



Thoughts on the study of architecture at the Folkwang-School of Design (FfG), Essen-Werden, Architecture Department (under construction)

Ralph Johannes, Essen: 3.7.1964

Situation

The avalanche of new 'advances' in human life, whether they be scientific, technical, social or economic, is a fact of our times which can at best be directed with a certain amount of effort, but no longer changed. In parallel with this inexorable development, the body of our knowledge is growing in such a way that no individual is capable of embracing it any longer. We understand too much, we know too much, we hear too much, and nevertheless this superfluity moves us only superficially, for how little, in essence, are we capable of doing something constructive, creative, with these advances.

Task

An important characteristic of almost all schools of architecture is the lack of an inner sense of direction and the absence of a leitmotif.

"It is just that decision to take a particular direction which is decisive for the quality of a school. The teachers should be as good as possible so that the (chosen) direction can be maintained, for even the best group of talented men advancing in the wrong direction or in different directions not only achieves nothing for a school, but also leads it into chaos." (Mies v.d. Rohe)

I do not regard the decision to take a certain direction as meaning that the tutors in the Architecture Department of FfG should identify with a style, the school of a particular master, an ideology of form in whatever embodiment, or indeed a fad. I see

the uniting principle in the common task of concentrating our teaching programme on those areas which are of **use** to the **individual** and to the **community**.

Architecture is not only the art of building or structural art, but rather in its simplest form it deals predominantly with what is **useful to human beings**.

This first commandment for architecture is not new. It has always been the guideline for those who see beyond themselves and peer out into a world of superordinations and subordinations within communities.

“But our architects were not always so selfless in the depths of their souls. The self-willed, ‘great’ architects will always find it difficult to enter into the spirit of a ‘lesser’ client’s soul; and thus each of their works comes to bear the ‘great face’ of their own soul! The reticent, ‘minor’ architect, on the other hand ...prefers to copy everything fashion or history presents to his eyes as a model. ... That is why the style-creating forces of building are always inherent in the third type – the type of architect whose actions and omissions are predominantly determined by dedication of the I to the We.” (Martin Wagner)

Genuine personality and genuine community which only arise in a relationship are currently disintegrating into extreme individualism and extreme collectivism. There is today – with a few exceptions – only un-form or uniform. We have to find an objective measure of value, free from individual interpretation and free from uncontrollable, compulsive or emotional self-portrayals.

In the light of our present dynamic situation, which merely permits hypotheses for the impending work, the **human scale** is a universally applicable principle of order.

Our bodies are the yardsticks for perception of the things we see and feel. They are also the unit of measurement which enables us to establish a finite, three-dimensional coordinate system in infinite space.

It must be our task to show what influence light, space, dimensions, shape and colour have on the human psyche. On the basis of **objective** laws, all students must gather the knowledge and experience which can enable them to view their environment as an organic whole.

Furthermore, the study of seeing on the basis of scientific facts is of extreme importance. The student must study the effects of space, form and colour in experiments, recognise contrast, direction, tension, calm and optical illusion, and discern the significance of what we call the human scale.

My colleagues Hirz and Haunschild and I are in agreement that the **human being** in all his functional aspects should be at the centre of our work. That means, however, that subjects like ergonomics (physiology and psychology of work) and sociology will have to be taught by visiting lecturers.

Of course, the preceding remarks fall far short of encompassing the task of the architect. His **main function** can be found in the ability to **design space** creatively. The end cannot however be achieved without means. If it were possible to accept the human being and his relationship with space as a basis of the understanding and shaping of forms, this would constitute a common key to all kinds of design work.

I see the leitmotif of our work in the principle of order of **HUMAN BEINGS AND SPACE**.

Potential solutions

Anyone wishing to provide a systematic education today is faced with the dilemma of a lack of examples to emulate on the one hand, and excessive demands coupled with a flood of information on the other. Problems are not only multiplying in terms of quantity, complexity and difficulty, but are also changing more rapidly than ever before.

In the past – even after the radical intellectual change of the Renaissance – the individual architect still, to a certain extent, stood on the shoulders of his predecessors. As traditional ties gradually loosened, he had more and more decisions to make himself. But these were relatively simple, as there was still a residue of tradition. Today, however, the absence of tradition has become totally apparent.

Following the decline of these values and the emergence of new, important manifestations of our civilisation, such as the branching out of science, technology, industrialisation and the economy, with the resulting social structure, the architect now stands helpless and alone.

In this field of tension between diverging symptoms, he is now forced to **rethink** his job, starting with basics. The rapid alternation of events shaping our civilisation has made a slow development of forms through several generations impossible. His solutions must, accordingly, be extremely clearly thought out and implemented without the “regula falsi”. Misplanning would have extensive and serious consequences.

The reality, however, looks different. Apart from a few exceptions, the majority of architects are still behaving as if nothing had happened.

It is now no longer possible to evade the responsibility to act consciously in response to these things. Our age urgently needs those architects who are capable of coordinating and optimising the planning of an entire project with its complex embedding in the environment.

“While the engineer starts with a striving for technological functionality, or the artist may proceed alone from a striving for an aesthetic statement, the architect should consider further aspects above and beyond these – that very no man’s land. Fulfilment of technical functions does not in itself mean fulfilment of social functions, in which aesthetic demands are also to be counted. The architect’s work, therefore, by no means ends at the surface of things; he is not a cosmetician of external form, or a casing designer. Matching a structure to the complex demands is only possible when the conditions below the surface are also penetrated, which in most cases can only occur in cooperation with the relevant specialists.” (Horst Rittel)

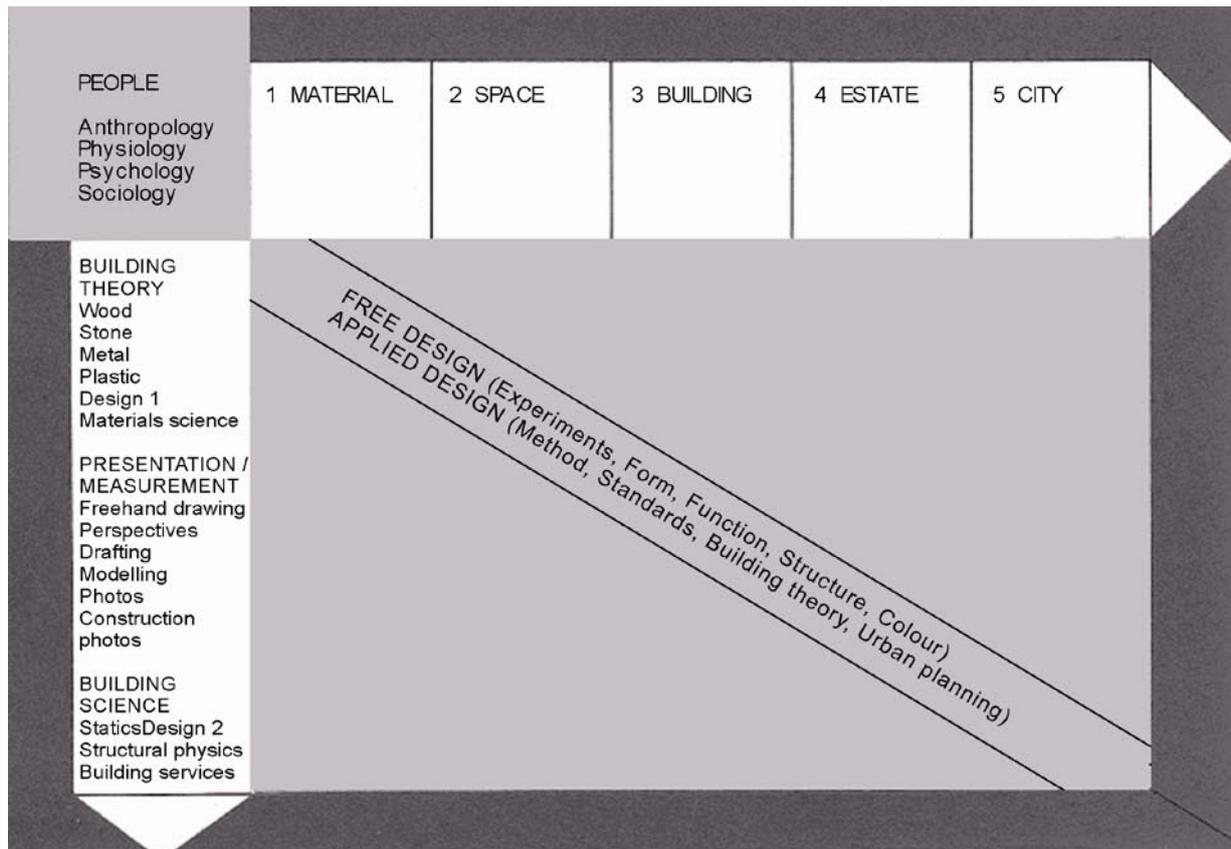
What prospects, then, does pedagogy offer for a new architectural education which meets the needs of our times?

The basis of all teaching should be training and development of the capacity for **logical** thought.

“Education must lead us from irresponsible opinion to really responsible judgement.” (Mies v.d. Rohe)

Seen from this perspective, ideal teaching in every subject must consist of three parts which have to be inextricably interlinked:

1. Education in **methodical** observation, thought and action on the basis of objective facts.
2. **Systematic** dissemination and acquisition of corresponding subject knowledge (following the principle that it is not necessary, nor is it possible, to know everything; one merely has to know where to look or ask).
3. **Practising and applying the knowledge acquired** in the performance of tasks in the areas of ‘free and applied design’ (see diagram), with the students obliged repeatedly to justify the results of their work.



Diagram

The study of architecture is not, of course, a rational pursuit. If that were so, we could classify it all too quickly as a science. But if our architecture – like all great works of architecture – is to be an expression of our times, we have to attempt to establish a disciplined grasp of ideas, embrace the objectivity of the scientific method and develop a theory to explain what we do.

For, “the great epochs of art always had their ‘school’ or ‘theory’, the necessity of which was just as much a matter of course as has been and is the case in the sciences. These theories could never replace the component of the intuitive, because knowledge per se is barren. It has to be content with the task of supplying the material and the method. Intuition, which needs that material and that method as the means to an end, is fertile. But the end can never be achieved without the means, and in this sense intuition would also be barren. Not an ‘either-or’, but an ‘and’.”
 (Wassily Kandinsky)

I am of the opinion that a school or theory must not be prescriptive. Otherwise, we run the risk of 'fossilised academism' with all its detrimental effects such as the inability to make corrections, programmatic thinking and a loss of internal conflicts.

On the other hand I believe that our curriculum must demand strict discipline as an aid giving direction, method and clarity to the work of the teachers and students. Thus, for example, the entire work of the department for all semesters will have to be set out in a timetable and organisation plan before the start of each semester and year. This joint periodical compilation of such a plan should serve as a check and confirmation of right or wrong procedure, or else it will be totally impossible to steer a clear course.

As creative work and inventiveness cannot be taught or learnt, we can at least create an atmosphere that extensively promotes the development of creative powers. For example, the experimental work of the students under the rubric of 'design theory' (and I would propose it be renamed 'free design' – see diagram) is in my opinion of the greatest significance. This subject should be taught up to and including the 5th semester, for only through continuous, independent creative work – similarly to independent research – will it be possible to develop new design concepts which themselves act as a stimulus for 'applied design' (see diagram). Otherwise, the danger of part of the students slipping into uncritical, sterile and schematic programmatic thinking will be too great.

In order to intensify the initiative and cooperation of the students in the verbal field, too, the traditional method of teaching in the form of lectures should be increasingly replaced by seminars. This way of working provides a good opportunity to train the skills of unscripted eloquence.

To raise the intellectual level and deepen the understanding of the various topics covered, the students should be obliged to read selected books, on the basis of reading lists. To check that they actually do read those books, essays should be written on each book, forming the basis for later discussion. Possibly, as a general incentive, a prize could be awarded for the best essay.

The fact that the architect occupies an important position and has a **duty** to the economy as a whole should not be forgotten in the curriculum.

There is surely no doubt that the work of an architect or student of architecture increasingly involves the processing of information either directly between people or by exchange in the form of professional literature. As a result, especial importance should be attached to the establishment of a comprehensive subject library (possibly managed by the department). Not picture books, but textbooks and professional journals! Students will have to be granted unimpeded access to work with these.

It cannot, I think, be disputed that a large proportion of the most important professional literature is published in English. Can the students draw on this body of knowledge? Each student should demonstrably possess adequate skills in a main foreign language, particularly with regard to the numerous opportunities for inviting visiting lecturers from abroad to assist in our work.

In the establishment of a curriculum, an appropriate balance between the nurture of abilities and the development of skills is of great importance. Although no uniform, balanced synthesis of theory and practice has yet been found, it is my view that

mandatory practicals before and during the course should be prescribed. The six weeks of training at the college construction site before the start of the course has already been adopted as a **must** in the curriculum. Furthermore, I should like to propose that one year of practical experience in an architectural firm should be demonstrated before the preliminary examination (5th to 6th semester). In this connection, the course records should also be changed to a kind of logbook, in which not only the subjects studied, but also the test results and the practicals should be listed.

As the Architecture Department will be at a stage of puberty for some years to come, it urgently needs the understanding, help and support of the directors, not only in spirit, but also financially. Would it be possible for the fund for teaching materials (visiting lecturers, textbooks and journals, experimental apparatus, etc.) to be considerably increased for the coming years? The most pressing matter is however the appointment of a tutor for construction and statics. A proper architectural education without that subject, currently unassigned, is simply inconceivable.

Conclusion

“It is not enough to teach people a specialist subject. With that, they do of course become a kind of usable machine, but not a rounded personality. The decisive factor is for them to have a vital feeling for what is worth striving for. They have to have a vital sense of what is beautiful and what is morally good. Otherwise, with their specialised knowledge, they will be more like a well-trained dog than a harmoniously developed creature.

They have to learn to understand the motives of mankind, their illusions and their sufferings to acquire the right attitude to their fellow human beings and the community.

This is first and foremost what constitutes and preserves civilisation. This is what I have in mind when I recommend the humanities and not just dry specialist knowledge as important.

Overemphasis of a rigid system and premature specialisation from the point of view of direct usefulness kill the spirit on which all cultural life and thus finally also the blossoming of specialised knowledge is dependent.

Furthermore, it is part of the essence of a valuable education for independent critical thought to be developed in young people; a development that is extensively endangered by overburdening them with material. Overburdening necessarily leads to superficiality and a lack of culture.

Teaching should be such that what is presented is experienced as a valuable gift and not as an annoying chore.” (Albert Einstein)

