# Building the New, Hygienic, Healthy Man in Modern Architecture: Friedrich Wolf and the 'Neues Bauen'

### Christina Flötotto

Christina Flötotto was awarded the Christie's Diploma in Fine and Decorative Arts, London, 1996. She graduated with a masters degree in classics and philosophy from the University of Glasgow. Currently she is undertaking research towards a PhD at Edinburgh University, due to be completed in 2001.

#### Abstract

A close analysis of Friedrich Wolf's theory of hygienic layers reveals that light, air, sun, cleanliness and fitness were the determining factors not only in the creation of the 'New Man' but also in the formulation of a 'New Architecture'. Examples from both medicine and architecture illustrate that the design criteria associated with the Neues Bauen were identical to those proposed by Wolf to build the 'New Man'. Wolf was one of the most famous authors on popular medical, as well as socio-hygienic, literature in Germany during the 1920s. As a public figure Wolf influenced Oskar Schlemmer, Hannes Meyer, and their teaching at the Bauhaus, as well as architects like Richard Döcker, Bruno Taut, Mics van der Rohe, Walter Gropius, Le Corbusier, and the famous critic Adolf Behne. His most famous publication Nature as Doctor and Helper (Die Natur als Arzt und Helfer)<sup>1</sup> not only shows his obsession with hygiene, health and fitness but also reveals the underlying mechanisms that lead to the analogy of the healthy body and modern architecture. This analogy is the consequence of a system Wolf propagated in his popular medical reference book, in which he demonstrated his therapeutic system.

#### Introduction

Friedrich Wolf is hardly known as a doctor these days, although he was one of the most widely read authors of popular, medical and socio-hygienic literature in the Weimar Republic. Wolf's medical brochures were affordable for the man in the street and he knew how to translate the latest scientific results into lively, popular language readily understandable to the layman. This was also true for his most famous publication: *Nature as* 

Doctor and Helper, a book of some 600 pages, illustrated with over 450 pictures. By 1933 it had reached four editions and was also sold during the Nazi regime. The book is subdivided into three sections. The first part introduces the parts and inner laws of the body, focussing on the function of the skin and, related to that, nudity, fresh-air cures and onen-air schools. The second part is concerned with the prevention of nutritional problems, clothing, induced and occupational illnesses, sickness resulting from housing conditions and general health education. The third part, dedicated to the practical art of healing and the natural healing qualities of such things as light, air, water, gymnastics and sport. Throughout the book illustrations are used to stress Wolf's rather dogmatic principles. There are pictures of the entire Wolf family naked, sun-tanned, and athletic, performing gymnastic exercises, jogging, taking early morning baths in a Felke bathtub<sup>2</sup> and of Wolf taking the obligatory early morning walk with his son Markus (who later became the infamous spy master of the GDR). All this is set in front of the background of free nature and her constituent elements; light, air and SUII.

#### Friedrich Wolf and the 'Neues Bauen'

Wolf conceives illnesses as the consequence of negative environmental influences, which are to be fought against by civilized man through natural healing methods. He believes that every part of the body is directly related to all the other parts of the body so that any partial defect would negatively effect the body as a whole. It is for this reason that Wolf's aim is not the therapy of single parts of the body that show particular symptoms but rather he turns his attention towards the human being as a whole and his or her immediate environment. Within this immediate environment the dwelling was of a very special significance. The house could support natural healing processes but on the other hand it could as Wolf states: "kill the human being like an axe."<sup>3</sup>

Wolf proposed a definition of architecture, from his position as a naturopath, very similar to that of the contemporary architectural avantgarde which was led by Bruno Taut, Walter Gropius, Le Corbusier, Richard Döcker and Adolf Behne. Wolf not only knew these people through reading their publications but knew many of the architects and artists personally. That is particularly true for those who were closely involved with the Bauhaus at Dessau. Some of them, Oskar Schlemmer for example, who did the stage design for the performance of Wolf's theatre play *Der Arme Konrad* at the Berlin Volksbühne, belonged to his close circle of friends. Schlemmer sent a copy of the Bauhaus newspaper (with a Christmas greeting written on it), *Bauhaus 1, 1926*, to Wolf, including articles with photographs of the 'Meistersiedlung Dessau'.<sup>4</sup> At the time Wolf was working on his book *Nature as Doctor and Helper* and was grateful for any inspiration. Schlemmer's information was included in the chapter on hygienic housing.

However, this relationship was not at all one-sided. At the time when Wolf was in close contact with the Bauhaus there was a widespread interest in an architecture designed to work in the service of the 'New Man'. The then director, Hannes Meyer, had revised the Bauhaus curriculum and had thereby given the first signals for a change of direction. Meyer explicitly demanded an architecture that would take into consideration all those factors which determine the natural processes of life such as "sexuality", "body care" and "domestic hygiene".<sup>5</sup> Because of Meyer's initiative social hygienists from the Dresden Museum of Hygiene were invited so speak in front of the Bauhaus students.<sup>6</sup> With Oskar Schlemmer's executive power and support a department of biology was established. It even had its own health doctrine consisting of cell and embryo theory and the study of the respiratory system, diet, hygiene and clothing.<sup>7</sup> Schlemmer's enthusiasm for Wolf's medical book was so great that many of its pictures and ideas can be found in his teaching notes.

A further important architectural contact was Richard Döcker who built the Waiblingen sun therapy hospital near Stuttgart in 1926-28.<sup>8</sup> In his medical book Wolf promotes Döcker's buildings as exemplary for healthy living. Even the Wolf family house was planned and executed by Döcker whose design referred directly to the hygienic requests that had been formulated in *Nature as Doctor and Helper*. Döcker also arranged for Wolf to have access to the Weissenhofsiedlung, in Stuttgart, a couple of weeks before the official opening.<sup>9</sup>

In the preface of *Nature as Doctor and Helper* are photographs of the simple, 19<sup>th</sup> century, cluttered, Markart interior. These photographs are accompanied by the exclamation:

Less is more! Do away with the façade! Despite all the refinements regarding technical matters, the man of the future seeks simplification. The most visible expression of this is the Neues Bauen. The new house does not have a dozen little towers, bay windows and niches with busts of Flora; it is a clear, sensitively ordered unity of living. Formed around light, air and easy cleaning. Likewise the interiors are no plush museums any more... Less is more! For the first time in our era we clearly and courageously put an end to the facade and also to the dusty habits and a world of empty appearances that do not correspond in any way to our new world of work and intellect. Precisely those reforms proposed by the 'New Architecture' after the chaos of late-nineteenth century celecticism are endorsed by naturopathy.<sup>10</sup>

### EDINBURGH ARCHITECTURE RESEARCH

The famous publication Neues Wohnen, Neues Bauen<sup>11</sup> by the well known art critic Adolf Behne undoubtedly had the biggest impact on the development of Wolf's theory on the relationship of the 'New Man' and the 'Neues Bauen'. In Wolf's book we find that various illustrations, as well as theoretical contents, have been taken straight out of Behne's publication. The relationship between Wolf and Behne was not only marked by a deep friendship but also by the understanding that with their work they supported each others theories. Just as naturopathy was a precondition of the creation of the 'New Man', the 'New Man' was the precondition for a 'New Architecture'. Behne writes:

The Neues Bauen requires a 'New Architecture'. A 'New Architecture' requires the 'New Man.<sup>12</sup>'

The following letter to the ailing Adolf Behne gives evidence about the high esteem each felt for the other both privately and professionally. In 1929 Wolf wrote:

My dear Dr. Behne! For the time being I am very downhearted not to be able to help you, i.e. not to be in Berlin. I do hope, however, the colleges in Berlin are treating your kidney infection in a mainly dietetic way rather than in an heroic way with injections and so on. Sacro egoismo are my concerns regarding your health! For it is your latest book, Neues Wohnen which convinced me that as an outpost-fighter - willingly or not - you must be safeguarded for our own sake! Especially in regard of Taut's book Der Neue Wohnbau, which was also sent to me a couple of days ago. Even though Taut's book is well written concerning its objectivity, it lacks inner foundation and an attitude towards the human beings we are building for. In this respect his work, even though this might sound paradoxical, remains academic. Dwelling - habitation - inhabitant, the social class of the inhabitant, or even better the other way round in it's order, no link must be missing within this pyramid! And it is this, which distinguishes your book from those building reformers who still stand above these matters! I certainly will review your work for the Stuttgarter Neues Tageblatt and the Hamburg Junge Menschen. It is late now, the letter is yet to be picked up by a courier. Enough for today! And pucker up, dear Behne! Get well soon! Your dear wife shall keep me informed! All the very best, Yours Friedrich Wolf.13

The connection between the 'Neues Bauen' and Wolf's medical concept goes far beyond the suggested affinities. Wolf develops a system in which, finally, the creation of the 'New Man' is down to the same laws as the creation of the 'New Architecture'. The key to this system lies in viewing the human body as an entirety. The order of subheadings "What shall we eat?", "How shall we dress?", "How shall we live?" indicates Wolf's ambition to cure the whole man from the inside to the outside, from the inner organs to the skin, the clothing to the house. Within this chain all elements are of equal importance since every part is directly connected with the whole. Just as the inside determines the outside, and the content determines the form, man determines his immediate environment: his skin, his clothes and his house.

The inter-dependence of the elements of this environment is characterised by a system which works in a very similar way as the Chinese box principle. The smaller entity always determines the next largest so that in the end the biggest box is determined by the smallest, i.e. the core. Apart from their size the same criteria are exhibited by all the boxes and they are, therefore, interchangeable.

The application of this metaphor is vital for revealing the underlying mechanisms of the relation of the 'New Man' and Modern Architecture. The immediate question one wants to ask is: what are the consequences that result from the connection between man and architecture, or more precisely, the nexus of 'New Man' and 'New Architecture'? Applying Wolf's principles to architecture we have an analogy between body, clothing and architecture in which the covering envelope is interchangeable. When Wolf quotes the hygienist Max von Pettenkofer's demand that: "Our skin is intended to bathe in air"<sup>14</sup> he infers that, according to his system, this must also be true for clothing and housing. Comparison of two illustrations which come from different chapters of Wolf's medical book shows that this is actually true.<sup>15</sup>



Figure 1. Mies' apartment house at the Weissenhof, Stuttgart, 1927.



Figure 2. Woven Fabric Magnified.

The apartmenthouse by Mies van der Rohe at the Weissenhofsiedlung and the fivefold enlargement of a woven piece of textile, when compared, show an amazing likeness, not only functionally, but also in structure and form. Starting out from the argument that naked skin should be exposed to air, coverings for the naked skin should be of a porous, woven fabrie which stimulates health through its high level of porosity. The illustrations suggest architecture can also perform this function by creating a porous membrane around the naked body - the long band of horizontal fenestration takes over the function of the breathing pores setting up, on the façade, an alternating rhythm of solid wall and ventilation space. "Like the new clothing", writes Wolf, "the 'New House' is based on simplicity, sachlichkeit, light, air, truth and clarity."<sup>16</sup>

For Max von Pettenkofer the boundaries between the architectural body and the body of the house had fallen half a century earlier. In his famous paper On The Relation Of Air To Clothing, House And Earth (1876) he stated more precisely:

In general the house pursues the same hygienic functions as the clothing... The house must never be an instrument which closes us off from the outer air and so clothing mustn't. In certain ways clothing and house merge. The coat and the tent are very close to each other... The hat is the roof of the clothing, and the roof is the hat of the house...<sup>17</sup>

Here we are not dealing with a coincidental use of the house/body metaphor for the reason of a very lively and insistent health propaganda. The direction taken by Wolf and Pettenkofer leads directly into gestalt psychology and to the art historian Heinrich Wölfflin. From 1910 to 1912 Wolf took part in Wölfflin's seminars in Berlin (as did Adolf Behne). Wölfflin began his PhD dissertation: Prolegomena Of A Psychology Of Architecture, with the question: "How can tectonic form gain expressive power?"

So far we have recognised the human being and his general proportions as decisive for architecture; this principle may yet be expanded. An architectural style reflects the posture and movement of the people of it's time. It is one's attire that first expresses the way one wants to move and hold oneself and it is not difficult to show that architecture matches the manner of dress of its time...<sup>15</sup>

Consequently, house, clothing and man do not only merge, they match. In the book *Neues Wolmen, Neues Bauen*, highly praised by Wolf, Behne also takes up this theme:

We must always view every form together with the human being it represents. It is only then that we have a proper judgement of what this form is worth, of what it means to us.<sup>19</sup>

Behne is convinced that certain forms actually represent the human being, or more precisely, a certain type of human being. Behne proves this statement with a visual comparison of human body and architectural body and finds that the clock tower of a church and the tower of a military base match the type of man employed below.

Is it not amazing how the vicinity of church and military base are turning into a built manifesto of class distinction? Behind these towers don't we see the two different types of human being?<sup>20</sup>

#### When Wolf states:

A straight line runs from the interior without the veiling door curtain and without drapes, without dark corners and without plush furnishings to the short skirt, the bobbed hair and the almost naked body of today's stadium fighter...<sup>21</sup>

This is to be taken literally. It is not-only the 'New Man' who is ideally naked but the house, too, which undresses and sheds its clothes. In his book Behne illustrates that a villa can be undressed like a man.

# EDINBURGH ARCHITECTURE RESEARCH



Figure 3. The Grunewald Villa, Berlin (left), Sketch by Behne of Grunewald Villa stripped of decoration (lop right), Gropius' Meisterhaus, Dessau (boltom right).



Figure 4. Photograph of a female athlete from Woll's medical book.

To prove this he transforms a negative example, the 19th century Grunewald Villa in Berlin, by simplifying it in a drawing. Behne simply strips of its decoration. When he arrives at the stage that only the bare white walls are visible he compares it to what should be the ideal outcome of the transformation: the Meisterhaus in Dessau by Gropius. The comparison of this house with a photograph of a female athlete, who Wolf declares to be "clear, clean, [and] airy", does not really demand any further comment. Her upright posture is not the consequence of a stiff uniform but the result of her muscular body and her obviously healthy constitution. Her clothing matches Wolf's hygienic ideals: she has a "free collarless neck" and bare arms and legs both for hygienic and aesthetic reasons. Her sports leotard is smooth, simple, without ornament and covers only a minimum of her body. In this way it guarantees the ideal effect of light, air and sun on the naked skin. The smooth and very plainly rendered walls of the Meisterhaus presentthemselves in the very same manner - over a third of their area consists of wall-openings; the fort-like character of the towers has disappeared; the building has been opened to the light, air and sun. A newspaper article of 1927 presents Gronius' Meisterhaus as a prototype for hygienic architecture. "Open", "clear", "healthy" and "self sufficient" are not only attributes with which the author describes the architecture of the house but also the naked, muscular, sun-tanned, healthy man behind it. Only the leotard prevents the 'New Man' from being absolutely free and healthy, just as the walls only tolerate a partial flow of light, air and sun. The comparison of Friedrich Wolf's outdoor-room - designed by Richard Döcker - with it's inhabitant, the twenty year old medical student Friedrich, is an extreme illustration of just how well healthy architecture can match the healthy inhabitant. Instead of clothing the 'New Man' wears only his musculature and tanned, healthy skin. Just as he is exposed so to is the completely 'undressed' architecture. Of the 'plaster-dress' the only thing that remains is the bare iron construction for the cotton sublind which now defines the air space. Behne's observation that the human body matches the architectural body is also true for Wolf's concept of the 'New Man' and Döcker's concept of the Neues Bauen. In the magazine The Ideal Home, of 1927, one reads under the heading "The new dwelling and the 'New Man'":

Strict objectivity, this is the new catch-phrase of the new belief, however, this is too narrow since we are dealing with far more than objectivity, namely with the transformation of man by architecture... If clothing has such a big impact on the human being it is very easy to guess what the effect of the extended dress, the house, has on him. The house must take into account man's longing for renewal, which in our time is much stronger than in others... The human being is mobile, he learns, he matures, gains deeper insights and views, in short: the physical process of the constant death of cells and their renewal is an analogy to man's constant transformation and renewal in general.<sup>21</sup>

The house is not only a second skin, or hygienic layer, which is said to have health promoting qualities but is to be understood as the nucleus of both personal and social renewal. To the new hygienic man this layer must be tailor made, without the hat and without the heavy constricting overcoat. The house gets rid of its oppressive pitched roof, throws off the applied façade decoration like a corset and punches larger openings in the facade just like undoing the top button of a shirt. In its sporty dress the house embellishes itself only with gymnastic appliances and in its naked simplicity it challenges the 'New Man' to bathe in the sun and the air, to take part in sport and, thus, to gain total health.

In the year following the publication of Wolf's book a third student of Wolfflin proffered his knowledge on the emancipated house - Siegfried Giedion - with his book *Befreites Wohnen* which shouts from the cover: "light light, air air air, opening opening opening". Giedion writes:

Today we need a house which in it's overall structure is in tune with a freer understanding of the body through sport, gymnastics and a sensible way of living: light, transparent and mobile. It is only logical that the consequence of this opened up house is also a reflection of today's psychological condition: there are no isolated matters any more. Everything interpenetrates everything else.<sup>21</sup>

#### Conclusion

The history of the Neues Bauen and its aesthetics has not really taken into account the question of hygiene and the various health reform movements. While working through the historiography of modern architecture oneself, one senses very strongly that both hygiene and health were of more than marginal significance. Up until today it is the slogans like 'rationality', 'norm' and 'function' that are identified as the determining constituents in the creation of the Neues Bauen. However, the vast amount of primary sources convince one that behind the language of the Neues Bauen there is more than these tired slogans. The re-emergence of interest in the importance of hygiene in the inter-war period is fundamental for it contributed substantially to the accomplishments of architecture and culture in the early twentieth century. The last quotation is again from the magazine *The Ideal Home*.

The new architectural forms which gradually pop up everywhere are not due to fashion whims and desires, they are not arbitrary creations of any one architect but the expression of a new state of mind... Architecture is not only a technical matter but most of all it is a mirror image of the mental purpose in life within a certain era. It is a cross section through the psyche and attitudes of living. This is why in the Neues Bauen the hunger for light and sun and the attitude towards life of those firm, sinewy bodies finds its expression just as much as does the bringing into line with mechanical function. Close connection with the landscape, wide openings for light, roofgardens, these are all characteristic of the 'New Architecture'. After all the body culture movement finds in these modern examples a nice confirmation proving that it is on the right path.<sup>24</sup>

## Notes and References

<sup>1</sup> Wolf, Friedrich, Die Natur als Arzt und Helfer, Dt. Verl.-Anst., Stuttgart, 1928

<sup>2</sup> The Felke bathtub was a newly developed bath that allowed outdoor bathing a could be used with a minimal amount of water.

<sup>3</sup> Here Wolf is making a reference to an original quotation from the Berlin artist Heinrich Zille. Zille had become famous for his sarcastic observations of the working class.

Please note that all quotations have been translated from the original by the author.

<sup>4</sup> Nachlass Friedrich Wolf, Akademie der Künste Berlin, FW 154/10

<sup>5</sup> Meyer, Hannes, "Bauhaus Und Gesellschaft, Erstveröffentlichung" in Bauhaus, Zeitschrift für Gestaltung, Dessau 3, 1929, p.2

<sup>6</sup> Neubert, Rudolf, Mein Arztlehen. Erinnerungen, greifenverl, Rudolstadt, 1974, pp.52-55

<sup>7</sup> Sonna, Birgit, Oskar Schlemmer: Der Neue Mensch. Körperkultur und Lebensreform, München, 1992 (Dissertation)

<sup>8</sup> Döcker, Richard, Terrassentyp. Krankenhaus, Erholungsheim, Hotel..., Stuttgart, 1929

<sup>9</sup> Nachlass Friedrich Wolf, Akademie der Künste Berlin, FW, Mappe 383
<sup>10</sup> Wolf 1928, p.9

"Behne, Adolf, Neues Wohnen, Neues Bauen, Leipzig, 1927

<sup>12</sup> Ibid., p.7

<sup>13</sup> Bauhaus Archiv Berlin, Nachlass Adolf Behne, letter from Wolf to Behne, 16<sup>th</sup> July 1927

#### EDINBURGH ARCHITECTURE RESEARCH

14 Wolf 1928, p. 313, "Die Luft"

<sup>15</sup> This paper as originally intended to be supported by photographs. Unfortunately it was not possible to include them. Due to this some paragraphs might be not as clear as they would have been otherwise.

16 ibid., p. 241, "Wie Sollen Wir Wohnen?"

<sup>17</sup> von Pettenkofer, Max, Über die Beziehungen der Luft zu Kleidung, Wohung und Boden, Braunschweig, 1872

<sup>18</sup> Wölfflin, Heinrich, Prolegomena zu einer Psychologie der Architektur, München, 1886, p.46

<sup>19</sup> Behne, p.74

<sup>20</sup> Ibid., p.73

<sup>21</sup> Wolf 1928, p.345

<sup>22</sup> Prof. Rudolf Bosselt, "Die neue Wohnung und der neue Mensch," in *Das Ideale Heim*, 1927, p. 644-46.

23 Giedion, Siegfried, Befreites Wohnen, Zürich, 1929, p.8

<sup>24</sup> Fritz Widermann, "Wohnungsreform und Lebensgestaltung," in Das Ideale Heim, July 1928, pp.235 – 260

#### Illustrations

Figures 1, 2 and 4, from Friedrich Wolf's Die Natur als Arzt und Helfe, p.252, p.233 and p.235.

Figure 3, from Adolf Behne's Neues Wohnen, Neues Bauen, p.148.