Sure, we can see them, the objects of design; they are layouts and devices, from the building to the can opener. The designer designs them logically and ready-to-use, assuming certain boundary conditions: for the can opener it is the constitution (or structure) of cans. The designer of cans on the other hand starts from the constitution of the can openers; that is his boundary condition.

Thus, the world can be conceived of and categorized – for example – in houses, streets, traffic lights, kiosks; in coffee-machines, dish-washers, tableware, tablecloth. This categorization leads to an understanding of design that excludes a certain device, accepts its boundary conditions, and aims at building a better coffee machine, or a more beautiful one (...).

Nevertheless, we can categorize the world differently – and if I understand the „Pattern Language“ correctly, Christopher Alexander tried to do exactly this. He does not distinguish between house, street, and kiosk, in order to build better houses, streets, and kiosks; rather, he separates the integrated complex street corner from other urban complexes; because the kiosk makes a living from my bus not yet arriving and me buying a newspaper, and the bus stops here because a couple of lines meet, and the commuters get their connection right away. Street corner is just the visible circumscription of the phenomenon. Furthermore, it contains parts of organizational systems: bus lines, schedules, magazine sale, traffic light phases asf.

This classification of the environment also gives a design impulse. Yet, this impulse includes the invisible parts of the system. (...)

What are institutions? Let us leave Christopher Alexander’s street corner and look at a clearly perceivable institution: the hospital. (...) Let us describe the hospital as an institution. Beyond all other things it is a system of relations between human beings. Interpersonal systems are also designed, created, in parts, though, by tradition and history, but in other parts by human beings living today. If the Ministry of Health declares the production of diet food to be under the supervision of the head office
and not under the supervision of the medical staff – or vice versa – this resolution is part of the design of the institution. (...)

Are there more such institutions? Yes, indeed: the night. – But, night is a natural phenomenon, right now, the sun is shining on the antipodes, and that is why around here it is dark? – Anne Cauquelin was the first one to propose: The night is being made. And indeed, it is human behaviour which designs the night this or that way along man-made institutions. In Switzerland, after 9 p.m. I can work calmly and then go to sleep; to telephone this late in the evening is considered unpolite. In Germany, my telephone keeps silent until 11 p.m., then it comes to life; at 10. p.m. the bargain rate begins – leading to a congestion of all long distance lines so it takes about an hour until you finally get through.

Thus, the night, which originally had something to do with darkness, is human-made. It consists of opening hours, closing times, fares, schedules, habits, and also of street lamps. Like the hospital, night would need a re-design: Why does public transportation close exactly at the hour when people are leaving the pubs after a glass of wine, so that, after all, and despite good reason they drive home by car? Would not a different organization of opening- and closing hours protect those women from violence who have to walk home at night alone? Is it necessary that even in our cities the only reasonably safe way to get home at night is by driving ones own car? (...)

We point out another institution: the household. For the traditional designer, the household is a collection of devices, a romping place for blueprint. The things to invent and to optimize are legion: coffeecooker, mixer, dishwasher, to name just the kitchen machines. With new appliances, the designer takes care that everything stays the same. (...)

A subsystem of the institution household is the removal of dirt. What is dirt? Why do we remove it? And where does it go to after it was removed? – We all know it, but we don’t like to admit it: The removed dirt, together with the detergents, is what causes environmental pollution. (...)

By giving different examples I wanted to demonstrate that design has an invisible component which is institutional and organizational and in which the designer constantly participates. However, due to the common way of classifying our environment, this remains hidden. By dividing the world according to objects, and letting the invisible play a role as a boundary condition the world is being designed, too: Not changing the institutions, while at the same time the world of technical objects is developing, is indeed also a way of designing. (...

At the beginning I already assumed that the designer divides the world according to objects instead of problems. This results from a linguistic determination which takes the labelling of something as a deplorable state for a way to solve the problem. (...

This short circuit between labelling and remedy goes hand in hand with an exclusion of the boundary conditions. Beyond the device to be designed, no technical or organisational changes shall be necessary. Successful is what can be included into the existing systems, however overloaded they may be. (...

This way of problem-solving is due to the status of the designer within the decision-making processes: as a deliverer of ideas who takes in effect no responsibility. (...

Thus, design has to open up towards socio-design: towards a reflection on problem solutions that derive from including both roles and objects in a coordinated process of changes. (...

Invisible design today means: the conventional design which is not aware of its own social function. Invisible design could mean instead: a design of tomorrow which is able to consciously include invisible overall systems consisting of objects and human interrelations.

(translation by Alexander Klose)