SERVING THE NEW HOUSING PRODUCERS
The role of the architect within projects developed through Collective Private Commission in the Netherlands

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Master Architecture
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zelfbouw

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METHOD
What is the role of the architect within Collective Private Commission projects in the Netherlands?

RESEARCH

- Interviews with architects
- Literature Study on CPC

SERVING THE NEW HOUSING PRODUCERS

THE ROLE OF THE ARCHITECT IN COLLECTIVE PRIVATE COMMISSION PROJECTS IN THE NETHERLANDS
What is CPC and how does it work?
Where does it come from?
What does a CPC-project look like?
What are the different aspects of sustainability in a CPC-context?
What is the role of a process facilitator in these groups?
What can be my role and how can we realize sustainable ambitions?
How do I involve people of the CPC-group in the design?
Overall: what are do’s and don’ts for me as architect?
SPOTLIGHT: SOESTERHOF, AMERSFOORT
A COMPLEX NETWORK OF ACTORS

WHAT DOES A CPC-PROJECT LOOK LIKE? (case2)

The Wagenwerkplaats, a industrial site in Amersfoort is saved from destruction trough protests of inhabitants of the adjacent neighborhood. A sustainable conference turns this citizen movement into an active association which promotes sustainability in the neighborhood, leading in the end to new plans: can we built CPC on the Wagenwerkplaats? Project Soesterhof is born.

The plans for Soesterhof are however not easy to realize, since the land is owned by the Dutch Railways, who asks a high price. Connections with the municipality are good, but since on this moment there is no zoning plan for the area, permission to build the project there can become a time-consuming process. However, the CPC-group has a lot of external contacts due to the connections of the sustainable association Duurzaam Soesterkwartier.

Inside the area group two architects, of which both have their own architecture office, a landscape architect, an urbanist and a researcher from Wageningen University.

The CPC-group has just hired an process facilitator and is now entering the feasibility phase, in which all involved households check if they can afford the CPC-project. Therefore, an architect is not yet selected.

Inside Architect

Since Soesterhof is in its initiation phase, it has not yet selected an architect. I spoke with Marco Tavenier, one of the two architects who are in the group of future residents and asked him about his vision as an architect for citizen participation in the design of the Soesterhof.

Office

Marco Tavenier has his own architects office and was already active at the association ‘Sustainable Soesterkwartier’ via which he got involved in the CPC-group for Soesterhof. Since they are already existing for a while, he has made some texts and designs for them. He describes that his role is on this moment still quite vague. Since he has not yet that much experience with CPC-groups he learns a lot from the developments the group now goes through.

Tavenier is also member of the ‘Woonwerkplaats’, a workgroup which develops a vision for the whole area of the Wagenwerkplaats.

Attitude

Overall, Tavenier is more nuanced than other architects, likely caused by carefulness to not be too strict about a process he has had no real experience with yet. Personally I also taste the difference with the architect which is only hired in that Tavenier experiences architectural domains far more as a collaboration inside a team of the architect and the other future residents than as loose parts which are architect-minded or residents-minded.

Some themes are really clearly architectural and mainly flow from the information the architect has gained during sessions and meetings. The architect translates the wishes of the residents. He is always the one that has to translate all the information in a tangible design. When discussing the topic of form, Marco gives a remark which describes this as follows: ‘you could almost say that ‘form follows function’ here in the sense that the form follows from the proceeding other domains.’

There are quite some domains in which the residents have freedom to choose whatever they want, but the architect can steer this by presenting options and doing suggestions.

‘You can almost say that ‘form follows function’ here’

Woonwerkplaats

We are working on this vision that the area becomes a combination of dwelling and working. We aim at a process of 40-50 years in which the area should be filled with buildings. Soesterhof is for us a pilot-project, standing on front of the rest of the development of the area. (of which the vision is that other dwellings are also developed trough CPC, red.)

‘It is clear that the ones who are on the front and take part in everything are aso the ones who determine the most.’

Group Process

When we started with Soesterhof, there were already 40-50 interested people at the first meeting. It went further as a loose group from Duurzaam Soesterkwartier, while the latter is invited by important moments, such as setting up ambitions. Many people are enthusiastic of the realization of such a project on this spot, but there are also many who dread the length of the whole process. Eventually there is a group who steers the process and a ‘tail’ of people who will hook on when it gets more concrete. That is no problem, discussing all things with 40 people is harder than with 15. And those who are on the front are also the ones who determine the most in the project.
RESEARCH

ROLES OF THE ARCHITECT

What can be your role as an architect within CPC-projects and how do you reach sustainable ambitions?

Aljid van Doorn has done research after the role of the architect which is very valuable for CPC. Commission DNA (Union of Dutch Architects) she has published a document which describes six different roles for architects, of which two roles are relevant for architects within CPC-processes: ‘the developing architect’ and ‘the specialist architect’.

The developing architect

This type of architect bureau initiates projects, develops them and steers the process. A great asset for them is that they generate their own work and have a lot of freedom in the design process. By the new chances for these bureaus is mentioned that they can explore new markets, for example CPC. But also the value of the local market is a plus. These bureaus distinguish themselves by imagination, co-creation and intrinsic motivation. Important for them is knowledge about development costs, building contracts and marketing & branding.

When we place the developing architect within the traditional building actor model, the architect suddenly is ‘head’ of the process again: he can take the role of project manager, architect or contractor. (Doorn, 2014, p. 3)

The developing architect is also recognised in other literature. For example Van Gameren describes in his article about CPC: ‘Collective commission makes it particularly attractive for architects to initiate projects, since it enables them to pass any development risk on the collective of clients rather than that should it themselves’ (D. v. Gameren, 2013, p. 12).

The specialist architect

Another of these architect types which can also be involved in CPC-processes, but then in another way, is the ‘specialist architect’. There are architectural bureaus specialized in the design process on how to organize workshops with users and citizens participation. These bureaus are frontrunners on their specific terrain and have capacities to interpret the problem at hand, connect different scale levels and visualize possible solutions. There is a growing demand for sustainable solutions and new processes such as community building, co-creation, user participation etcetera.

In the traditional building model, these architectural bureaus are placed as advisers underneath the architect of a project. (Doorn, 2014, p. 13)

In interviews, it became clear that especially since more often a process manager is guiding the citizen initiative architects are developing this way. Some offices are not specialising on CPC-processes, but more on a kind of architecture the CPC-processes might find appealing. An example is GROENBLAUW, which is specialising in ecological building, which was appealing to the inhabitants for Kwantel in Ede-Lanxmeer.

(Interview Pütz, 2014)

Interviewed architects

CASA-architecten (Hein de Haan) search anew for the role of the architect. They have initiated projects, but groups also contact them because they have made name. They enlarge their role by adding the job of process facilitator.

Architects who become process facilitator are an example of specialists. Another example is Ekim Tan, who developed a method for co-design (see p.44-45).

The other interviewed architects have their own vision and specialization, as is normal for an architect office, but did not take the role of van Doorn describes. They did not initiate projects themselves, were only responsible for the design and did not work as advisor under other architects.

CPC-groups

In groups we recognize inside experts, which are people who are professionals in sustainability on the inside. Examples are architects, environmental specialists and researchers. They will bring in most innovative ideas and try to get the group with them.

Experts specialized in the building industry will often be included in the building team, which communicates with the architect.

These experts can be opinion leaders, but also non-professional people can have that role. They are a junction in the social network. These people will be often active as leader of a workgroup or as board member.

Change agents are the architects and process facilitator, however because they work for the group, their influence is quite large and do not only work trough opinion leaders. Therefore they often also have the role of innovation champions.

Van Doorns description that the whole organization is concerned with sustainability is however most important. Inside experts, innovation champions, change agents and opinion leaders all need to communicate clearly and involve the whole group in the decision process.

Realizing sustainable ambitions

In her book ‘Het duurzame ontwerpproject’ (the sustainable design project) Aljid van Doorn notices that a sustainable design project is also a social construction. Informal aspects are perhaps determinative for the development and realization of sustainable ambitions. From interviews with actors in the building profession van Doorn concludes that ‘soft qualities’ are as important as knowledge and skills. Competencies here are: curiosity, interest in the other, self-understanding and an open attitude.

A study done by BovuKennis shows that 25% of the actors point at the client when asked which actor counterworks the sustainability in the process. Often clients are unaware of the special task they have in a sustainable project. On a basis of competencies for good leadership in the built environment from Karin Laglas, van Doorn develops competencies for good leadership of clients in sustainable design projects:

- Vision with respect to the sustainable project
- Courage to take risks which benefit the sustainability of the project
- Decisiveness to take decisions between sustainable solutions
- Involvement at the project from initiative to realization
- Basic knowledge of sustainable design
- To reconcile different sustainable ambitions

Rogers describes some different roles in the system for innovation diffusion: the opinion leader, the change agents and the innovation champion. Opinion leaders are people within the social system who are a junction in the communication network. Change agents are experts who bring specific knowledge inside the network from the outside, trying to influence the system via the opinion leader. The innovation champion is the key figure for taking over the innovation in an organization. Dansen described only the presence of several innovation champions helped realize high sustainable ambitions. The architect is an example of an actor which can take this role. Van Doorn describes how important it is that not only one person is concerned with sustainability, but the whole organization. Innovators often forget that they work from another frame of reference that the people they work together with. To be accepted, it is important to communicate the message clearly and make clear which tangible improvement the sustainable innovations can offer.

(Doorn &Bueren, 2012)
Arnstein (1969) Ladder of citizen participation

- Citizen control
- Delegated power
- Partnership
- Placation
- Consultation
- Informing
- Therapy
- Manipulation

Degrees of citizen power

Degrees of tokenism

No power

Participatory Design in CPC

But this needs a shared ‘language’
<table>
<thead>
<tr>
<th>THE ARCHITECT AS COMMUNICATOR</th>
<th>Create an ‘information bridge’ or shared language to gather design information and verify design steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>THE ARCHITECT AS EXPERT</td>
<td>Take enough distance from the group to design. Interprets the wishes of the group and integrates what is essential</td>
</tr>
<tr>
<td>THE ARCHITECT AS GUARDIAN</td>
<td>Support the group to make decisions and help to guard their priorities</td>
</tr>
</tbody>
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WORKSHOP

Literature Study on Participation
Course by Marc Tassoul
Research Report
Design of a workshop
Building Design
Flexible Education

Living & Meeting in Green

Families and single apartments

Green space for the neighborhood
DESIGN

Workshop

Analysis
PvE

Starting Points

Preliminary Design

Final Design

Building Design
DESIGN SITE
Wagenwerkplaats, Amersfoort
URBAN PLAN

Expected development
- Housing
- Creative industry
- Education & Events

Plan for Soesterhof

CPC-neighborhood

Park (and sound barrier)

Existing terrain
1 | A community in an urban setting

Breaking open the urban block
Semi-public
DESIGN OVERVIEW
Transition from public to private
Sketch of the Transition from the split-level dwellings to the shared garden
Sketch of the platform with the meeting place and pergola
Theme 3 | Use and Maintainance

Use of the garden

- No-contact // Family Contact
  - House
- Contact with direct neighbors
  - Shared
  - Green // Outside space
- Contact with group
  - Communal
  - Garden // Outside space
  - Playing field & beach
  - Activities // Meetings
  - Social care system
Principles guiding Garden Design

ACTIVITIES
Scheme Maintainance

Residents

- Neighbor-garden: Quick clean after usage for an evening (4 hours) weekly each year (16h, 2h and 40 min each month)

- Social activities: 40 min each month

- Communal garden: 17 min a month

- Neighbor garden: 2 hours each month

- Avarage Person can be bought in together or done themselves. Total: +/- 5,5 uur

- Social activities: 40 min each month

- Communal garden: 17 min a month

- Neighbor garden: 2 hours each month

- Avarage Person spent 4 hours once a gardening weekend

Professional & Residents

- Cleaner: 5 hours a week

- Gardener: Once a year

- Every person once a half year for an evening (4 hours)

- Every person 2 hours each month

- Gardener: 5 Persons spent 4 hours once a month

Professional

- Technical Engineer: One hour a month

- Painter: Once a year

- Painter: 2 days

- Painter: One hour a month

- Painter: 2 hours each month

- Gardener: Once a year

- Gardener: Every person for an evening (4 hours) once a half year

- Gardener: Every person 2 hours each month

- Gardener: Each year a gardening weekend

- Gardener: After a Year

- Gardener: Once a month

- Gardener: 5 Persons

- Gardener: Every person for an evening (4 hours) once a half year

- Gardener: Every person 2 hours each month

- Gardener: Each year a gardening weekend
Theme 4 | Integration of specific dwelling wishes

CASE 1 | Family Split-Level Dwellings

Not building your own home, but shaping your own living process

Extendable
To fit in future dwelling wishes

Flexibility
'non-flexible', serving spaces in the middle area

Split-level
To create connections to the street and central garden

... and to create strong architectural relations
Youth
Starter
Present
Near future
Future

- grand view
  (weidsheid)
- facilities are
  far away
- Fokke: middle
  of nowhere,
  Monique: between
  Deventer & Apeldoorn

Farm
student rooms
& rent apartment
row-house
larger house
Farm

- different student houses
- started living together:
  rent of apartment above
  medical practitioner
- City center of Wageningen
- 4 rooms
- +/- 110 m²
- near to train station,
  different facilities
  and city centre

- 6 rooms
- +/- 150 m²
- near to train station,
  different facilities
  and city centre
- Natural light inside
- Privacy, rather no
  people above
- Smaller own garden fine
  for communal garden

- Longing to go back,
  but after kids are grown

De Jong Family
Fokke (45)
Monique (40)
Pieter (11)
Meike (10)
Froukje (7)
Animation Dwelling
Theme 5 | Relation to the context
Communal Building

South Facade (facing Garden)
1. DWELLING

Sand-Lime Blocks

Hollow-Core Floors

Steel Columns

Materials Construction
Detail 2

Dwelling (+4,5m)

Floor finish
Cement Screed (with floor heating)
Insulation panel (Wood fibre)
Hollow core floor (concrete)

Dwelling (+1,5m)

Outside (Balcony)

Terrace boards
Beam to carry terrace boards
Water vapour foil
Prefab Concrete balcony

Rubber
Console
2. GARDEN

Semi-Intensive Roof

Substrate Layer

Floor Matt

Drainage Layer (Granulate)

Roof & Water protection foil

Concrete ceiling

beam parking lot

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*Floor Matt*
3. COMMUNAL BUILDING

[Sketch of communal building with various rooms and spaces indicated]
Sketch Construction
Roof construction

Main construction

Insulation panels (Isovis) with beams (gordingen)

'Panlatten'

'tengels' placed on insulation panels

Natural Slates ('leien')
Detail 2

State (natural)
Batten (panlatten)
Ribs (ribben/tangels) placed on insulation boxes
Water Vapour Foil
Isovlas elements with roof carrying beams

Wooden truss
Wooden wall finish
Cellulose insulation
Water Vapour Foil
Timber Frame Wall (HSB)

Outside
Inside
CLIMATE DESIGN

1. Heat Pump
2. Accu for Solar Panels
3. Air Handling Unit (LBK)
Ventilation
Calculation Pipes:
Aquifer System

Calculated: 315 kW needed, Cascade system 4 pumps

90 kW master

90 kW slave
90 kW slave
90 kW slave

Size of 01 unit:
770
1300
1450

Source: GeoHolland b.v.
Isolated tube to transport the hot water to the dwellings

Low Temperature Heating in the Dwellings
PV-Systems

Thin Film Panels - Solar Frontier

Profit PV-system = Irradiance on parcel (kWh/m²) x PV-capacity (kWp) x Performance Ratio

Performance Ratio = 91,1% (0,91)
Pv-capacity under Standard Test Conditions (maxP or kWp) = 170W or 0,17kW

1. Irradiance = 1020 * (0,97-0,03) = 958,8 kWh/m²  Profit = 958,8 * 0,17 *0,91 = 148,3 kWh/m²
2. Irradiance = 1020 * (0,92-0,03) = 907,8 kWh/m²  Profit = 907,8 * 0,17 *0,91 = 140,43 kWh/m²

1. 72 * 148,3 = 10667,6 kWh  2. (54 +45) * 140,43 = 12498,3 kWh
Total = 10668 + 12498 = 23166 kWh (23mWh) per jaar
What is this design?

Integration of information:
- Workshop & Interview
- Site Analysis

Hypothesis:
- Opening the Urban Block
- Combining Different Target Groups
- Tackling Social Care Issues
- The shared and communal as central theme
What should be the role of the architect within projects developed through Collective Private Commission in the Netherlands?

Communicator: Listen to the people  
Guardian: guard their priorities  
Expert: create strong architecture

Not only to satisfy the current dwelling wishes, but also the future ones, it is the architects job to create quality and shape the way the residents live together in a community.