuperation park, there is a barefoot trail. Along the trail, trails of various materials are provided, such as mazes, mud feet, temperature feet, etc. There will also be some landscape facilities that stimulate the touch of hands and feet.

2. The Appearance And Efficacy of Health-Themed Green Infrastructure

2.1 Restorative ecological background landscape content of moving target tracking in Wireless Sensor Networks

Surrounded by forests and farmland, the town is an important natural landscape around the town, which has the benefits of health promotion and restoration. There are forest patches on the south, west, and north sides of the town. Although the proportion of forests is not too large, the forests have undergone near-natural management. The trunks are straight and tall and grow well. Tree species include *Cyclobalanopsis glauca*, fir, pine and so on. The Fendolin components released by such tree species mainly include bornyl acetate, pinene, camphene, bornence, α -pinene, which can kill diphtheria, typhoid fever, dysentery bacillus, salmonella, anti-inflammatory, anti-asthmatic, analgesic, Calming, reducing blood pressure and other effects [5-6]. The large amount of farmland around the town makes the pastoral landscape an important substrate for the town. Studies have shown that in the rural

landscape, the farmland landscape has a good effect of relieving stress[7].

2.2 A model of natural health park

There are four main parks in the town, namely Kurpark, Stadtgarten, Skyline Park, and Ostpark. Among them, the health park is the most healthy one. Called a model of natural health parks.

The sanatorium park was donated by Kneipp and has a total area of about 16.3 hectares. It is open for free and is located in the southwest of the town. The health park has original trees dating back to 1873, distinctive barefoot trails, tennis courts, fruit trees, Kneipp facilities, etc., as well as a series of gardens [8].

2.3 Landscape facilities that affect perception

Bad Wörishofen's green infrastructure conveys Kneipp's ideas through a landscape approach. People can interpret a healthy lifestyle directly from the gardens of the Sebastian Museum, the gardens of the nursing homes, the landscape sketches of the streets and parks, and the logos.

The Kneipp Museum Garden is the inner courtyard garden of the museum. It vividly displays the five health concepts of Kneipp therapy: water, exercise, plants, nutrition and balance. The center of the garden represents water, which is a small water bowl with water pipes for hydrotherapy. Four areas are divided around the water. The representative plant of the medicinal plant area, in addition to planting medicinal herbs, there is also a beautiful rose, called Kneipp rose. There is a fruit tree in the area opposite the medicinal plant area, which represents healthy and balanced nutrition. On the other side of the medicinal plant area is a balance beam and other facilities, which represent sports. The diagonal area of the medicinal plant area represents balance. The site is designed as a small labyrinth with landscape sketches of nuns silhouettes along the way, implying that things must have order and balance like a clock [9].

2.4 Spa facilities with clear curative effects

Bad Wörishofen is famous for its hydrotherapy. Spa facilities mainly include branch bath, elbow bath, foot bath and water walk [10].

The branch bath is the essence of the Kneipp healing facility. It is a combination of salt water and blackthorn branches. It looks similar to a pavilion from the outside. As shown in the picture, a circle of huge intertwined branches is placed in the pavilion. The salty fountain drenches the branches from above. People can sit around the branches and take a deep breath of the richness in the air. The air with salt and the essence of blackthorn branches. The fountain is a mixture of 26.7% natural salt water (without iodine) and clean water, and the concentration in the branches is about 20%. It has been discovered by medicine that inhaling this salty air can not only expectorate and relieve allergic symptoms, but also reduce inflammation, prevent and treat chronic bronchitis and sinusitis, and help prevent cardiovascular diseases and relieve fatigue. It is called a medical "miracle" [11]

Both elbow bath and foot bath help strengthen the immune system, promote blood circulation, accelerate metabolism, promote venous return, and relieve fatigue and pain. The foot bath is also very effective in helping sleep and relieving high blood pressure. The elbow bath is a raised pool. The pool is equipped with a separate water pipe to connect to cold water, and the water temperature is controlled at 12 °C to 18 °C. The specific operation is to first immerse the arm in cold water to the middle of the upper arm until you feel the cold. At the same time, take a deep breath and relax, then gently lift your arm out of the water, pause for about 30 to 40 seconds and then put it in cold water, after which you can cycle several times [11]. The foot bath pool is about 0.5 meters high, with handrails. The water temperature is lower than 18 degrees Celsius and the water surface is not higher than your knees. At least 2 to 4 people can stand and soak at the same time. There will also be a small sand pit for foot control beside the pool. A cabinet for storing clothing and footwear. Water trails can be found in street green spaces or parks. The river is used to improve the paving material at the bottom of the river to increase foot massage, such as gravel paving.

3. Conclusion

Bad Wörishofen, Germany, has grown into a mature resort town after a century of evolution. The

green infrastructure of the town plays an important role in balancing the ecological environment and development and utilization, and exerting the benefits of the environment in helping health.

Bad Wörishofen's green infrastructure has the characteristics of perfect landscape structure, immersive health experience, diverse greenway systems, and active landscape intervention. The health-themed green infrastructure has a unique appearance. The town has a restorative ecological background of forest and farmland, a natural healing park with rich sensory stimulation, gardens, landscape sketches and signs that affect perception, and spa facilities with clear curative effects.

Bad Wörishofen's green infrastructure has important reference value for the development and construction of healthy towns in China. It outlines the ideal picture of a healthy town. A perfect landscape structure and a diverse greenway system can be realized through overall planning. An immersive health experience and active intervention landscape require meticulous design. The change of cognitive behavior and the guidance of a healthy lifestyle require health and psychology. Thorough understanding. People who live and recuperate in small towns open windows, walk on the street, walk into parks, and hike the suburbs. Beautiful nature is always everywhere, and reminders of recuperating facilities and exercises are constantly appearing along the way. With such green infrastructure, Kangyang Town can demonstrate the quality of health and effectively promote people's health.

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