

Example

PROJECT PAPER IN ENVIRONMENTAL PSYCHOLOGY

Ideas and contributions to environmental psychology of Kurt Lewin, Egon Brunswik and Roger Barker



Summary

This project paper made a choice to describe the ideas and contributions to environmental psychology of Kurt Lewin, Egon Brunswik and Roger Barker. Environmental psychology is the study of transactions between individuals and their physical settings. The project paper thought it would be useful to briefly describe the development of the history of environmental psychology. Then further we have focused on the main topic of this paper.

The ideas of Lewin and Brunswik helped create the intellectual basis for environmental psychology. Roger Barker is the father of ecopsychology and was taken up with the physical environment. His intension was to study and develop a method that would study human behaviour in their natural context. Environmental psychologists use a lot of different models and theories and the field is vital, diverse and still growing.

Preface

This paper was written in autumn 2008 at Lillehammer University College. This field is an interesting element of psychology and is a relatively new field. I wondered at first what this topic really was about. It was inspiring to start read about topics in curriculum, and I started to think about all the things in the environment that can affect us. I think that environmental psychology is important, and it can be useful for us to learn how the physical environment psychologically affects us.

I have read a lot about Kurt Lewin and some of Roger Barker and think they are interesting theorists, and wanted to write about their contributions to environmental psychology.

In this project paper undersigned have used a lot material from Environmental psychology Principle and practice written by Robert Gifford and looked at internet. I found two good articles on a database in psychology. Those articles where found at Academic Search Premier and have been used in this project paper.

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Introduction

“Individuals change the environment, and their behaviour and experiences are changed by the environment” (Gifford, 2007:1).

To illustrate psychology we can think of a tree with many branches. Academic psychology has roots both in the natural and in the human sciences. The statement above is referring to environmental psychology. What is this field about? Environmental psychology examines the transactions between people and their physical environments (e. g. Bell et al 1990, Gifford 1994) (Asmus, Bell, Busby & Sundstrom, 1996).

In these transactions, we change the environment, and our behaviour and experiences are changed by the environment. This field includes theory, research and practice aimed at making buildings more humane and improving our relationship with the natural environment. Environmental psychology is only about 40 years old, but some social scientists have worked on these issues for decades more (Gifford, 2007:1).

When psychologists use the term environment, they are often referring to a wide range of phenomena which can be: Life events, family dynamics and the built environment in both a social and physical form to name a few (Halpern, 2004:1-2).

Our purpose here is to briefly describe the ideas and contributions to environmental psychology of Kurt Lewin, Egon Brunswik and Roger Barker. Egon Brunswik and Kurt Lewin are two great precursors of the field. This paper is first going to briefly describe the development of the history of environmental psychology. Then it will be useful to describe the research on their theory and empirical research, on transaction between people and physical environment. This paper will finally and as a closure discuss their research and theories strength and weaknesses (Gifford, 2007:4-5).

A brief history of the development of environmental psychology

Environmental psychology may seem at first to be indistinguishable from the main core of psychology because most psychologists examine the relations between environmental stimuli and human responses in one way or another. This field is a young and vital discipline, although environmental psychology`s origins may be traced almost as far back as the rest of psychology. “Perhaps one of the outstanding weaknesses of contemporary psychological

theory is the relative neglect of the environment by many of the most influential theoretical viewpoints” (Isidor Chein). Environmental psychology has always been on the edge of psychology, examples of this is that this field is not taught in every university and the main concern of environmental psychology- the everyday physical environment has rarely received serious attention in psychology (Gifford, 2007: 1-4).

In the past six years publications in environmental psychology have steadily expanded. The empirical research streams continue to flow and environmental psychology is published occasionally in social and personality psychology. In community psychology we can find journals such as “American Journal of Community psychology” (Asmus, Bell, Busby & Sundstrom, 1996). Although the major processes and topics in mainstream psychology- development, cognition, learning, social relations, abnormal behaviour- occur in everyday physical settings, only environmental psychology systematically investigates the physical settings in which they occur. That environmental psychology has deep roots within the field and is at the same time at the edge of the discipline is illustrated in the theoretical work of Egon Brunswik and Kurt Lewin (Gifford, 2007:4).

Egon Brunswik

Egon Brunswik was probably the first person to use the term environmental psychology in print. This was back in 1943. He was born 1903 in Budapest and trained in Vienna. He emigrated to the United States in the 1930s. Brunswik was an Austrian- American psychologist. From 1937 he was professor in California (USA). What did Brunswik originally concentrate on? Egon originally concentrated on the basic process of perception. The term perception has different meanings, although a common element in most meanings is that perception involves the analysis of sensory information. When cognitive psychologists talk about perception, they are usually referring to the basic cognitive processes that analyse information from the senses. Research and theories have attempted to reveal and describe the cognitive processes responsible for analyzing sensory information and providing a basic description of our environment. By this, basically means, how we make sense of our senses. However, Egon Brunswik ideas have been extended far beyond processes of perception (Braisby & Gellatly, 2005:73).

He also strongly advocated *representative design*. The idea that research designs should include a much wider array of environmental stimuli than psychologists of the day typically

employed. What did Egon Brunswik mean by that? These stimuli, he said, should be more representative of the real world of persons we are trying to understand (Gifford, 2007:5).

Egon Brunswik argued that psychological processes are adapted to environmental properties. Brunswik proposed the method of representative design to capture these processes and advocated that psychology be a science of organism-environment relations (Gifford, 2007:4-5).

Following the ideas of Brunswik (1943-1955) - that cognition is well adapted to people's natural environments, some judgment researchers have argued that overconfidence is an artefact of artificial experimental tasks and the non representative sampling of stimulus materials (Braisby & Gellatly, 2005:409). Representative design involves randomly sampling stimuli from the environment or creating stimuli in which environmental properties are preserved. This departs from systematic design. The development of representative design, examine its use in judgement and decision making research and demonstrate the effect of design on research findings. There have been some critics to this view. Dhimi & Hertwig suggest that some of the practical difficulties associated with representative design may overcome with modern technology (Dhimi & Hertwig November 2004).

Kurt Lewin

Kurt Lewin was a German- American psychologist which was born in 1890. Lewin became a professor in 1926 at the University of Berlin and from 1933 in USA. He was interested in affect and "action" psychology, but it is worth mentioning that Lewin also did important contributions with his experiments in child psychology and pedagogic social psychology. He also wanted to use physiology and mathematics in the study of psychology (Amundsen, Holm & Eskeland, 1954:2510-2511).

Kurt Lewin was an inspiring teacher and the founder of action research. Lewin was an important theorist and was the other great precursor in this field. He was born in Prussia and trained in Germany. Kurt Lewin did the same as Egon Brunswik, he emigrated also to the United States in the 1930s. His *field theory* had a great effect. Kurt Lewin was one of the first to give active consideration to the molar physical environment (Gifford, 2007:5).

Lewin was an inspiring theorist with great ideas. His idea of *action research* was perhaps the first major push in psychology toward linking scientific research with real social

change. Lewin's influence, through these two ideas, has been very strong and made a difference to this field of psychology. He was interested in the environment in the sense that he thought of the physical environment as the *foreign hull*. What did Lewin mean by that name? The sense in which Lewin thought of the physical environment- at least all those aspects of it that are outside a person's awareness- is revealed in the name he called it: *Foreign hull*. At first he did not look at the *foreign hull* as something that could be a part of psychology. Lewin could not accept that idea in that sense. This was early on, but later he agreed that forces from the *foreign hull* can affect psychological processes. Lewin proposed that this field of inquiry be called "*psychological ecology*" (Gifford, 2007:5).

Meanwhile, Brunswik and others believed that the physical environment can affect people without their knowing. To describe this, for example the hum of a fluorescent light fixture might affect an office worker's satisfaction with work productivity even though the office worker is unaware of the hum. This is one of many things that can affect us from the physical environment. We are unaware and don't think that the environment can have such an impact on how we feel and cope with everyday. Can our environment affect us psychologically? Egon Brunswik believed that if such factors truly can affect us psychologically, they must be studied systematically. Despite their influential ideas, however, neither Brunswik nor Lewin performed studies that today would be called environmental psychology. Brunswik had few students, and for many years his ideas had little influence on psychology. Because of that, although his contribution was important, remains on the edge of psychology (Gifford, 2007:5).

Kurt Lewin on the other hand was so inspiring, and also has had a strong influence both in students and in psychology. He was a charismatic person and dynamic, with his strong personality he became someone that students listen to. Kurt Lewin inspired many students who, in turn, have profoundly shaped the direction of social science. However, most of Lewin's students interpreted his ideas to mean that social environment was crucial. The physical environment was not stressed (Gifford, 2007:5).

Roger Barker

"The father of ecological psychology"

Kurt Lewin had two students who did take the physical environment very seriously. Roger Barker and Herbert Wright taught that psychology was too individualistic and wanted to

study the individual in their natural contexts. Barker and Whright, they did take the field more seriously and pursued psychological ecology. Barker and Whright later on, however change the name into *ecological psychology* (Gifford, 2007:5).

Barker was the founder of behavioural ecology and behaviour setting theory. In a lecture at the University of Oslo they said we can think of Roger Barker as the father of ecological psychology. One was interested of studying the connections between the every day, and by this we mean the environment that individuals live in day by day. One also wanted to study people`s behaviour in and the experience of them. The goal was to study the human being in their natural environment. Ecological experiences instead of experimental methods. Adherents of ecopsychology often think of the bond between individuals and the Earth in terms of ecological unconsciousness, denial, addiction and mental health. The first use of the term in this sense, in English, appears to have occurred in 1986. The approach of ecopsychology developed simultaneous with the environmental psychology. A few years later after 1986, ecopsychology was popularized in a book by Theodore Roszak, a history professor, who claimed that the Earth was crying out for rescue from the heavy weight of industrialism. He wrote that the needs of the Earth and needs of the person were continuum, that both were suffering from related causes (Gifford, 2007:12).

This approach looked at the Earth as a kind of living being. Ecopsychologists view the earth sacred, but victimized. This damage to the Earth is thought in turn to cause individuals “psychological destruction” and which will be a leading cause of human pain. What can be the solution to this problem? To solve the problem we need an ecological approach. The solution to this problem, include developing an ecological self through the spiritual inspiration that is said to come from wilderness and from living more sustainably. As ecopsychologists seem to believe that people in less- developed areas of the world do, though understanding the ideas of deep ecology, and from developing a new understanding of self in relation to the planet through counselling or nature experiences (Gifford, 2007:12).

Although environmental psychologists agree that many individuals could lead more environmentally responsible lives, many are uneasy with the unscientific approach of ecopsychology. The themes and claims of ecopsychology are attractive, but most are difficult to evaluate scientifically. Some environmental psychologist, consider ecopsychology to be a well- meaning, but misguided quasi- religious movement (Gifford, 2007:12).

There are some researchers that have adopted the basic attitude of ecopsychology, but try to conduct scientific research. One team showed, for example, that natural landscaping in

housing projects encourages more use of outdoor areas and more social interaction. Another examined the roots of environmental activism and found that it appears to begin with nature experiences in childhood. Models within the activist's family are important. Experiencing nature as a spiritual inspiration may be facilitated by social interaction combined with wilderness immersion. Other research suggests that various kinds of contact with nature promote health (Gifford, 2007:12).

Environmental and ecopsychology according to some authors, may be able to offer each other useful ideas and techniques and therefore to create a powerful synthesis for understanding the change. That is, ecopsychology's passion without environmental psychology's passion may be irrelevant. Perhaps the most eloquent discussion of the relationship between the two approaches, Joseph Reser worries that two may simply be incompatible (Gifford, 2007:12).

Behaviour settings

Roger Barker & Herbert Whright began a large scale and long lasting research project in 1947 that studied *behaviour settings*. This was small ecological units enclosing everyday human behaviour. Behaviour settings include both the social rules and the physical-spatial aspects of our every day lives. The restaurant, concert hall or meetings are examples of behaviour settings. Barker worked hard with his colleagues to describe the social and physical characteristics of these settings. He did also work on other identifiable behaviour settings for entire towns. In reflecting on the origins of his research, Barker said: "The awful truth dawned upon me that although I was well informed about the behaviour of children when confronted with tests and experiments devised by scientific investigators, I knew no more than a lay person about the situations and conditions the towns provided their children and how the children behaved (Gibson, 2007:5)".

A major theoretical construct is the *behaviour setting*, which is a central part of Roger Barkers ecological psychology. A central tenet of behaviour setting theory is that consistent, prescribed patterns of behaviour, *called programs*, are found in many places. If you enter a classroom, a sporting event, or even a political protest, you are likely to see recurrent activities, regularly carried out by persons holding specific roles. For example, every basketball game features two teams of players who run, pass, and score; Officials who monitor rule violations and cheer and boo (Gifford, 2007:9).

There are variations in the action of individuals, we know that they do occur, but traditional theorists pay less attention to it. Traditional behaviour setting theorists pay less attention to psychological processes and individual differences among participants than do the stimulation and control theorists. They are impressed by the uniformity rather than the variability in the actions of those who occupy a given role, especially in contrast to the behaviour of those occupying a different role. We can imagine and consider a football game, for example, the differences in behaviour of players and the fans of the football game. Behaviour setting theorists tend to explain person- environment relations primarily in terms of the social features of a setting such as typical activities and its physical features (Gifford, 2007:9-10).

To understand what this theory is about we have to look at the key concept of the behaviour setting theory. One important element, is the level of *staffing*. For a variety of reasons, a given behaviour setting may attract many or few who wish to participate in its activities. When there are too many individuals around and the behaviour setting fails to find a way to exclude extras, overstaffing results. When too few are attracted, understaffing results. When we think for a minute about this, we probably recall instances of both overstaffed and understaffed behaviour settings in our experience. What were the consequences for individuals in these settings? Allan Wicker has extended the behaviour setting concept in time. Behaviour settings are not static entities; they are born, they struggle, adapt, thrive, and they die (Gifford, 2007:10).

“The roots and edges”

The ideas of Egon Brunswik and Kurt Lewin created the basis of this field as a formal discipline. It is important to have in mind that the roots of environmental psychology began much earlier. Theories focused on arousal, load and stress (Asmus, Bell, Busby & Sundstrom, 1996).

Before 1920, psychologists contributed to this field and had studied the effect of noise and heat on work performance. A study of where students sat in classrooms in relation to the grades they earned was published in 1921. The famous Hawthorne studies of lights effect on work performance began in 1924. It is worth noting that these studies were almost atheoretical. The researchers were looking for simple, deterministic effects of the environment on work performance (Gifford, 2007:6).

Discussing this paper material

The contributions and models of Kurt Lewin, Egon Brunswik and Roger Barker have helped the intellectual basis for environmental psychology (Gifford, 2007:6). Environmental psychology may seem to be indistinguishable from the main core of psychology. Perhaps one of the weaknesses of contemporary psychological theory is the neglect of the environment by many important and not at least influential theoretical contributions. We have seen that the origins of environmental psychology may be traced almost as far back as the rest of psychology. However, one can in sum; think of Environmental psychology as a young and vital discipline that requires the pursuit of both scientific principles and practical application, as it seeks to ameliorate the variety of problems in both the built and natural environments from the transactions of person and the environment (Gifford, 2007:4).

Egon Brunswik was probably the first to use the term environmental psychology in print. Brunswik has come up with important ideas, and he strongly thought that psychological processes are adapted to environmental properties (Gifford, 2007:4-5). Brunswik proposed the method of *representative design*. The contributions are interesting, but some critics have been met with his *representative design*. There might be some practical difficulties associated with the method. The importance of representative design in psychology and the implications of this method for ecological approaches to cognition are discussed (Dhami and Hertwig November 2004).

Egon Brunswik model is however a very useful tool for understanding how people perceive and comprehend physical environments (Gifford, 2007:4-5).

Kurt Lewin was an inspiring teacher and the founder of action research. He was interested in many fields, dynamic in person, had great ideas and models. His *field theory* had a great effect. Lewin's theory is an important element in environmental psychology's problem-solving goal (Gifford, 2007:5). Kurt Lewin had a student which also took the physical environment very serious. Roger Barker had strongly opinions. Barker wanted to study the individual in the environment, but not in the extreme individualistic view. He thought psychology was too individualistic. He still was interested in the individual, but not with internal processes inside the individual. The goal was to study people in the natural environment just as we study animals. Roger Barker's ecological descriptions are important and in spite of, that he was against experimental methods, he wanted it to be empirical.

Perceptions processes construct an inner mental representation of the external object. In environmental psychology cognition and perception is important, but not interested in the senses in that kind of way. They focus on the relation between physical environments. No theory in environmental psychology, however, applies to all the topics in environmental psychology. Competing theories have different view of how we can explain person-environment events. If the future is like the past, new theories will be merges, takeovers, some will be built on each, further extensive, others will not (Gifford, 2007:6).

Today`s theories in environmental psychology probably is an accurate, but partial explanation of human behaviour in the physical context. This is not rare, but normal in sciences, and will bring us to see the truth on our acknowledgement pathway.

Concluding remarks

Environmental psychology is a discipline that requires of both scientific principles and practical application as it seeks out to study and understand the variety of problems in the natural and built environments that arise from person- environment transactions (Gifford, 2007:4).

Theory in environmental psychology is vital and diverse, and the main focus has been to describe the ideas and contributions of Kurt Lewin, Egon Brunswik and Roger Barker. Brunswik and Lewin have deep roots within the field and at the same time of the edge of the discipline. They are great precursors of the field (Gifford, 2007:4-5).

Roger Barker did take the physical environment seriously. Ecological psychology asserts the importance of behaviour settings, naturally occurring and social- physical units in small scale of regular patterns of person- environment behaviour (Gifford, 2007:12-13). Person- environment transactions are influenced by many different factors some solve problems in physical settings others work on establishing scientific principles (Gifford, 2007:18).

Much is known, but much is still hard to describe and understand. Environmental psychology is a young discipline, but a growing one. There are a lot of challengers around the world, and it is important to understand and improve relations between humans and their environment (Gifford, 2007:18).

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