KU LEUVEN



CHANGES - kickoff meeting

Investigation on efficacy of maintenance practice in Belgium



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Investigation on efficacy of maintenance practices in Belgium

- 1. study maintenance problems of historic buildings (listed and non-listed
- 2. understand monitoring and reporting (Monument Watch)
- 3. understand the types of interventions that have been performed in the past
- 4. evaluate the effectiveness, the durability and the cost of these interventions
- 5. understand the skills and knowledge involved in this process



state of the art on quality management of maintenance

01/2016

factors that influence the efficacy of maintenance practices in Belgium

02/2016

case study work

2 regions urban (Mechelen) – rural (South-East of Limburg)

4 functions

1) business & catering, 2) church & chapel, 3) residential, 4) lack of occupancy

12/2015 - 02/2017



cases

2 regions <u>urban (Mechelen)</u> – rural (South-East of Limburg)

4 functions

1) business & catering, 2) church & chapel, 3) residential, 4) lack of occupancy

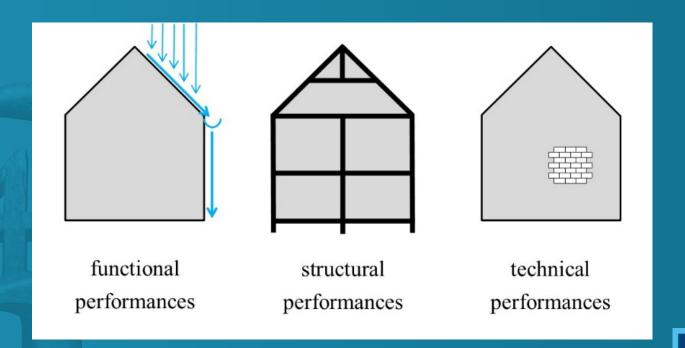
20-25 cases

- 1. general condition assessment (public accessible areas) + detailed condition assessment of specific areas (to be identified for each case)
- 2. analysis reports Monument Watch
- 3. analysis records of interventions
- 4. In-depth interviews (owners, public administration)
- 5. Focus groups (architects, contractors, public administration)
- 6. general survey (owners, architects, contractors, public administration)
- Assessment of current performances and definition of expected performances for specific areas – related to detailed condition assessment (to be identified for each case study)
- 8. maintenance cost analysis service



Cases: focus

- 1. functional performances: drainage system
- 2. structural performances: roof structure
- 3. technical performances: repair of pointing mortar



Planning case study research

	J	F	M	Α	M	J	J	Α	S	0	N	D
Mechelen												
interview 1												
analyzing documents												
site visit + interview 2												
South-East Limburg												
interview 1												
analyzing documents												
site visit + interview 2												
Focus groups												
General survey												



3 churches, 4 private dwellings, 3 commercial dwellings

OLV v bijstand

18th C tower, 19th C church

OLV v Hanswijkbasiliek 17th Century

Cathedral St Rombouts
13th-14th-16th Century



Reports MW (2) 1998, 2003

Only tower listed



Reports MW (6) 1993, 1995, 1998, 2004, 2009, 2014

Regular maintenance, cleaning of gutter 1-2 times a year



Reports MW (6) 1996, 1999, 2003, 2006, 2010, 2014

Provincial government

3 churches, 4 private dwellings, 3 commercial dwellings

19th Century residence, in origin 16th C

Interbellum residence by arch J Chabot

16th Century townhouse

Interbellum residence by arch J Chabot









Reports MW (1) 2013

Reports MW (3) 1999, 2004, 2011 Reports MW (3) 1995, 1997, 2006

Reports MW (2) 1999, 2002

Decay, restoration and renovation, roof already completed

problematic maintenance of gutters

Problematic maintenance gutters, steel windows, joints

3 churches, 4 private dwellings, 3 commercial dwellings

19th Century residence, in origin 16th C



Reports MW (1) 2013





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Reports MW (1) 2013



3 churches, 4 private dwellings, 3 commercial dwellings

19th Century residence, in origin 16th C

Interbellum residence by arch J Chabot

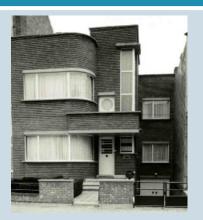
16th Century townhouse

Interbellum residence by arch J Chabot









Reports MW (1) 2013

1999, 2004, 2011 problematic

Reports MW (3)

Reports MW (3) 1995, 1997, 2006

Reports MW (2) 1999, 2002

Decay, restoration and renovation, roof already completed

problematic maintenance of gutters

Problematic maintenance gutters, steel windows, joints

3 churches, 4 private dwellings, 3 commercial dwellings

Interbellum residence by arch J Chabot



Reports MW (3) 1999, 2004, 2011

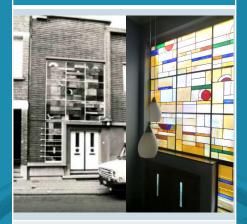
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3 churches, 4 private dwellings, 3 commercial dwellings

Interbellum residence by arch J Chabot



Reports MW (3) 1999, 2004, 2011

problematic maintenance of gutters



3 churches, 4 private dwellings, 3 commercial dwellings

Interbellum residence by arch J Chabot



Reports MW (3) 1999, 2004, 2011

problematic maintenance of gutters



3 churches, 4 private dwellings, 3 commercial dwellings

19th Century houseArt gallery + private residence

17th C house Shop + private residence

16th C timber houseShop + private residence



Reports MW (4) 2001, 2004, 2009, 2011

Regular maintenance, yearly cleaning of gutters



Reports MW (6) 1995, 1998, 1999, 2002, 2005, 2014



Reports MW (8) 1993, 1996, 1998, 2002, 2005, 2010, 2012, 2014

3 churches, 4 private dwellings, 3 commercial dwellings

19th Century house Art gallery + private residence



Reports MW (4) 2001, 2004, 2009, 2011

Regular maintenance, yearly cleaning of gutters



