RECIPROCITY

THE ROOTS OF ENVIRONMENTAL PSYCHOLOGY IN NORTH AMERICA

Editors: Henk Staats and Silvia Collado
Submissions

Whilst we encourage all our members to submit material, any submission for inclusion in the Bulletin should be written to high standards of English grammar and punctuation. To help the review process, we kindly ask you have the material checked by a fluent English speaker before submitting it to the Bulletin. Include names, affiliation and full contact details of all the authors, as well as a picture of every author.

Please, send your contributions for the next issue by e-mail to the following email addresses: staats@fsw.leidenuniv.nl and scollado@unizar.es

All manuscripts should be written in Times New Roman 12 pt., double-spaced. The maximum word length for articles is 2000 words. Include names, affiliation and full contact details of all the authors, as well as a picture of every author.

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## New publications section for IAPS members

Those members who have recently published an article in a well evaluated or high ranked journal, as well as a book or book chapter with a relevant publisher, please send the complete reference of your publication in APA format to: scollado@unizar.es, and it will be included into the next issue. Note that all contributions should be published in English.
It is with great pleasure that we present the new IAPS Bulletin, #51. You might be curious by and, at the same, familiar with the title of this editorial address.

The concept of reciprocity is one of the pillars in our discipline, implying the bidirectional effects that people and the environment have, as represented on this Issue’s cover. The concept came to our mind when reflecting on the wonderful contributions of this Issue and how each of them, in different ways, reminds us of the importance of reciprocity, both for theoretical and practical reasons. Bob Gifford brings us back to the roots of Environmental Psychology in North America and, through time, we (re)discover the pioneering work of those who, already in the last years of the 19th century, highlighted the significance of considering the environment when trying to explain people’s cognitions, affect and behavior. And the word environment, as Gifford presents it in his piece, does not only relate to the individuals’ physical surroundings, but to the effects that other aspects of our surroundings such as weather, type of lighting, or interactions with other people, have on us. And these already had a place in these initial studies of environmental psychology. Although the first studies that considered the influence of the environment on people mainly focused on one of the arrows of our cover’s figure (i.e., from the environment to the person, and mainly from the built environment), much work has been done since then. Sabina Pahl and Mat White open their text about their new research program in Vienna stressing the relevance of people-environment interactions for human life, and the fact that we, people, also have a deep impact on our environment. In their text, they describe the different research activities they are conducting in Vienna, with the aim of investigating not only how the environment influences people (e.g., benefits of experiences in nature) but also how people influence the environment (e.g., environmental pollution). This reciprocity is also well-represented in the two PhD theses described in this issue of the Bulletin, each taking care of one of the arrows. Sadhana Jagannath’s thesis mainly focuses on the influence of people’s homes on their psychological wellbeing. Britt Stikvoort’s thesis focuses on the other direction, examining how people influence the natural environment and how sustainable behavior can be promoted.

Many of the IAPS members have attended one of the two conferences that took place this year, and that involved research in the people-environment interrelationships. As reflected in the conference reports included in this issue of the Bulletin, themes such as how design influences physical and mental wellbeing, the climate crisis, and how to promote sustainable behavior were among the main topics of these conferences. These conferences provided the physical space and time to share and discuss people-environmental interactions with excellent researchers, as well as to reunite ourselves with friends and colleagues. As you’ll see in this issue, some new opportunities for scientific reciprocity arise in the coming year. We’d like to bring to your attention the next IAPS conference, which will take place next July in Barcelona. As Sabina Pahl and Matt White recognize in their text, environmental psychology as a discipline has very much evolved within the last decades and, if we are lucky, we might find ourselves in the conditions to teach and do research on the reciprocity of people and the environment. But if we are not so lucky in our daily work environment, we can always look forward to the intense interactions and scientific exchanges that will take place at the next IAPS conference.

Apart from the above, this Issue also contains quite a number of contributions to the My Favorite Book or Paper Series. We hope you enjoy discovering everybody’s inspirational piece of
work as much as we do. We end up with the News section, containing interesting contributions such as the 50th anniversary of the MSc in Env. Psychology in Surrey, a description of agent-based modeling (ABM), employing sophisticated computer models to analyze people-environment interactions, and the main results of a project on innovations for social housing. At the end of the Issue, you’ll see references to IAPS members’ publications.

Happy reading,

Henk and Silvia
From one perspective, the attitudes and behaviours encompassed by what we now call environmental psychology presumably began in North America with the first settlers of it, about 14,000 years ago. None of us were around then to document it, but those people were certainly engaged, for example, in territoriality. They presumably employed spatial cognition when they hunted and fished, lived in carefully arranged residential spatial arrangements, and presumably experienced deep place attachment. However, as far as we know, they did not engage in a scientific approach to study these behaviours.

So, when did modern (scientific) environmental psychology begin in North America? One mid-century view (Chein, 1954) was that “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.” Chein was correct to advocate that psychologists needed to pay attention to the environment, but only half-correct. It is true that much of psychology ignored the physical context of behaviour into the 1950s, but it is also true that a few pioneers had been doing so for just over half a century when Chein published his article.

The answer to “when did it begin” depends on whether one marks the beginning in terms of the relevant nature of the effort undertaken (that is, work that we would now call environmental psychology, but did not at the time), or in terms of work undertaken under the banner of the discipline named environmental psychology. The former precedes the latter by about five decades.

I trace the beginning of the beginning to an article by the Reverend James Stephen Lemon, “The psychic effects of the weather” in the American Journal of Psychology (1894). It followed widespread mid-19th century concerns and observations about how the weather affected life in general, which of course itself followed upon ancient speculations by Greeks, Romans, and many others through the centuries.

Lemon’s article basically laid out a challenge to behavioural scientists to examine how weather affected people. He opened his article with this: "Psychology is now studied from many points of view, but the relation of psychic processes to weather has never received much attention. The subject opens a field as large as it is new in which the writer has for some years been collecting materials. The following note [i.e., his article] may suffice to show the scope of the subject, till a fuller and more systematic presentation I hope to make ere long" (p. 277). (For whatever reason, this never did happen for Lemon, at least in the published record.). He added that "We have gathered a long list of ejaculatory expressions and un-premeditated remarks concerning weather, which furnish data of interest..." (p. 279). (By "data" in this sentence, Lemon did not mean empirical data; he meant ideas or intriguing speculations.)

Lemon followed that up with one of those remarks that he had heard, which helped to convince him that scientific

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The Roots of Environmental Psychology in North America

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study was necessary: “The head of a factory employing 3,000 workmen said: ‘We reckon that a disagreeable day yields about ten per cent less work than a delightful day.’” (p. 279).

Lemon deserves credit, in my opinion, for being admirably aware, back in 1894, of the challenges to the future scientific examination of the effects of weather: “Laboratory investigation of the subject meets at the outset the difficulty of distinguishing results of weather changes from similar states otherwise caused.” However, Lemon was optimistic that progress could be made: “This difficulty is no greater than are many other topics of research and we believe will not invalidate our methods and results.” (P. 279)

OK, enough of preliminaries and forecasts! When did research that we would now call environmental psychology begin (in North America... or anywhere)?

As best I can determine, the first scientific work that we would now call environmental psychology was completed by Edwin Grant Dexter, for his 1899 PhD dissertation at Columbia University in New York. Dexter spent the next few years after completing his dissertation collecting more data, and then published Weather influences: An empirical study of the mental and physiological effects of definite meteorological conditions in 1904. The book partly included his dissertation studies and partly included the research done after his dissertation.

Dexter’s book is rather amazing for the amount of research that it reports as a very first scientific effort in our field. It was not one study, but a collection of many studies book reported data that Dexter collected himself. It contains chapters entitled The Child and the Weather, Crime and the Weather, Insanity and the Weather, Health and the Weather, Suicide and the Weather, Drunkenness and the Weather, and Attention and the Weather: In my view, Dexter deserves much more credit than he now receives. He is virtually forgotten, except for one retrospective, recently published in the International Journal of Biometeorology (Stewart, 2015).

One might say that the next step was William James (1911) writing about the mental effects of earthquakes, based on his own experience surviving the 1906 San Francisco earthquake. His chapter does not contain empirical data but as an introspective report it forms a valuable early contribution to environmental psychology.

Then, in 1914, Gustave Feingold, a student of Hugo Munsterberg at Harvard published an article that initially discussed eyewitness identification, but then reported a study of environmental perception (Feingold, 1914a). He showed subjects pictures of places on postcards, and asked them to assess their similarity, thus collecting empirical data on environmental perception.

Feingold also worked on the idea of environmental sameness as an influence on consciousness (Feingold, 1914b). He sought to find the optimal balance of environmental homogeneity (all is the same) and heterogeneity (all is different) for a construct that he called “continuity of consciousness.” That is comprised, he said, of (a) awareness of the present and (b) recollection of the past, which is “the interlocking of the present with the past.”

Feingold sought to discover “What must be the nature of the environment...which should yield the richest and most tenacious interlocking of the present with the past?” (p. 436). (And the answer was, after doing his study? “Hence we may conclude that
an environment which is a mixture of about 30 per cent homogeneity and 70 per cent heterogeneity is the most ideal environment for the continuity of consciousness." (p. 441), an intriguing outcome.

Early on, researchers were concerned with the physical workplace. For example, John Morgan was (1916) was examining the impact of noise on workplace performance as early as 1913. Morgan used sophisticated equipment and methods, for that time, and showed that although noise negatively affected worker performance…at first…and that workers compensated for the distraction and managed to overcome the effect of noise. However, Morgan apparently did not study the effect of that extra effort on the workers.

The next research that we would now call environmental psychology would be Griffith’s (1921) seating study, which showed that randomly-assigned college seating (determined alphabetically by surname, the custom at the time) was related to grades in the course. Because the students were randomly assigned, we might well call Griffith’s study the first experimental, or at least quasi-experimental, work in environmental psychology.

The mid-1920s saw the (in) famous Hawthorne studies of the effect of lighting level on work performance begun in 1924. These studies were, indeed, “environmental psychology,” but in my opinion they caused the temporary death of the field, because they (inappropriately) concluded that lighting had no effect worker productivity (Snow, 1925). Later analyses of the data from three experiments showed that they were flawed (Izawa, French, & Hedge (2011).

Fast forward to 1935. Kurt Lewin is sometimes credited as a founder of environmental psychology. However, he did not believe that the physical environment itself had a role in psychology: “Since the psychological environment…is not identical with the physical…environment, one cannot…proceed from the physical forces…(1935, p. 78), and “The environment is…to be defined not physically…” (p. 79). Lewin limited “the environment” to one’s perception of it; the actual environment was not to be bothered with in his psychology.

However, another prominent psychologist who did assign the physical environment a deserved role was Henry Murray, the Harvard personality psychologist. He used the term “press” rather than environment, but he clearly meant what we today call the environment. Murray wrote, “…press are…forces which may affect the subject harmfully or beneficially…” (1938, p. 120) and he further described them as mobile or immobile, autonomous or docile, and importantly—as alpha press (actually existing, that is, physical), and beta press (one’s interpretation of alpha press).

OK, you may ask, but when did our named field begin? One must give credit for that to Egon Brunswik, whose views clashed with those of Kurt Lewin, but were compatible with those of Henry Murray: the actual physical environment must be taken into account. Brunswik used the phrase in 1943 while writing a sentence that will make sense to those who are familiar with his lens model, if no one else: “One of the comparatively neglected tasks of a molar environmental psychology is to find out the extent to which environmental hierarchies of probabilities of object-cue as well as means-end relationships do find a counterpart in similar hierarchies of evaluation by the organism” (1943, p. 259). Brunswik’s sentence may be magniloquent, but hey…this was the first-ever printed use of our field’s name, so we will forgive him.
Some might argue that Brunswik may have used the phrase, but was not an environmental psychologist in any modern sense, given that his primary interest was in perception itself. Those of us engaged in environmental perception would disagree and grandfather Brunswik into our tribe, given that some of us have borrowed his lens model for environmental psychology (e.g., Craik & Appleyard, 1980; Gifford et al., 2000; Macdonald & Gifford, 1989; Shaw & Gifford, 1994). In fact, a close reading of Brunswik (1944) reveals that he included everyday physical scenes as part of his research: “The surroundings in which the survey was made included scenes on the street and campus, in the laboratory, at the desk, at home, and in the kitchen. An attempt was made to cover recreation and study, daytime and evening (including periods of artificial lighting) under conditions and in proportions representative of the daily routine.” (p. 4).

Another candidate for “inventor of the phrase,” given that Brunswik may never have used the phrase again, and probably would not have self-identified as an environmental psychologist, would be Kenneth Craik (1966), perhaps the first to use it in the modern sense.

However, we must acknowledge that others used compatible names early on. Two conferences on “architectural psychology” were held in Utah in 1961 and 1966, and one of the organizers was Calvin Hall, a psychologist. Kurt Lewin had used the term “psychological ecology.” Two of his students, Roger Barker and Herbert Wright, took the actual physical environment more seriously and changed Lewin’s version of the name to “ecological psychology.” This term did not refer to nature, as it might today, but to what today might be called human ecology. They began a large-scale and long-lasting research project in 1947 that studied behavior settings, small ecological units enclosing everyday human behavior (1955). Behavior settings include both the social rules and the physical-spatial aspects of our daily lives. The classroom, the sports event, the concert, the restaurant, and the council meeting are examples. Barker and his colleagues worked hard to describe the social and physical characteristics of these and other identifiable behavior settings for an entire small town. In reflecting on the origins of his research, Barker (1980) later said,

“The awful truth dawned upon me that although I was well informed about the behavior 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.”

Kenneth Craik
By the 1950s, other pioneers in environmental psychology were at work, even before the field had a name. For example, Maslow and Mintz (1956) showed that the same photos of people were rated more positively when the ratings were done in a beautiful room than when they were done in an average or ugly room, even though the aesthetics of the room were never mentioned to the raters.

In the middle 1950s, Robert Sommer, with the psychiatrist Humphrey Osmond, began to systematically alter the physical elements of buildings in Saskatchewan, Canada, and to monitor the effects of these changes on behavior (Osmond, 1957). By rearranging furniture and redesigning wards in a geriatric hospital, they found they could increase communication among the elderly women in the hospital. At the same time, Sommer began his famous studies of personal space (Sommer, 1959), and spent many years at the University of California, Davis, in part suffering with my intellectual development, inspiring my research while working as his assistant, and saving me from some 1960s antics. Homage to that Bob from this one!

Meanwhile, at McGill University in Montreal, researchers were checking what happens when the environment is removed as much as possible (Heron, Doane, & Scott, 1956). Was this “anti-environmental psychology” or was it a way to demonstrate how important the physical environment is for us?

In New York, another team, headed by William Ittelson and Harold Proshansky, read about Sommer and Osmond’s research and began to map the behavior of patients on a mental hospital ward (1970). They were instrumental in creating the first Ph.D. program in environmental psychology at the City University of New York (CUNY) in 1968. They also assembled the first (so-named) environmental psychology book in 1970.

Two other modern pioneers in North America were Joachim (Jack) Wohlwill and Daniel Berlyne. Wohlwill’s 1970 article in American Psychologist was one of the earliest “announcement” pieces in the field. Influenced by Egon Brunswik, Wohlwill emphasized the connections between environmental perception and social concerns while at Pennsylvania State University. In Canada, Berlyne focused on why we manifest curiosity and explore our environments. He invented the term “collative property,” which describes the hedonic levels of arousal in terms of its novelty, complexity, surprisingness, and incongruity. Both Berlyne (52) and Wohlwill (59) died too young, or their contributions would have been much greater.
Environmental psychology, our very interdisciplinary field, was heavily influenced in its early days by architects who believed that buildings are—or should be considered—“envelopes for behavior.” A primary example is Amos Rapoport. His 1969 book, *House Form and Culture*, documented how culture, human behavior, and the environment affect house form. In general, Rapoport’s work, represented in several later books, has emphasized culture as an obviously important factor in human behavior and environmental design.

Out in the middle of North America, another modern pioneer was at work. Over many years at the University of Utah, Irwin Altman focused on the social aspects of environmental psychology. His book, *The Environment and Social Behavior* (1975) set the standard within the field for the quartet of privacy, personal space, territoriality, and crowding. Altman also edited a series of volumes with the collective title *Human Behavior and the Environment*.

Up in the north-central US, Stephen and Rachel Kaplan toiled for many years, and developed the concept of Attention Restoration Theory, the subject of the most-cited article in all of environmental psychology (Kaplan, 1995). They also worked as well at other elements of human functioning in relation to the physical environment, particularly related to cognition. Few outside of Michigan or our field would know that Stephen was also appointed professor of electrical engineering and computer science! Back in the 1970s they were taking inner-city children into nature to learn how trees and open spaces would help them.

South of the US border, Serafín Mercado, started the first graduate (Masters) program in environmental psychology in Mexico, at UNAM, in 1989. In 2017, a graduate program that included environmental psychology as specialty area was established at the University of Sonora, in Hermosillo. Environmental psychology groups, conducting research and teaching environmental psychology courses, exist in Guadalajara, Guanajuato, Veracruz, the State of Mexico, Hermosillo, and Mexico City.

The main North American organizations dedicated to environmental psychology are the American Psychological Association’s Division 34 and the Canadian Psychological Association’s Section on Environmental Psychology. We turn next to a selection of (mostly) still currently active environmental psychologists who work in North America.
## A Selection of Today's Prominent Environmental Psychologists in North America

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<td><strong>Ann Devlin</strong></td>
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<td><strong>Gary Evans</strong></td>
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<td><strong>Scott Geller</strong></td>
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### Barbara Brown
*University of Utah*

Barbara Brown’s research interests include the linkages between the physical environment and human behavior, with special focus on the community design, health, sustainability and place attachment.

### Susan Clayton
*College of Wooster*

Susan Clayton is interested in understanding and promoting a healthy relationship between humans and nature. She also studies how the environment shapes identity, and the perceptions of justice within the context of environmental challenges.

### Ann Devlin
*Connecticut College*

Ann Devlin specializes in the creation of more humanistic environments for healthcare, including psychotherapy offices, and also facilities that house the elderly. A secondary research emphasis is wayfinding.

### Gary Evans
*Cornell University*

Gary Evans researches how the physical environment affects health and well-being among children, focusing on environmental stressors, housing, learning environments, and the environment of poverty. He also does work on children’s environmental attitudes and behaviors.

### Scott Geller
*Virginia Tech*

Scott Geller works on many areas of psychology, but including environmental, with a world-class behavior-change emphasis. Few can say this, but Scott completed 50 years of teaching at the same university.

### Robert Gifford
*University of Victoria*

Robert Gifford investigates a range of topics, from climate change and sustainability to architecture, place attachment, and disaster preparation. A generalist, he also develops measurement scales and general models such as his Theory of Behavioral Choice, and is the author of five editions of the textbook, *Environmental Psychology: Principles and Practice.*
Jeff Joireman  
*Washington State University*  
Jeff Joireman's research topics include reactions to repeated warnings about depleting resources, factors influencing whether individuals believe climate change is a threat, and whether they will take action to prevent it.

Ming Kuo  
*University of Illinois*  
Ming Kuo's research shows that urban greening can reduce aggression, crime, and ADHD symptoms. It also promotes self-discipline and academic achievement in children, as well as health across the lifespan.

Maria Montero  
*Universidad Nacional Autónoma de México*  
Maria Montero emphasizes psychological and environmental restoration, social ecology and community development, and the development of psychometric measures.

Patricia Ortega-Andeane  
*Universidad Nacional Autónoma de México*  
Patricia Ortega-Andeane’s work focuses on environmental evaluation of hospital settings, Environmental stressors. Environmental restoration, the perception of risks and disasters, and chaos in educational and residential settings.

Serafin Mercado-Domenech  
*Universidad Nacional Autónoma de México*  
Serafin Mercado-Domenech founded the UNAM program in environmental psychology and has worked on space syntax, perception of air pollution, housing design, global environmental change, and urban diversity.

P. Wesley Schultz  
*California State University, San Marcos*  
Wesley Schultz focuses on social marketing and behavior change. Recent projects include studies on recycling, energy and water conservation, the behavioral dimensions of climate change, and cross-cultural research on environmental attitudes.
David Seamon
*Kansas State University*

David Seamon studies the ways that the natural and built environments contribute to human well-being. His research includes human aspects of design as well as environmental and architectural aesthetics, with a strong focus on phenomenology.

César Tapia-Fonllem
*Universidad de Sonora*

César Tapia-Fonllem’s research in environmental psychology focuses on conceptual integration and empirical validation, predictors of energy-dense food choices, and the impact of nature on wellbeing.

Daniel Stokols
*University of California, Irvine*

Daniel Stokols’ research emphasizes the health and behavioral impacts of environmental stressors, applications of environmental design research to urban planning, the environmental psychology of the Internet, and the ecology of collaboration in cross-disciplinary science teams.

Richard Wener
*New York University*

Richard Wener studies the way correctional architecture affects facility operations and the behaviour of staff and inmates. He has studied ways to reduce violence, vandalism, and stress in correctional settings, and written about using this information to support humane conditions in detention settings.

Jennifer Veitch
*National Research Council of Canada*

Jennifer Veitch is Principal Research Officer at the National Research Council. She researches the effects of indoor environmental conditions, particularly lighting and office design, on health, well-being, and performance.

Víctor Corral Verdugo
*University of Sonora*

Víctor Corral Verdugo’s work emphasizes wellbeing from positive environments, the relationship between self-care positive-family-environment-and wellbeing, beliefs, perceived risk, obstacles and the intention to act against climate change.
References

- Griffith, C. R. (1921). A comment upon the psychology of the audience. Psychological Monographs, 30, 36-47.
- This week’s citation classic (1980). Current Contents, 12(26), 10.
Environmental Psychologists and their allied colleagues have to be a resourceful kind. People-environment interactions are central to human life, whether through experiencing built environments or natural environments, or when encountering natural disasters, environmental pollution or climate change. However, in Psychology at least, posts dedicated to environmental issues have been rare to date. Environmental researchers in Psychology have, more often than not, held positions in Social or Personality Psychology or other sub-disciplines, or found a more welcoming home in neighbouring disciplines. So when we learned about the University of Vienna plans to create an Urban and Environmental Psychology group, we 'threw our hats in the ring'. There appear to be more such opportunities now and we’re thrilled to see the field being recognised more and growing steadily, and are keen to play our part.

Arriving in Vienna in the autumn of 2020, it was still COVID times and we had several travel cancellations, a mask denier during the journey and complete uncertainty when our belongings would arrive. But the accommodation viewed via phone did exist and was not an AI hallucination, phew! The next weeks flew by, making arrangements, getting to know the city and university and setting up the offices. Starting here was a bit tricky and slower than normal, because of COVID; all teaching was still online and the coffeeshops we had so looked forward to were closed. But we were so excited to build a new Environmental Psychology group in “the most liveable city in the world” (BBC, 2023)². Our ambition was to cover both aspects of Environmental Psychology, that of environments influencing...
people (e.g., benefits of nature) and of people influencing environments (e.g., environmental pollution).

Coming from the UK, we had not realised beforehand that universities may set up start-up funding for building the group and research projects, and we felt very lucky to be given such resources. Soon we advertised for two PhD students and a Post-doc. We also brought funding related to an EU-funded interdisciplinary Innovative Training Network (ITN) called Limnoplast with us, which investigates plastic pollution in freshwater. Maja Grünzner, the fabulous Early Stage Researcher on this project actually arrived before us!

After so many supervision Zoom calls to start her PhD, as soon as COVID restrictions were eased, we met in Café Himmelblau and she explained lots of practical aspects of living in Vienna, like where to buy used bikes. Maja started her research by exploring expert perceptions of microplastics risks and solutions for microplastic pollution (e.g., Grünzner et al., 2023). Finding that fast fashion is an important determinant of microplastic pollution, she then explored behavioural determinants of fashion consumption and pathways to reducing it. Thus Maja remains the true original member of the group!

Maja was joined soon after by two further PhD researchers: Jana Köhler and Sandra Geiger. Jana came from a Master’s degree in Sweden, Sandra from one in the Netherlands. It was still COVID times and the university was closed, so building the group remained a slow process and we can only take our hats off to these determined colleagues who moved to a new country to start their PhD work (or continue their PhD, in the case of Maja). Embarking on a PhD is daunting under normal circumstances, and here were brand new supervisors who didn’t have a clue how anything worked at the University of Vienna either, with most university offices closed... not an ideal start!

Jana and Sandra are both interested in unravelling the social processes that facilitate or impede pro-environmental action, but they take different approaches. Jana investigates the social risks associated with adopting pro-environmental behaviours and is interested in strategies on how best to navigate social interactions. Sandra investigates pluralistic ignorance, that is how and when people misperceive how others think about climate change, for example, and how such misperceptions can be changed.

PhD positions in Austria can be funded either centrally by the university and then typically last for 4 years with a teaching commitment, or they can be funded through other...
internal or external projects. In the latter case they are often for three years, but without a teaching obligation. For either option, PhD contracts are typically for four days a week, with a contract of employment including pension contributions, holiday allowance etc. We haven’t yet come across an Austrian PhD position that is funded through a studentship, which is common in the UK, for example.

Leonie Fian from Austria joined the group next, taking a research-only PhD position connected to the interdisciplinary Plenty project (https://microplastics.univie.ac.at/de/ueber-uns/). Leonie investigates risk perception of microplastics in food and drink and tests which factors predict support for diverse measures and policies, alongside other researchers who look at microplastic from a natural science perspective.

Sari Nijssen joined from the Netherlands who had just finished a PhD on anthropomorphism in human-robot interaction. She took the 6-year postdoc position, which, although called that, is more like an assistant professorship, where people can have the freedom to develop their own research specialisation and carve out a profile to be competitive for permanent academic positions (or at least that’s how we’ve interpreted this role). Sari is now investigating mind perception as a route to biodiversity conversation, combining experimental and applied research approaches and building on her background in Cognitive Science and Behaviour Change.

Early on we were also joined for some time by Valeria Vitale from Italy and Chaoqun Zhang from China – we really take internationalisation seriously and have now had more than 30 people from nine countries working with us or visiting (at the last count). We look forward to more visitors and exchanges. To us, these social interactions are at the heart of a thriving research group, to discuss research, for sure, but also to share the frustrations of rejections and challenges of an ever-more-demanding field, develop joint strategies, brainstorm ideas, and simply enjoy the feeling of being part of an international network of researchers who care about people and the planet. In a fundamental way, to us building a new research group is all about fostering an atmosphere that brings together a team, have colleagues and visitors who can create something together that is bigger than any individual. We strongly feel we are part of this bigger community and want to live this culture that we experience with international colleagues at meetings and conferences such as those organised by IAPS, IAAP’s ICEP etc. Researchers from other fields have often remarked on the collegiate, supportive and constructive communication culture in Environmental Psychology – we also want to cherish and nurture this and not take it for granted.

Having settled into a routine more, we started building the network and developing ideas for new research grants, especially EU focused. We are currently working on four research projects. First, ZeroPM investigates “forever chemicals” (e.g., PFAS, PFOA etc.) across many disciplines from chemistry to toxicology. We contribute Environmental Psychology perspectives to investigate risk perception of these substances and their uses, test labelling approaches and the social and psychological underpinnings of the essential use concept (https://zeropm.eu/). Dr. Ellise Suffill from the UK came (via a USA post) to Vienna to support this project as postdoctoral researcher. Second, SOS-ZEROPOL (https://soszeropol2030.eu/) also looks at pollution, but focuses on four different pollutants from source to seas: forever chemicals, microplastics, eutrophication and underwater noise and is supported by Dr. Nina Vaupotic from Slovenia (who arrived here via a German PhD). Nina splits her time between SOS-ZEROPOL and GOLIAT (https://projectgoliat.eu/). GOLIAT is about 5G measurement, exposure and risk perception. In these projects we are partners and Co-Is, working with researchers from other disciplines and countries.

Finally, the most recent addition, RESONATE, started in June 2023 and is led by Mat who has not led an EU project as a coordinator before. The focus is on the associations between nature contact and health, investigations of Nature-based Therapies (NbTs) and nature-based social prescribing (https://resonate-horizon.eu/). RESONATE has 14 participating organisations from Bulgaria to the UK, and from Italy to Denmark and builds on a recent paper describing a resilience framework for nature and health (White et al., 2023). Mat is in equal measure excited and petrified by the experience, but also reassured that this amazing team of international experts is willing to work with him, and by having a fabulous project manager in Julia Egger.
We have also begun a range of collaborations with colleagues at the University of Vienna, notably exploring the new area of Environmental Neuroscience (Doell et al., 2023). Beyond Psychology, the university is keen to open up to interdisciplinary and applied research, and has a new strategic focus on environment / climate / sustainability, both in terms of research excellence and in terms of their own operations – a great time to represent Environmental Psychology here. They recently founded the Environment and Climate Hub to encourage innovative research across disciplinary boundaries (https://ech.univie.ac.at/). Within the research group, we have also made connections with the Austrian Ministry responsible for Climate Action and Environment, the Austrian Environment Agency, Viennese cultural institutions and other Austrian Universities. We have the feeling that there is now great interest in Environmental Psychology and quite a lot of expectations that we can make a difference if Psychology is integrated – hopefully these are expectations we can fulfil, at least partly!

Looking back on three years of building the new research group, what are the key insights? First, it’s all about the people! We are thrilled to have such a fantastic team who support (and challenge!) us, from the student assistants who were invaluable when we tried to get to grips with an unfamiliar teaching system, to Organisation Assistant Christine Sporrer and the PhD students that apply open science standards as a matter of course and whose statistics and R skills vastly surpass ours – they teach us something every day, including the importance of balancing work and play. Talking of teaching, the students both at Bachelor and Master’s level have been an absolute joy to work with. Their curiosity and earnest concern with the environment and climate change is an inspiration and gives us hope, but we also see the toll these worries take on the next generation and want to do our best to empower and support them to find their way. Third, we ask ourselves what is the best way of building a research group? Should it be tight and focused on one area, or should it be broad, trying to represent many environmental issues and many different psychological approaches including qualitative and quantitative methods? We have opted for the latter, mostly because we are curious ourselves and want to get involved in many issues, but we also see that a narrower focus might help the visibility and depth of the research. But there are probably different approaches that fit different teams. Fourth, we foster collaboration, but also try to encourage strong personal profiles, especially in the PhD students. This is so that it is very clear which projects and initiatives someone has led when they go to the next stage and are asked to explain, for example in a job interview, what they have contributed (as opposed to collaborating in a bigger team, as co-authors etc.), to demonstrate leadership and the ability to be an independent researcher. In our view, being an Environmental Psychologist these days requires a lot of different elements: a degree of leadership and the ability to see a project through from start to finish, team spirit and collaboration skills and of course resilience, persistence in the face of the oh so many setbacks researchers experience, and we really hope in the group we can develop new perspectives and grow and learn from each other, and open up diverse career options.

Overall – worth moving? Absolutely, even if there are considerable switching costs and it’s a big disruption; we’ve found it gave us a very new perspective and shows up both good and bad things about what you thought was ‘normal’ in terms of how a university works. Also the new geographical perspective has been absolutely fascinating and we still sometimes marvel at how far East we are in Europe (try pinpointing Vienna’s location on a map of Austria, how good are you?). We were very happy in the UK and very settled, with great colleagues, and, no, it wasn’t an easy decision. We still miss the ocean too. But we also love looking at the departure boards in the Hauptbahnhof, the trains to other European capitals, the opportunities and adventures possible from our new base. 😊

Footnotes

1 We would also soon find out that it is also rated the unfriendliest city in the world by expats, but let’s ignore that for now (Standard, 2022).

References

• The Environmental Psychology group’s web-site: https://env-psych.univie.ac.at/
• ZeroPM website: https://zeropm.eu/
• SOSZEROPOL website: https://soszeropol2030.eu/
• GOLIAT website: https://projectgoliat.eu/
• RESONATE website: https://resonate-horizon.eu/
• Environment and Climate Hub website: https://ech.univie.ac.at/
The International Conference on Environmental Psychology 2023 (ICEP 2023) took place in vibrant Aarhus, Denmark, June 20 to 23, 2023. Right after the conference, we, the local organizers, were exhausted, but also invigorated and happy, not least because of the kind and positive feedback we received from grateful participants.

ICEP 2023 was organized as a collaborative effort by staff from the Department of Psychology and Behavioural Sciences and the Department of Management at Aarhus University. We hosted the conference at the main campus of Aarhus University, ranked in the top 10 of the most beautiful university campuses in Europe by The Times Higher Education (2018). The size of the conference – about 525 physically present – stretched the university’s conference centre and Aula to the limit, but they were adequate, with the advantage of having all rooms for the plenary sessions, keynotes, parallel sessions, and poster sessions close by.

The conference obviously welcomed papers on all topics in environmental psychology. However, acknowledging that radical changes in human behaviour are needed to mitigate the negative effects of emissions and resource depletion, we had chosen the conference theme “Towards an impact-oriented behavioural science and sustainable behaviour change”. Indeed, a large proportion of oral and poster presentations focused on the promotion of sustainable behaviour change, directly or indirectly. The same is true for the four keynotes, which were excellent and each covered important aspects of impact-oriented behavioural science.
In the opening keynote, Christian Klöckner reflected on the potential and the limits of environmental psychology for contributing to a better world. For this, he drew on examples from finished and ongoing projects, including a study in Norwegian and German supermarkets to increase consumption of sustainably fished seafood, an intervention in Norwegian schools to reduce food waste, and the EU project ENCHANT, which implemented behavioral science-informed intervention strategies large scale in close collaboration with municipalities, energy providers, and NGOs. He showed that effects in the field are often substantially smaller than in the lab, among other things because carefully planned large interventions studies in the field can be derailed by unexpected events, such as a pandemic or an energy crisis. And he advocated more field studies to obtain valid estimates of the effects of behavioral interventions.

In the Graumann lecture, Lorraine Whitmarsh also focused on the difficulty of achieving the degree of behavior change required to reach our climate change targets. She emphasized the need for social transformation and argued that public engagement and participation in decision-making about what a low-carbon future looks like, and how to reach it, is required to reach ‘net zero’ carbon targets in the coming years. We also need a wide range of measures to change people’s behaviour at home, work and elsewhere, and “upstream” solutions are generally much more effective than “downstream”. Based on her prior research, Lorraine suggested five principles that increase public support for net zero policies: (1) fairness, (2) co-benefits, (3) freedom and choice, (4) information and education, and (5) leadership.

Nina Mazar’s keynote lecture was very much in line with the two former, emphasizing the difficulty of transplanting ideas from the laboratory or controlled pilot settings into the “wild,” translating findings from one context to another, and scaling up interventions. Behavioral science has the ability and promise to tackle tough social problems, but it is
increasingly important to pay attention to the nuances of how the science is done and how to use behavioral science. Nina showed examples of how minor changes in formulations of items in questionnaires can lead to radically different results, of substantially smaller effects of behavioral interventions when scaling up, and of failure to generalize results between WEIRD and non-WEIRD contexts. She also advocated more field studies, paying careful attention to details and contextual factors.

In the final keynote lecture, Terry Hartig challenged our fundamental understanding of nature. “Nature” has diverse meanings, each with its referents. Those working in environmental psychology and allied fields favor some of those meanings, using them and attending to their referents in particular ways. Other meanings see less use, despite their relevance, and their referents receive relatively little attention. Terry discussed some meanings of “nature” and some problems that their use or neglect has had for environment-behavior-design research. Those problems involve forms of insensitivity or blindness – to some ubiquitous and behaviorally influential natural phenomena, to historical and cultural contingencies of restorative benefits of nature experience, and to limitations of evolutionary assumptions commonly invoked in discussions of such benefits. Terry emphasized the importance of awareness of these
problems for further development in theory and methods for the study of human-nature relations. In this way, he was very much in line with earlier keynote speakers in emphasizing the importance of field studies and contextual contingencies.

Besides these excellent keynotes, another highlight was the very well-attended panel discussion on the value and impact of environmental psychology in policy and practice, organized by Birgitta Gatersleben and with panel members Sarah Golding, Chris Jones, Melissa Marselle, Linda Steg, John Thøgersen, and Lorraine Whitmarsh. The main focus of this lively debate was on positive examples and how to overcome barriers for impact.

Most importantly, ICEP 2023 had attracted more than 400 oral presentations in six parallel sessions, and 143 poster presentations, making this the biggest ICEP ever. All plenary and paper presentation sessions were streamed online on Zoom. About 50 people had registered to participate online, 19 of these with an online poster presentation (but with posters physically present in the general poster session). For cost reasons, the conference was not fully “hybrid”. Online participants could only listen to presentations, they could not interact with speakers. So, in case of questions or follow-ups, they would have to send the speaker an email.

The possibility of participating online (for a low fee) was created for those who could not afford the trip to Aarhus or preferred to avoid a flight trip, to make the conference as sustainable as possible. Based, among other things, on discussions at ICEP 2021 in Syracuse, and on the good practice examples there and in the previous ICEPs (Plymouth and A Coruna), we had integrated sustainability thinking in all aspects of the conference, minimizing negative environmental impacts and promoting positive impacts. For example, Aarhus is easily accessible by train from everywhere in Europe. At conference lunches, we only served vegetarian food and at the conference dinner the food was vegan. As far as possible, the produce for lunches and dinner came from local and organic producers. To reduce waste, we gave all participants personal and reusable drinking bottles that can be refilled with tap water. No bottled water was offered. Also, coffee was served in mugs, no single-use cups. And instead of bouquets of cut flowers on the scene in the Aula, that would be thrown out after the conference, we used living plants, produced in Denmark. The conference badge was plastic free, we did not in general give out writing pads and pens (but they were obtainable on request), and we did not print the conference handbook or abstracts (but instead provided them in the conference app). We believe all these sustainability measures worked to everyone’s satisfaction.

Greetings from Aarhus,

John Thøgersen and Stefan Pfattheicher on behalf of the Organizing Committee.

https://icep2023.au.dk
Indeed, this year’s ICEP was the largest ever. Some 525 attendees joined for more than three days of conference activities, including two innovative pre-conference workshops, four keynote presentations, and over eighty parallel sessions. The increased interest in environmental psychology is clear, especially as the world recognises the urgent behavioural changes needed in response to climate and ecological crises, and the role of social science in supporting both human and planetary wellbeing. This was reflected in the work presented at the conference; as the word cloud of submitted abstracts showed, there was a clear emphasis on climate change, pro-environmental behaviour, and energy topics in this edition of ICEP. Keynotes by Christian Klöckner, Lorraine Whitmarsh, and Nina Mažar emphasised the importance of real-world applicability of our research, and how we can better engage members of the public in what we do – especially in relation to climate change and sustainability issues. One of the first parallel sessions on Wednesday focused on critical environmental psychologies, in particular, as a way to better understand individual behaviours in societal contexts.

Eleanor Ratcliffe

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It was a pleasure to attend the International Conference on Environmental Psychology (ICEP) in Aarhus this June. The last time we gathered at this event was in Siracusa in 2021, when restrictions around COVID-19 were still in force in several places. For many, this year’s conference was the first opportunity since the start of the pandemic to connect with international colleagues face-to-face, without social distancing. Aarhus University welcomed hundreds of environmental psychologists with open arms.

Aarhus University campus.

Word cloud summarising the main topics in submitted abstracts.
My own interests in environmental psychology lean primarily towards restorative environments. ICEP offered new theoretical and empirical insights on this topic and wider research on people—nature relationships, as well as perspectives on restorative urban settings. Tuesday’s pre-conference event, “Digital tools for mapping psychological qualities of the environment”, led by Marco Boffi and colleagues, allowed attendees to try out the CitySense smartphone app as a method of experiential Environmental Impact Assessment. Wednesday’s symposium on “New perspectives for restorative environments research”, chaired by Agnes van den Berg and Karin Dijkstra, set out new theoretical positions on why certain environments facilitate restoration, and invited researchers to engage with and test these propositions. A relatively new topic, environmental neuroscience, attracted so many attendees at its session on Thursday that there was standing room only. On Friday, Terry Hartig’s keynote on, “What nature? Whose nature? Our nature?” offered food for thought on how we conceptualise natural environments, and how we might diversify our study of people in the natural and physical world.

There is always good overlap between the ICEP and IAPS communities, which continued this year. It was excellent to see the IAPS Restorative Environments Network (REN) organise, as they have done at previous ICEPs, a two-part symposium that showcased diverse research from network members that covered soundscapes, residential housing, nature-based interventions, and favourite places, among other topics. The REN also arranged a fantastic social outing to a local street food...
market, which is example of the great work this network does in bringing researchers together – not only to present their work, but to get to know each other in more relaxed settings.

Building on previous years, many attendees to ICEP shared their low-carbon journeys to the conference on social media, with several research groups travelling by train from different parts of Europe (and looking like they were enjoying the trip!). The conference organisers also made many decisions that helped ICEP ‘walk the talk’ regarding sustainability, including the absence of single-use plastics, providing attendees with reusable water bottles, and vegetarian catering during the event. The conference dinner on Thursday went a step further, providing a delicious vegan meal with carefully-chosen wine pairings for each course, set in the surroundings of former workshop buildings (Centralværkstedet) in the middle of Aarhus. And then there was dancing...

At the closing ceremony on Friday the President of IAAP Division 4 (Environmental Psychology) Sabine Pahl, and the President-Elect Marino Bonaiuto, offered their reflections on the conference and their thoughts for the future. The balance between impact- and theory-led research, and the building of connections among the many topics that constitute environmental psychology, are likely to continue as conversations within our community. The next destination for ICEP is not yet finalised, but I have no doubt that it will provide space for these and many other exciting discussions. I offer my sincere thanks to John Thøgersen and his colleagues for hosting us in Aarhus this year. Environmental psychology is thriving and we have much to be glad about.
The EDRA 54 International Conference was held in Mexico City at the main campus of the National Autonomous University of Mexico (UNAM) from June 20th to 23rd. The central theme of the conference was "Environment and Health: Global and Local Challenges and Actions", which was of great interest to the 500 participants who attended from all five continents. The 142 sessions offered this year included papers, symposia, intensive sessions, collaborations, workshops, posters, short videos, and Graduate Student Workshop (GSW).

Some of the main topics addressed by specialists were climate change and the consequences for physical and mental health, quality of life and social justice, and the consequences of the pandemic on wellness in various settings: school, work, and public spaces. Stress and restoration in the workplace and health care settings, social change in underrepresented groups; the role of nature and its impact on health; community engagement for wellness in refugee and homeless groups, among others. By EDRA's mission, the main topics that were discussed were: the generation of inclusive spaces, equity, accessibility for older people or people with disabilities, the effect on the quality of life of people in social emergency conditions such as war refugees, and social and behavioral change for the awareness of environmental care.

The Keynote speaker, Gary Evans, spoke about “50 years teaching environmental psychology”. During his presentation, he explained how the relationship between human beings and their environment is analyzed in different scenarios: From home, where Professor Evans addressed topics such as environmental stimulation, personal space, territoriality, residential quality, and design. From the city, with aspects such as toxicology, overcrowding, noise, perception, cognition, and environmental stress. From work environments, where ergonomics, biomechanics,
The relationship between anthropometry, air quality, temperature, light, and color were elements to consider in healthy environments. And finally, from the Planet, where aspects such as restoration, aesthetics, attitude, and pro-environmental behavior are investigated to destroy the dragons of inaction.

Another Keynote speaker was Dr. José Sarukhán of the Institute of Biology of the UNAM, who presented "Responses to the socio-environmental crisis: based only on technology and without socio-environmental ethics?" mentioning how the global crisis can be seen from two aspects: global warming and loss of biodiversity. During his presentation, he invited the audience to rethink the solutions proposed from a technological point of view and how they fail to reverse the damage generated and are only a distraction from accurate answers. In the end, he shared a thought from environmental ethics that considers that the relationship with the environment should include all species, present and future generations, and with a genuine concern for the intrinsic value of nature and not only for the benefits that our species receives from it. Finally, Dr. Debajyoti Pati, Texas Tech University, in his Keynote lecture entitled "Positioning the Value of Environmental Design Approaches in Contemporary Health," acknowledged how robust scientific research has developed valuable knowledge for application in health care settings.

Two plenary sessions were also held; the first was called "Mental Health & Urban Life: Challenges and Actions for Livable Environments", with the participation of Dr. Victor Corral from the University of Sonora. He emphasized the importance of preserving our environments, which requires instigators of conservation behaviors such as self-care, care for others (altruistic, equitable), and care for the biosphere (frugal, pro-ecological). Dr. Medina-Mora from the School of Psychology, UNAM, provided data on how psychiatric disorders are more frequent in urban areas; how social segregation and community instability are associated with depression and psychotic disorders; and how multiple risk factors such as poverty, poor housing quality or noise are associated with more depression and alcohol abuse, while neighborhoods that provide walkable and recreational spaces have less psychiatric disorders. Dr. Ruggeri of the University of Maryland explained the relevance of contributing to creating and modifying landscapes that promote health and allow communities to cope with changes and uncertainties related to social, political, and climate factors. In the second plenary session entitled "Challenges and Actions for a sustainable future: Housing, public spaces, and design technologies", Dr. Ryuzo Ohno of the Tokyo Institute of Technology described the importance of environmental perception and people's sensory experience in designing spaces. To do so, he presented the results of experiments with virtual animations. Sara Topelson

Conference participants countries of origin.
of the CIDOC Foundation highlighted how urban public spaces are small ecosystems that are accessible and enjoyable for everyone, spaces for socialization and dialogue; likewise, Mario Schjetnan of Grupo de Diseño Urbano México highlighted their contribution to projects that contribute to public health, safety, environmental resilience, climate change, and community identity. Brian Jencek of HOK focused on showing diverse examples of how public space should be intentionally designed to (a) be used, (b) be a “place,” (c) have contact with nature, people, and (d) culture.

As part of the conference, three mobile sessions were offered; in the first one, people visited “El Templo Mayor” Museum; in the second one, attendees saw the murals of the Central Library and the University City of UNAM, which was proclaimed as a UNESCO World Heritage Site in 2007. The third was a visit to the Environmental Value Area of the “National Canal,” 32.32 hectares of Urban Forest recovery work. This last site was awarded the Great Places Awards in the Place Design category, among other CORE awards granted during the conference by EDRA. Finally, a banquet was held at the Medicine Palace, the former seat of the Holy Office Court, a magnificent example of Viceroyalty architecture in the old university neighborhood (1736). On this occasion, in addition to a superb dinner, the EDRA awards were delivered: Robin Moore, Professor at North Carolina State University, received the EDRA Career Award, and Nilda Cosco, Director of The Natural Learning Initiative, received the EDRA Organization Award. The EDRA 54 conference concluded with a big smile and compliments from many participants for the opportunity to be in a great megalopolis like Mexico City, full of culture, excellent food, and human warmth.

Patricia Ortega-Andeane, Ph. D.
General coordinator of the Organizing Committee
Impressions of one of the participants in EDRA 2023

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EDRA 54 was a great experience. The conference was well organized; located on the campus of UNAM, nestled within Mexico City, one of the world’s most culturally and historically richest places. Patricia Ortega Andeane led the local efforts to put the conference together along with the Dean of Psychology at UNAM, Maria Elena Medina-Mora, and Elif Tural, the EDRA chair.

The overarching theme was the interplay among design and planning, the climate change crisis, and human health and wellbeing. Social justice was a key theme running through the meeting as well. Keynote and plenary presentations included teaching environmental psychology; a critique of technological responses to climate change; how environmental design research has influenced healthcare design over time; the integration of nature, climate change threats, and sensory experiences into urban design; and designing places to optimize human physical and mental wellbeing.

I cannot do justice to all of the wonderful papers; symposia; and workshops but here are a few of the themes that I noticed while in attendance and after re-reading the program: Children’s environments; programming and design methods; tools for assessing settings in real time; building sustainability as well as resilience through design and planning; digital environments; enhancing experiences of nature and other positive aspects of places; and enhancing public and community spaces.

With nearly 500 registrants and a host of participants from Central and South America, many opportunities for meeting old friends and making new ones were available. For me in addition to the diversity of attendees, a notable feature of the conference was the large number of first-time attendees - many in their 20’s and 30’s. The futures of EDRA and IAPS are bright!
IAPS conference is a biannual international meeting, whose next edition, the 28th, will take place the 2nd to the 5th July of 2024 in Barcelona.

People’s relationships with the environment are complex and constantly changing. Challenges such as transitioning to more sustainable living spaces, switching to different energy sources, reducing consumption, encouraging circular economies, and addressing climate crisis present new challenges for society, as well as for the scientific community, in terms of both creating new technologies and managing human behavior.

To bring about change, it is essential to examine phenomena from various angles, with different disciplinary perspectives, theoretical and methodological approaches, in order to come up with solutions to socially and environmentally important issues and ultimately work towards the well-being of people and society as a whole. As ecology pointed out in the early 20th century, any action to be sustainable must be “different” and adapted to each ecosystem, that is, to each social or eco-social context.

The congress venue, the city of Barcelona, is an open and cosmopolitan city. The city works harder than ever to cut greenhouse gas emissions, increase the production of renewable energy, and reduce the mobility of motor vehicles, among other environmental actions. In parallel, the local government has continued to work towards a greener and more sustainable city model in different areas, like mobility, with the creation of new bike lanes across Barcelona and urban planning with the proliferation of the new superblocks and green corridors, among others.
IAPS 2024 will address the challenges faced by many cities as well as the environmental settings. Therefore, six topics of great relevance are proposed:

1. Climate Change and sustainability - Changing human behavior
2. Natural and urban environments – The transitions of cities
3. Participation, citizenship, and environmental justice
4. Place attachment: Space, gender and post-colonialism
5. Mobility, habits and needs
6. Information, communication management, and construction of realities

Considering these challenges, the conference will focus on seeking strategies to promote sustainable environments that favor greater inclusion, social participation, and transdisciplinarity in addressing the needs of housing, mobility, and sustainability.

For more information, please visit: www.iaps2024barcelona.com

The deadline for abstract submission has been extended to the 31st of December 2023

We look forward to welcoming you to Barcelona next summer!

The Organizing Committee.
Dear IAPS colleagues,

it is a pleasure to announce that the next XVII PSICAMB Conference on Environmental Psychology will take place in Malaga, Spain, from February 3 to 6, 2025, in the recently inaugurated building of the Faculty of Psychology and Speech Therapy of the University of Malaga. The Conference is organized by the Department of Social Psychology, Social Work and Social Anthropology, under the presidency of M. Carmen Hidalgo, and has the support of PSICAMB (Association of Environmental Psychology). Its main topic is: Psychology in the face of new environmental challenges. The conference aims to contribute to the dissemination of psychoenvironmental research, and to promote the discussion of ideas and experiences, allowing progress in the solution of the most current and relevant environmental problems.

As in previous editions, we expect the participation of colleagues from different countries, mainly from Europe and Latin America, from different academic and applied fields as disciplines such as psychology, architecture, urbanism, geography, tourism, and natural sciences, among others.

For more information, check the Conference website: congresopsicamb2025.uma.es

The deadline for abstract submission is July, 31st 2024. All slide shows will be in English, and the presentation language can be Spanish, Portuguese or English.

We hope to meet you in Málaga, capital of Costa del Sol.

M. Carmen Hidalgo on behalf of the Organizing Committee and M. Carmen Aguilar on behalf of PSICAMB.
Faculty of Psychology and Speech Therapy of the University of Malaga.
The Environmental Design Research Association (EDRA) invites practitioners, researchers, and educators to submit their proposals for EDRA's 55th annual conference on the theme of Human-Centric Environments. The conference is hosted by the University of Oregon in Portland, Oregon, and will center on promoting human-centric design that considers people’s prosperity, satisfaction, and well-being while celebrating sustainability, resilience, and diversity in the built and natural environment at all scales.

Our conference theme, human-centric environments, will reconnect researchers, designers, and practitioners in renewed ways. We observe the applicability of the conference theme in recent developments and across multiple disciplines and industries that are shaping both our media and matter. Human-centric environments can be seen as both a *Panacea* and a *Pariah*. It provides the power of explanation and forecasting human interactions and forces of design in the built and natural environment towards a mutual understanding of co-existence within our planet in the face of climate change. EDRA55-PDX will be a progressive setting to question and explore human-centric environments and design in six conference tracks and scales:

1. Nature and Urban Ecology
2. Sustainable Buildings, and Infrastructure
3. Resilient Design for Climate Change
4. Design for Health and Well-being
5. Spatial Justice, Diversity, and Inclusion by Design
6. Transdisciplinary Design and Collaboration/Open Track
We will frame our discussions in all the conference tracks of our design, research, and policy projects by asking key questions, including:

• How can the design of the built and natural environments be analyzed and evaluated from a human-centric perspective?
• How can we think of the multiple sub-themes and tracks from a premise of putting the human at the center of our design and research projects?
• What is the role of human-centric design and research in the age of AI?
• What does it mean to occupy environments that are both human-made and human-centric?
• How can teaching future generations of designers flourish with transdisciplinary collaborations that celebrate human-centric design pedagogies?

LOCATION AND CONTEXT

EDRA55 will take place in Portland, Oregon, a strategic setting to explore the conference theme. Portland has pioneered the vision of a more walkable and sustainable city that is focused on a human-centric framework of development and urban renewal. From BIPOC-owned businesses to micro-breweries, museums to gardens and parks, and award-winning restaurants to food carts, people from all walks of life can find themselves at home in the independent and welcoming Rose City. With its multicultural neighborhoods, every part of Portland has a unique history, and every Portlander has a story to tell. EDRA55 attendees will find many ways to connect with Portland’s cultural communities during their visit.

This conference invites papers that focus on the theories, applications, evaluations, research methods, histories, activities, practices, and design solutions related to promoting human-centric environments at all modalities and scales. EDRA55 PDX sets the stage for transdisciplinary collaborations between environmental design researchers, design practitioners, academics, not-for-profit organizations, and public and private sector stakeholders to lead the charge in transforming people's relationships with each other, their communities, and their environments toward net positive futures that are centered on human satisfaction, prosperity, and well-being. We encourage you to join us as we debate, discuss, reflect, and transform our capacity to impact social, environmental, and economic challenges around the world through a human-centric approach.

EDRA welcomes submissions from all disciplines and professions to represent the full variety of issues environmental design researchers and practitioners address in their work. All submissions will undergo a peer-review process. EDRA55 will publish conference programs and proceedings with all accepted abstracts and full papers with special highlights of award-winning papers and posters.

Ihab Elzeyadi on behalf of the Organizing Committee
KEY DATES

October 16, 2023
Submission portal opens. Visit www.edra.org/edra55

December 18, 2023
Due date for the following submissions: Intensives, Paper Abstracts, Individual Presentations, and Group Presentations.

January 29, 2024
Due date for Visual Presentations including abstracts for Posters, Digital Media Shorts, Work-In-Progress, and Graduate Student Workshop submissions.

February 19, 2024
Due date for revisions of Full-papers, abstracts, individual, and group submissions.

March 1, 2024
Regular registration begins and Early Bird registration ends.

June 19-22, 2024
EDRA55 Conference in Portland, Oregon

EDRA55 ORGANIZING COMMITTEE
EDRA55 PDX is a collaboration between the School of Architecture and Environment – University of Oregon, the local host, and the Environmental Design Research Association.

EDRA55 Organizing Committee:
Ihab Elzeyadi, Ph.D., LEEDAP, Chair, EDRA 55 PDX, Professor of Architecture and Director, High Performance Environments Laboratory (HiPE) – University of Oregon.

Chandra Robinson, AIA, co-chair, EDRA 55 PDX, Principal, LEVER Architecture.

Philip Speranza, AIA co-chair, EDRA 55 PDX, Associate Professor of Architecture and Urban Planning, School of Architecture and Environments, University of Oregon.

EDRA55 Program Committee:
Debarati 'Mimi' Majumdar Narayan, Ph.D., Program Chair and Chair-Elect of EDRA Board.

Deni Ruggeri, Ph.D., EDRA Executive Director.

Lorraine E. Maxwell, Ph.D., Emeritus Board Member, Ex-Officio.

Julie Stevens, MLA, Board Member.

For more information, please visit: www.edra.org/page/edra55

We look forward to seeing you at EDRA55 in the City of Roses, Portland, Oregon, June 19 - 22, 2024!
My Favorite Book or Paper
FAVOURITE BOOK: TIGHT SPACES

Rich Wener
New York University, U.S.A

The book that most shaped the start of my career was *Tight Spaces* by Bob Sommer. In 1974 I was a pre-doctoral clinical psychology intern in Los Angeles, at a community mental health center. We worked in a brand new building that was attached to a large hospital, and I was not the only intern who thought that this building was so badly designed that it negatively affected patients and therapists. Although my co-workers and I frequently mused on these issues we had no idea that anyone had actually written on such a subject until my friend and advisor, Chris Keys, recommended Bob Sommer’s *Personal Space*. It was a revelation. While I was reading *Personal Space*, Sommer’s next book, *Tight Spaces*, came out and I quickly bought a copy. While the earlier book lays out a basis for looking at the psychological impacts of physical space, *Tight Spaces* discusses the negative effects of Hard Architecture in a way that helped shape my approach to the study of jails and prisons. Sommer points out that design that is built specifically to resist human imprint is more than just uncomfortable and unpleasant. It also sends a message that says “try as you might you can’t have any impact on me.” That message serves as a challenge to users that actually increases the likelihood of vandalism. This book even changed the way some prison officials talked about new jail design, and the term “hard architecture” crept into correctional language. These books made me so excited about the field that I switched my focus and dissertation topic from clinical to environmental psychology. I feel very lucky that many years later I had the opportunity to tell Bob how much his book meant to me.

FAVOURITE BOOK: THE END OF AVERAGE

Wesley Schultz
California State University, U.S.A

This book made me think. The average is core to much of my work. In science, we use the central limit theorem as a foundation to our research; we test for differences in group means in our experiments; and my work on social norms is fundamentally about perceptions of the average. But are we mistaken in our thinking? This book challenges us to reconsider the concept of average and “normal.” And by relying so heavily on the average, are we blinding ourselves to individuality?

FAVOURITE BOOK: THE LONELY CENTURY. COMING TOGETHER IN A WORLD THAT’S PULLING APART

Sigrun Kabisch
Helmholtz-Centre for Environmental Research, Germany

I came across this book during a late-night television report on cultural issues. In it, author Noreena Hertz, a British economist, describes strategies for dealing with loneliness - a phenomenon that is becoming increasingly important in today’s world. In my research on housing satisfaction in large housing estates, I found that despite high population density, many residents live alone and experience loneliness. As a result, social isolation and health problems emerged. How can this be dealt with? Family and neighborhood networks are important, but if that doesn’t work? Noreena Hertz introduces the topic with serious definitions, approaches and descriptions. She connects it to emotional closeness, love, and respectful treatment of each person as part of society. By describing a variety of strategies in different parts of the world, sometimes funny, sometimes strange, sometimes sad, she provides an eye-opener for better coexistence. It is a plea for caring towards our fellow human beings.
FAVORITE ARTICLE:
HOSPITAL DESIGN AND THE TEMPORAL AND SPATIAL ORGANIZATION OF NURSING ACTIVITY

Fiona de Vos
Studio dVO & University of Amsterdam, The Netherlands

I was a psychology major, planning to become a developmental psychologist and work with children. Then I read an article for one of my classes that completely changed my outlook on psychology and the course of my career.

The article showed the effect of ward layout on staff workload and efficiency in French hospitals. This may not seem so surprising now, but at the time it was a novel approach. The shape of the ward and the location of the nurses’ station turned out to have a major impact on the well-being of patients and staff. A nurses’ station at the beginning of a long corridor, with rooms on either side, increases the number and length of trips staff have to make. In addition, the farther the room is from the nurse’s station, the less safe the patient feels. In contrast, a round or square unit with the nurse station in the middle allows for shorter and more equal distances to all rooms and a visual relationship between patient and staff.

I was so fascinated by the idea that you could use design to create safety and security, 24/7, that this article marked the beginning of my journey to become an environmental psychologist. In 1996, I founded Studio dVO, a consultancy and research company that uses environmental psychology to create places where people thrive. We use our knowledge to optimise the wellbeing and performance of people, buildings, and organisations.


FAVORITE BOOK:
HOUSE AS A MIRROR OF SELF

Lucía Poggio
Universidad Complutense de Madrid, Spain

Thirteen years ago, when I started my research career, my supervisor, Juan Ignacio Aragonés, told me this book could be interesting for my thesis. The version I have in my hands was the only one I could locate online to buy, and it comes from a public library in Arizona (US). “House as a mirror of Self: exploring the deeper meaning of home” is a book written by Clare Cooper Marcus, professor of Architecture and Landscape in Berkeley. Without being a book specifically about Environmental Psychology, it illustrates clearly and simply for the reader the influence and affective bonds that individuals develop towards our physical environments. In addition, it is one of the first books that delve into the emotional meaning of the home, whether from psychology, anthropology, architecture, or planning. It made it clear to me that environmental psychology, albeit unconsciously, is present in all spheres of life.
FAVOURITE BOOK:
ENVIRONMENT, COGNITION AND ACTION: AN INTEGRATED APPROACH

Maria Johansson
Lund University, Sweden

One of my first encounters with environmental psychology as a psychology student in the 1990s, was “Environment, cognition and action: An integrated approach” edited by Gärling and Evans (1991). I became fascinated of understanding how people perceive their surroundings. In one of the chapters, “Environmental assessment from a neurobiological approach” Rikard Küller, introduced the Human-Environment Interaction model (which is, despite its name, a transactional model according to Küller) outlining how people’s environmental responses would be dependent upon the perception of both physical and social aspects of the environment, what activity a person is engaged in at the time, and personal characteristics. Originally the model was developed in relation to the built environment and with a strong focus on one specific psychological process. During the years I have had the opportunity as an environmental psychologist to participate in multidisciplinary collaborations on real-world problems associated with building design, urban developments as well as management and conservation of biological diversity. In these collaborations the Human-Environment Interaction model has to me always been close at hand as a useful tool for illustrating the need for considering the individual’s situational contexts when trying to understand people’s emotions, cognitions and behaviours.

FAVOURITE BOOK:
PSICOLOGÍA AMBIENTAL

Claudia Manzano
Tecnológico Nacional de México, Mexico

This book by Charles Holahan was my first approach to Environmental Psychology. I bought it second-hand in a bookstore in the historic center of Mexico City to learn about environmental attitudes and discovered an interesting world related to history, perception, personal space, stress, and environmental agglomeration. It is easy to read, which increased my desire to learn more about the subject. It also made me care more about environmental problems and possible solutions to them. But first, we should learn about attitudes and their influence on the behavior of the individual. It is an easy-to-read, interesting, and enjoyable book. I keep it with great affection because through its pages I learned to value the importance of environmental psychology.

FAVOURITE BOOK:
RESOLVING SOCIAL CONFLICTS AND FIELD THEORY IN SOCIAL SCIENCE

Gabriel Muños
University of Groningen, The Netherlands

I bought this collection of texts by Prof. Kurt Lewin in 2007 when I finished my studies because I knew Lewin’s ideas were fundamental to the discipline. It is such a familiar tune to talk about all Lewin’s contributions that it feels wrong to list them, from the field theory to group dynamics via action research and leadership. They are all fundamental ingredients of our social and environmental psychology. For a few weeks, I read and reread this book hours at a time, growing my understanding of the field and how it could be. Two specific things have stayed with me to this day: formalizing every idea helps others understand the message, and avoiding false dichotomies is crucial; research and practice are not a dichotomy; theory and application are not a dichotomy either. Many of Kurt Lewin’s contributions impregnate our lives, and the contributions that do not, maybe should.
FAVOURITE BOOK: SOLVOKTEREN

Femke Beute
Inland Norway University of Applied Sciences, Norway

This is not a scientific book, but a children’s book. ‘Solvokteren’ is Norwegian for ‘The guardian of the sun’ and it captures several of my research interests, partly sparked by emigrating from the Netherlands to Norway. This book is about Lilja, who grows up in a place without the sun, with only darkness, rain, and very little vegetation. She finds the place where the sun is hidden, a natural place full of abundance. She sets the sun free, only to discover that the heat of the sun eventually leads to drought. This story appeals to my research fascination for the role of the sun in restorative processes (e.g., cycles of day/night, light/dark, seasons). I am fascinated by how we can better integrate the sun in restoration theory, and how climate change influences restoration opportunities. It also illustrates that the natural environment not only is a source of restoration but that it also shapes our lives.
Imagine a world where coastal regions are battered by tropical storms, where scorching hot summers, extreme rainfall and draughts are common occurrences, and where devastating landslides and forest fires are no longer the exception, but the rule. In fact, one hardly needs to call upon the imagination, it is enough to tune in on global weather reports.

Reducing CO\textsubscript{2} and other greenhouse gases could limit the effects of climate change. While one person’s actions alone might not turn the tide, so to say, the combined effort of all can make a difference. Indeed, a part of reducing emissions lies in changing human behaviours, lifestyles and decision-making (Dietz et al., 2009), which makes it important to understand what motivates people to (not) engage in pro-environmental behaviours. Is it the promise of financial gain, the pull of a cleaner environment, the joy of doing what is right, or societal norms demanding it of us? These questions have kept scientists busy for quite some time, and will likely continue to do so for some time into the future. Against this backdrop, my thesis focused on the question of what inferences may be drawn from studies focusing on pro-environmental motivations.

Not to be all over the place, I limited my studies to three theoretical models: the Theory of Planned Behaviour, its older sibling the Theory of Reasoned Action (Fishbein & Ajzen, 2011) and the Norm Activation Model (Schwartz, 2011).
These theories are causal and operate within individuals. That is, they theorise that for a person to intend to perform a behaviour, they need to experience certain motivations. These motivations, in turn, can be based on beliefs and perceptions of the world. Say an individual has never seen any financial gain in recycling plastic bottles. Suddenly, they are made aware of a deposit return scheme. Their belief that recycling bottles can be financially rewarding might become stronger and more positive because of this new knowledge, and this may subsequently affect their intention to recycle. If financial motivation indeed has a causal effect on intentions (and subsequently behaviour), then, all else being equal, one can expect that increasing this person’s perceived profit of bottle recycling will result in increased intention. If nothing else happens to prevent it, more bottles will then be recycled.

These and similar theories are frequently used in observational studies that attempt to explain (self-reported) pro-environmental behaviour and intention. However, observational and between-subject analyses are not the best tools in the drawer to analyse causal claims. Moreover, they do not correspond to the level at which most psychological theories are proposed to operate, which is within the mind of an individual. For example, the correlation between experienced social norms and intention tends to be weak in observational between-subject studies, even though experimental designs – which are better suited to uncover causal effects – do find effects of social norms on intentions (Bergquist et al., 2019), while within-subject correlational designs also find an association between social norms and intentions (Stikvoort & Juslin, 2022). Indeed, the presence or absence of a correlation in an observational study need not be indicative of the presence or absence of a causal relationship. A correlation could just as well be the result of a hidden (set of) third variable(s) causing the correlation.

My main thesis quest was to investigate, when it comes to motivations to engage in pro-environmental and energy-saving behaviours, what questions can be answered with different approaches to data, and which approaches are better matched to investigate theories that explain the relationship between motivation and behaviour. To this end, I looked at data from observational and experimental designs, and analysed data at the level between individuals, as well as within individuals. Central to these studies were motivations relating to perceived financial and hedonistic gains, environmental benefits, social normative and moral aspects.

I found that analysing data at different levels (within or between subject) and from different designs (observational or experimental) affects whether one finds associations between motivations and pro-environmental intention or not. For instance, stronger financial motivations (i.e., beliefs that pro-environmental behaviours would be financially beneficial) did not correlate with stronger general pro-environmental intentions when analysed across individuals. In other words, whether people had strong financial motivations was not indicative of their pro-environmental intentions. Yet, when an individual reported a stronger financial motivation for a specific pro-environmental behaviour compared to other behaviours, they tended to have stronger intentions towards that specific behaviour. The same pattern emerged for normative motivations. Between individuals, there was no correlation between perceived normative pressure and intention to engage in pro-environmental behaviours, but within individuals, people had stronger intentions to engage in behaviour for which they perceived more normative pressure. As an illustrative example, this might look as follows: two people differ in their perceived normative pressure to engage in pro-environmental behaviours, yet their intentions (and possibly actions) are the same. At the same time, for each of these two people, it is the case that they have stronger intentions to perform those pro-environmental behaviours for which they perceive most normative pressure, as opposed to behaviours for which they perceive less pressure. In these two instances – financial and normative motivation – there seem to be different factors involved in the processes that generate differences between people, as
opposed to differences within people. Correlational analyses alone cannot tell us what will happen if we were to raise these motivations for a given pro-environmental behaviour.

A different dynamic occurred for environmental motivations. Environmental motivations predicted intentions both between and within individuals. That is, those with strong environmental motivations were more inclined to perform pro-environmental behaviours compared to other individuals, and people were also inclined to perform a pro-environmental behaviour when their environmental motivation for that behaviour was stronger, compared to other behaviours. However, when environmental motivations for the same set of behaviours were manipulated in an experimental set-up, no increase in intentions was detected.

It hardly needs stating that the world is now more than ever in need of a sharpened understanding of the motivations causing decreases or increases in people’s pro-environmental behaviours. Part of that involves testing and using theories that attempt to explain motivational processes in an appropriate manner. In this light, an important take-away message in my dissertation is that relying on between-subject analyses of observational data alone will not reveal such causal structures, nor does it necessarily approximate them. Associations between motivations and intentions should be investigated in a way that is more closely aligned with the theoretically proposed mechanism, that is, a causal effect of motivations on intentions that operates within individuals.

References

My PhD thesis looked at residents’ psychological wellbeing at home and how flexibility in the design of their home can support it. The homes in which we live can support many psychological needs and behaviours that are important for our wellbeing. A flexible home, in particular, could support many changing and varied needs. Flexibility is an architectural design concept. It refers to the extent to which the built environment can be transformed or modified (to suit different needs or desires) as well as the extent to which an environment is designed to support different and changing needs or desires of its occupants. For example, an architecturally flexible home may allow structural changes such as expansions or partitioning rooms, or multifunctionality of spaces. A flexible home could offer greater control to its users, support resident wellbeing, but can also be more socially, financially and environmentally sustainable (Schneider & Till, 2005, Carmichael & Taheriattar, 2018).

Architectural flexibility is often discussed in theory and practice within architecture and engineering. However, residents’ individual and fundamental needs and perceptions - which are important to understand when designing flexible homes - are rarely explored empirically. The aim of my thesis was to address this gap in knowledge.

In my thesis I explored both architectural (or design) flexibility and how it relates to, and interacts with, what I labelled Behavioural Flexibility. This captured the extent to which residents, occupiers or user of residential spaces make modifications and changes to their homes. These modifications include simple changes like personalising spaces by painting walls or moving furniture, as well as larger-scale changes such as rebuilding work. One housing scheme that perfectly demonstrates both architectural and behavioural flexibility is Quinta Monroy by The Elemental Architectural practice in Chile. The houses were designed for future expansion, allowing residents to build them over time based on their changing needs.
In my thesis I examined the relationship between architectural and behavioural flexibility and residents' need satisfaction in order to examine whether flexible design can support human wellbeing. Residents’ psychological wellbeing at home was measured with two scales (designed for this research) that captured basic eudaimonic needs of Autonomy, Competence and Relatedness (BPNT; based on Ryan & Deci, 2002) and hedonic need for higher positive affect and lower negative affect (PANAS; Watson et al. 1988 and SPANE; Diener & Biswas-Diener, 2009).

In an online survey, the first study established a positive and significant association between flexibility of the home (in general) and residents’ eudaimonic and hedonic wellbeing. Residents who felt that their homes were more flexible reported higher wellbeing at home. Study 2 examined the role of Architectural and Behavioural Flexibility in relation to wellbeing. Behavioural flexibility was modelled as a mediator as the literature suggests that Architectural Flexibility supports a higher sense of behavioural and decisional control (e.g., Averill, 1973; Habraken, 2008; Till & Schneider, 2005) and will ultimately allow residents to engage in the behaviour of making changes (Bechtel, 1977; Schoggen et al., 1989, cited in Bower et al., 2019). Results showed that greater perceived architectural flexibility (availability of rooms and spaces, multifunctionality and modifiability of rooms and spaces), supports higher hedonic and eudaimonic wellbeing. But this relationship is mediated by behavioural flexibility (residents’ behaviours of making different types of modifications to their homes). These results suggest that it is not necessarily enough that a home is designed to be flexible; when residents cannot (and do not want to) make changes to their home, the relationship between architectural flexibility and wellbeing is no longer significant. This is especially important for residents living in rented accommodation who are restricted in the extent to which they could alter their home, possibly at the risk of experiencing lower wellbeing in their homes.

Study 3 examined in more detail the relationship between residential wellbeing and perceived opportunities, abilities and motivations to make changes to a house, using a representative sample of UK residents. This was done by drawing on the COM–B model (Michie et al., 2011), which suggests that behaviour is a function of capabilities (C), opportunities (O) and motivations (M). Three models with different measures of opportunity or architectural flexibility were examined. The first model examined opportunities to make changes to spaces/rooms, the second the perceived availability of spaces/rooms and the last the perceived multifunctionality of spaces/rooms.

In the first model I examined the importance of perceived opportunities provided by the built environment to make changes, and residents’ capability and motivation to make changes in the house, in relation to reported behaviours (making changes) and wellbeing. As expected, residents’ behaviour was significantly driven by its COM predictors. In turn, behaviour predicted eudaimonic wellbeing at home. The results confirmed that having opportunities provided by the built environment of the home for changes, and in addition, having capabilities and motivations to make changes to the home predicts eudaimonic wellbeing, if people actually engage with the behaviour of making changes.

In the second and the third model, behaviour was not found to be a significant mediator of the relationship between COM components and wellbeing. Having enough space at home for various activities and being able to use the rooms for more than one activity was found to be important for wellbeing, but behaviour — whether or not residents ‘used’ these opportunities — was not important.

Finally, an initial exploration into the causal nature of this relationship between Architectural Flexibility and wellbeing was examined in an online experimental study of 2x2 design. Participants were randomly exposed to one of four scenarios with high or low flexibility opportunities, and high or low capabilities and motivations to make changes. The study showed that participants who lived in an imaginary home that offered both flexibility opportunities and had Capability and Motivation to engage with this flexibility reported greater eudaimonic and hedonic wellbeing as opposed to residents who were provided with only high Opportunity, or presence of Capability and Motivation, or neither.

Overall, findings from my thesis suggest that Architectural flexibility (availability, multifunctionality, modifiability of spaces) and Behavioural Flexibility (using flexible opportunities and making changes) have positive and inter-related influence on residents’ Hedonic and Eudaimonic wellbeing at home. Designing flexible houses can support residents’ hedonic and eudaimonic wellbeing. However, people’s personal capabilities and motivations to engage
with flexibility opportunities also play a significant role. In designing new homes, and developing policies for existing homes, it may be crucial to consider how these factors can be incorporated to support residents’ wellbeing better.

The findings challenge the current housing policies in the UK that limit the extent to which residents can make changes to their houses to suit their needs. This is especially so when people do not own their homes or live in flats and apartments that are typically less alterable compared to a bungalow or terrace house – differences which have been spotted across my studies. For new homes in development, the findings encourage incorporating design ideas that can easily facilitate behaviours such as personalisation, decoration and changing furnishing, easily movable furniture for rearrangements to suit residents’ changing needs – all of which were found important for wellbeing in my studies. Considerations are needed to provide many types of architecturally flexible qualities in a home that can better support larger population of residents who have a varying range of capabilities and motivations.

Sadhana is an Architect from India who is driven by the importance of putting people, their needs, and experiences at the heart of architectural design. She completed her MSc and PhD in Environmental Psychology at the University of Surrey focusing on residential environments and is now a Research Fellow at the University of Stirling working on the Designing Homes for Healthy Cognitive Ageing project. Sadhana is also a visiting researcher at the Environmental Psychology Research group at the University of Surrey.

On 20 September 2023 the University of Surrey celebrated the 50th anniversary of their MSc in Environmental Psychology. The program was one of the first of its kind and is still unique today due to its holistic focus on people-environment relationships. The course has taught well over 450 students from many different backgrounds who have gone on to be leaders in the field.

The event was opened by Professor Birgitta Gatersleben (Director of Environmental Psychology, and Programme Director 2002 – 2021). Two talks followed reflecting on the past by Professor David Canter, who launched the MSc at Surrey in 1973 and Professor David Uzzell, who ran the programme between 1985 – 2002. Three alumni then shared their amazing journeys since graduation: Dr. Daniel Iacofano (1978 Cohort) head of the hugely successful consultancy firm MIG in the US, Dr. Clare Twigger-Ross (1989 Cohort), Principal Consultant at Eunomia Research and Consulting, and Dr. Tony Craig (1998 Cohort), Head of the Social, Economic, and Geographical Sciences department at the James Hutton Institute. Dr Eleanor Ratcliffe, the current programme leader closed the event emphasizing the key values that underpin Surrey’s MSc in Environmental Psychology: innovation, leadership, and community.

This historic celebration marks not only a milestone but also a stepping stone towards a future filled with continued excellence and innovation in environmental psychology. Here’s to the next 50 years!
Left to right: Dr Sarah Payne, Dr Eleanor Ratcliffe, Professor Birgitta Gatersleben, Tamala Anderson, Hongyuan Huang, Dr Melissa Marselle, members of the Environmental Psychology Research Group.
Over the last 20 years I have been involved in numerous projects that have attempted to use the power of computers to help understand various aspects of people-environment relationships. Early on in my research career, most of these focused on the best ways to represent the “environment” aspect of people-environment relationships. But looking back, I think I had inadvertently fallen into the trap of being seduced by the seemingly realistic nature of computer visualisations, and along the way had begun to neglect the person side of things.

Today, we have started to represent individuals in computer models in such a way that takes their social, physical and temporal contexts into account. The most commonly used methodological approach (and software associated with it) for this is referred to as agent-based-modelling, or ABM (Wilensky & Rand, 2015). Think of an ABM as a model built inside a computer representing more than one individual (i.e. an agent) interacting with other individuals along with relevant elements of the environment, in a simulation of the world unfolding over time. This is surely similar to the project at the heart of people-environment studies - which aims to understand dynamic transactions between people and their socio-physical setting. As Wapner et al. (1973) put it rather well: “Persons are not sticks moving under the impact of environmental stimuli. They construe and exploit their surroundings in terms of interests and motives, and act in terms of their definitions of situations” (p.272). Agents in an ABM respond to their individual situation and create aspects of the situations that other agents respond to. As such, for studies exploring dynamic person-situation interactions, the method is a great fit.

Moving to the applied world, computer simulation techniques developed for ABM allow policy tracks to be explored in a way that kind of allows us to speed up time. If we can find a way to simplify the important things we are trying to understand, then computers are incredibly fast at enabling us to explore the logical consequences of believing certain things to be true. So if a policy makes an assumption about human behaviour, a computer simulation model will be able to take that assumption and explore what this means if it is absolutely true (which is very rarely a reasonable assumption).

But in the years since, whilst working on projects using an ABM approach, I have realised that the need to dedicate time to understanding another disciplines approach and way of talking about things is a two way street. Sometimes there are language gaps that go unnoticed until the process of trying to formalise social science theory begins, as the collaborative effort I was involved in to discuss how to formalise social identity theory using ABM found (Wijermans et al., 2022). Even the word “model” means very different things to different disciplines.
A CAVEAT: TAKE THE TIME FOR REAL INTERDISCIPLINARY UNDERSTANDING

A large number of problems that environmental psychologists are trying to contribute to could benefit from considering taking an agent-based modelling approach. But this is no small undertaking. Complex problems require interdisciplinary collaborations, and interdisciplinary collaborations like this need to dedicate time to communicating well. Without a deep level of understanding between individuals from different backgrounds, there is always a risk that a surface level of understanding communicated out of politeness (e.g., the affirming “nod” of understanding one sometimes sees in project meetings) is not actually as robust as might be assumed. Environmental psychologists benefit from asking seemingly trivial questions of modelers (and asking again if the answer is not clear), and similarly, modelers need to put some pressure on environmental psychologists to be somewhat clearer in their efforts to construct theoretical ideas. These modelling approaches have huge practical value, particularly in their ability to represent “plausible futures” arising from different scenarios. However, to use these models well requires us to see ourselves as modelers. We should not leave the modelling to physicists, statisticians and computer scientists, any more than we should avoid using linear models because we are not trained mathematicians. As a fundamentally interdisciplinary endeavor, people-environment studies needs more theory, and we would benefit from embracing a computational social science approach in our quest to do this. This requires us to intentionally slow down. Gaining consensus around what to represent in an ABM, and then how to represent those things is a project in and of itself. Slowing down can feel uncomfortable though. I would suggest however that in many ways, interdisciplinary project should feel uncomfortable. The key is learning to sit with this discomfort and find ways to understand why it has arisen. Which takes time.

ACKNOWLEDGEMENTS

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References

The project focused on upgrading the existing social housing stock to reduce housing deficits and achieve positive social, health and financial outcomes for low-income residents. Using Living Labs as social innovations to communicate with key stakeholders such as residents, housing associations and local authorities, we developed solutions for targeted upgrading of a specific housing neighbourhood. We recognized the urgent need to improve communication between agents and users through appropriate tools. Therefore, we tested flexible approaches to adapt to the individual needs of the stakeholders involved in order to support decision-making in the social housing upgrading. In addition to surveys and interviews, we also used new visualization approaches, such as virtual reality, building information modelling and value cards. Based on a common conceptual and methodological framework and aligned research questions in a transatlantic nexus, each team analysed housing upgrading processes. Different approaches and tools were compared to identify commonalities and local specificities. The starting point of the project coincided with the Covid-19 pandemic, which hampered empirical research and international exchange in the field. Through intensive online-meetings, we kept each other informed about the research process. We conducted an elaborate scenario process that allowed us to obtain comprehensive information on the upgrading priorities in each country and highlighted the transatlantic divide. After the pandemic, we were able to visit the case study areas. We recognized the very specific political and climatic conditions in each of the four cases and the respective opportunities and constraints for upgrading the social housing stock according to the needs of the residents. Nevertheless, the importance of green spaces around the housing stock was evident in all cases. The residents emphasized their positive impact for health and social contacts. The international and interdisciplinary collaboration allowed us to learn innovative methods and gain new and unexpected insights into our research topic.

Partner institutions:
- University of Campinas, Dept. of Architecture and Construction, Brazil, Doris Knatz Kowaltowski
- Helmholtz Centre for Environmental Research, Dept. of Urban and Environmental Sociology, Leipzig, Germany, Sigrun Kabisch
- Delft University of Technology, Faculty of Architecture and the Built Environment, The Netherlands, Clarine van Oel
- University of Huddersfield, Innovative Design Lab, United Kingdom, Patricia Tzortzopoulos

Project website: www.fecfau.unicamp.br/~uvital

Project duration: 1/2020-6/2023

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References


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Examining the psychological and social drivers of unsustainable and sustainable consumption, this Concise Introduction provides an insightful overview of the causes of unsustainable consumer behaviour and the instruments and interventions needed to create a sustainable consumption pattern.

‘This Concise Introduction brings together expertise from consumer psychology and behavioural economics and systematically reflects on the drivers of unsustainable as well as sustainable consumption. Thøgersen gives a comprehensive overview for an interdisciplinary readership. He starts with evidence regarding the unsustainability of current consumption patterns, discusses the most relevant psychological models to understand consumption, and then gradually widens the focus to the societal context of consumption and the structural changes needed for the promotion of sustainable consumption patterns.’

- Ellen Matthies, Otto-von-Guericke-University, Germany

‘This short volume synthesizes research on the environmentally significant behaviors of individual consumers, drawn largely from psychology and behavioral economics. It offers readers from outside these fields useful insights into what shapes these behaviors and how they might be changed by applying research-based knowledge.’

- Paul C. Stern, Social and Environmental Research Institute, US

‘Pressures on the planetary boundaries are caused by the types and levels of consumption in a affluent societies. Based on 35 years’ research experience, Professor of Economic Psychology John Thøgersen has written an outstanding and scholarly book analysing antecedents, consequences, and countermeasures. The book should be read by everyone concerned about environmental issues.’

- Tommy Gärling, University of Gothenburg, Sweden
IAPS MEMBERS’ 2023 PUBLICATIONS

ARTICLES


• Kenward, B., & Brick, C. (2023, in press). **Large-scale disruptive environmental activism strengthened environmental attitudes in the United Kingdom.** Global Environmental Psychology. https://doi.org/10.23668/psycharchives.13225


• García-Mira, R. (2023), Resilience. In D. Marchand, E. Pol, & K. Weiss (Eds.). 100 key concepts of environmental psychology (pp. 119-120), Routledge


