

# The economics of style

The price effect of neo-traditional architecture in  
residential real estate

# Motivation

- International proliferation of neo-traditional architecture
- Reports in popular press (popularity of 1930s in NL)
- Neo-traditional architecture praised and ridiculed

# Relation to existing literature

- Style, through vintage, as control
- Heritage, star architects
- Office buildings (architects, not style)

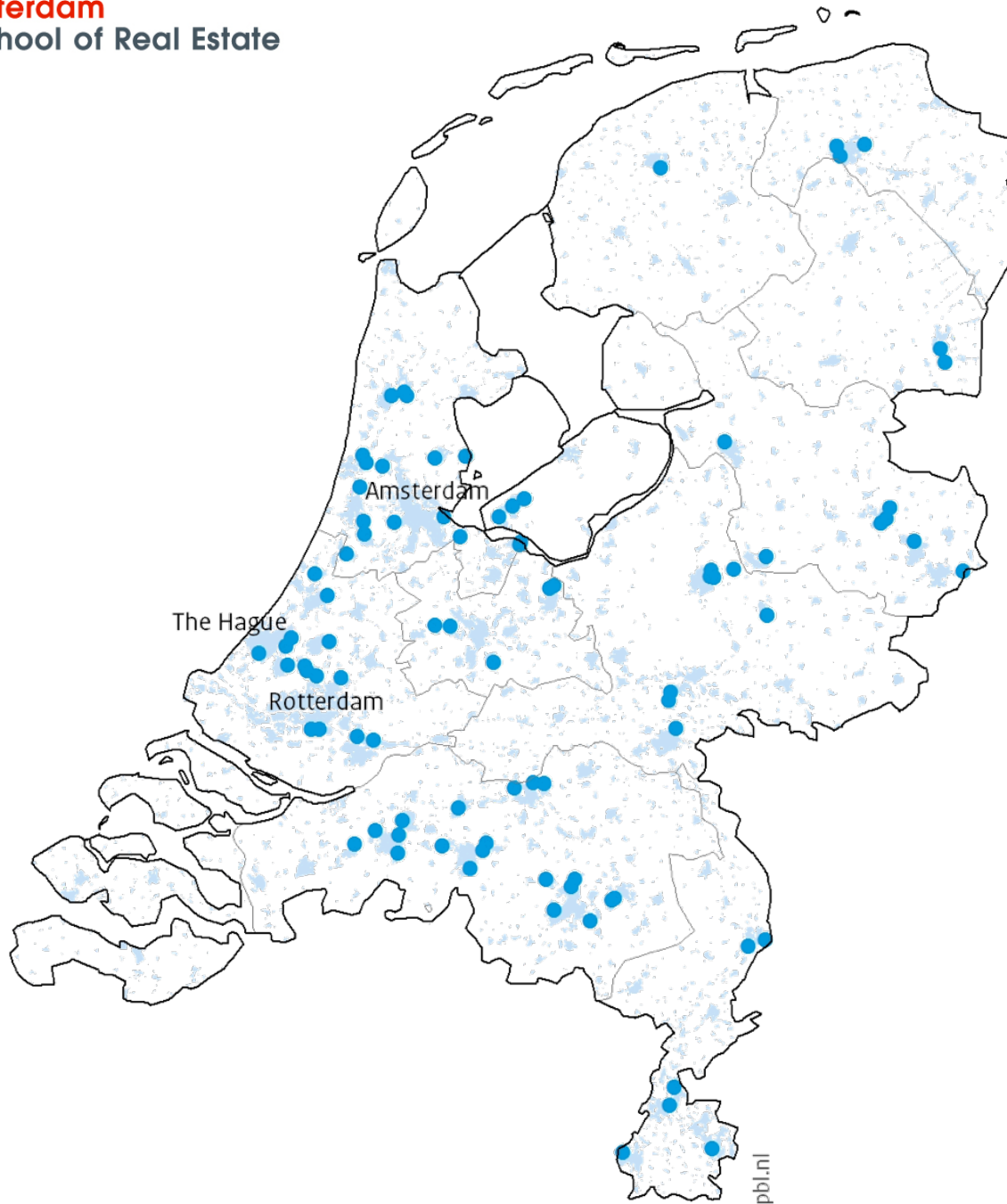
# style

- Style, vintage, age, maintenance, obsolescence
- Style can be reproduced
- Dutch 'show case': VINEX

# Vinex

• Vinex, national

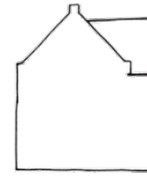
- From growth cores
- Decentralization ' to compact cities



- Location Vinex urban-extension areas
- Built-up areas



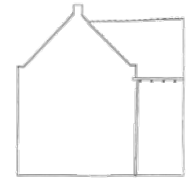
Neo-traditional



Shape ☒



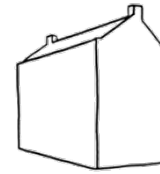
facade arrangement ☒



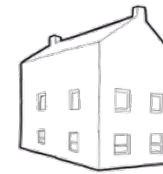
detailing ☒



Referring to traditional



Shape ☒



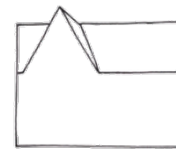
facade arrangement ☒



detailing ☒



Non-traditional



Shape ☒



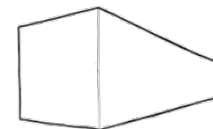
facade arrangement ☒



detailing ☒



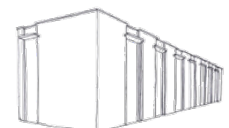
Non-traditional



Shape ☒



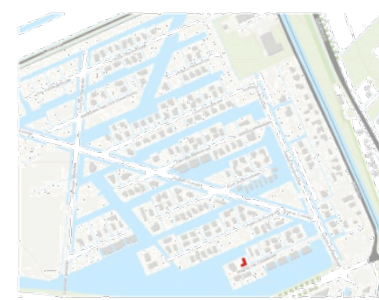
facade arrangement ☒



detailing ☒



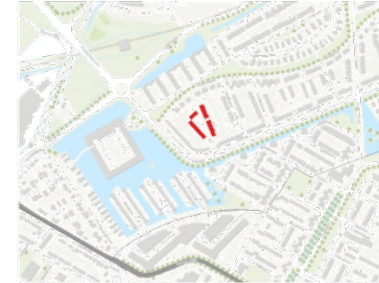
Marinus van Eyskade, Nesselande, Rotterdam



Mix of styles at the neighbourhood level



Wierde, De volgen, Hendik-Ido-Ambacht



Cluster in a patio



Otto Cluivingenlaan, Zuiderburen, Friesland



Cluster in a street



Brandevoort, Helmond



Cluster at the neighbourhood level



## Housing supply (in Vinex)

- Large construction sites, land often owned by municipality
- Plans created by municipality and builders jointly
- Construction starts when 70+ % sold
- Public and private role municipality

# Price 'premium'

- Construction costs
- Sorting
- Supply restrictions

# Results

	Total Vinex	Pure neo-traditional	Referring to traditional
Transaction price (average, x € 1.000)	265	362	356
Surface (average, square meters <sup>1</sup> )	136	171	159
Plot size (average, square meters <sup>1</sup> )	214	258	309
Dwelling type (% of transactions)			
Terraced	54%	36%	29%
End-of-row terraced	19%	9%	12%
Semi-detached	18%	32%	32%
Detached	9%	23%	27%
Total	100%	100%	100%
Number of transactions per year			
1996	16	0	0
1997	81	1	0
1998	571	0	7
1999	1,914	1	75
2000	2,933	1	137
2001	3,806	9	185
2002	4,265	32	264
2003	4,670	56	308
2004	5,361	60	379
2005	6,201	100	438
2006	6,656	134	561
2007	6,731	118	585
2008	5,713	89	542
2009	4,131	44	376
2010	4,054	52	433
2011	3,677	62	419
2012	3,794	67	445
2013	3,271	44	277
2014 Q1+Q2	2,841	28	121

# Results

	Vinex – all 1995-2014		Neo-traditional – clustered 1995-2014	
	Coefficient	Std. Error	Coefficient	Std. Error
Style (ref. = non-retro)				
Pure retro	0.148***	0.012	0.065***	0.016
Appealing to retro	0.048***	0.003	(ref.)	
Clustered			-0.021**	0.009
Characteristics				
Surface (ln)	0.040***	0.001	0.036***	0.003
Plot size (piecewise. ln)				
< 300	0.042***	0.001	0.025***	0.003
< 500	0.040***	0.001	0.035***	0.002
< 1.000	0.030***	0.001	0.035***	0.002
Construction year (ln)	0.175***	0.042	6.873***	1.009
Dwelling type (ref. = terraced)				
End-of-row terraced	0.049***	0.002	0.066***	0.006
Semi-detached	0.190***	0.002	0.229***	0.007
Detached	0.301***	0.003	0.357***	0.009
Parking facilities (ref. = nothing private)				
Parking place	0.076***	0.002	0.048***	0.007
Carport	0.126***	0.003	0.067***	0.013
Garage	0.180***	0.002	0.103***	0.006
Garage + carport	0.175***	0.006	0.100***	0.012
Large garage	0.228***	0.005	0.153***	0.012
Maintenance level (ref. = average or below)				
Inside	0.090***	0.007	0.099***	0.031
Outside	0.039***	0.008	0.064*	0.037
Landlease (ref. = no landlease)	-0.046***	0.006	-0.123***	0.019
Other controls				
Time fixed-effects	Year-dummies - not presented			
Spatial fixed-effects	Zipcode-dummies / PC5 - not presented			
Constant	10.276***	0.348	-40.193***	7.665
Adj. R-squared	0.848	0.134	0.877	0.133
n	60,716		6,305	

# Results

	Neighborhood income 2002-2011		(Semi)detached above €400,000,- 1995 - 2014		Only terraced 1995 - 2014	
	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Style (ref. = non-retro)						
Pure retro	0.164***	0.014	0.123***	0.017	-	
Appealing to retro	0.049***	0.003	0.029***	0.006	-	
Pure + appealing	-		-		0.034***	0.005
Characteristics						

	Vinex-all 2006 - 2014		Municipalities >20% neo-traditional 2006 - 2014	
	Coefficient	Std. Error	Coefficient	Std. Error
Style (ref. = non-retro)				
Pure retro	0.115***	0.012	0.080***	0.016
Appealing to retro	0.039***	0.003	0.022***	0.006

# Conclusion

- Significant price premium for neo-traditional architecture
- Most likely as a result of stringent planning
- (but apparently people do value style)