Lost in Space?
Architectural Psychology - Past, Present, Future

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Environmental psychology as a scientific discipline originated in Europe. From 1904 to 1939, *Willy Hellpach* published contributions on nervousness and civilization, on people in modern cities, and on other environmental issues. With the forced emigration of *Kurt Lewin* and others, environmental psychology came to the United States. A scholar of Lewin, *Roger Barker*, did classical field studies on standing patterns of behavior and behavior settings in a small town of Kansas. American pragmatism and quality control were favorable to the new field, contrary to old Europe, where the number of specialists is still very limited, and evaluations rare.

Architectural psychology is the *psychology of built* (mostly urban) *environments*. In German-speaking countries, it is one ""old leg" of environmental psychology, the second one being *psychology of environmental protection*. A methodological review by Kaminski (1995) summed up five *perspectives* in environmental psychology - patterns of spatial distribution, everyday jigsaw puzzles, functional everyday action systems, sociocultural change and evolution of competence.

Having been used earlier in the United States (e.g. [1]), the term *architectural psychology* was used as title for a publication on the Strathclyde conference of 1969, and was introduced in Germany as a translation for "Bauwelt Fundamente" [2]. Another conference under this title took place at the University of Strasbourg [14]. Ten years ago, a German architectural data base analysis on architectural psychology listed 47 books and articles since 1976 [8].

Starting with Strathclyde, architectural psychology has come to age and passed its 25th birthday. Thus, a triangulation of its position, especially in Central Europe, seems interesting and necessary. A recent *survey* mainly on *university projects* in German-speaking countries [16] found a decrease of studies about the psychology of built environments. 25% of all projects were reported in a category which back in 1975 had made up 40%. This means that in the rapidly expanding field of environmental psychology (13 -uncoordinated!- workshops and poster sessions on environmental topics including only 2 on architectural psychology are registered for the Munich DGPs conference in October 1996), the proportion of built environment-studies *dwindles* relative to the environmental protection field. Günther, in his unpublished

survey of BDP (Association of Professional German Psychologists) *members*, found only a handful active in architectural psychology - mostly part-time, not full-time.

A discrepancy between the "high interest" displayed by planners and a very *low institutionalization* was noticed in Germany by Kaminski [11], and is even stronger in Austria, where no psychological institute exists at a university of technology (in Germany and Switzerland, there are several). Consequently, in 1996, Austria has only two full-time architectural psychologists both outside technical and arts universities.

Looking into the first *German handbook* of environmental psychology [15] published 3 years after the US Stokols & Altman handbook [17], you will see that *architectural psychology* is "*everywhere and nowhere*" - it comes to the surface in the editorial, under human geography, under phenomenology, the ecological optics of Gibson, and environmental representation. Not terminologically, but as a *background concept*, it is quoted in environmental cognition (part 5), space and motion (part 6), environments and users (part 7), special environment: the city (part 8) and environmental planning and design (part 9). When turning the pages, I had the impression that an interested architect trying to find the links between architecture and psychology must come to the conclusion that they are "lost in space". Main fields present in the 1990 handbook are *spatial and environmental perception* and the psychological implications of *housing*. Two books summing up German housing & psychology are from Flade [4] and Harloff [6]. Repeated research activities come from Tübingen, Berlin, Magdeburg, Darmstadt, Bern, Vienna and Salzburg.

How is the *international research situation*? Using the SSCI, PsycLit, Psyndex, ICONDA, BIP, VLB, DA and SOLIS/FORIS data bases, the author collected articles and books resp. -chapters on architectural psychology and related fields in German- and English-language countries mostly from 1990 to 1996 [19]. SSCI is the main social sciences data base issued by ISI (USA). PsycLit is produced by the American Psychological Association. Psyndex comes from Trier, and covers German-language research material. ICONDA is compiled at IRB Stuttgart, and a special planner and architecture data base. BIP stands for English-language books in print, VLB is its smaller German-language cousin. DA offers Dissertation Abstracts, and SOLIS / FORIS social & economic sciences.

Fifteen keywords were searched for in all data bases. Table 1 shows the results of 7 data bases [1]. What is no longer striking after our handbook findings - architectural psychology as term is almost non-existent, except in

ICONDA. Again we have to notice that most of architecture & psychology sails under other flags. Looking for psychology and architecture, you can find more under housing quality or built environment*. Checking the SSCI entries for "architectural", it was found that from 1991 to March 1996, 37 research articles were covered, of which 6 (15,4%) were from psychologists on psychological topics (design process, legibility, architectural preference / education). This is not bad compared to the new field of virtual reality where, in the same time, only 2 of 34 research articles (5,9%) were from psychologists. One of the two was published in Japanese language.

Keyword	SSCI	PsycLit articles	PsycLit books	Psyn-dex	ICONDA	BIP	DA	Sum
architectural	116	96	96	48	>1000	1331	976	>3000
architect. psychology	0	0	0	3	14	1	0	18
design & psychology	9	1	1	0	171	0	0	182
simul. & psychology	2	2	2	0	7	0	0	13
simulation research	2	5	5	2	-	35	6	(55)
housing quality	10	8	8	8	127	10	10	181
urban quality	1	2	2	5	12	41	0	63
full-scale model*	0	1	1	0	15	2	2	21
built environment*	40	22	22	2	297	46	89	518
post-occup.evaluation	0	3	3	1	52	0	5	64
user needs analysis	0	0	0	0	24	0	0	24
space perception	6	23	23	22	4	43	3	124
spatial simulation	0	1	1	0	0	1	4	7
spatial quality	0	0	0	1	8	4	0	13
virtual reality	84	26	26	10	49	113	1	309

Table 1. Prevalence of 15 keywords in 7 data bases.

Coming from the planners' side, the ICONDA data base registered 14 entries on *architect(ural) & psychology* from 1976 to July 1996. Five came from architecture journals, two were books written/edited by psychologists (Canter, Geisler), two were meeting reports (Strathclyde, Strasbourg) and only one a psychological research article. Apparently, the filter of ICONDA did not let in very much. In comparison, 49 entries on *virtual reality* were listed, 33 of which came from the USA.

As this contribution is related to *full-scale modeling*, it is of great interest how much of international research work is present in the data bases. The answer is brief regarding SSCI - no entry. Even the broader search range of *simulation* produced almost a blank. 15 entries were found at ICONDA, with

a focus on technical simulation - 3 times aerodynamics, 6 times engineering and seismology (e.g. on offshore drilling platforms), but also 3 full-scale reports from Denmark and England.

The studies found by the data base search do not outline an "old, settled" discipline, but rather the sketchy, random, arbitrary surface of a field always "starting anew". As a recent example, discussions at the 2nd EAEA conference (1995) showed that several good architectural simulation studies since 1973 caused no major impact upon planner's opinions and were almost unknown [13]. This weak tradition is also due to a lack of review articles, handbooks and other compendiums - major sources are Kaminski [9], Korosec-Serfaty [14], Geisler [5], Flade [4], Kruse, Graumann & Lantermann [15], and Fischer [3]. The connections to health psychology were monitored by Keul [12].

"Re-inventions of the wheel" are also caused by the lack of joint meetings (except the 6th EFA conference 1996, of course) and of interdisciplinary infrastructure in German-language countries (contrary to the United States). Organizationally, IAPS in Europe does not play such an integrating role as EDRA in the USA. Social pressures building up on architecture nowadays by inter-European competition, citizen activities and wishes for informed consent in most urban projects should not result in drawbacks of interdisciplinary efforts, but form a new challenge for urban planners to cooperate efficiently with social scientists. A working group for architectural psychology (Keul-Martens-Maderthaner) has been active since 1994 and produces a quarterly German-language newsletter ([Orts:Sinn]) that goes to 240 people. A promising project is currently running at Salzburg - the Chamber of Architecture for Upper Austria and Salzburg ordered an image study on self-image and external image of the architect by the public, the media, and decision makers.

References

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[16] Stokols, D.; Altman, I. (Eds.). *Handbook of Environmental Psychology* (2 Vol.). New York: Wiley, 1987.

[17] 1280 Entries obtained from 6 of the 8 data bases (except the DA and the -blank- SOLIS-FORIS search) are available on 3.5 inch disk at the Univ. of Salzburg, Insitute for Psychology, Hellbrunner Straße 34, A-5020 Salzburg.