*design practice • user experience • professional values • architectural quality*

# Architects' Attitudes Towards Users: A Spectrum of Advocating and Envisioning Future Use(rs) in Design

**Valerie Van der Linden (1)**
**Hua Dong (2)**
**Ann Heylighen (3)**

*Abstract*
As designers of people's living environments, architects are committed to deliver 'good' designs, but whose appreciation is considered here may differ. Perspectives range from architects themselves or their professional community over a particular client to society at large. Due to the increasing complexity of design processes, however, architects may not have direct access to users' perspectives. This article explores what underpins architects' constructions of the people they design for, drawing on an ethnographic study in three Belgian architecture firms. Interviews with architects shed light on their motivations and reasoning regarding responsibilities towards users. Additionally, observations of design meetings illustrate the visions in play when architects reflect-in-action about future use(rs). Results show a spectrum of attitudes, affecting how the presence of 'the user' is shaped in design. The insights are useful for developing strategies to support architects in accommodating, negotiating and acting more consciously on user experience in design.

**Affiliation**
**KU Leuven, Department of Architecture (1, 3); Tongji University, College of Design and Innovation (2)**

**Contacts:**
**valerie.vanderlinden@kuleuven.be (1)**
**donghua@tongji.edu.cn (2)**
**ann.heylighen@kuleuven.be (3)**

**Received:**
**06/03/2017**

**Accepted:**
**15/09/2017**

**DOI:**
**10.17454/ARDETH02.12**

**ARDETH#02**

*Introduction*

Since ultimately architecture exists by the grace of its inhabitants, the user is often put forward as a measure of 'good' design (Cuff, 1992; Vardouli, 2016). As designers of people's living environments, architects are committed to deliver 'good' designs, but what is considered here is not per definition users' appreciation. Due to the different requirements and the constellation of stakeholders involved, design processes are growing increasingly complex. Consequently, architects often do not have direct access to users' perspectives, although taking these into account is recognised important in design (Sleeswijk Visser, 2009). As users' position is pushed back, the floor is open for other actors to make claims about use-related qualities in architecture. The question emerges: how do users feature in the architects' design process? One way of addressing this question is to investigate the sources that architects draw on to know about users – an objective of the overall project comprising the study reported here. If we are to understand how this knowledge features in the design process, however, we argue that it is also important to gain insight into architects' particular personal or collective attitudes as underpinning knowledge adoption. Therefore, this article aims to empirically explore architects' attitudes towards the people they design for.

As designers of people's living environments, architects are committed to deliver 'good' designs.

Therefore, this article aims to empirically explore architects' attitudes towards the people they design for.

First, the background section summarizes related literature on architects' constructions of 'the user' and the role of (professional) value and attitude in design. Next, the methods section introduces the empirical research set-up, encompassing an ethnographic study in three Belgian architecture firms. The subsequent results sections zoom in on architects' perceptions of users' and their own position in design as well as their visions and shaping of future users, as such combining reflection-on-action with reflection-in-action. The final section concludes with implications of architects' attitudes in shaping the presence of 'the user' in design.

*Background: 'the user', values & attitudes in design*

'The user' is not an uncontested term for referring to the people that interact with a design – in the case of architecture: a building or space. It is often considered problematic because of its link with pragmatism and rationality (Hill, 1998, p. 2) and criticised for its

tendency to reduce people to a functional object (Lefebvre, 1991). However, the term is commonly used to distinguish from the category of the client, e.g., in architectural participation (Till, 2005, p. 30), and appreciated for its implication of 'positive action' (Hill, 1998, p. 2).
'The user' could be regarded as 'a historically constructed category of twentieth-century modernity that continues to inform architectural practice and thinking in often unacknowledged ways' (Cupers, 2013, p. 2).
In the functionalist paradigm, which is still frequently referred to by architects today, architects were considered the designers not only of people's living environments but also of their actual practices of use.

> Modernist rhetoric waxed eloquent about the needs of users. It represented architecture as the vehicle of social welfare and set public housing at the highest priority of architecture. But there was no question of consulting with the user of housing estates during the course of their design. No one bothered to explain why, since the picture was too obvious. Users were not a stable or coherent entity. And users did not know what they wanted or, more importantly, what they *should* have. Their collective needs, interpreted by the architect and the sponsoring agency, would be codified in the 'program' – as had been the case with hospitals, schools, and prisons in the past. (Kostof, 1989, p. xiii)

The claim that architects have the authority to determine future use relates to the topical discussion on the architectural profession's 'autonomous' position (Imrie and Street, 2014). Studies found a strong sense of identity and autonomy in architects' self-understanding, resulting in persuading clients as opposed to being at clients' service (Kornberger, Kreiner, Clegg, 2011) and in a self-referential architectural design process focussed on order and purity, pushing out the contingencies of people's everyday life (Till, 2009).
What architects consider as architectural quality and ideal use resonates with the values propagated by the contemporary paradigm in their professional community. In this article, we follow Le Dantec and Do's definition of 'values' as "the *principles, standards, and qualities that guide actions*. These may be personal, cultural, or professional' and 'are the *underpinnings* for design judgements" (ivi, pp. 122-123). Literature

What architects consider as architectural quality and ideal use resonates with the values propagated by the contemporary paradigm in their professional community.

highlights the role of professional values in the service architects provide, as this service relates to their professional reputation. Architects watch closely over their values, and try to realise them often at the cost of profit and sometimes even of use values (Bos-de Vos, Wamelink, Volker, 2016).
When constructing their image of future users, several studies found, architects use their own experience as a main reference (Cuff, 1992; Imrie, 2003; Verhulst, Elsen, Heylighen, 2016). However, given the social nature of architectural practice, other parties (e.g., clients and other stakeholders) bring their conceptions to the drawing table as well. Consequently, architects can struggle with conflicting (societal) visions. In the context of designing care buildings, for example, they are found to assemble predominant care visions with innovative ones (Buse *et al.*, 2017).
Besides diverging visions, incoherence may result also from the practical application of architects' image of future users. Since certain aspects of 'the user' are only explored in relation to certain design issues, assembling these characteristics may yield an imaginary user rather than a realistic user: a puppet-like model that is ascribed features and further manipulated along the way (Verhulst, Elsen, Heylighen, 2016). This resonates with sociological research in other design disciplines, where the users figuring in designs have been described as an 'assemblage' resulting from multiple voices in the design process (Wilkie, 2010).
The abovementioned literature suggests that architects and their professional environment play a significant role in constructing 'the user' who will be considered in design. We will use the condensed term 'attitude' to refer to architects' personal position (e.g., towards users) in their professional work, shaped by personal values and convictions, those of the firm, the larger architectural community, the client or other stakeholders. As design ultimately revolves around judging the appropriateness of imagined solutions (Schön, 1984; Le Dantec, Do, 2009; Lloyd, 2009), this attitude frames the direction of the design.

However, given the social nature of architectural practice, other parties bring their conceptions to the drawing table as well.

Because the description of a design problem does not contain sufficient information to resolve it, the attitude in which it is approached strongly determines how the problem is understood and thus how it will be resolved. (Heylighen, 2014, p. 1362)

*Methods*

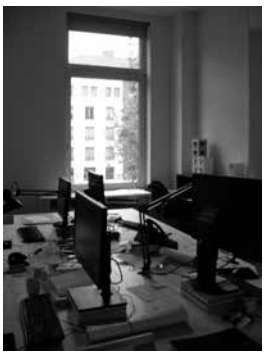
In order to bring to the surface those personal and collective attitudes, the research presented in this article applies a social-constructivist lens to studying architectural practice, implying that meaning is co-constructed in dialogue with participants. Starting from an understanding of design as situated in and distributed across a socio-material environment (Le Dantec, 2010; Heylighen, Nijs, 2014), we adopted an ethnographic research approach, situated in this daily design environment. Through this methodological position, the research inscribes itself in the practice turn, pioneered by Cuff (1992) and recently gaining more support in studies of professional cultures like those involved with conceiving and producing architecture (e.g., Yaneva, 2009; Pink *et al.*, 2010).

Insights are gained through an ethnographic study in three diverse, renowned architecture firms in Belgium. The first author visited each firm during a six-week period, studying four to five of the projects on which architects were working at the time. This resulted in almost 400 hours of observation and 16 in-depth interviews[1] (most with architects, some with project partners or clients), encompassing both what architects say and how they act. Table 1 displays details about the firms involved and data collected. The firms and projects were chosen to cover a broad range of project types and procedures. For a more elaborate motivation and description of the research methods and their relation to the findings, we refer to a methodological paper based on the study in the first firm (Van der Linden, Dong, Heylighen, 2016a). The overall analysis focused on architects' 'designerly ways of knowing' (Cross, 1982) about users, mapping the socio-material mediators in architectural practice. Below we only address the particular aspect of architects' attitude towards users, which came to the fore as an important facet. Findings are illustrated with visual design materials and with quotes from the interviews (transcribed verbatim) and excerpts from observations (based on field notes), translated from Dutch by the authors. For reasons of confidentiality, names have been replaced by pseudonyms.

**1 - One of the interviews (at ArchiSpectrum) was conducted in the context of an earlier exploratory study (see Van der Linden, Dong, Heylighen, 2016b). Because of its relevant and complementary content (offering an additional perspective), it was included in the data set.**

The first author visited each firm during a six-week period, studying four to five of the projects on which architects were working at the time.

**Table 1. Overview of the firms and data collected during the study**

| | Canvas Architects | studio: ratio | ArchiSpectrum |
|---|---|---|---|
| *firm details* | 6 architects | 9 architects | 100+ collaborators |
| | Ghent | Brussels | Brussels + 2 other locations |
| *data collection* | 128h observation | 129h observation | 139h observation |
| | 6 in-depth interviews | 5 in-depth interviews | 5 in-depth interviews |
| | fall 2015 | fall 2014 | spring 2016 |
| *main projects followed* | - cultural facility<br>- housing for people with a mental impairment<br>- housing for people with dementia<br>- single-family house with office space | - town hall<br>- residential care facility for people with dementia<br>- intergenerational housing<br>- senior housing<br>- social housing | - leisure facility<br>- housing with care facilities<br>- social housing<br>- mixed project (schools, leisure & housing)<br>- mixed project (town hall, retail & housing) |
| *workplace impression* |  |  |  |

*Architects reflecting on their relation with users*
*Users' position in design*

The architects participating in our study showed a range of different attitudes concerning users' position in the design process. At the one end of the spectrum there were architects who saw no point in consulting users. One argument behind this viewpoint was that in several projects the people accessible for consultation are not the actual future users. For example, an architect at studio: ratio remarked in an interview

that the residential care facility they were designing would accommodate new residents and staff members, so he deemed consulting the users of the client's current facility irrelevant. Another argument, stated by several architects, was that involving users in the design process is a hassle and (therefore) produces few valuable insights. The observations confirmed that direct user participation was not part of the architects' general way of working. Some architects who had tried it out were rather sceptical about it.

Experience teaches that one doesn't learn a lot from residents. Right. [...] It's a bit of a phantasm that if you ask people what they want, that you'll have a good decision. [...] This whole system of norms, there's no way round it. But that's something residents for example *don't* get. So I think there's little point in asking, because it's just wasted time. [...] So in all honesty, the resident consultation here was just to make people feel involved [...] [and] very well-informed.

– architect at ArchiSpectrum (interview)

The architects participating in our study showed a range of different attitudes concerning users' position in the design process.

In [one of our school projects] we wanted to have such a participatory process, that we would really work *with* the teachers [...] And [that meeting with the teachers] turned out to be complete chaos [...] and I thought 'this is a hopeless task'. It was extremely difficult to have a discussion with primary school teachers about architecture or about working. [...] The participatory [element] was more in this value of engagement, rather in a kind of intellectual satisfaction than [in providing] input for us.

– partner at studio:ratio (interview)

Involving users in the design process is a hassle and (therefore) produces few valuable insights.

Most architects showed little enthusiasm for end-user participation. Several remarked that it would take too much effort and saw it as 'yet another thing' for the already overburdened architect. Beside this predominant, negative stance towards direct user involvement, most architects were open towards receiving use-related information in an indirect way, especially about daily activities or operation and its spatial implications. In most cases this was achieved through professional representation of users, e.g., by the client. Often architects indicated that it is the client's task to define the programme in terms of future use. In case of (public-)private projects it was also deemed

the developer's task to figure out who the public is. Clients' expert knowledge was highly valued by architects and seemed to be experienced as a way to speed up the process (as compared to studying user requirements themselves). Architects were generally aware that the end-user perspective was often missing, but the absence from the process of users and their voice was not really questioned.

Architects were generally aware that the end-user perspective was often missing, but the absence from the process of users and their voice was not really questioned.

A few other architects did try to expand the range of users involved. Some saw it as their task to guide the client throughout the process, which could involve stimulating the client to investigate their own question. A project director at ArchiSpectrum, for example, mentioned that she often suggested clients to organise a workgroup in order to involve users' perspectives. In some cases, architects set up small informal studies, trying to talk to end-users themselves. Convinced of the relevance of any different perspective than their own, these architects are situated at the other end of the spectrum concerning users' position in design. At ArchiSpectrum, for example, the head of interior architecture found it difficult to fill in all the options based on his own judgement and therefore preferred a sounding board with actual users during the design process. Another example is an architect and partner at Canvas Architects, who slept over in a house for people with dementia in order to understand the context of their design.

An architect and partner at Canvas Architects, slept over in a house for people with dementia in order to understand the context of their design.

The examples show that although firms can have a particular view, positions may differ between individuals. This differentiation is also illustrated by the observation of a (lasting) conflict between an architect and intern at Canvas Architects. When the intern commented that asking people what they want does not make sense, since architects know better, the architect was shocked and commented that this was a very arrogant attitude, especially for a novice.

*Responsibility in representing absent users*

When users are absent during the design process, positions differ regarding the extent to which architects feel as the users' representative (e.g., towards other parties). Whereas some architects (especially partners) rework the project definition based on their own vision (see *Vision as a Guiding Principle*), we mentioned that most architects indicated it is the client's task to define the programme in terms of future use.

These architects then consider it their responsibility to answer the question as best as they can, putting to work their architectural repertoire.

I've also had discussions about this in the firm. I'm having problems with developing a programme as an architect. Well, of course it depends from person to person and also on your training. [...] And I think, well it's purely my own opinion, I prefer to depart from a programme laid down by the client. [...] that's what *I* see as my task as an architect. [...] I'm working with volumes and architectural details.

– architect at studio:ratio (interview)

Nonetheless, during design meetings, even these architects were observed formulating numerous suggestions regarding use. In a housing project, for example, the architect cited above strived for an enclosable kitchen as a separate spatial entity from the living room, which he saw as a quality for the future inhabitants. This was however against the wish of the developer who preferred a simple kitchen block against a living room wall in order to cut costs. In general, architects seemed to have clear ideas about such qualities, but had difficulties in putting them forward in discussions.

Whereas we observe that all architects involved in our study defend architectural qualities for the benefit of users, the degree of passion they show in advocating future users differs. This seems to relate to how they perceive their own and users' positions in design. Especially the head of interior architecture at ArchiSpectrum had very strong feelings about his responsibility as a user representative, attaching great importance to realising his professional 'promise' towards users. This meant checking colleague architects' concepts from the users' perspectives, as well as promoting the client's interests in front of developers or contractors.

We observe that all architects involved in our study defend architectural qualities for the benefit of users, the degree of passion they show in advocating future users differs.

Sometimes I'm in conflict with developers who say "*shh*, shut up, you're not saying anything, right, don't start off on that". [...] You're building [a school] and then you're like "*mm*, there's a storage missing here", or weird decisions, [let's say] the sanitary is on one level. I say "hold on guys, we're building three storeys on top and there's not a single toilet. If one of those kids has to go to the toilet, where should he go?

Should he go all the way downstairs, all alone? We're going to provide some sanitary, right?". When you're saying this, [they're like] "yeah, that wasn't foreseen, right, they *didn't* ask, *so*". But then I'm like "they *didn't* ask? *(bangs on the table)* Where is our responsibility?(!)" [...] You cannot blame a client for inexperience. He might be inexperienced, but it's our responsibility to help him.

– head of interior architecture at ArchiSpectrum (interview)

Architects' engagement seemed to enhance through a closer relation to users. This was for example highlighted by one of the Canvas Architects who spent two days among people with dementia in order to understand their situation (see *Users' Position in Design*).

Anyhow you're becoming really concerned with that project. If you're there [among people with dementia] for two days, it gets under your skin. Well, I mean, I'm certainly going to stay with [Canvas Architects] until the project is realised, so, yeah, because I, yeah, it really leaves a mark on you [...] I think it's an awfully beautiful project.

– architect at Canvas Architects (interview)

*Architects in action: envisioning future use(rs)*
*Vision as a guiding principle*

The architects participating in this study aspired great ambitions (aesthetical, societal, sustainable/ecological...), usually surpassing that of the client. "We don't want to do literally what they're asking for either. I think we should offer the potential they're not seeing promptly", an architect at Canvas Architects explained. Several architects thought they had a better idea than what was suggested in the brief, and saw it as their task to present this added value.

Of course we've made suggestions about how [the project] can be *more*, or what we think are other action areas in the building [...] so we have an even more ambitious view, I think.

– partner 2 at Canvas Architects (interview)

Architects' vision is obviously dynamic, and can be stimulated by their architectural community.

This vision is not necessarily project-specific, but can come to the fore as themes that are being reprised in different projects across the architects' repertoire. Architects' vision is obviously dynamic, and can be stimulated by their architectural community. In Flanders, the Flemish Government Architect (FGA) team outlines the

frame for many public projects. Studio:ratio mentioned that the FGA expected a certain 'pilot value' in their care project, pointing out a future direction for architectural practice. In another project, Canvas Architects had to combine the client's project definition with a higher-level ambition put forward by the FGA.

It's important to get this context and other opinions, in order to get your own position clear: what am I doing? and where do I want to get? and why do I do things? [...] how are we going to realise that and how is that compatible with the project definition and so on. Because actually, the client himself is not interested in this. Wait, maybe that's jumping to conclusions a bit. He *is* interested, but it can in no way endanger the operation or cost-effectiveness of his site. So you as an idealist or utopian architect can come up with all sorts of ideas, but in the end you need to get it operational on the site [...] actually it should be an added-value for the client.

– partner 1 at Canvas Architects (interview)

Architects' vision is not only a matter of personal affinity, conviction or ambition, it also creates a generative concept to frame or assess design decisions. At ArchiSpectrum, for example, the project directors usually draw up a project definition based on the values of the firm. When this vision results in a position that is strong enough to defend against all other parties, it has the potential to transcend or reconcile conflicting questions. Often architects' vision was translated in very particular ideas about how the design ought to be used. In order to be successful, however, this requires a match with the actual use practice.

Architects' vision is not only a matter of personal affinity, conviction or ambition, it also creates a generative concept to frame or assess design decisions.

Sometimes it's a potential that's in the project that's not always coming out completely, due to the use or whatever reason. We've got a passive school, for example, which has a part opened for the neighbourhood to use, where we say: imagine that you open up *more* of the school, then that would mean an improvement or enhancement of this societal value, but it would also mean an enhancement of the economic value, because you invested in a passive building and this investment returns more if you use the building more. Yes, that's how the values reinforce each other. But it's not always evident.

– partner at ArchiSpectrum (interview)

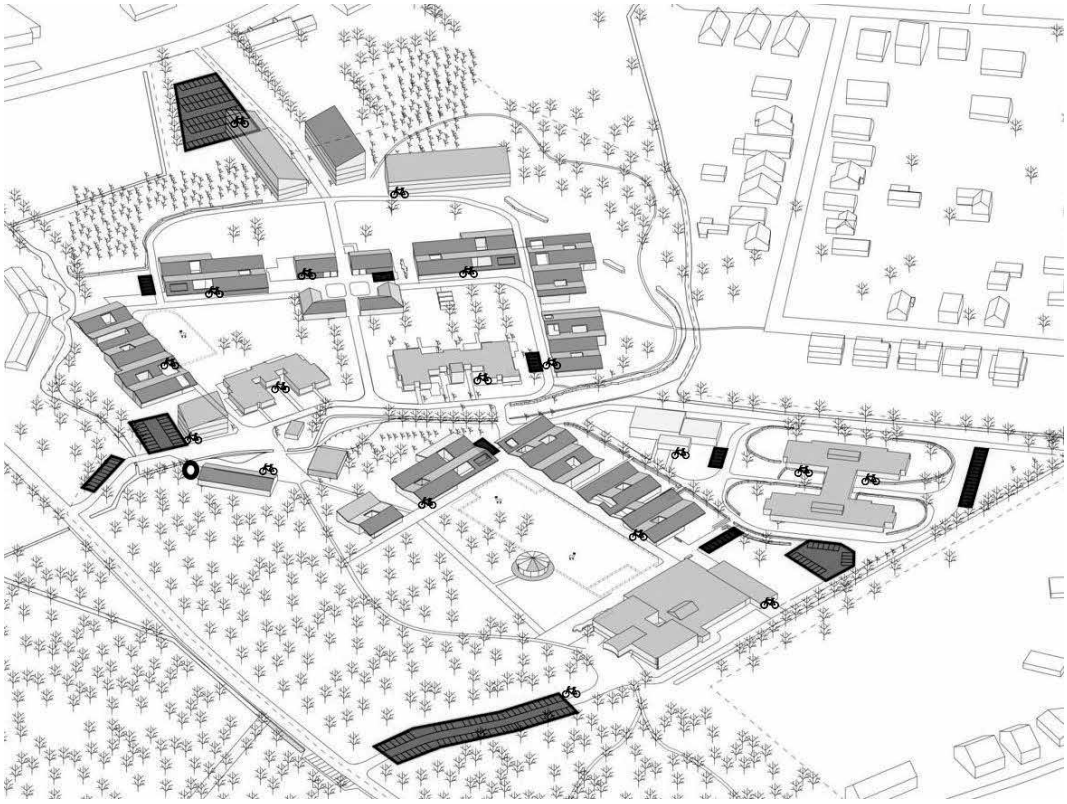


Fig. 1 - Site plan demonstrating the mobility in a sheltered housing facility. The architects proposed parking lots for the staff (outlined) at the outskirts, as opposed to parking spots for visitors (dark grey) close to the houses and omnipresent bike parking spaces (bike symbol), suggesting on-site staff mobility by bike. © Canvas Architects

Architects' vision can also lead to a desire to change current practices and questions or requirements formulated by the client. In a housing project for people with a mental impairment, for example, Canvas Architects tried to keep the staff parking and road for small trucks away from the vicinity of the housing units (Fig. 1). This sparked an ongoing discussion with the client about the aspired intimate and green atmosphere for the residents as opposed to the practical operation of the site, which architects had lost track of, according to the client.

It's amusing that you think differently, but this goes too far: we've already told our people we're abandoning the central corridor in favour of scattered houses, but a village without access?(!)

– client (observation)

*Shaping future use(rs) in design*

A discussion with the client team regarding future use, like the one described above, provides a particular occasion for architects to explicitly envision,

negotiate and design use-related aspects. To continue this example from the observation: the client team and architects subsequently explored together different use scenarios, such as picking up a resident and doing the tour with a food cart. In such situations the client clearly plays a key role in shaping future use. In light of the aim of this article, it is interesting to look also at architects reflecting on users by themselves. The examples below give an idea about whom and what kind of experience they discuss in different situations.

When making statements about use in design meetings, architects seemed concerned most often with how (the dimensions and materialisation of) the design would be perceived: e.g., whether people will like it, whether it will be legible, and what people will associate with it. Utterances like the following were frequently observed:

- "if you're standing here, how do you experience that? [...] I'm worried about this view" (architect at ArchiSpectrum);
- "if I'm driving round the park and want to have an apartment there, and I see there's a construction site, it has to be better than the rest" (partner at ArchiSpectrum).

The abovementioned examples suggest that architects refer to their own experience. The following examples make even more apparent how they adopt self-reference as a dominant strategy when thinking about future use.

- In a discussion about the mobility in 'an alley' on the site in a small rural city, one architect at ArchiSpectrum stated that he wanted to be able to reach the houses' front door by car, "to drop off my crates of Orval [Belgian Trappist beer]", to which another architect reacted that "cars are so passé", which clearly related to his own situation of living in the Brussels metropole without possessing a car (Fig. 2).
- In an early design meeting about a housing project observed at studio:ratio, one of the partners saw a terrace as a 'basic quality', whereas the intern personally preferred a large openable window over a small terrace.

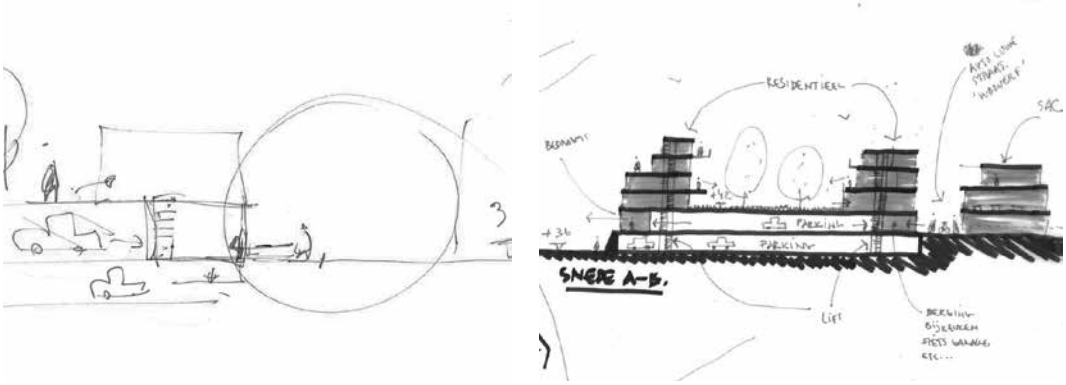


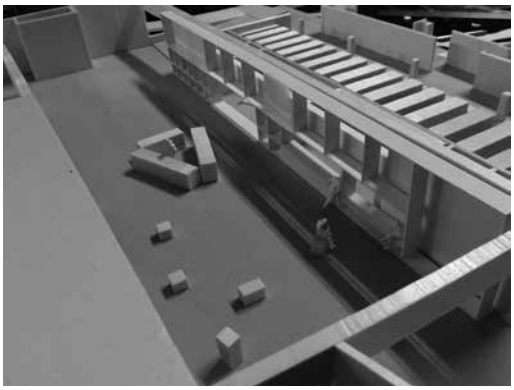

Fig. 2 - Sketch sections made during a design meeting about a mixed programme project to explore the status of 'the alley'. The left sketch highlights this alley as an entry to a lower layer of dwellings. The right sketch elaborates on this. After some scribbling that reflects the discussion, the architect annotated 'low-traffic street – home zone'. © ArchiSpectrum.

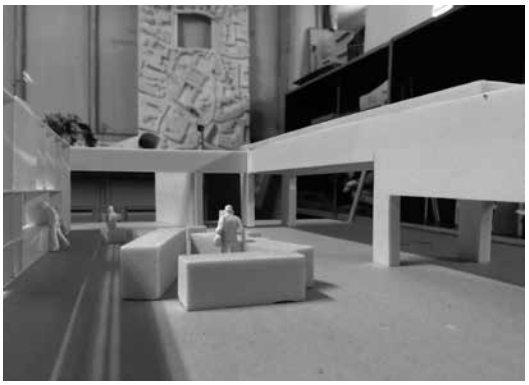
- Also during a group discussion about the scenography and refurbishment of a cultural building, the architects at Canvas Architects imagined themselves as visitors: "you feel small", "I wouldn't know where to go". However, when considering the staff of the cultural facility, they acknowledged that they needed more information about the practical operation (e.g., on the position of the entrance desk, the lines of crowd, the ticketing affairs) (Fig. 3).

We observed very little explicit attention being paid to the diversity of users. This may relate to, on the one hand, architects' practice of shaping users after their own image, and on the other hand, a predominant conception of architecture serving a general (abstract) public – implying the unnecessity to particularise 'target groups'. Some architects did state that they tried to differentiate this future public, however, the resulting subcategories were often also rather general.

> The broad, wider context is very important at the start of a project. So we have to take into account all users. For example a care project: it's not just for the older resident who comes and lives there, but also for the caregiver, for the visitors, for the people from the neighbourhood who pass by. So that fits the societal value we attach great importance to.
>
> – project director at ArchiSpectrum (interview)

The most concrete user images featured in projects where the client had an existing building in use, and especially when there was a clear 'target group'. In Canvas Architects' housing project for people with a mental impairment, for example, the particular perspective and needs of this 'target group' were often considered. At





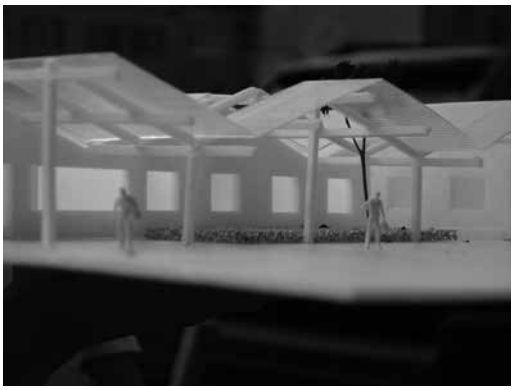


Fig. 3 - Sketch model of the entrance area of a cultural facility. It features loose foam elements representing furniture (e.g., mocking up an entrance desk) that were used to explore use scenarios of how people would work in or visit the building.
© Canvas Architects

Fig. 4 - Sketch model of a dwelling unit in the sheltered housing project. The architects were very much concerned with how the space under the pitched roofs would be experienced by the mentally impaired residents and tried to anticipate this through model-making.
© Canvas Architects

one stage, when discussing the (roof) structure, architects were squatting on the ground to see the model on the table at eye level and imagined the residents' perception, which they explicitly differentiated from their own.

> The high ridge in the rooms is too high. Usually it's nice to have varying heights, but for those people, I don't know. For those people, it's the intimacy of space that counts, I think.
> – partner 2 at Canvas Architects (observation) (Fig. 4)

The observations bring to the fore a gamut of use-related qualities that architects consider themselves and subsequently project onto users as their wishes, including (in random order): sustainability, orientation, light, independent living, accessibility, non-stigmatisation, view on activities, relation with outdoors/nature, intimacy, hominess, novelty, mobility, (historical) context, openness, activation, care vision, materiality, architectural detailing, and community.
Whereas these aspects stimulate reflections about use(rs), other factors are in play that are rather limiting to envisioning future use(rs). Architects them-

selves reflected that thinking about users was often limited by economic constraints.

- In a mixed project with housing observed at ArchiSpectrum, for example, the thick layer of earth needed for planting trees in the gardens that were foreseen on top of an underground parking, turned out to be too expensive. So architects compromised their initial vision and concluded that the garden would rather be like lawns and that residents would have to use planters instead.
- At another project observed at ArchiSpectrum, the landscape designers from a partnering firm remarked laughing that they were amazed to see architects starting off a project with a grid of a parking lot as an underlay. This is another clear example of economic aspects dominating reflections about future use, since the structure defines the project cost.

Besides economic aspects, also political ones can be decisive.

Besides economic aspects, also political ones can be decisive. Architects were often observed fearing the reactions of people from the neighbourhood who could block a project. Also ever-present in architects' minds during design were the competition's jurors (and by extension the people they are accountable to), being the ones who had to be pleased and convinced. Consequently, design representations were often thoroughly thought through in terms of the messages they


Fig. 5 - Draft render of a mixed programme project (including a school), with annotations by an architect suggesting changes concerning use(rs) to be made by the external renderer.
© ArchiSpectrum

are conveying, which also includes the people populating them and the activities they perform (Fig. 5).

*Discussion and conclusions*

Recognising the situated, distributed and encultured nature of design, the present study examined architects' attitudes towards users as an aspect to better understand how knowledge about users features in the design process. To this end, it combined a focus on (professional) values in architectural practice with a focus on user experience in design and highlighted their intertwining. The findings suggest that prevailing ways of understanding architects' (lack of) attention to user experience deserve nuance and that efforts to support this attention should take into account the diversity of attitudes.

First, the results suggest a link between architects' attitude towards users and what architects perceive as their own role and added value in the design process. On the one hand, there were architects who dig deeper to find motivations underlying a question in order to provide a better answer. They contrasted with those who aspire to realise the esthetical or technical maximum in answer to a project definition they take more or less for granted. Whereas the former seemed more open to a more prominent position of users, to advocating their needs and including them in the design, the latter seemed more inclined towards an autonomous position of architects.

The results suggest a link between architects' attitude towards users and what architects perceive as their own role and added value in the design process.

This reveals a spectrum of attitudes concerning the positions of users and architects in design. Firms can take a position on the spectrum, in line with their professional vision, as much as this positioning is a matter of individuals taking a personal stance. The often voiced critique that architects hold on to their autonomous position (cf. Till, 2009; Kornberger, Kreiner, Clegg, 2011; Imrie, Street, 2014) should thus be nuanced, since we observed a range of attitudes and initiatives – that moreover can alter with the dynamics in a design process. Our findings suggest that user experience actually is often on architects' minds, but that this attention is put into practice in very different ways. Since the study was limited to a period of observations and interviews in three firms, it could not look into the dynamics and

This reveals a spectrum of attitudes concerning the positions of users and architects in design.

implications of architects' attitudes during the longer course of a project, nor into managerial or organisational strategies in architectural practice at large. Future research in these directions could contribute to supporting architects in aligning and anchoring such values with/in their way of working.

Another important observation is that what architects understand as architectural quality concerns aspects relating to user experience.

Another important observation is that what architects understand as architectural quality concerns aspects relating to user experience. This was touched upon only briefly in the study as architects were mainly prompted for their ways of knowing about user experience. Investigating this link content wise thus requires more research. If we look at the origins of this understanding, architects' professional ambition to realise quality seemed to relate to what their professional community puts forward as quality. This is a dynamic process, as the professional community (in this case often embodied by the Flemish Government Architect team) continuously re-evaluates what good architecture is, and what topics architects should address (Cuff, 1992; Styhre, 2011).

The results also highlight the very indirect position of users in the design process.

Finally, the results also highlight the very indirect position of users in the design process. The fact that users are rarely consulted does not necessarily mean they are not considered, but it does have important implications for architects' constructions of users, which become very dependent on their values, sources and imagination. In general, users and their experiences are addressed in a fragmented and instrumental way and are rarely made concrete and explicit. Hence, it is possible that architects who are motivated to realise qualities that benefit users work with abstract user images. Condemning these architects for the absence of explicit users in their design (Imrie, 2003; Verhulst, Elsen, Heylighen, 2016) may do them injustice. However, these architects may subsequently encounter difficulties in putting their ambitions forward, since the intangibility of user experience makes it hard to argue for, especially against more technical aspects and with other stakeholders (Van der Linden, Dong, Heylighen, 2017). Therefore we conclude that making user experience more tangible is a promising direction for future work, as it could help architects in exploiting use-related qualities in their design and in negotiating them with other stakeholders.

*References*

Bos-de Vos, M., Wamelink, J.W.F.H., Volker, L. (2016), *Trade-offs in the value capture of architectural firms: The significance of professional value*, "Construction Management and Economics", 34 (1), pp. 21-34.

Buse, C. *et al.* (2017), *Imagined bodies: architects and their constructions of later life*, "Ageing & Society", 37 (7), pp. 1435-1457.

Cross, N. (1982), *Designerly ways of knowing*, "Design Studies", 3 (4), pp. 221-227.

Cuff, D. (1992), *Architecture: The Story of Practice*, Cambridge, The MIT Press.

Cupers, K. (2013), *Introduction*, in Cupers, K. (ed.), *Use Matters: An alternative history of architecture*, London, Routledge.

Heylighen, A. (2014), *About the nature of design in universal design*, "Disability and Rehabilitation", 36 (16), pp. 1360-1368.

Heylighen, A., Nijs, G. (2014), *Designing in the absence of sight: Design cognition re-articulated*, "Design Studies", 35 (2), pp. 113-132.

Hill, J. (1998), *Introduction*, in Hill, J. (ed.), *Occupying Architecture: Between the Architect and the User*, London, Routledge, pp. 1-8.

Imrie, R. (2003), *Architects' conceptions of the human body*, "Environment and Planning D: Society and Space", 21 (1), pp. 47-65.

Imrie, R., Street, E. (2014), *Autonomy and the socialisation of architects*, "The Journal of Architecture", 19 (5), pp. 723-739.

Kornberger, M., Kreiner, K., Clegg, S. (2011), *The value of style in architectural practice*, "Culture and Organization", 17 (2), pp. 139-153.

Kostof, S. (1989), *Foreword*, in Ellis, R., Cuff, D. (eds), *Architects' People*, New York, Oxford University Press, pp. xi-xix.

Le Dantec, C.A. (2010), *Situating design as social creation and cultural cognition*, "CoDesign", 6 (4), pp. 207-224.

Le Dantec, C.A., Do, E.Y.-L. (2009), *The mechanisms of value transfer in design meetings*, "Design Studies", 30 (2), pp. 119-137.

Lefebvre, H. (1991), *The Production of Space*, trans. D. Nicholson-Smith, Oxford, Wiley-Blackwell.

Lloyd, P. (2009), *Ethical imagination and design*, "Design Studies", 30 (2), pp. 154-168.

Pink, S. *et al.* (2010), *Ethnographic methodologies for construction research: knowing, practice and interventions*, "Building Research & Information", 38 (6), pp. 647-659.

Schön, D. A. (1984), *Problems, frames and perspectives on designing*, "Design Studies", 5 (3), pp. 132-136.

Sleeswijk Visser, F. (2009), *Bringing the everyday life of people into design*, doctoral dissertation, TU Delft.

Styhre, A. (2011), *The architect's gaze: The maintenance of collective professional vision in the work of the architect*, "Culture and Organization", 17 (4), pp. 253-269.

Till, J. (2005), *The negotiation of hope*, in Blundell-Jones, P., Petrescu, D., Till, J. (eds), *Architecture and Participation*, Abingdon, Taylor & Francis, pp. 23-42.

Till, J. (2009), *Architecture Depends*, Cambridge, The MIT Press.

Van der Linden, V., Dong, H., Heylighen, A. (2016a), *Capturing architects' designerly ways of knowing about users: Exploring an ethnographic research approach*, in Lloyd, P., Bohemia, E. (eds), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, *DRS 2016*, Brighton, Design Research Society, pp. 3229-3243.

Van der Linden, V., Dong, H., Heylighen, A. (2016b), *From accessibility to experience: Opportunities for inclusive design in architectural practice*, "Nordic Journal of Architectural Research", 28 (2), pp. 33-58.

Van der Linden, V., Dong, H., Heylighen, A. (2017), *The good client: How architect-client dynamics mediate attention to users*, in Hay, R., Samuel, F. (eds), *Professional Practices in the Built Environment*, Reading, pp. 174-183.

Vardouli, T. (2016), *User design: Constructions of the "user" in the history of design research*, in Lloyd, P., Bohemia, E. (eds), *Proceedings of DRS2016: Design + Research + Society - Future-Focused Thinking*, *DRS 2016*, Brighton, Design Research Society, pp. 65-81.

Verhulst, L., Elsen, C., Heylighen, A. (2016), *Whom do architects have in mind during design when users are absent? Observations from a design competition*, "Journal of Design Research", 14 (4), pp. 368-387.

Wilkie, A. (2010), *User assemblages in design: An ethnographic study*, doctoral dissertation, Goldsmiths.

Yaneva, A. (2009), *The Making of a Building: A Pragmatist Approach to Architecture,* Bern, Peter Lang.

*Acknowledgements*

The authors would like to thank the participants for granting access to their daily professional environment and for the time and effort devoted to explaining their work, motivations and concerns. This research received funding from the KU Leuven Research Fund and through a PhD Fellowship of the Research Foundation – Flanders (FWO).