

Safety in the Car City

The Swedish Case

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The formation of a traffic safety discourse

- Traffic safety (as a concept) not discussed before the 1930s
 - the 'question of high speed'
 - the 'question of drunk driving'
- Liberal car politics
 - the car represented individual freedom; a freedom that should not be restricted
 - the car driver's responsibility; fostering 'traffic culture'
- Abolishment of speed limits in the 1930s
 - 1930 in country roads
 - 1936 in cities
- Traffic safety enters the debate
 - National Society for Road Safety, 1934
 - Official statistics for road traffic accidents, 1935
 - Government committee on the 'question of traffic safety', 1936

The human factor

- Almost complete focus on the 'human factor' in the 1940s and 1950s
 - the accident-prone driver
 - 91,8 % of accidents caused by the 'human factor'
 - Traffic safety measures should focus on the driver
- Psychologists and physicians key professions
- An individual-psychological explanatory model

Children - an anomaly in the model

- Accidents involving children could not be explained
 - Inevitable 'by its nature'
- An anomaly in the individual-psychological explanatory model
- 461 fatal accidents in 1946 increased to 923 in 1953:
 - a third of the victims were children
- No. of cars soared
 - 250,000 in 1950
 - 1,250,000 in 1960
- How to solve the critical problem of accidents with children?



Traffic safety – a planning problem?

- Architects, planners and engineers entered the arena
- 'Bad planning', not the human factor, caused accidents, particularly accidents with children
 - Solution: move the children
 - The car as norm
- US and British role models

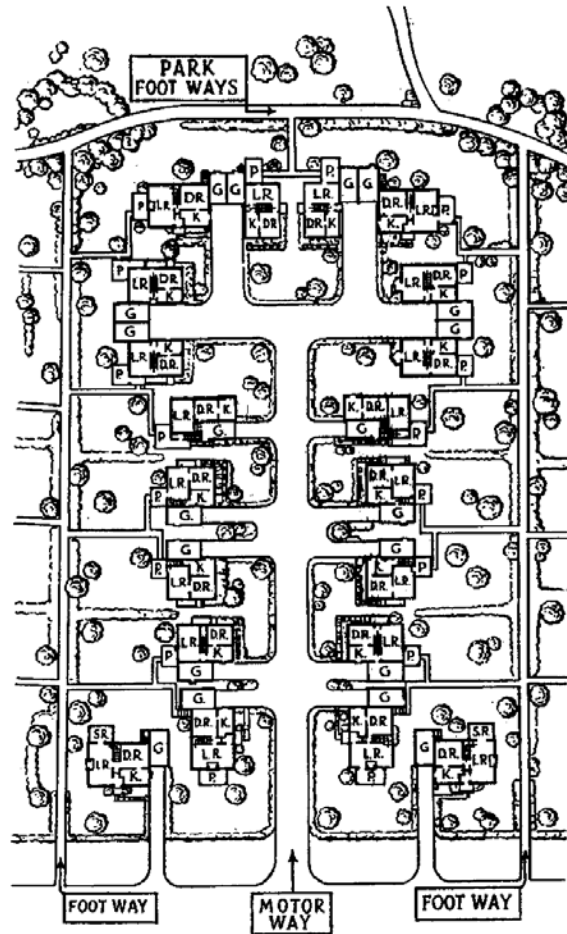


Fig. 18—Plan of a typical 'Lane' at Raddburn. The park in the center of the superblock is shown at the top ; the motor ways and foot-ways to the houses are at right angles to the park



Fig. 20—Plan of the Residential Districts, dated November 1929

'A new town planned for the motor age'

County of London Plan (1943)

UNIVERSITY PRECINCT : BLOOMSBURY

A recognition of the existing precinct by the closing of side streets and a diversion of through traffic on to sub-arterial roads around the area and on to the main north-south and east-west relief tunnels, shown dotted on the plan. The proposal envisages a reconstruction centred around the new University buildings and the British Museum devoted primarily to the expanding needs of the University and its students.

The road widths and the traffic roundabouts are shown in diagrammatic form.

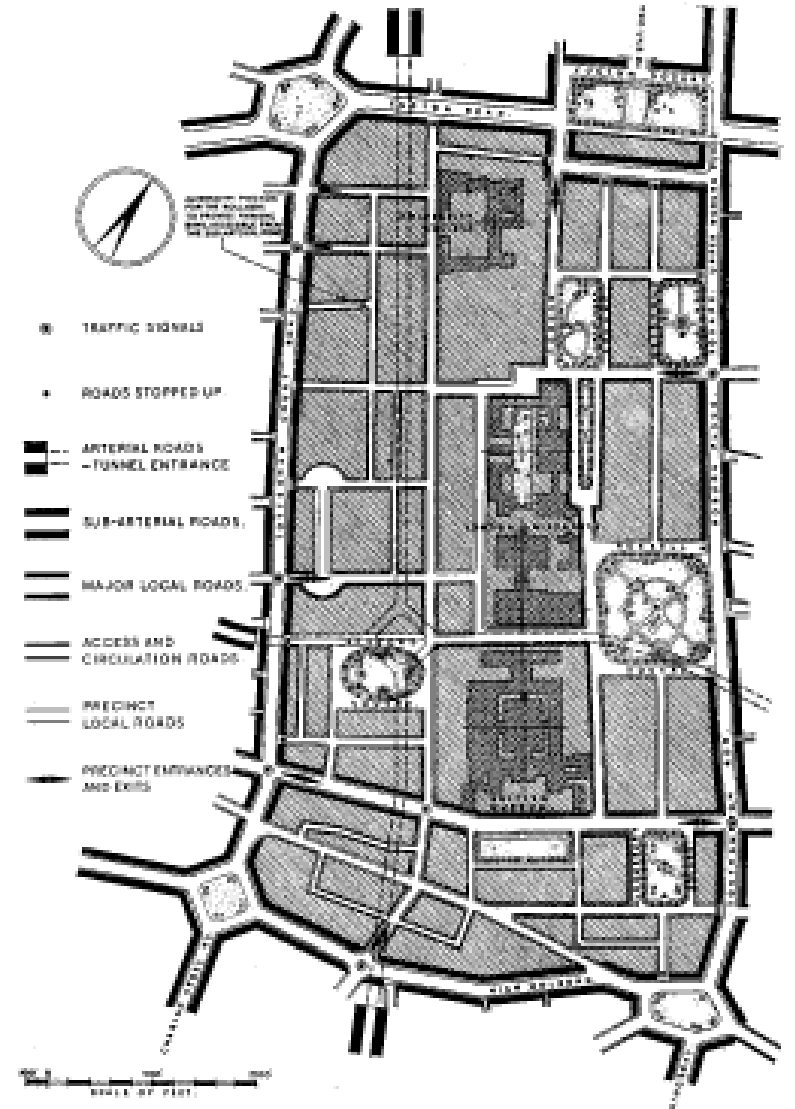


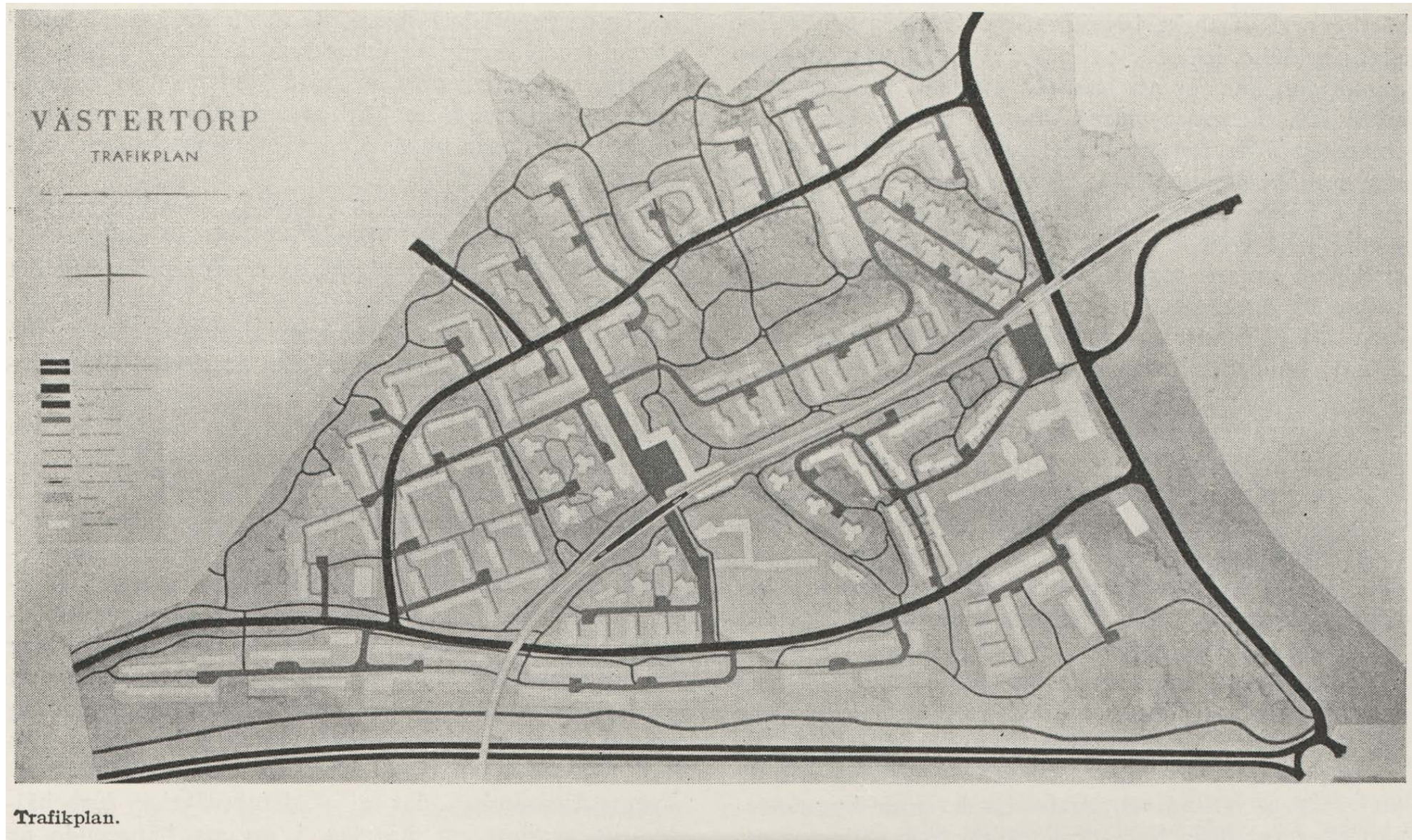
FIG. 6

Traffic safety – a planning problem?

- Architects, planners and engineers entered the arena
- 'Bad planning', not the human factor, caused accidents, particularly accidents with children
 - Solution: move the children
 - The car as norm
- US and British role models
 - The Radburn plan, N.J., 1928
 - *County of London Plan* (1943) & *London Greater Plan* (1944)
- Otto Danneskiold-Samsoe, *Nutida engelsk samhällsplanering* [Contemporary English society planning] (1945)
- The Swedish exhibition "Replanning Britain" in 1946

Traffic safety through town planning

- Traffic differentiation – key planning principle
- Early Swedish examples
 - Södra Guldheden, Gothenburg (1950)
 - Västertorp, Stockholm (1950)



Traffic plan for the residential district Västertorp in Stockholm (1947)

Traffic safety through town planning

- Traffic differentiation – key planning principle
- Early Swedish examples
 - Södra Guldheden, Gothenburg (1950)
 - Västertorp, Stockholm (1950)
- 'The principle of differentiation is well-known and widely accepted, but rarely used for planning of traffic systems for whole regions'
- Not an established practice ...
- ... but an idea that fitted well with the new visions of car city

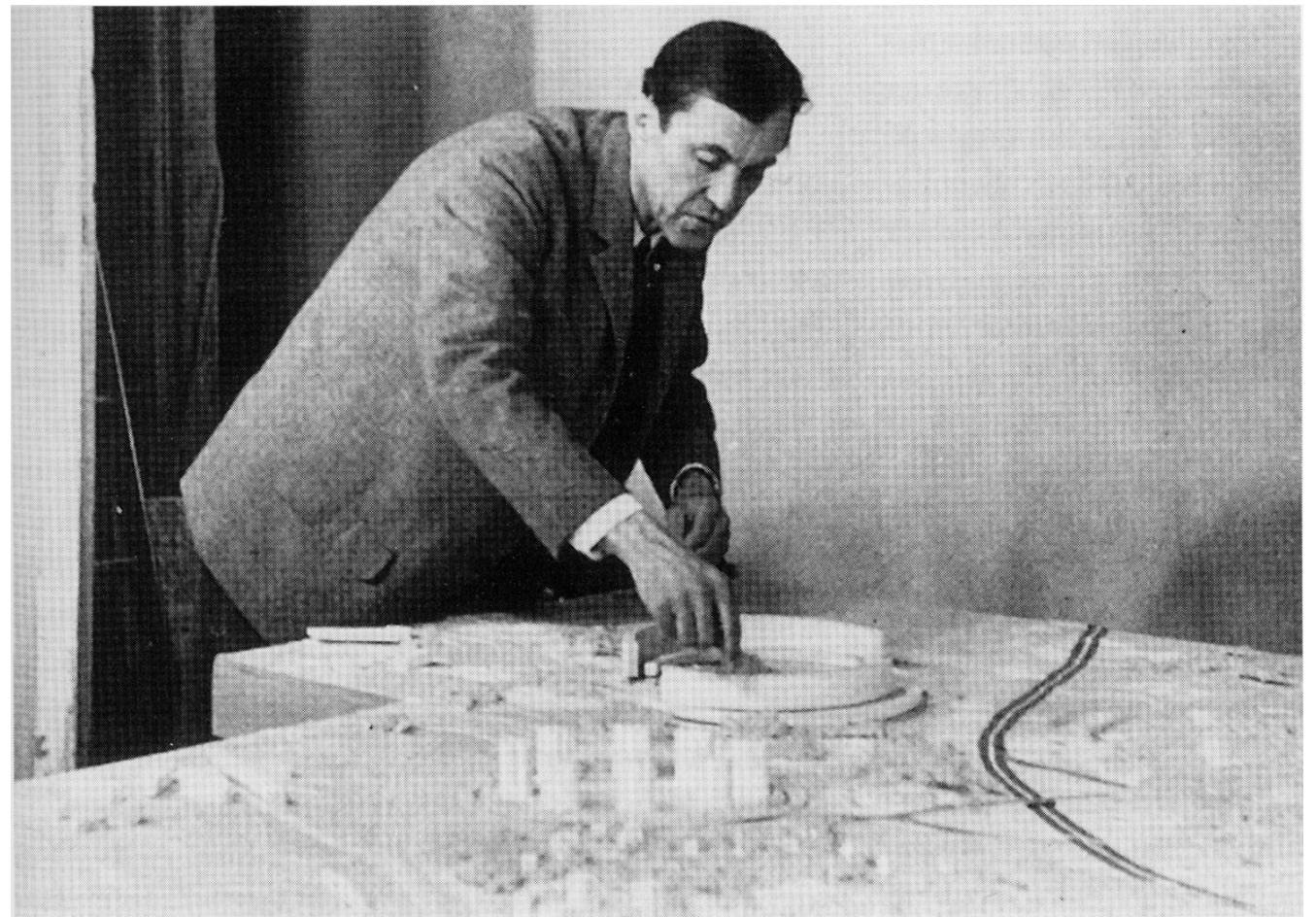
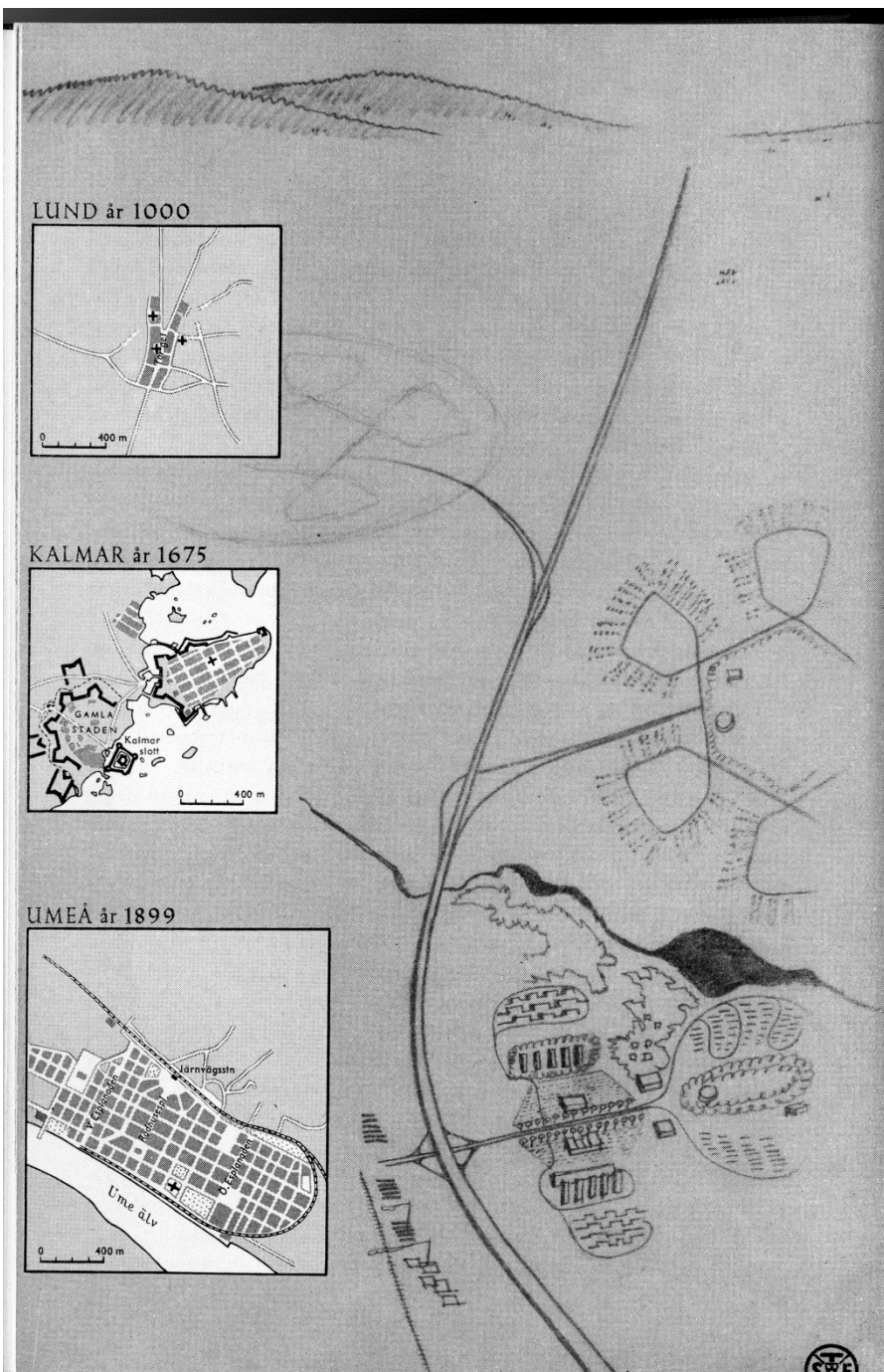
Bilstaden [The Car City] (1956)

The enormous expansion in motoring has become the most acute problem of social planning.

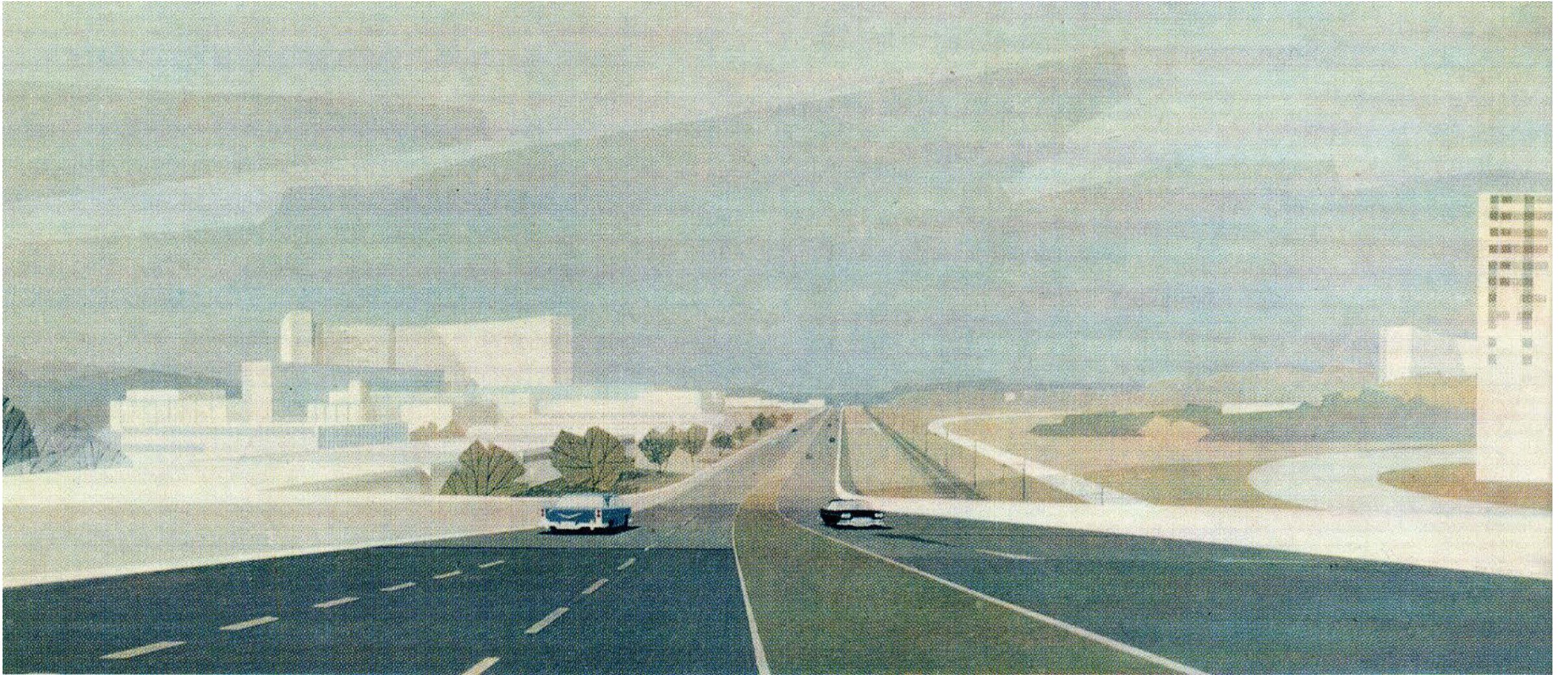
But the car must not be seen as something that causes trouble in social planning. We must focus on motoring as a positive factor of great significance in our way of life.

We must therefore examine whether the car ought not to lead to a new thinking in town planning.

One good way of doing this is to study how to plan for a 'car city', a new city that really is designed to take account of the car.



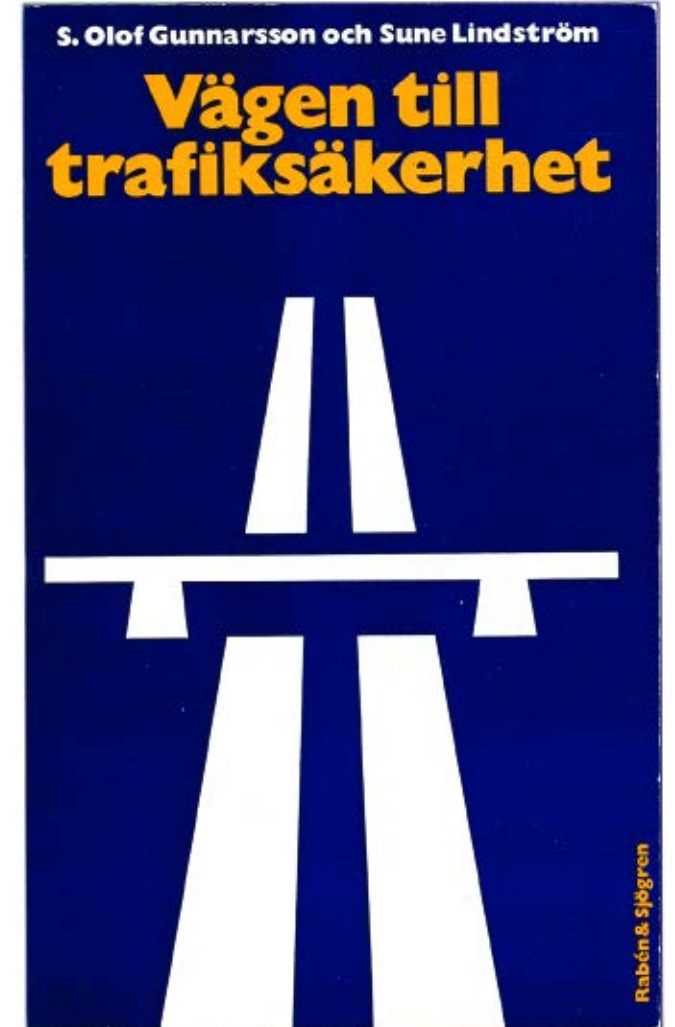
'One increases the speed and safety at the same time with technological solutions'



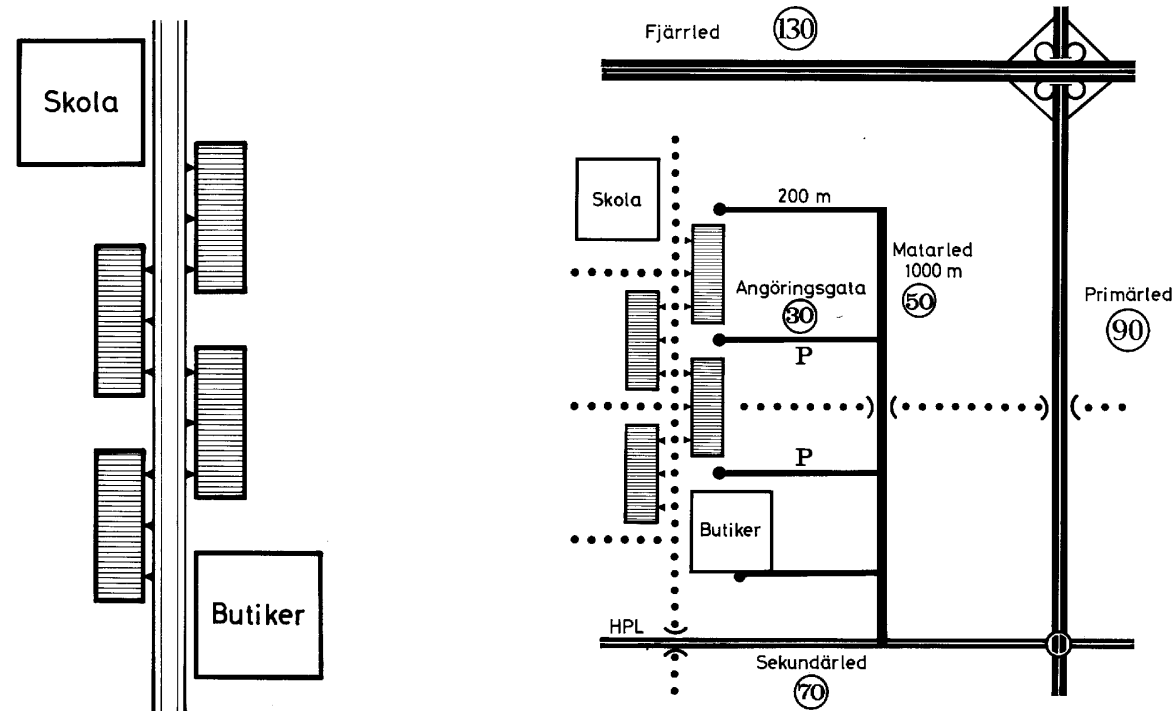
Plan for Täby Centre, north of Stockholm (1961),
completed in 1969–73

Traffic safety guidelines for town planning

- The SCAFT group 1958
- A scientific basis for the planning principles
 - Operations research and statistics
 - 90 to 95 % of accidents caused by the traffic environment (i.e. the road)
- *Vägen till trafiksäkerhet* [The Road to Traffic Safety]
 - Traffic safety measures must be traffic-friendly

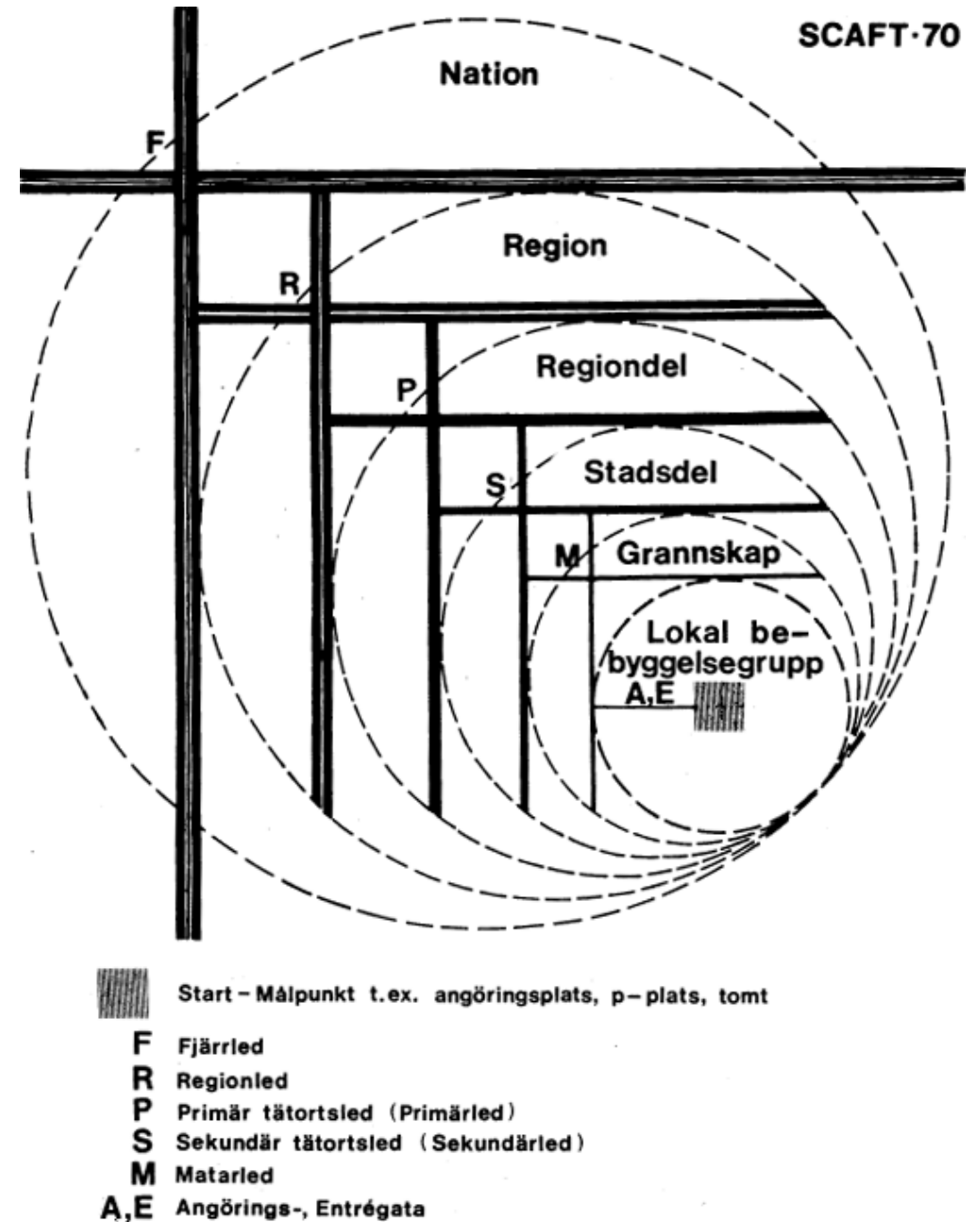


'What is a city? A traffic system that must be reshaped'





A comprehensive and coherent system that connected the national traffic system with single buildings via a hierarchy of roads.



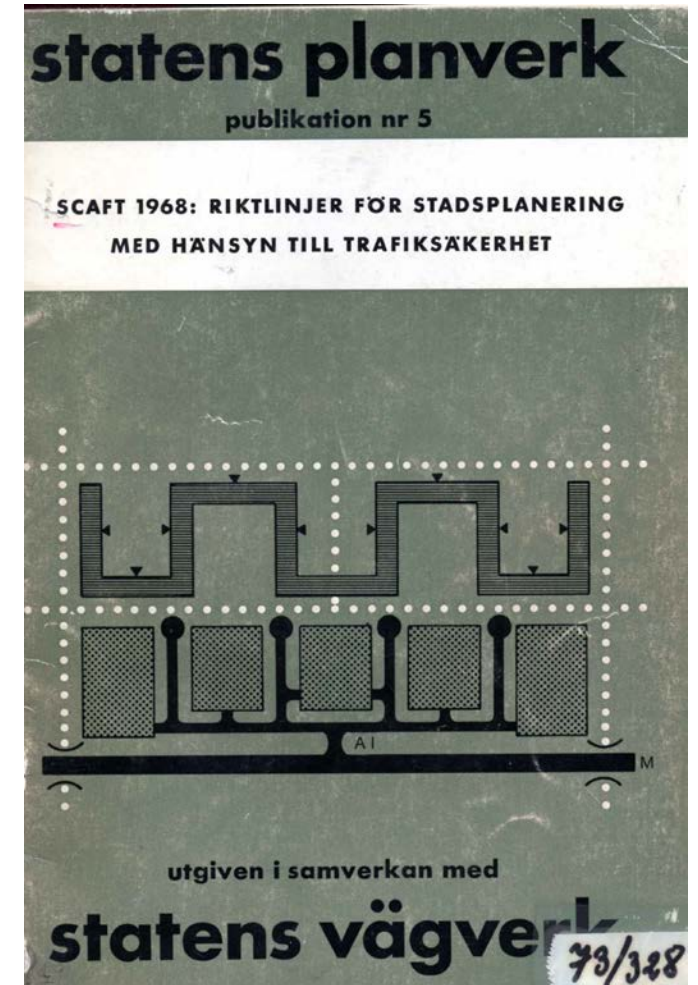
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)				(11)			(12)	
Litt	Typ av bilförbindelse	Tillåten högsta hastighet km/h	Maximal längd m	Minimi-avstånd mellan korsn. m	Max. antal korsn.	Typ av korsn. mellan led av samma eller lägre klass	P-restrictioner	In- och utfarter från tomt, P-plats etc.	Tvärsektion				Trafik i eller intill körbanan			Typ av korsn. mellan bilförbindelse och	
									Antal körfält	Delad körbana	Vägarrenar	Skyddszon min. m	Mopedder	Cyklar	Fotgängare	Mopedväg	Gångväg, cykelväg
FI	Fjärrled Typ 1 (Riksmotorväg och motortrafikled)	>90 [90]	—	2500 /5000/	3 per 10 km	Planskild	✗	Nej	$\geq \frac{4}{2}$	Ja Nej	Ja	25	Nej	Nej	Nej	Planskild	Planskild
FII	Fjärrled Typ II	>90 [90, 70]	—	750 [500] /1500/	7 per 10 km	Plan [Planskild]	✗	Nej	$\frac{4}{2}$	Ja Nej	Ja	25	Nej	Nej	Nej	Planskild	Planskild
PI	Primärled Typ I (Stadsmotorväg)	90 [70]	—	1000 /1500/	7 per 10 km	Planskild	✗	Nej	≥ 4	Ja	Ja	25	Nej	Nej	Nej	Planskild	Planskild
PII	Primärled Typ II	70 [90]	—	750 /1200/	10 per 10 km	Plan	✗	Nej	$\frac{4}{2}$	Ja Nej	Ja	25	Nej	Nej	Nej	Planskild	Planskild
SI	Sekundärled Typ I	70 [50]	/5000/	500 /750/	10 per 6 km	Plan [Planskild]	✗	Nej	≥ 4	Ja	Ja	10	Nej	Nej	Nej	Planskild	Planskild
SII	Sekundärled Typ II	50	/5000/	250 /400/	10 per 3 km	Plan	✗	Nej	$\frac{4}{2}$	Ja Nej	Ja	10	Nej	Nej	Nej	Planskild [Plan]	Planskild
M	Matarled	50	1000	50 /100/	12 per 1 km	Plan /3-vägskorsn./	✗	Nej	$\frac{4}{2}$	Ja Nej	Nej /Ja/	5	Nej [Ja]	Nej	Nej	Planskild [Plan]	Planskild [Plan]
AI	Angöringsgata Typ I	30	200	—	—	Plan /3-vägskorsn./	✗	Ja	2	Nej	Nej	3	Ja	Nej	Nej	—	Plan [Planskild]
AII	Angöringsgata Typ II Småhusbebyggelse	30	250 [300]	—	—	Plan /3-vägskorsn./	✗	Ja	2	Nej	Nej	3	Ja	Nej	Nej	—	Plan [Planskild]
EI	Entrégata Typ I Småhusbebyggelse	30	150 [200]	—	—	Plan /3-vägskorsn./	✗	Ja	2	Nej	Nej	3	Ja	Ja	Ja	—	—
EII	Entrégata Typ II Småhusbebyggelse	30	50 + 200	—	—	Plan /3-vägskorsn./	✗	Ja	1 (Enkelriktad)	Nej	Nej	3	Ja	Ja	Ja	—	—

/ / = Önskvärt [] = Specialfall

De facto a road standard

SCAFT 68 – National planning guidelines

- The only guidelines for town planning
- Considered one factor only
 - traffic safety
- Authorized by key government bodies
- The Minister of Communication (1967)
 - 'When one builds new residential districts it is important to follow these guidelines'
- Widely spread and used
 - 'the little green one'



Impact

- About 65 % of Sweden's more than 4 million dwellings built during the post-war period
- The 'Million Programme' between 1965 and 1974 (preceded by the construction of 900,000 dwellings during the previous ten year-period)
- Over 90 % of dwellings constructed between 1961 and 1975 due to state loans
- Plans needed official approval
- Planners and building contractors followed the advises in the guidelines, often literally

Staffanstorp, Lund (1973)



Conclusions

- Traffic safety => a critical problem for the nascent car society
- Traffic safety => a planning problem
- SCAFT 68 codified a car-friendly ideology
 - Put public transport at disadvantage
- Difficult to criticize traffic safety measures
 - After all: saving lives
 - But: *de facto* a road standard
- Subsequent standards based on SCAFT 68
 - Expressions of *frozen ideology*