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Urban Experiments

Creativity and Innovation – Cities of the Future are Places of Experimentation

Temporary Uses – Free Spaces as the Driving Forces of Urban Development

Diversity and Unfamiliarity – Urban Concepts for New Ideas

From Maker Tools to a Curated Public Space – What Characterises Labs?

Cities of the Future are Places of Experimentation for Creativity and Innovation

The cities of the future face numerous different challenges. They should be energy-efficient and ecologically sustainable, offer a high quality of life at affordable prices, present themselves as both historically authentic and modern at the same time and, last but not least, be highly innovative and economically strong. At the IRS, researchers from different disciplines are conducting research into these different aspects of viability of cities for the future. Starting from this edition, we will be presenting insights gained by IRS research during the Science Year 2015 in Germany themed "City of the Future".
First part: Cities need free spaces for experimentation.

For millennia, large cities have been known as the most important starting points for economic development. Their function as markets during the Middle Ages, and the large concentrations of population they offered during the Industrial Revolution ensured the economic viability of cities for the future. Not much has changed since then in principle, but the reasons for their economic significance have evolved continually.

A fundamental factor nowadays is the ability of cities to innovate – to generate, reuse and act as a catalyst for new ideas. "Encouraging innovation is therefore, a fundamental pillar for stimulating cities' economies – they support technology parks, business incubators or knowledge-based industrial districts," says IRS head of department Prof. Dr. Oliver Ibert. "An imbalance becomes apparent here, though, because innovation comes about not only as a result of high-tech research or in expensive laboratories." According to Prof. Dr. Ibert, large cities offer enormous potential for social, user-led and service-oriented innovations. No expensive laboratories are needed for this, he says – instead, we need low-cost open spaces, a culture of experimentation and the special atmosphere provided by creative cities.

Places for experimentation can be as diverse as the pioneers who occupy them or the enthusiasts who establish start-ups in order to market their ideas. If we take a look at what Berlin was like just after the fall of the Wall, we will see a huge range of possibilities provided by the innovative power of open spaces – from venues of culture

and experiences to labs or co-working spaces, says IRS head of department Prof. Dr. Gabriela Christmann. "After 1990, Berlin had a large stock of inner-city brownfield sites which it was possible to use cheaply and creatively." Just as many of these sites, such as the Potsdamer Platz, had projects planned on them, others were discovered experimentally and used temporarily – for example, the Tentstation in Berlin, which not only offered an urban campsite in the middle of a city, but was also a venue for fashion shows, concerts and open air cinema.

According to Christmann, it is not just the physical free spaces that are crucial but also the cultural inspiration and spontaneous creativity which are associated with them. The image of Berlin as an open, tolerant city and as a Mecca for start-ups and the creative scene contributes just as much to innovation and company establishment as does the existence of plots of land yet to be built on, or empty buildings, says Christmann. "This is why it is important to maintain or create free spaces like these in order to make cities future-proof in terms of innovation," says Christmann. At the IRS, several sub-aspects of these processes are being researched intensively. The department led by Prof. Ibert focuses on the sources and pathways of innovation, their relationship to urban spaces, and new places of experimentation such as labs and co-working spaces. Meanwhile, the department led by Prof. Christmann analyses the work of pioneers in urban spaces, social innovations and temporary uses. This issue of the magazine presents our research on the future of cities. ■

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Diversity, Unfamiliarity, Irritation – Urban Contexts and Globally Integrated Knowledge

Creative activities such as programming, writing or designing are very globalised in today's world. Both within communities of like-minded people and with potential customers, the internet allows people to communicate effectively and seamlessly, to do business with one another and to generate new ideas. The more specialised an interest or a product is, the more fruitful the exchanges are with global online communities compared with those with contacts in a person's direct vicinity. So, does that mean that the best place for innovation and experiments is in the virtual world? This idea is contradicted by empirical research and conceptual reflections from the IRS research department "Dynamics of Economic Spaces". The spatial concentration of creative people in scenes such as those in Berlin, Glasgow or Montreal is no coincidence, the department says – it is the expression of the fact that cities continue to provide an inspiring environment for creative processes. At the moment, however, the role of urban surroundings in more spatially open processes of knowledge generation is changing.

In insider circles, line 8 of the Berlin U-Bahn (metro) is nicknamed the "co-working line". It links the districts of Neukölln, Kreuzberg, Mitte and Wedding – i.e. most of Berlin's co-working and lab scenes – open places where new apps are created, 3D printers are shared to make prototypes, and online shops are established for highly specialised, global markets. What unites those who run and those who use these places is a desire to experiment and the need to have fulfilling work with a sense of purpose. "This

makes them part of the longstanding tradition of linking cities and innovation," says Prof. Dr. Oliver Ibert, head of the research department "Dynamics of Economic Spaces". According to him, there are two main reasons behind this close link, both of which became a reality in the past:

Firstly, cities offer the advantages of agglomeration – a high number of inhabitants and organisations with similar interests and specialisations. Anyone who, for example, has invented

a new medical procedure, will find more like-minded people who may help with developing the innovation further if they live near large research institutes and clinics. The contact advantages that large cities enjoy thanks to spatial proximity, promote policies which encourage innovation and business with cluster initiatives and technology parks.

Secondly, cities also offer the advantages of urbanisation. "Cities are places where people can feel alienated, and where innovations can come about as

the result of the interaction of unrelated areas of expertise, interests, practices or lifestyles and the resulting friction,” says Ibert.

These properties of cities were described as early as the 1960s by Canadian-American

mer, for example, will find competent like-minded people in his vicinity to help him with a specific problem related to a new programme application. In terms of such problems, the possibilities offered by online interaction across continents have changed working prac-

imity allows strangers to coexist and come together again and again in surprising ways. This creates opportunities for stimulating creative reinterpretations.” This means, therefore, that the advantages of urbanisation do still have an effect. The fact that even very specialised, locally based interests can be acknowledged and stimulated by global knowledge networks, means an increase in possibilities for recombining local elements in urban contexts – particularly in cities with high levels of diversity and openness to the outside world.

How important is physical proximity between people and organisations when it is becoming increasingly easier to share knowledge – even over long distances?



ican journalist and commentator of urban development processes, Jane Jacobs.

But what role do cities have as places of experimentation in the era of the internet, global conferences and increased job mobility? How important is physical proximity between people and organisations when it becomes increasingly easy to share knowledge effectively – even over long distances? These new developments could mean that the relative weighting of the advantages of agglomeration and urbanisation is altered in favour of the latter.

“On the one hand,” explains Ibert, “highly specialised knowledge can be shared comparatively well within a specialised discipline or community of practitioners despite long distances. It is even very unlikely that a program-

tics considerably, meaning that the advantages of living in an agglomeration appear less significant than they did 20 years ago.”

What it is difficult for the online world to replace, however, are direct, chance or planned encounters with people who have different views on, or no experience with the subject. This exchange between divergent practices is conducive to innovation, because it means programmers can get to know the views of new groups of users by observing them, while pharmaceutical researchers can gain insights from the clinical treatment of illnesses, they are researching, in addition to being able to understand those affected by the illnesses or their relatives more easily. “In this context, we see the city as a catalyst for innovation – a complex patchwork of local cultural practices. Spatial prox-

The department’s research on innovative processes and new places of experimentation in the city has led Ibert and his team to develop an understanding of spatially-distributed innovative processes as part of which labs, for example, take on an important local anchor function within communities that act on a global level. “For creative people, highly specialised expert exchanges in global networks and local encounters with laypeople are of equal importance” says Ibert – “it is because of this local anchoring of globally integrated knowledge that the U 8 line will not become redundant in the foreseeable future. It offers an urban infrastructure which guarantees that complete strangers can bump into each other in surprising ways in specific places, and that they also have the chance to look over each other’s shoulders while they are doing what they do best.”

These developments reinforce the status of cities as places of experimentation. Not only do they take on the function of local anchors for global communities – they also offer free spaces such as brownfield sites or disused buildings, which are perfect for temporary use (see interview with Thomas Honeck from page 6 onwards). “In both cases, cities open up spaces for innovations which are motivated by problems rather than by solutions and, in particular, are driven forward by demand,” says Ibert.

Ibert and his team give a broad definition of laboratory, which includes not only protected experimental free spaces, but also spaces, which have had relatively low levels of upgrading. They also say that other crucial elements are the fact that spaces can be used spontaneously, low social entry barriers, and a minimum of infrastructure connections and security. “This means that urban development policy, which has to deal with gentrification tendencies or vacancies, has an important role to play in terms of giving direction to



The city as a catalyst of innovation: Spatial proximity allows strangers to coexist and come together again and again in surprising ways.

According to Ibert, if cities want to be viable for the future as regards their ability to innovate, these research conclusions indicate that they need to give themselves a new direction and link the promotion of business and innovation with their urban development policy. For this purpose, he and his colleagues have produced a policy strategy which broadens the classic concept of the laboratory as the incubator of innovative processes.

innovation policy,” says Ibert. “Ensuring access to open spaces in cities with greatly increasing land prices is particularly critical. In this regard, systematic, inter-political approaches need to be developed to keep spaces open – approaches, that do not need to be static, but can operate in coordination with the innovative planning concept of temporary use.” ■

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Temporary Use as the Expression of a Conceptual Change in Spatial Planning?

Anyone who experiments is suspending the conventional conditions for a certain period and looking for explanations outside the patterns that are already known to us. Across all sciences and contexts, it would appear that the defining characteristics of an experiment are the fact that it is new, and that it is temporary. Based on a current IRS research project on temporary use, Thomas Honeck and Jan Zwilling discuss what an experiment in the urban context can look like, and what significance the desire to innovate and time limits have.

Temporary use and “urban experiments” – how do they fit together?

In a similar way to laboratories, the temporary uses of spaces are characterised by special circumstances in comparison to “everyday”, more permanent uses. These include, for example, time limitations, constructional characteristics of previous use, or limited facilities in terms of infrastructure. In order to deal with this, temporary users often find unusual, creative solutions. This is why they have come to the attention of architects and planners. In some cases, the experiments which have come about due to temporary use lead to results which can be applied in other contexts. In ideal cases, they make preparations for subsequent uses or even become permanent. As part of the German Research Founda-

tion’s project, InnoPlan, we are investigating the whole procedure of temporary use as an innovation in spatial planning – because planners are still experimenting with temporary uses.

Has temporary use already existed as a planning element for some time in German cities, or is this a relatively new phenomenon?

Temporary use of spaces is something, which has always been found in cities. Nevertheless, if we compare, for example, the traditional allotment gardens found near railway lines with today’s urban community gardens, we see that they are dealt with very differently. Our research from the InnoPlan project shows us that since the 2000s, temporary use has taken on a much more dynamic role in urban

planning. Major contributing factors in this regard have been experiments with temporary use as part of the International Building Exhibition Emscher Park, the initial structural support in Leipzig as well as the fascinating, Berlin’s colourful temporary use landscape of the 2000s. Interestingly, temporary use is also popular today in prosperous cities for promoting creative spaces.

Temporary use seems to balance planning (top down) and free spaces (bottom up). Are there examples of uses of space, which have been meticulously planned and those completely unplanned?

The term “temporary use” itself implies a desire to be rational and plan ahead. The other side of this is that there is a lively scene of culture-loving temporary

users who do not wish to be instrumentalised – and who certainly do not want to trigger gentrification effects.

This discrepancy has been part of planning with temporary use right from its beginnings. And it is what makes our research so exciting! As the procedure became institutionalised, planners increasingly made these temporary uses part of their established policy. Particularly in current projects such as the Tempelhofer Feld, which used to be home to an airport, temporary use is heavily curated – but this is also because it is public land which is at stake. High visitor numbers show that this normalised form of temporary use is also very popular in Berlin.

Temporary use of space is generally limited to a certain period. Of course, especially when it is integrated into planning procedures, one hopes that it will lead to longer-term effects. What are the advantages and disadvantages of temporary use from the perspective of city as a whole?

Particularly in the past ten years, Germany has seen intense, practice-related debate on the potential of temporary use. Some contributions see temporary use as a new form of public participation – creating strong identification with the place, which is evaluated as

positive or negative depending of the perspective.

Other authors describe temporary use as one of the few planning options for creating creative spaces and new concepts of space in the city. These do not only represent unique cultural selling points, but given the preferences of creative people also have an economic significance. In my opinion, we cannot afford to neglect the fact that temporary use makes it possible to delay decisions on the development of plots of land. When public land is at stake, this goes hand in hand with privatisation.

I would like to speak about the actors once more. So, what is the typical profile of temporary users? Does the planning sector make sure it gets certain actors on board, in the network of city activities?

The broad view we have gained from the InnoPlan project shows that we need to differentiate here. When one thinks of temporary users, it is usually young, creative space-use pioneers who spring to mind – who want to turn their cultural and perhaps social project into a reality with plenty of idealism and not much money. Such temporary uses are particularly noticeable in the urban environment and enjoy attention from the media and specialist literature. Of course, personalities like these are also



attractive in terms of planning. Some of these particularly successful spatial pioneers have managed to acquire considerable know-how about temporary use and put this to good use – as “professional pioneers”, so to speak.

In the past few years, however, we have witnessed the diversification of temporary space users: Groups of pensioners, for example, also use spaces temporarily. Similarly, studies show that temporary use can be important for youth work.

At the beginning, you said that temporary uses were a relatively new concept in terms of planning procedures. What prospects do you think temporary use will have in the future?

Within the framework of InnoPlan, we identified five different phases in the innovation process of new spatial planning procedures. At present, temporary uses are, on the one hand, in a stabilisation phase – something, reflected by the fact that they are being used in many different contexts in Germany, and that planning in terms of temporary use had been broadly institutionalised.

On the other hand, we can observe the mounting criticism of temporary use by the various actors involved: If temporary use projects are successful, the property's value increases and the users





often have to move elsewhere. For this reason, we have recently seen the link between temporary use and gentrification being made explicit more and more often.

I can certainly imagine that the referendum which took place in Berlin in 2013, in which a majority voted against construction on the former site of Tempelhof Airport, will have consequences: Following this outcome and the many conflicts about the ending of temporary uses, administrations, planners and land owners will think twice about whether they really want to stir up these issues again.

...So you think that temporary use has had its day?

No, I think that we will see a diversification of the planning procedures that we have been referring to as temporary use here. In different local contexts, “mutations” of the process will develop, which are dependent, among other things, on institutional circumstances, problems and experiences with the instrument. This criticism may also lead to the process being renewed – something we can refer to as process innovation.

An interesting example of this is the Holzmarkt project in Berlin, as part of which a foundation bought a brown-field site and has now leased it out to the former temporary users. A new mixture of short and long-term, public and private uses is being developed there. The story of temporary use is therefore continuing to take a very exciting course – but it is breaking up into many parallel sub-chapters.

Can we expect that urban experiments with temporary use will in future make contributions to the world of theory?

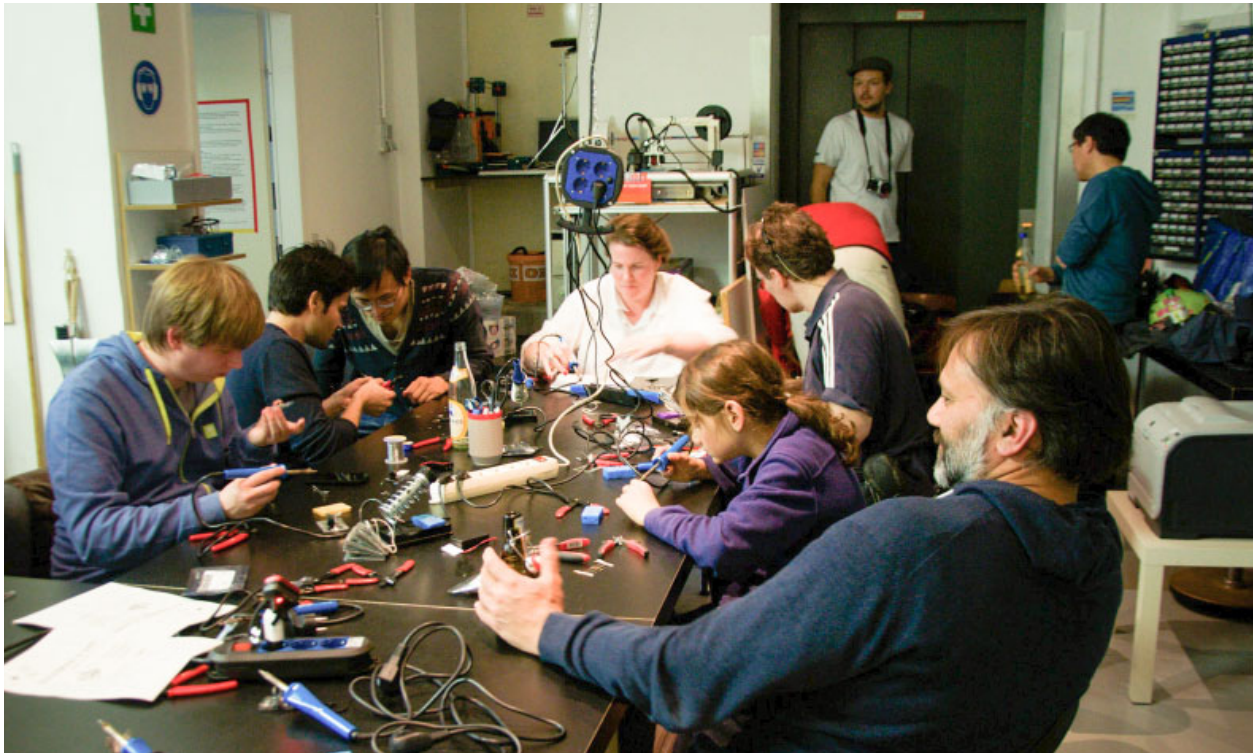
Yes, I think so. Spatial planning traditionally orients itself in the same direction as the controlling of growth. Now it is also about shaping stagnation and shrinking processes. We understand temporary uses as an expression of this conceptual change in planning. Of course, they can also serve to make us look at temporality in planning theory from a different perspective. Now that the planning practice-related debate on temporary use in Germany has reached a certain degree of saturation, it is time to think about possible theories we can derive from the situation. ■

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Labs as Places of Experimentation in the City

Labs seem to play an important role in connection with future-oriented, innovative economies in large cities. They enrich the exchange of knowledge, ideas and information and are well-known for being particularly conducive to creativity and innovation. But what exactly are labs, and what different goals and financing models are there? During a study in Berlin, IRS researchers encountered a huge variety of labs which benefit from open spaces in the city while simultaneously shaping the urban surroundings.

We define labs as organisations which make workspaces and technical infrastructure available to a wide range of very different users for a limited period of time. They are characterised by a high degree of social openness, and consciously bring actors together in order to promote creative experimentation and work. Some of them, such as grassroots labs or co-working labs, came about as a result of do-it-yourself initiatives. Joint practising, developing and testing are in focus. In contrast, however, there are also labs which are set up by companies or research institutes as think tanks and as places for the implementation of ‘open innovation’ processes. Their defining characteristic is their interdisciplinary, cross-sector orientation. “Specifically, in addition to common characteristics we also found large differences in the lab scene, which we built on to describe types,”

says Dr. Suntje Schmidt, deputy head of the research department “Dynamics of Economic Spaces”. She sees a fundamental common characteristic as being the combination of great thematic openness of many places, and curation which occurs to different extents in dif-

The second fundamental characteristic of different lab types is that they are equipped with so-called “maker tools” – technical equipment, which gives users low-threshold access to production processes. In a similar way to an open workshop, labs make items such

A fundamental common feature is the combination of the great thematic openness of many places, and curation which has differing levels of intensity.

ferent places. As a result of this, lab owners create occasions such as BarCamps and workshops for this purpose in addition to idea presentations and celebrations, which of course naturally appeal to certain groups of users. “We are talking about a curated openness of these labs, that is something which appeals to a certain target group,” says Schmidt.

as 3D printers, laser cutters, vinyl cutters or CNC milling machines available, which users can use to make prototypes or small series. What is crucial is that materials and raw materials, technical equipment, software and applications can be used flexibly in order to test and optimise creative and innovative processes. “This variety promotes the func-

tion of labs as places of experimentation,” says Schmidt. “Unorthodox ideas have the freedom they need here, so that some of them can develop into really new concepts.” Many labs also support these innovation and learning processes with training sessions and workshops, which also serve to select users.

“Unorthodox ideas have the freedom they need here, so that some of them can develop into real new concepts.”

The study of the Berlin lab scene shows that these establishments are closely linked to new economic developments in the city, and how they support both user-led and problem-centred innovation processes in particular.

Grassroots labs are most similar to the image of privately motivated initiatives, which support innovation from the bottom up. Company-owned labs or those associated with research institutes or universities are more closely connected to existing establishments in order to support their innovativeness. “This is where existing establishments open themselves up to the inclusion of external, often creative experts, in order to implement company goals or strategic academic innovation. What is interesting is that this opening up is not just in terms of organisation, but also occurs spatially.” In this way, some companies move to Berlin, specifically so that they can make the most of the city’s creative potential. This is more important for the process than spatial proximity to the company itself.

Schmidt and her colleagues in the research department see these open, flexible and communicative workspaces as the expression of a changing world of work and the increasing openness of organisations and innovation. These temporarily available labs flourish in Berlin, in particular – something, which is not only due to the city’s attractiveness to

company founders and freelancers but also the availability of spaces. Schmidt, therefore, sees positive effects in two respects: On the one hand, labs mean

that new actors enter the innovation system, who – in contrast to other large research and development departments – are driven by demand, interests and problems. In addition,

labs allow interdisciplinary work to come about more quickly and in a less complicated way, in addition to quicker and more focused work. On the other hand, Schmidt sees the labs as an asset to cities like Berlin, because they enhance their innovative power and improve their image.

“At the same time, however, the way in which labs use and shape urbanism in areas such as Berlin-Neukölln or Kreuzberg should not be idealised,” Schmidt points out. “We can see spatial and temporal parallels between the appearance of labs and transformational and gentrification cycles in certain parts of the city, as the groups of people who use the labs take on an important role in these processes.” This shows how the appearance of labs is linked to large-scale urban and societal development processes. The merging or proximity of accommodation and workspace and the return to small, flexible units can also be seen as a counter-movement to the urban development which followed the Athens Charter. The Athens Charter shaped the development of European cities from around 1930 right into the 1980s, with division into function-based zones and high rise structures. “At the moment, the future of cities looks like it will be fragmented and have multiple roles and functions,” concludes Schmidt. Labs as places of experimentation are a factor, which is increasingly gaining on importance. ■

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**“Geographies of Dissociation”
– Senate of the Leibniz
Association approves New
Research Project**

As part of the Leibniz Competition, the Senate of the Leibniz Association has approved one of the IRS’s new research projects, entitled “Geographies of Dissociation: the social construction of values from a spatial perspective”. The project, which has a duration of 2.5 years and is equipped with two post-doc positions, will be carried out in cooperation with Dr. Martin Hess from the University of Manchester, and Prof. Dr. Dominic Power from the University of Uppsala.

The project is meant to research processes of the social construction of economic values, illustrated with the example of the global fur industry from a spatial perspective. “In contrast to classic economics, in which prices are justified on the basis of the scarcity of goods and are determined almost automatically by the interplay of supply and demand, this project starts with the assumption that prices are not a given – instead, they are socially constructed in a complex process of societal negotiation,” says project leader Dr. Oliver Ibert, head of the research department “Dynamics of Economic Spaces”. The research which has existed on the topic up until now emphasises the fact that products (and services) gain value because they have a relation to other qualities with a positive value, for example fur and naturalness. Profits can be actively influenced through translations from a normative value system to a market price to be paid. This relation of one thing to another is called association. In addition, however, the project

looks at an aspect which has been neglected until now, which is just as important in practice but has not been researched in depth: the active ignoring of morally or normatively problematic sides of a good when its value is being constructed. In the case of fur products, it is the heavily criticised conditions in which animals are kept on many fur farms that must not be allowed to enter the consciousness of consumers to too great an extent. This “forcing out of one’s consciousness” is called dissociation.

Social science-based spatial research is particularly interested in this topic, as associations are often produced due to spatial proximity and regional origin. Dissociations, on the other hand, work with distancing the self, for example, when problematic stages of production are outsourced to faraway countries. The following research questions are directed towards the sector given as an example:

1. How are the products really made? Which type of spatiality characterises the structure of the global production network?
2. How are products positioned in symbolic value systems in order to increase their value, and how is spatiality dealt within this context? Can we identify different types?
3. What similarities and differences can be found between symbolic and functional relationships? What interaction is there between associative and dissociative mechanisms?

The research project is intended to make an empirical research contribution to our

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understanding of the social construction processes of economic values, as part of which associative and dissociative practices are given the same weighting. This makes it necessary to test new research methods. Methodological approaches to the capturing of symbolic spaces, as have been developed in cultural geography, are combined with methodological approaches to the capturing of global va-

lue creation networks, as have been developed in economic geography.

Finally, it is intended that the project will create knowledge to direct action – which will help us to better understand the consequences of consumer decisions, and will inform about the formation of regulations – for example, which product information must be included, and what should be permitted and banned in marketing. ■

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