

Ways to say
“this is (not) a cycle highway”



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We start with...

1. A game as a warming up to discuss...



We start with...

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2. CHIPS's vision on “readable CH’s”

Then we are ready to look at concrete...



We start with...

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3. Tools from CHIPS' readability toolbox

This structured framework will enable us to play



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4. A second game that might end with...

5. New input for the readability toolbox?



We start with...

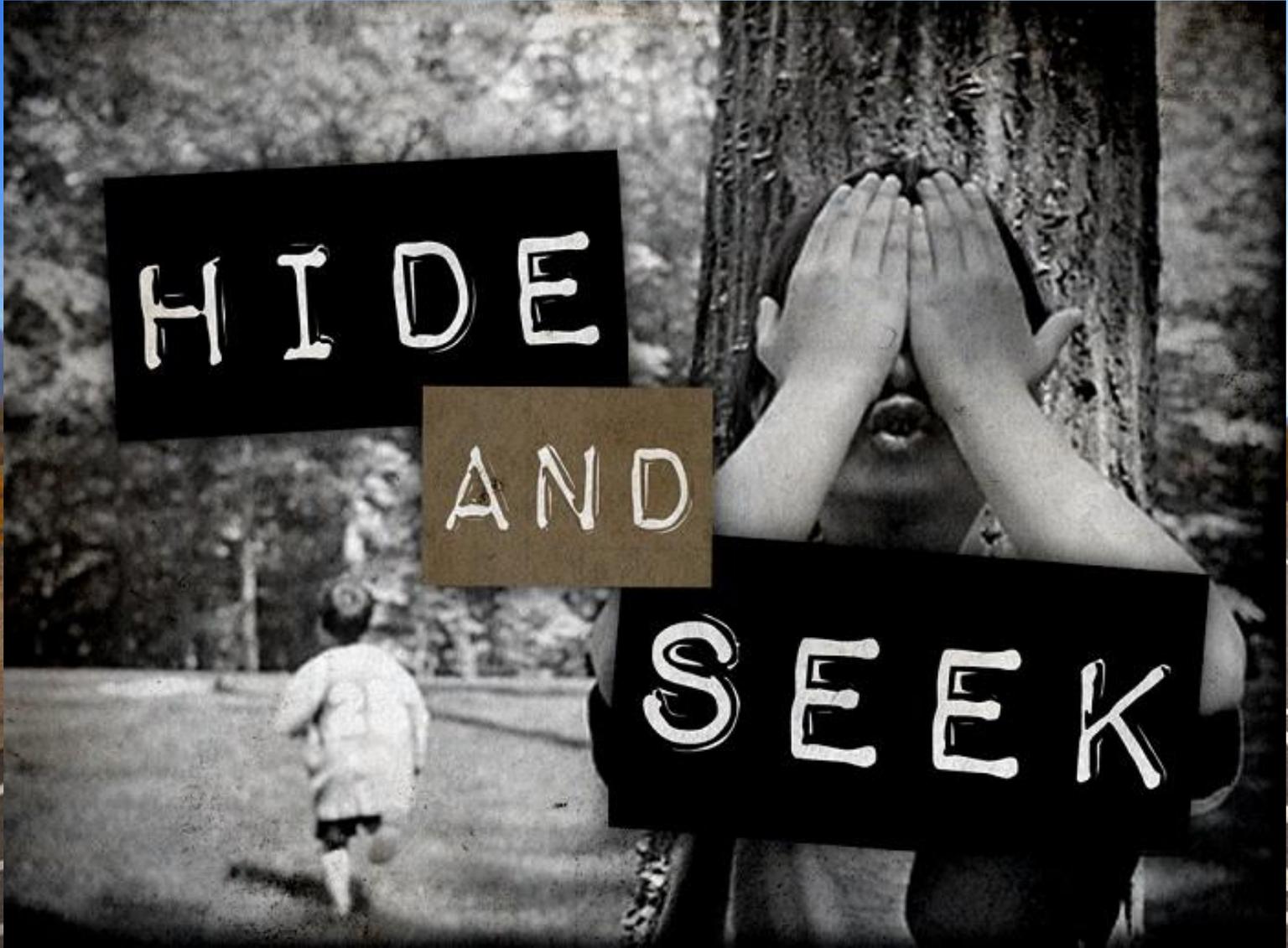
1. A game

2.

3.

4.

5.



The game I want to play

is **not** what you
might be thinking...

H I D E
AND

SEEK

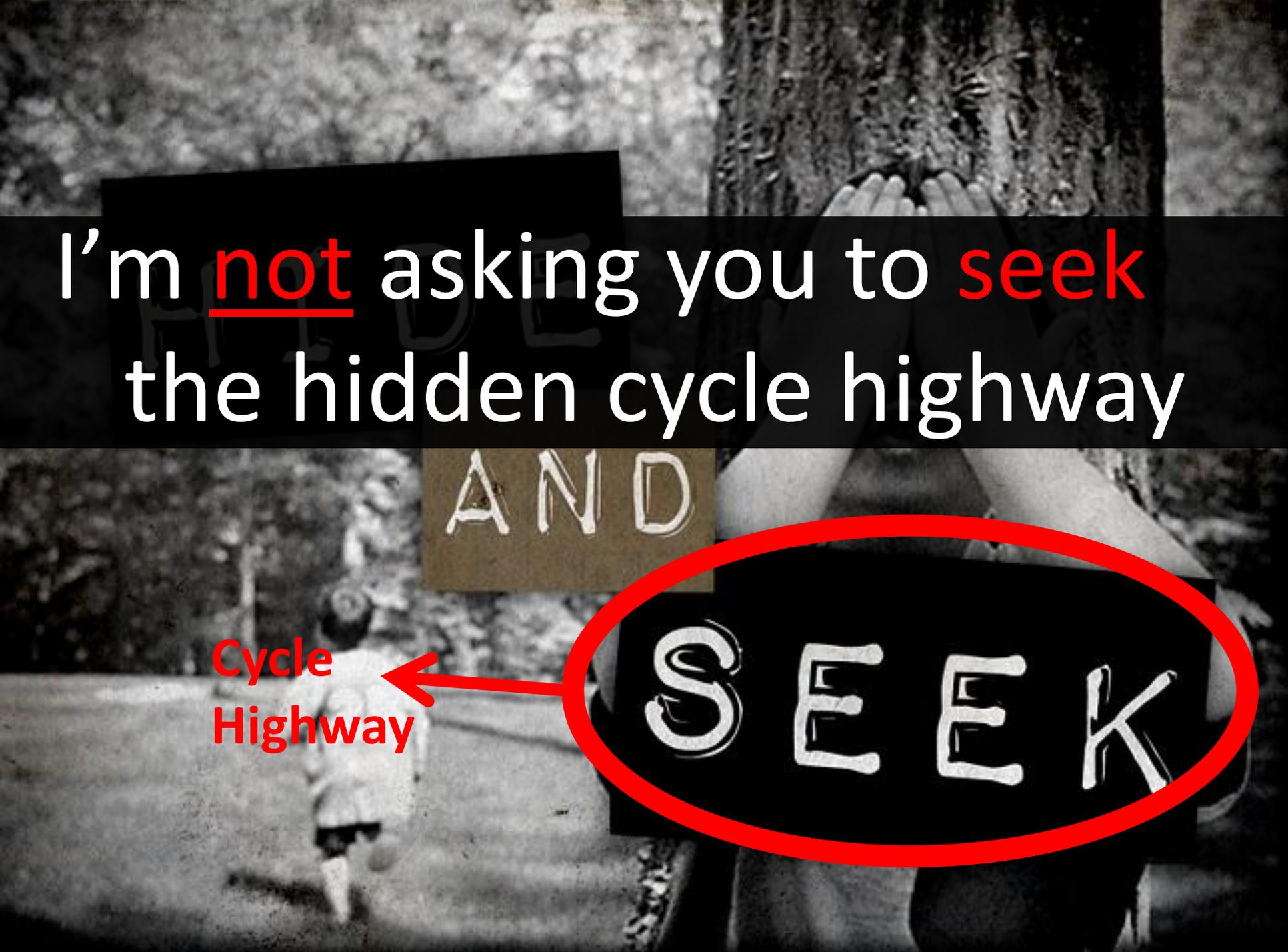
A black and white photograph of a child running in a field. In the foreground, a person is holding a large black sign with the word 'SEEK' written in white, stylized letters. The background shows a child running away from the camera on a grassy field. The overall scene is a visual pun on the game of hide-and-seek.

I'm not asking you to seek
the hidden cycle highway

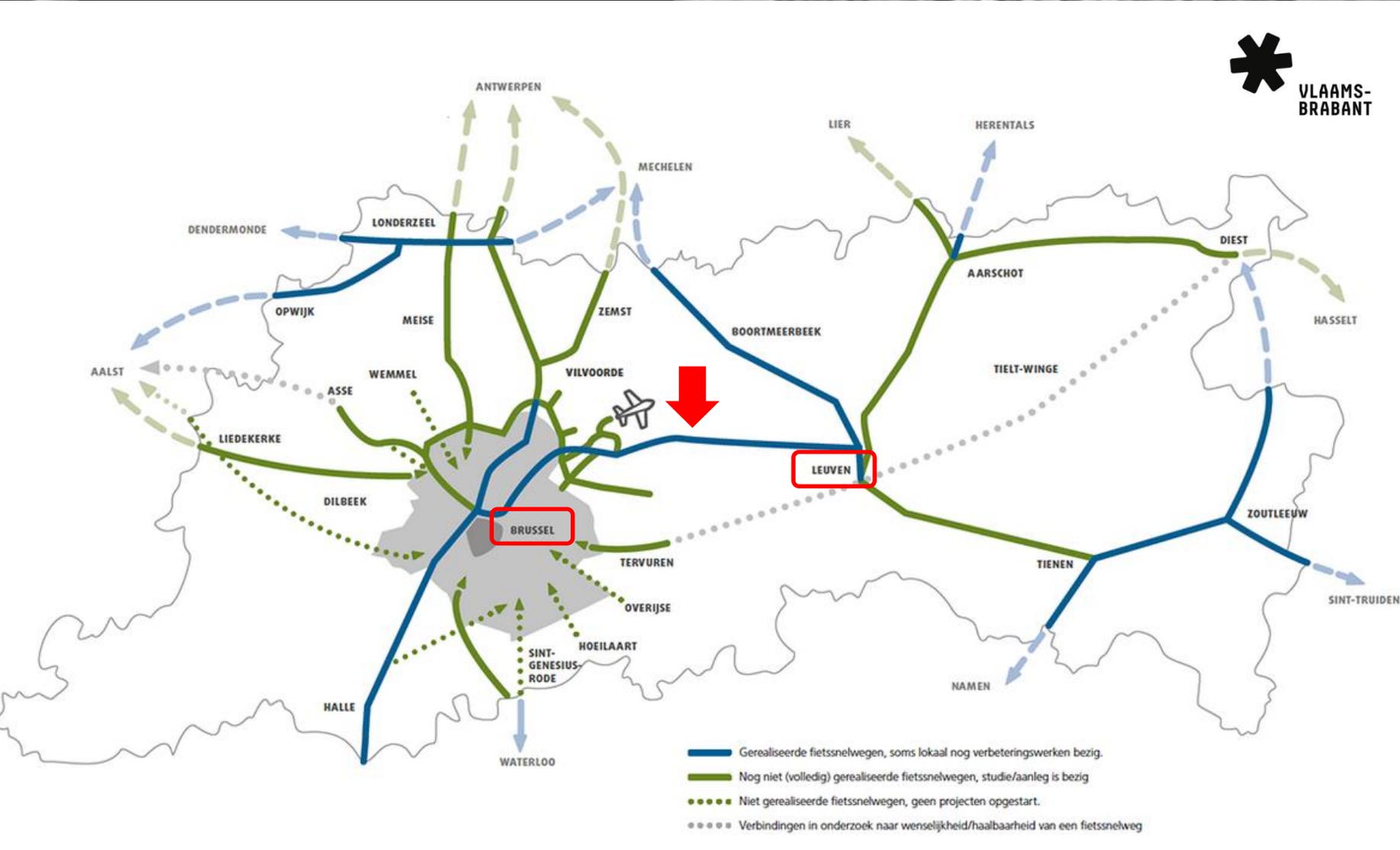
AND

Cycle
Highway

SEEK



Although there are many places where this game could be played



Here it seems quite easy...

But even here, there is not much that says “this is a cycle highway”



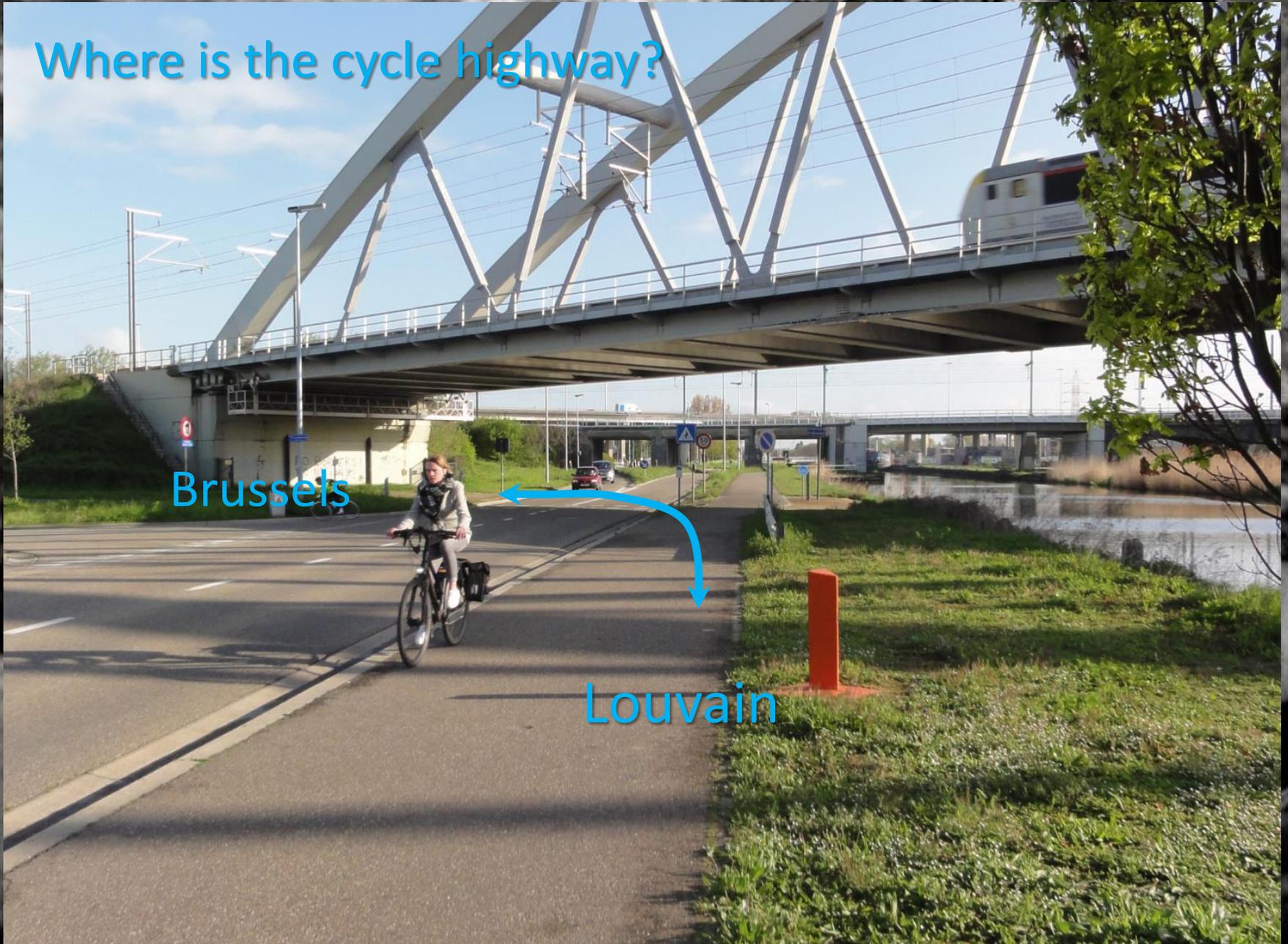
Part of the Cycle Highway Leuven-Brussels
CHIPS-partner Province of Flemish-Brabant

Here it is more challenging...



And we have also very challenging game levels...

Where is the cycle highway?



So there is a need to make it more tangible...

But does it make sense?

High quality infrastructure



But it's useful functional connection



And a backbone of the cycle network



And a mobility product



So there are two ways to look at CH's



It's a cycle highway...

when it works (more or less) as a cycle highway

And we can go for a combination of both views...



4 M



We start with the usefull stuff we have



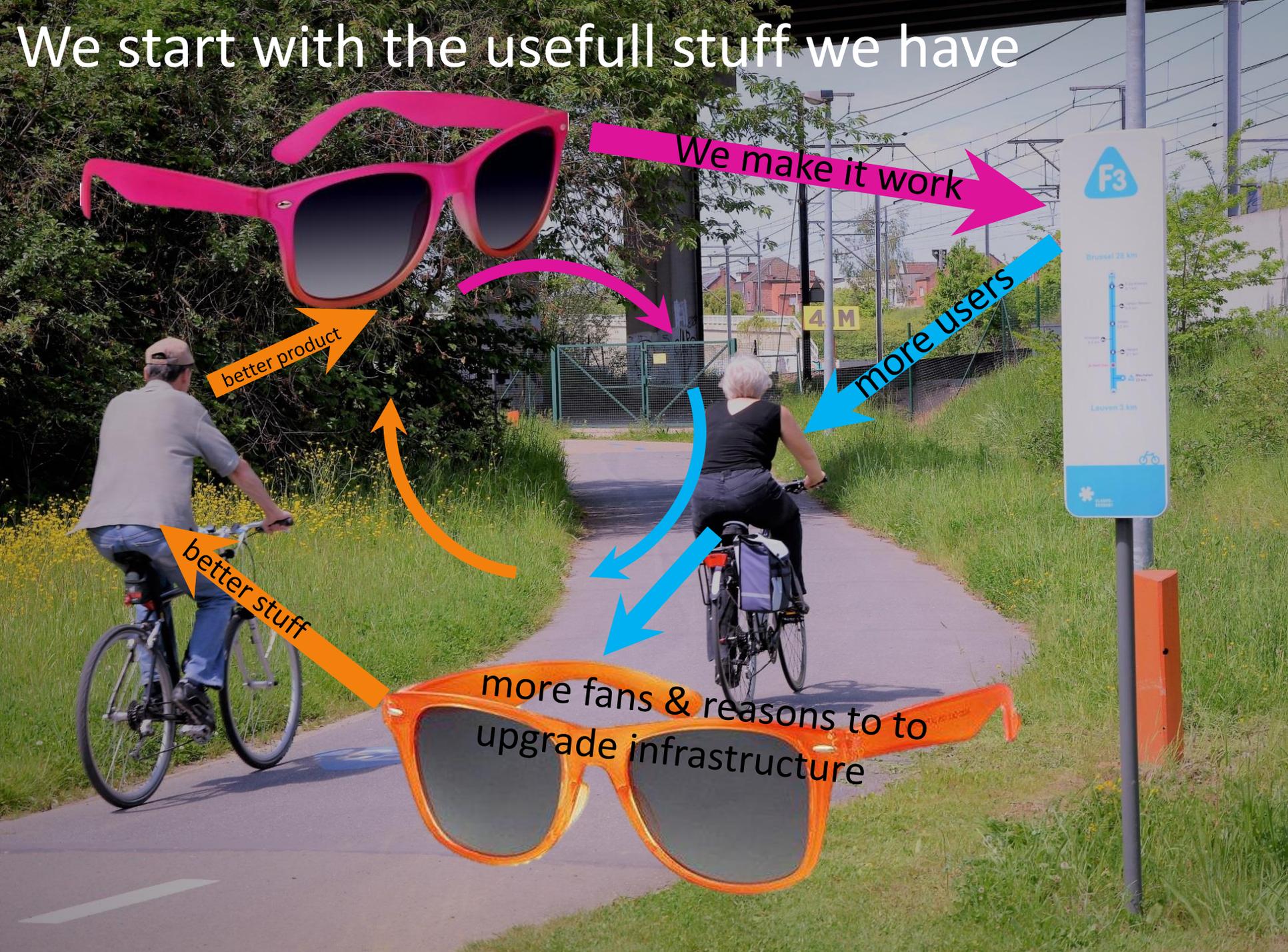
We make it work

more users

better product

better stuff

more fans & reasons to to upgrade infrastructure



So it makes sense to call this a (version of a) cycle highway

C99

Albertslundruten: 17,5 km.

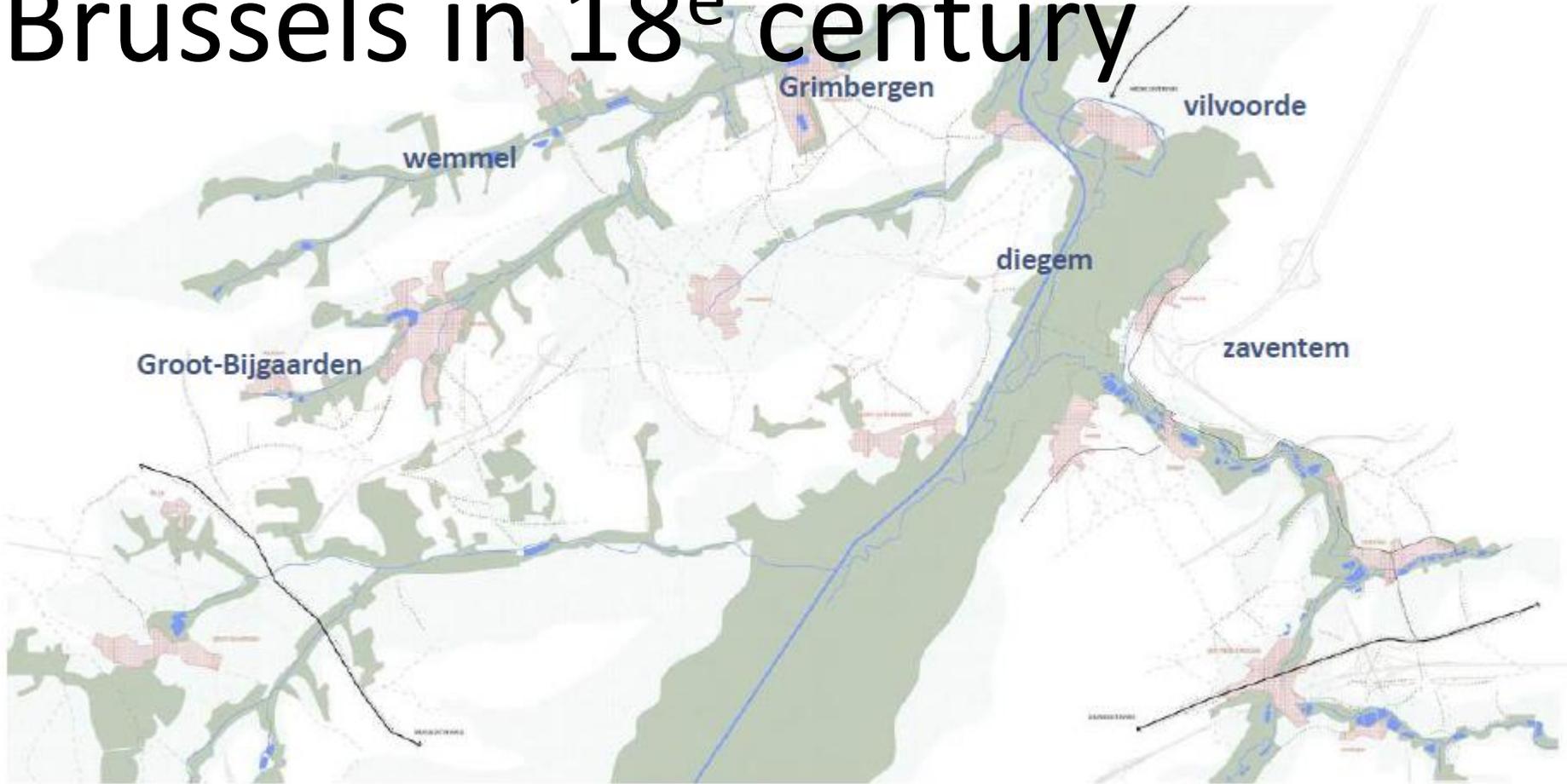
500 m.



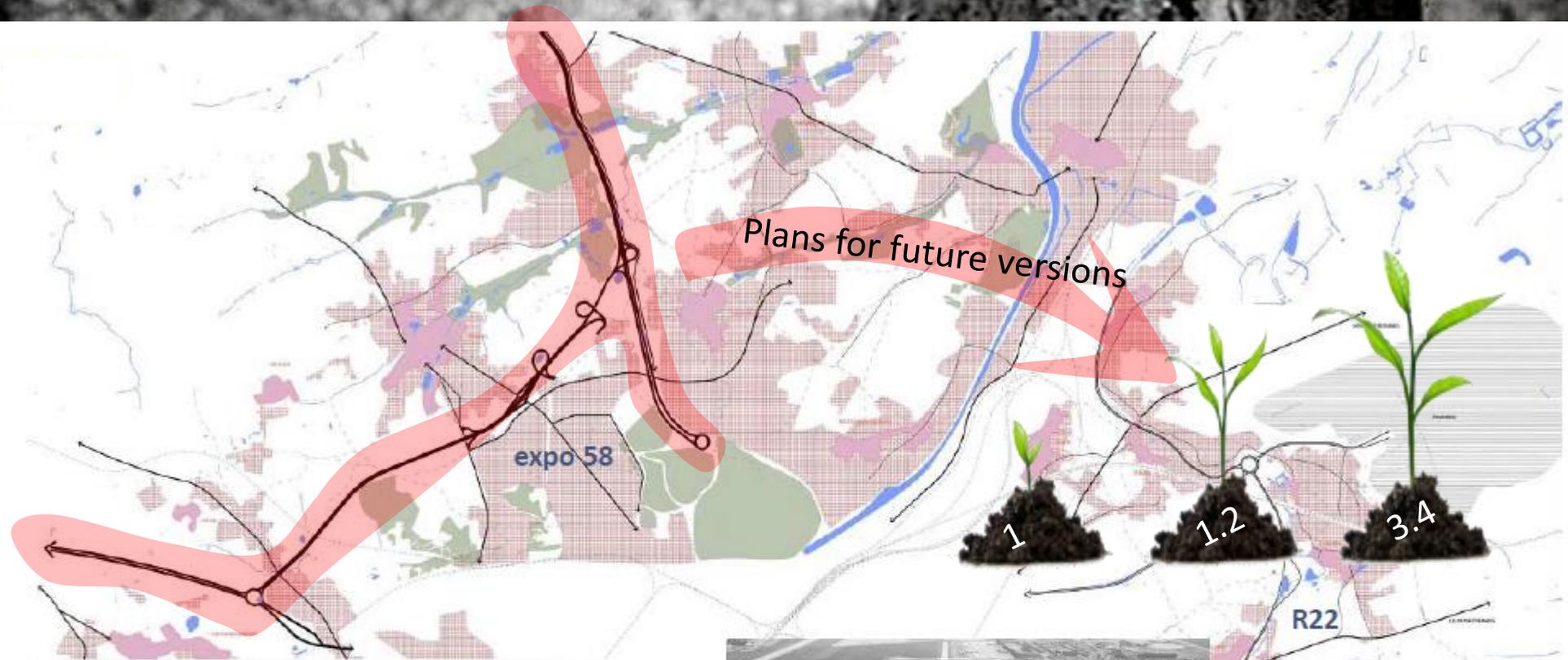
CYKEL SUPERSTIER 

Just as it makes sense to speak of
versions of motorways

Brussels in 18^e century

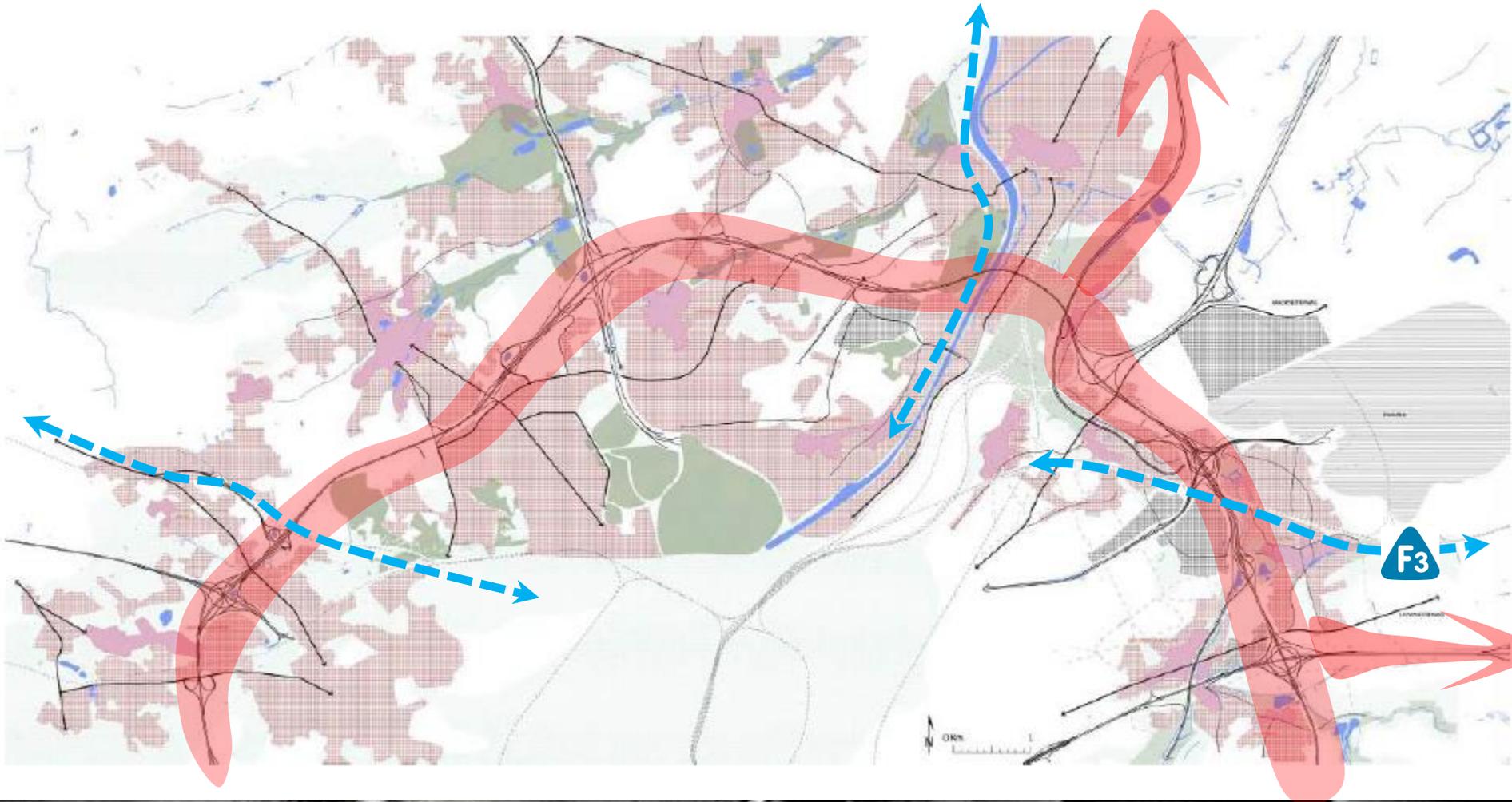


Brussels in the sixties



Brussels in the 21 century

And what about our era of cycle highways?

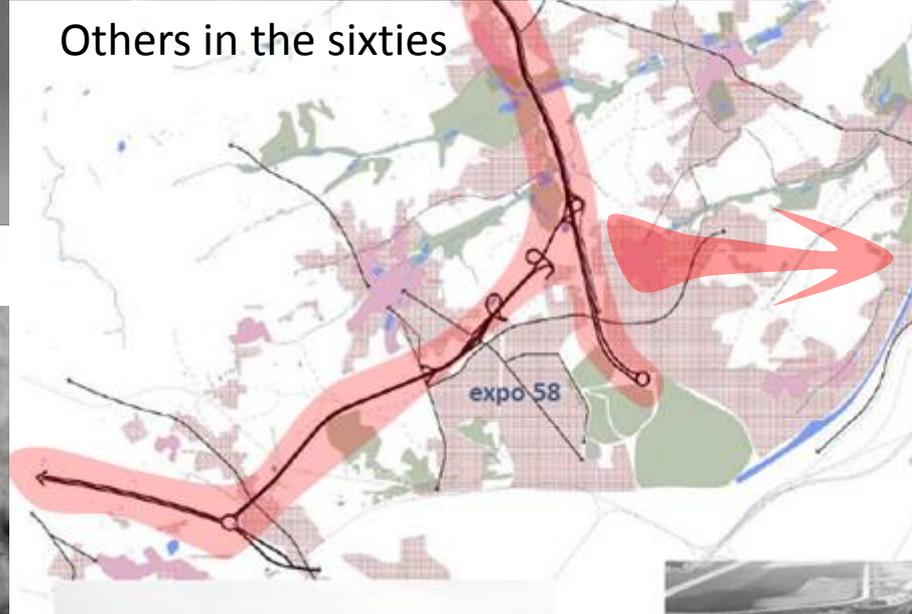


As to our era of cycle highways

Some regions are in the 18th century



Others in the sixties



Most cycle highways are still “salamised”



different pieces
of infrastructuur
build in...

different spatial contexts
by different partners
in different periodes
facing different challenges
etc...

So we have some tasty pieces...



And more challenging pieces...



And what about CHIPS-partner Gelderland?

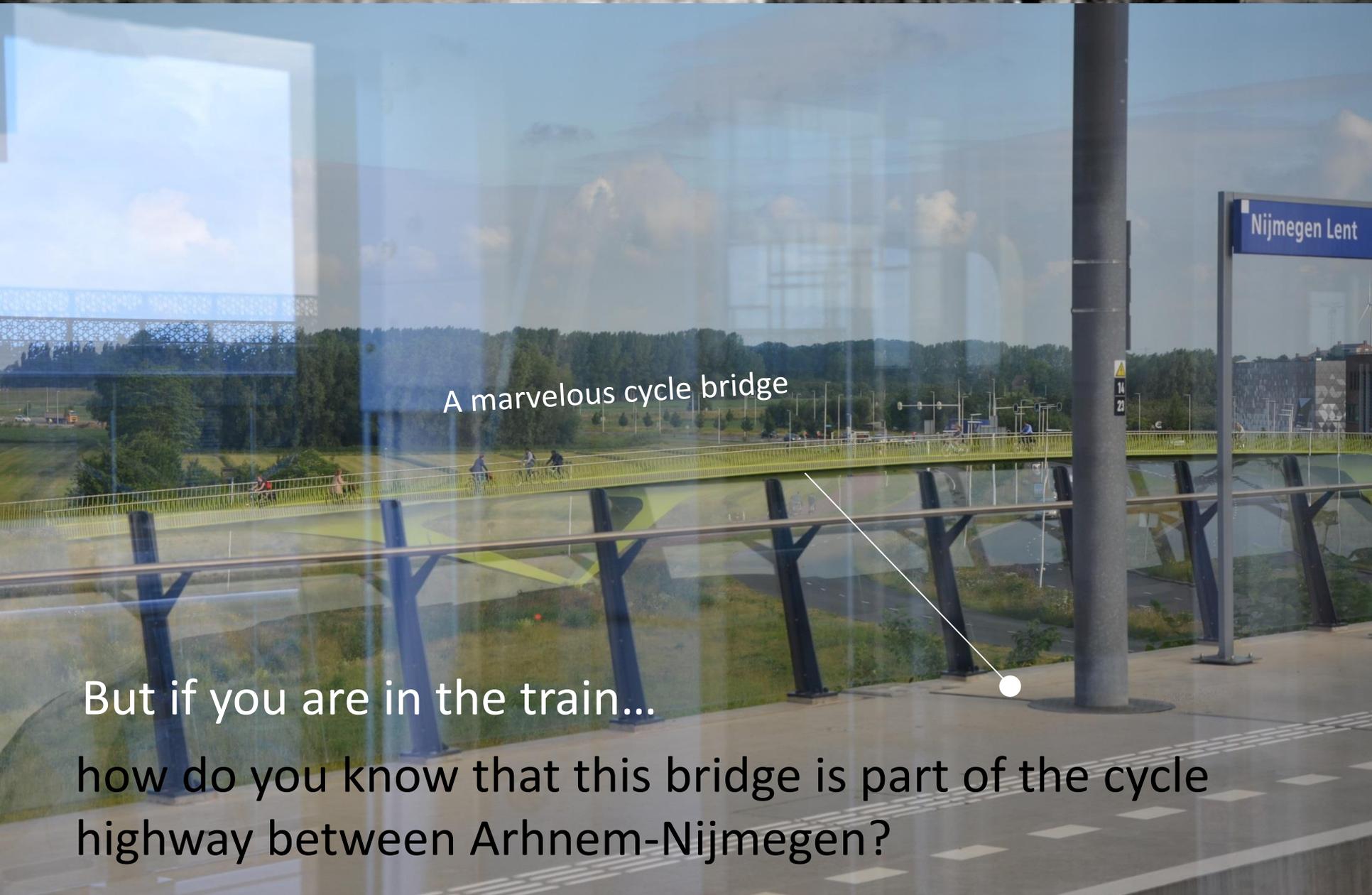


All the way beyond the sixties...

A marvelous cycle bridge

But if you are in the train...

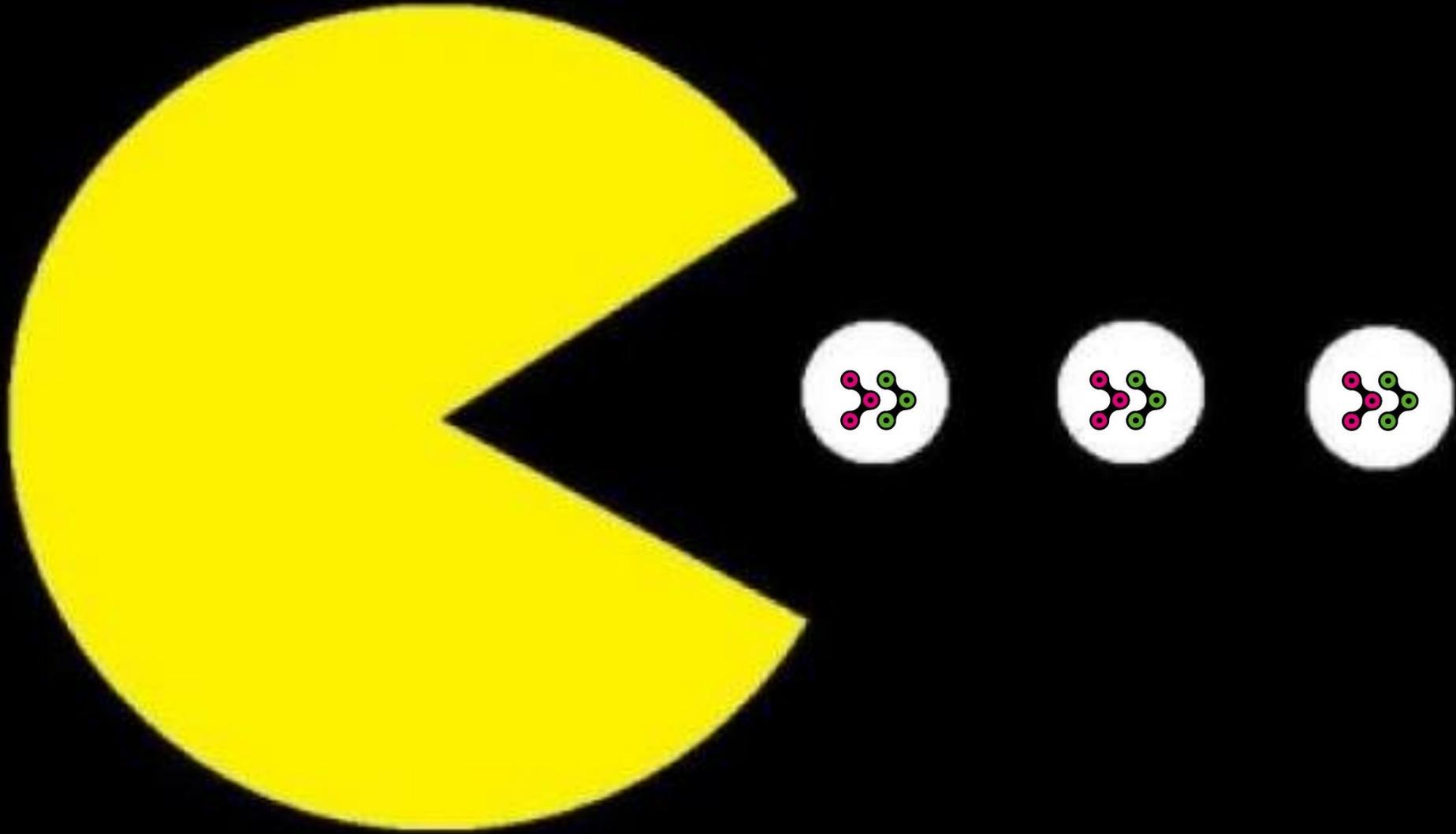
how do you know that this bridge is part of the cycle highway between Arnhem-Nijmegen?



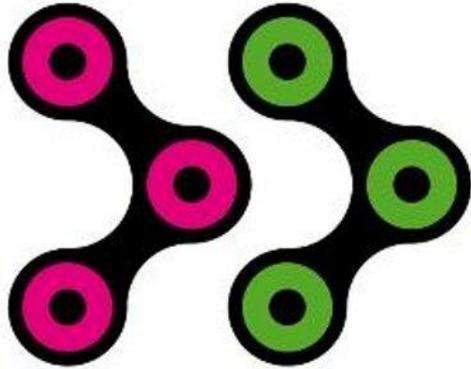
The infrastructure seems to be self-explaining



But only for those who know the secret...



The secret language...



= Rijnwaalpad

= Cycle highways

from the province of Gelderland

= Connection Arnhem-
Nijmegen

= F325 (national F-number)



Once you know the secret... its very easy!



But even in Gelderland, packman has some challenge.



Where is the cycle highway Arnhem-Nijmegen?



P.325 Nijmegen
Wijchen
Ressen Bemmel
Arnhem

42
50

A

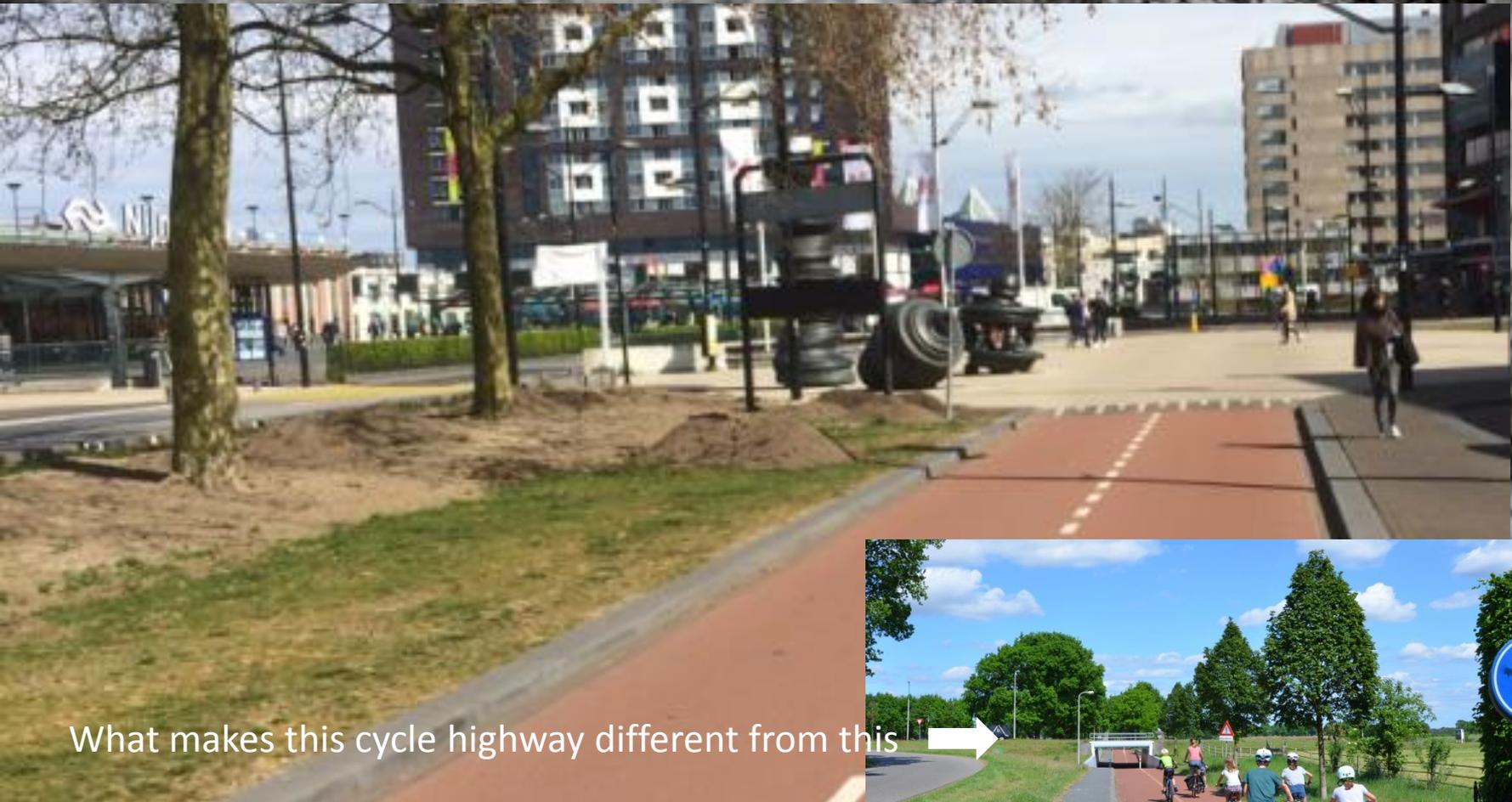
B

C

Is this zoom helpful?



And how do you know that this is **NOT** just one of **those** damn good holland cyclepaths?



What makes this cycle highway different from this



In Holland, there are cycle highways “everywhere” ...

A very efficient hiding strategy 😊



I think we can learn a lot from London...



The cycle highway is a branded product (CS3 number) and is very present for (potential) users

But as I said, there is another game I want to play...

HIDE

AND

SEEK

I want you to play the hiding role



I want to invite you for a thought-experiment

HIDE

AND



Think about different strategies to hide motorways.

How can we make this mobility product invisible?



Let's make 5 camouflage teams



Each team tries to design
at least *4 different types of
strategies*
to hide motorways



Visualise each strategy on a paper:
a drawing, a word...

make sure that your slide can be seen from a distance...



Strategy 1

Hide the infrastructure

Example of one type of strategy:

- Burry the infrastructure
- Give the infrastructure the same outlook as the environment: make it look like a forest, put buildings on it...

Strategy 1

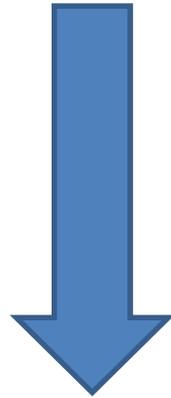
Hide the infrastructure



The different **hiding strategies** we discoverd



point at **touchpoints**:
ways to (get in) *touch* (with)
the mobility product



The idea/concept

The type of infrastucture

The identity, brand and name

Signage

Integration in other mobility products

Diffent digital tools (googlemaps, gps-devices)

Other types of communication

- word of mouth

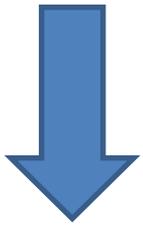
- radionews about congestion

- social media

...

Readability tools to make the cycle highway
readable as a mobility product

Ex. **hiding** the infrastructure for potential users



readability tools to expose
the infrastructure to (potential) users

Ex. readability tool: exposing the infrastructure to potential users



Implementation on the Flemish-Brabant F3- pilot



And on this cycle highway and motorway
you get in touch with
a “mobility products” for animals



There are similar readability tools in other regions

F.i. The RS1 Cycle Highway (Rhur)



But you could also (re)use a landmark

Landmark of a cycle highway
in Breda (Noord-Brabant
+ combination with CH brand



We start with...

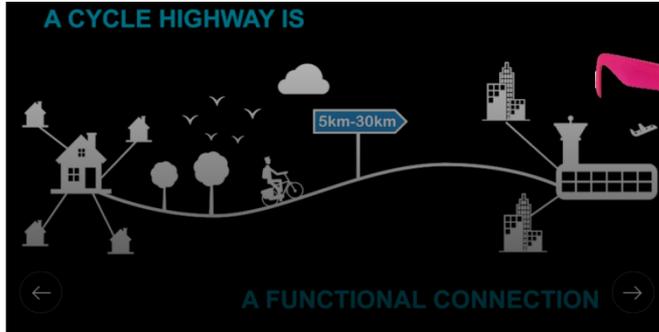
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Then we are ready to look at concrete...



We start from a shared concept of the mobility product

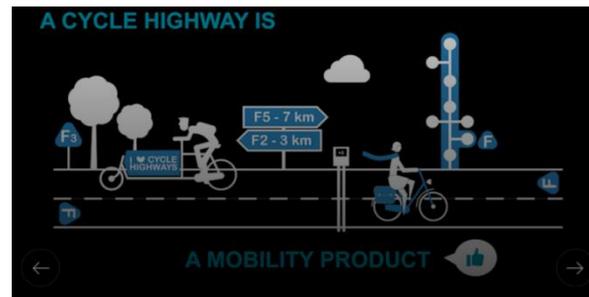


Functional connection

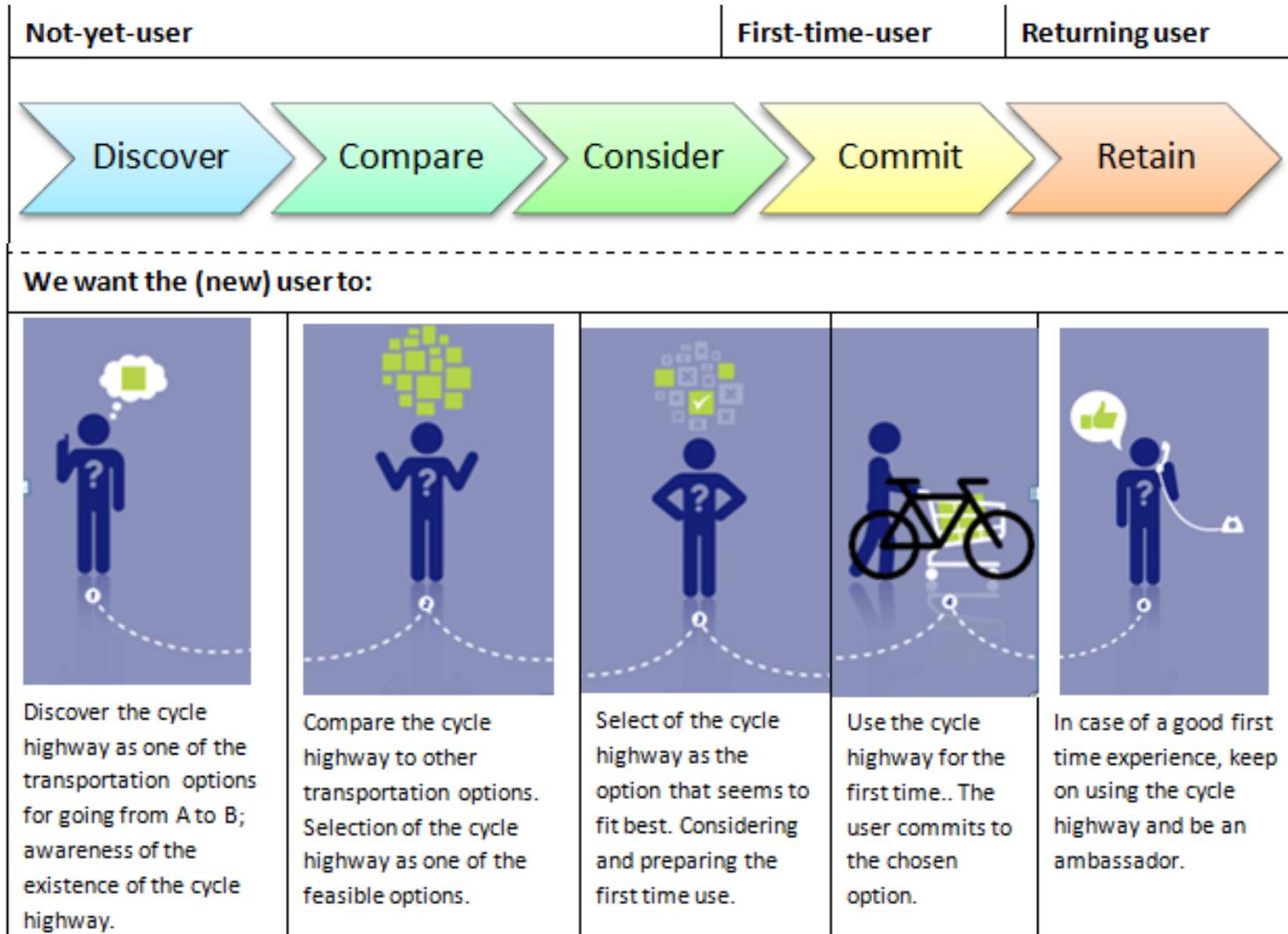
High quality infrastructure

Backbone of cycle network

Readable mobility product

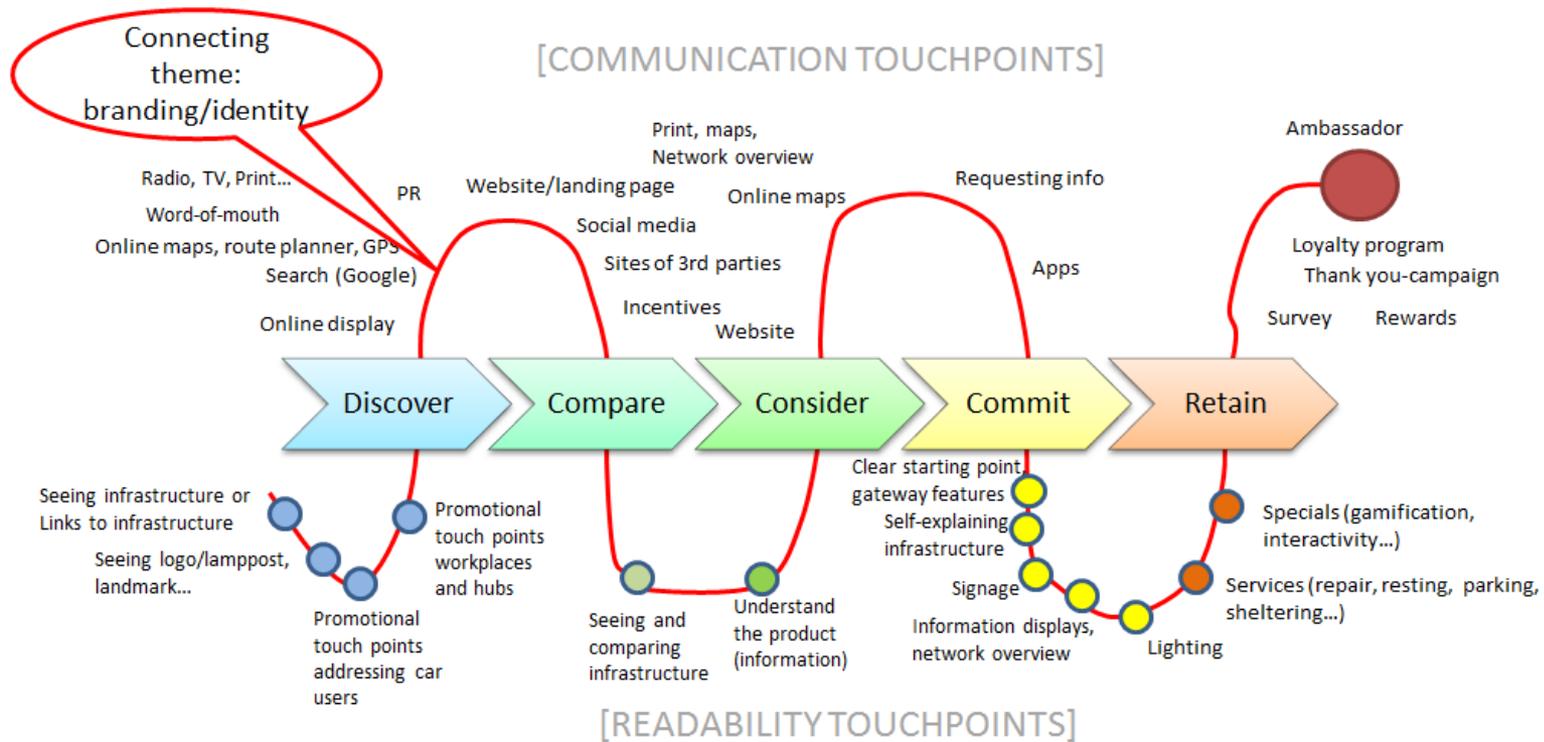


We tackle “readability” also from the perspective of a not-yet-users (customer journey)



And we point out that in this journey...

branding/identity is an important connecting theme for the different touchpoints



Example



Example of the Camino de Santiago (Way of St. James): a famous “mobility product” with a strong identity and brand. The logo of the shell is integrated in a lot of touch points like maps, signage and even as tattoo on the human body.

We discovered a strong relation between scale of branding and proliferation of touchpoints...

	Economies of scale	Learnability for new (potential) users	Awareness integration in diversity of touch-points
Route identity	 <p>RijnWaalpad</p> <p>The Comber Greenway</p>	<p>--- +</p>	<p>+</p>
Regional network identity	<p>+</p>  <p>Super Cycle Highways London</p>	<p>++</p> 	<p>++</p> 
European network identity	<p>+++</p>	<p>+++</p>	<p>+++</p>

An example of economies of scale (network-identity) in Flanders

- uniform logo and numbering system in 5 provinces



FIETSSNELWEGEN EN FIETSOSTRADES IN VLAANDEREN



VLAAMS-BRABANT



Provincie Antwerpen



Provincie Oost-Vlaanderen



Provincie Limburg



west-vlaanderen
De gebieden provincie



Economies of scale (network identity) in region of Copenhagen



And we came to this definition of readability:

*A cycle highway is 'readable' if a specified **user** at every moment and on every part of the cycle highway is capable to intuitively recognize and use the cycle highway with effectiveness, efficiency, and satisfaction.*

*Well thought-out **infrastructure** and elaborated **awareness** raising elements focusing on identity and guidance offer the cyclist **tools** to help **decision making before** and during the journey.*

We bear the
not yet user in mind...

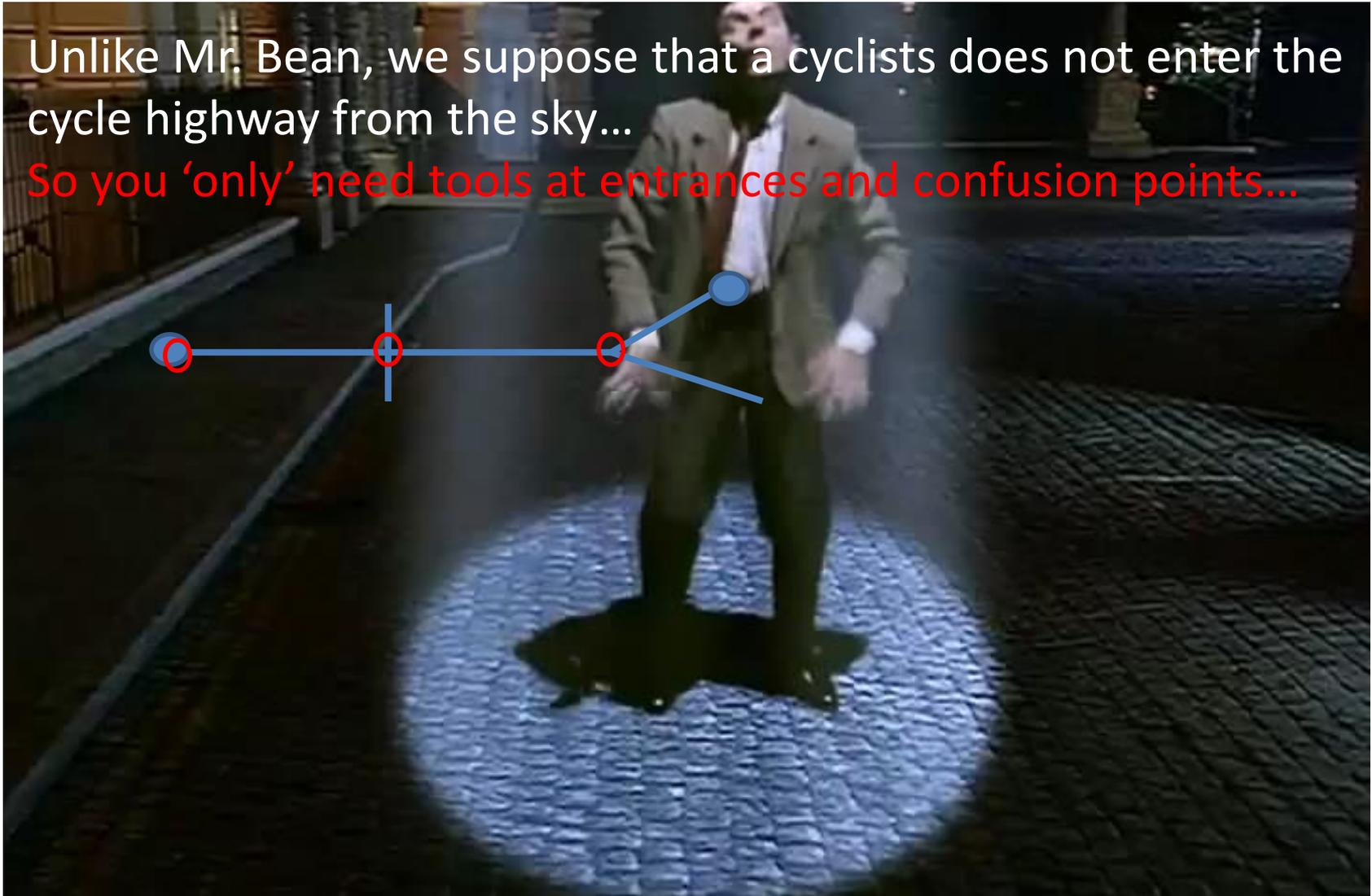


Further clarification of our definition:

A cycle highway is 'readable' if a specified user *at every moment and on every part* of the cycle highway is capable to intuitively recognize ...

Unlike Mr. Bean, we suppose that a cyclists does not enter the cycle highway from the sky...

So you 'only' need tools at entrances and confusion points...

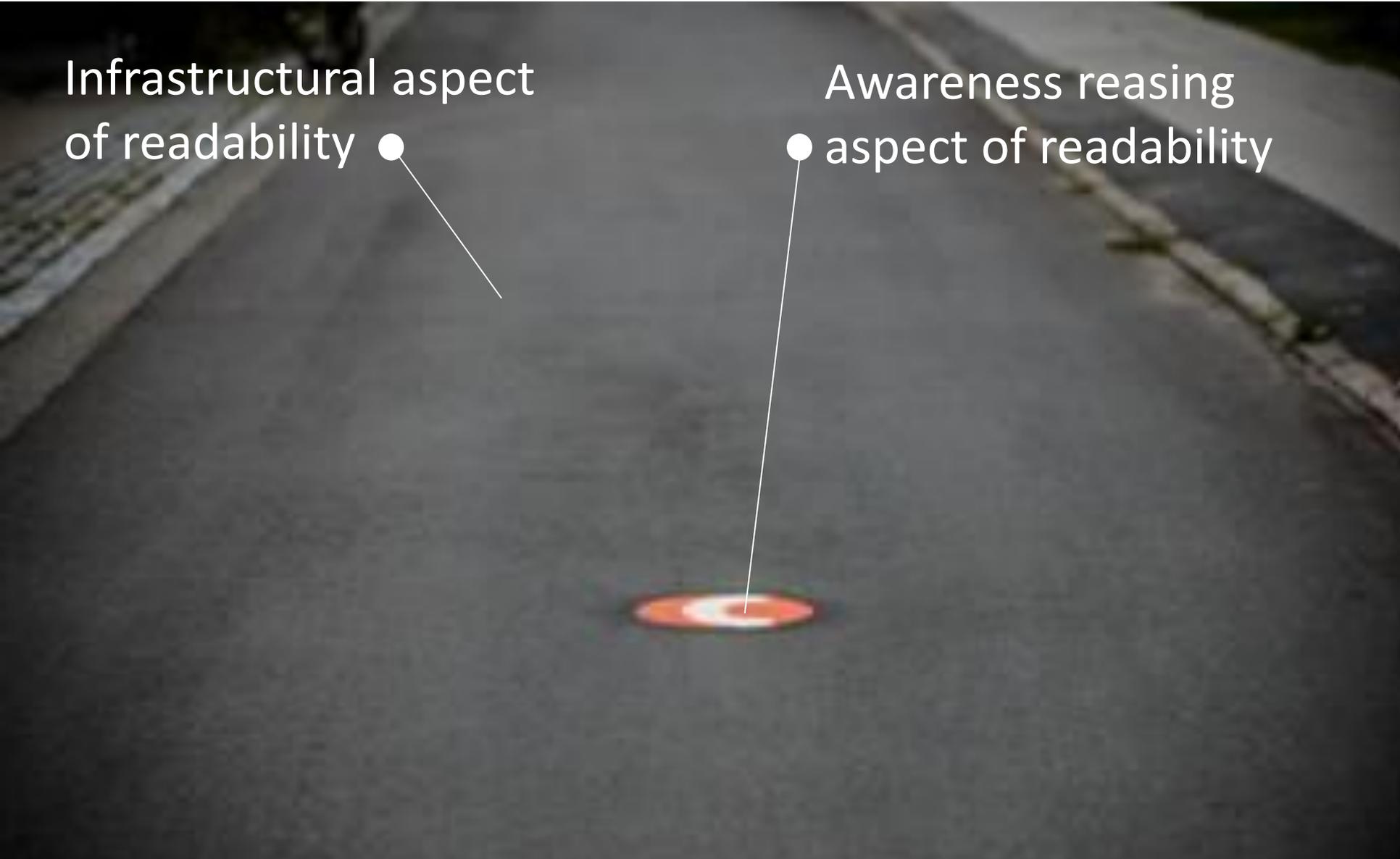


We differentiate 2 aspects of readability:

*Well thought-out **infrastructure** and elaborated **awareness raising elements** focusing on identity and guidance offer the cyclist tools to help decision making before and during the journey.*

Infrastructural aspect
of readability ●

Awareness reasing
● aspect of readability



Or applied to a previous case...

Readable
infrastructure



Awareness raising
aspect of readability

And there is an interaction between both aspects of readability

Good infrastructural readability

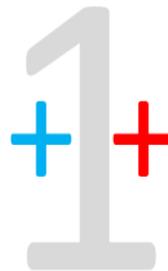
A positive **user experience** leads to a virtuous circle. Existing and new users take the roll as ambassadors leading to more and more users.

Bad infrastructural readability

Because of a lack of infrastructural readability the cycle highway is less “plug&play” and **user experience** is less optimal. Users need to look more for clues and will be less likely to take the roll as ambassadors.

High awareness

An identity layer is established by a consistent application of non-infrastructural readability tools: strong identity, name, brand, guidance system,...

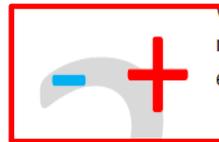


Non-users get easily in touch with the cycle highway as mobility product and first time users are maximally supported in their try. Quick mental integration, easy peer-to-peer-communication



Low awareness

Absence of an identity layer



Non-users don't easily get in touch with the cycle highway. They need more explanation and a more complex extra navigation strategy.



The existing users have a positive **user experience** but are not facilitated in their role as ambassadors. New users don't feel much support. It depends on their first time experience whether they return or make publicity through word of mouth.

Only well adapted seasoned users experience a positive **user experience**. Since the value of the cycle highway is not easily grasped by new inexperienced cyclists, there will not be a lot of new users.



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2. CHIPS's vision on "readable CH's"

Then we are ready to look at concrete...

3. Readability tools – CHIPS' toolbox

This structured framework will enable us to play



CHIPS' readability toolbox is an answer to a couple of challenges...

There is an emerging diversity in ways to say "this is a cycle highway"



SUPERCYKELSTIER



How to deal with this diversity in Europe?

Solution

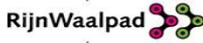
Let's start from shared problems so that we can use them as our guidelines...



Let's structure the solutions for our problems and learn...

We have shared identity problems and different solutions:

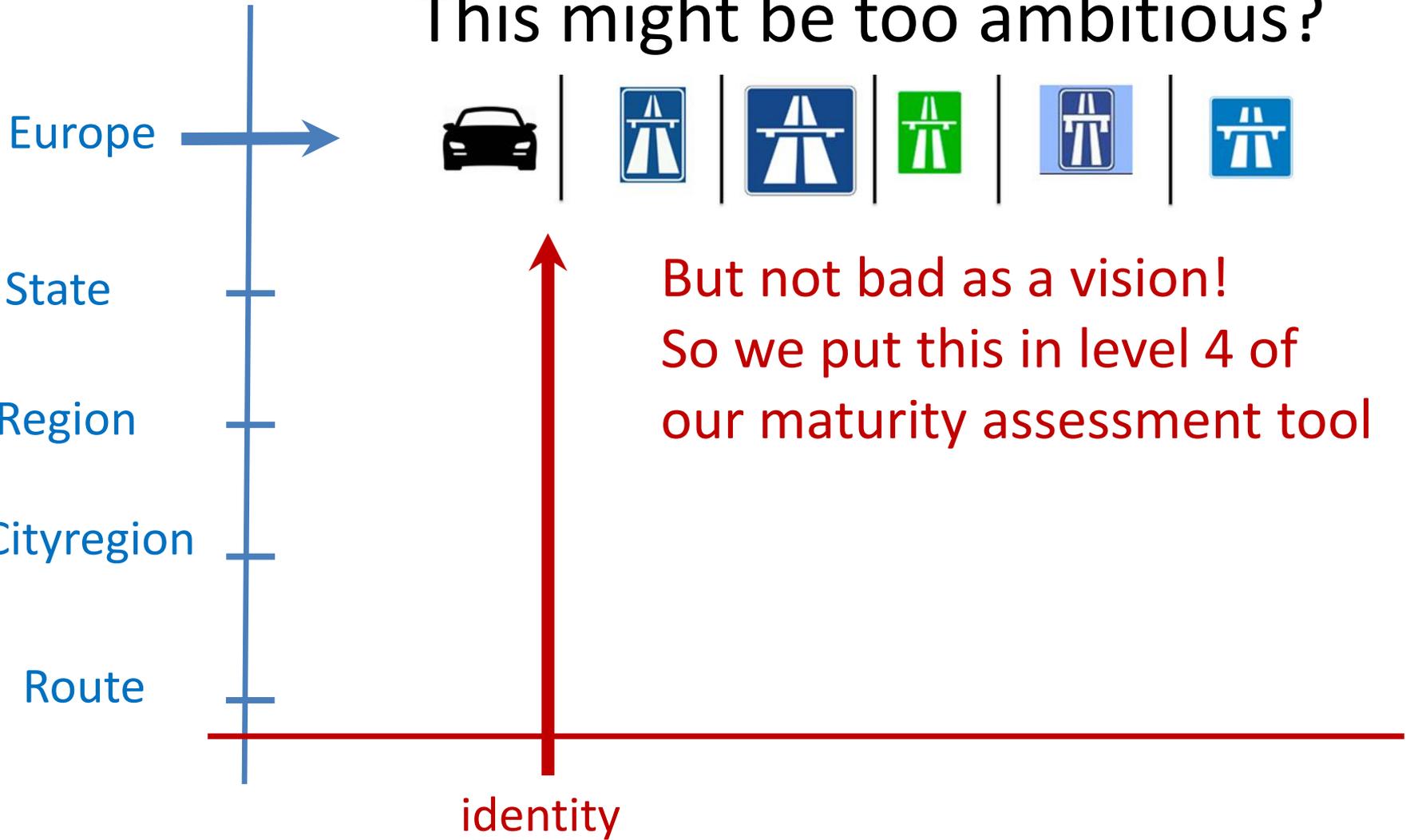
We can minimally aim at “uniformity in diversity” ...
 This means: network-identity

	Economies of scale	Learnability for new (potential) users	Awareness integration in diversity of touch-points
Route identity	 --- ++	 --- ++	+
Regional network identity	+  Super Cycle Highways London	+++ 	++ 
European network identity	+++	+++	+++



Scale

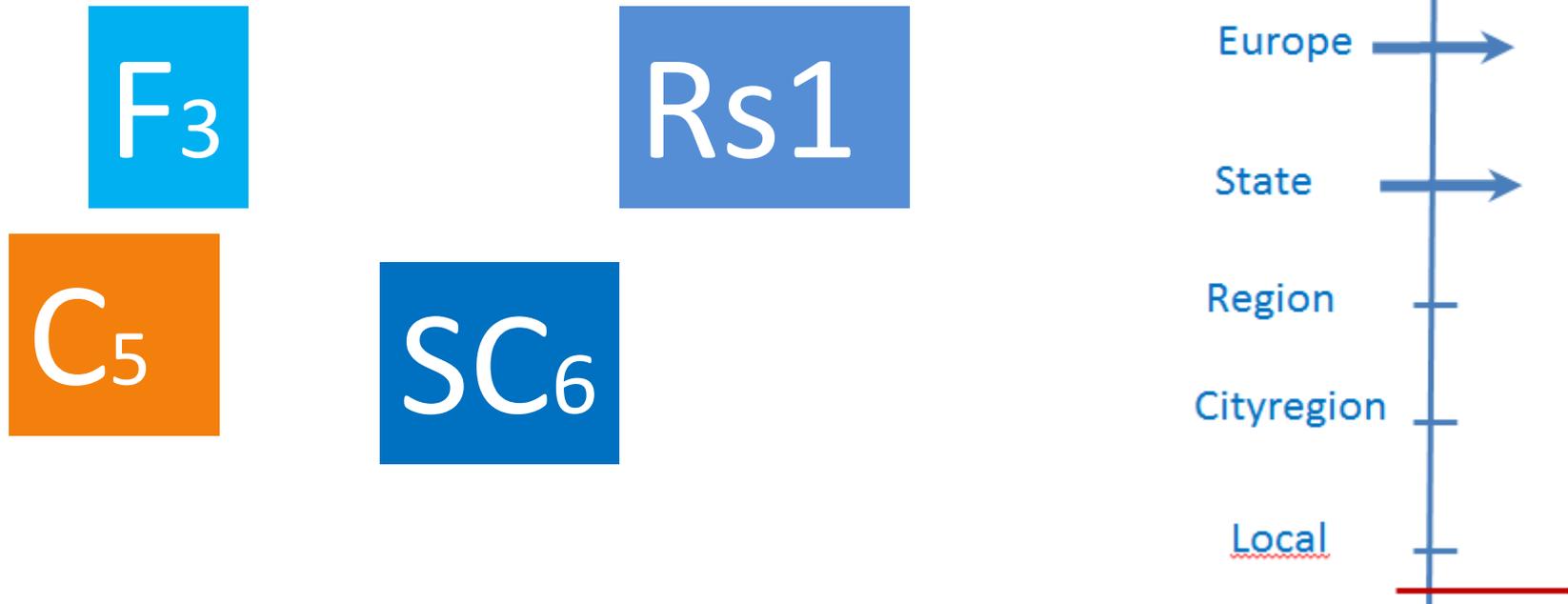
This might be too ambitious?



But not bad as a vision!
So we put this in level 4 of
our maturity assessment tool

Central readability tool and principle:

- we advise network-identity
- the use of letter + numbers
- and we advise to do it on the highest scale



Scale

Europe

State

Region

Cityregion

Route

Scale of branding

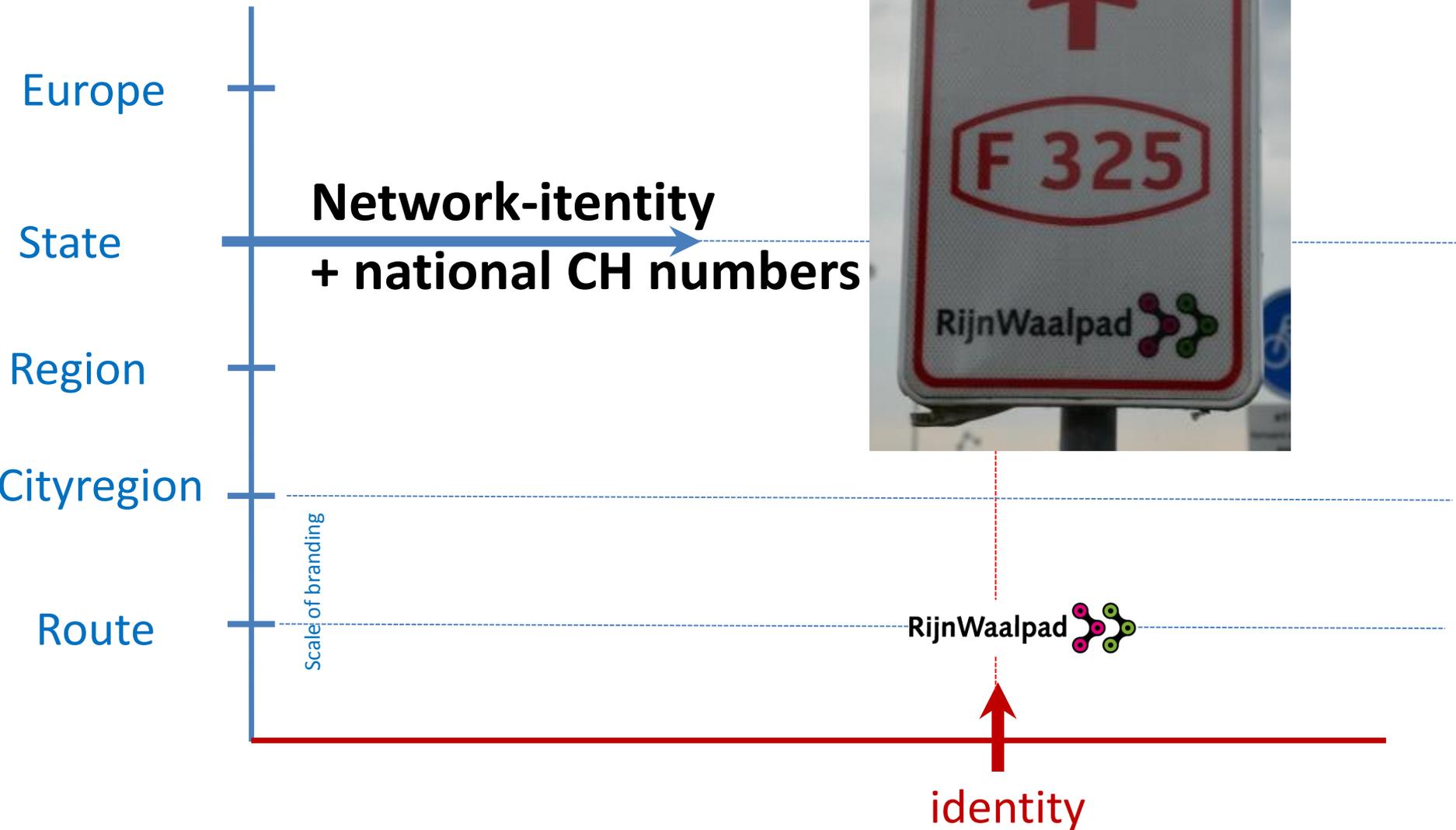


RijnWaalpad



identity

Scale



Scale

Europe

State

Region

Cityregion

Route



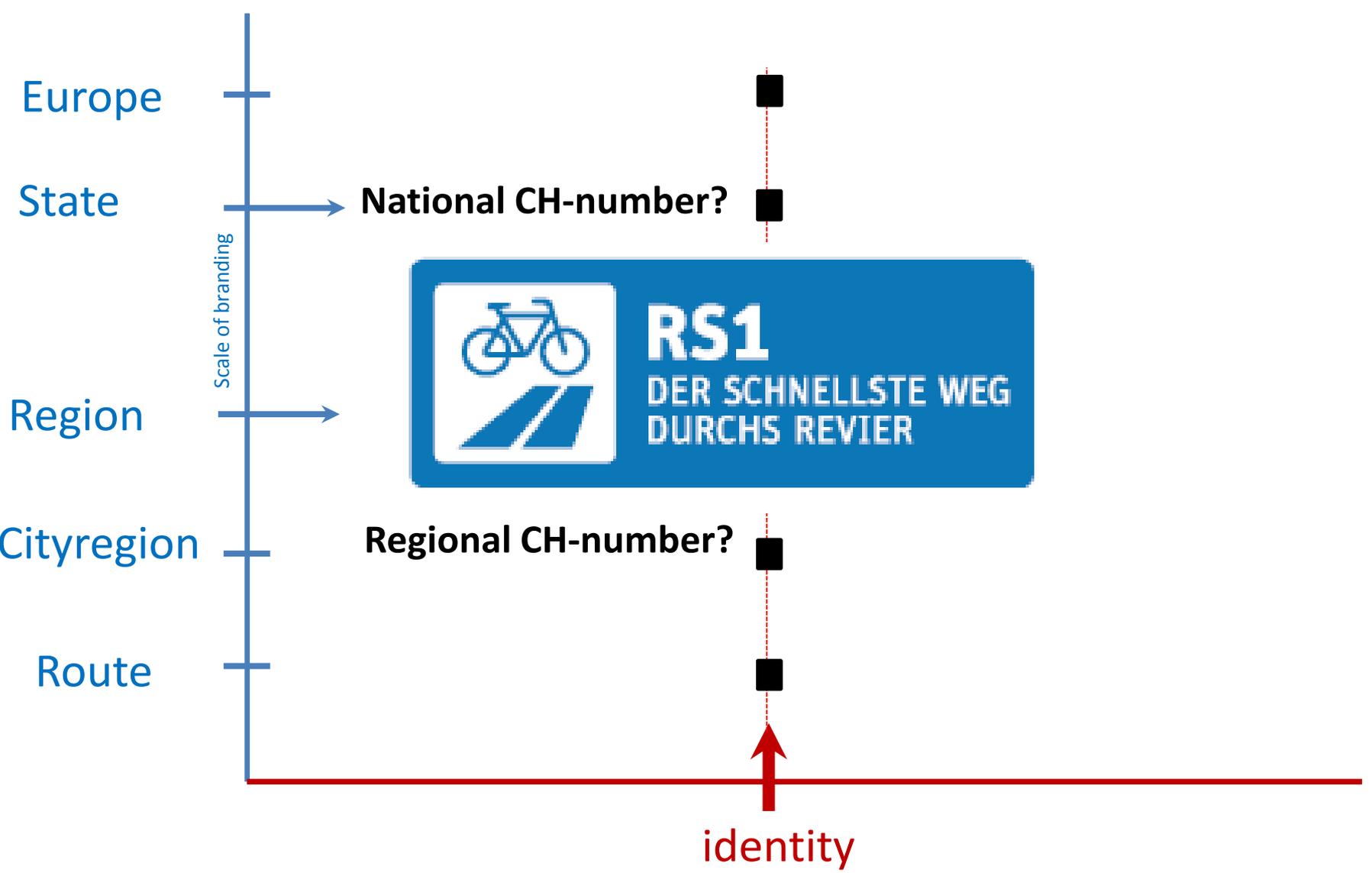
FIETSSNELWEGEN EN FIETSOSTRADES
IN VLAANDEREN



Network-identity + CH numbers in Flanders

identity

Scale



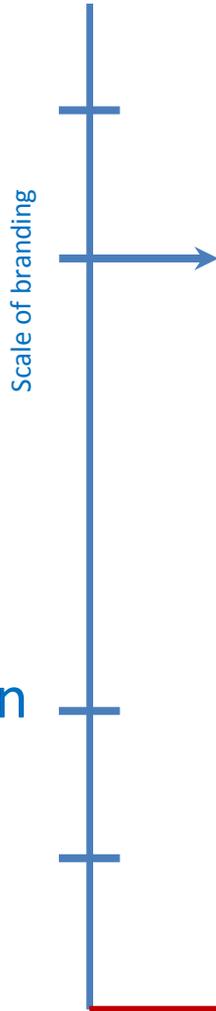
National CH-number?

Regional CH-number?

identity

Strategy: Letter + 99 to differentiate “comber greenway” as a cycle highway?

Scale



The signage on the Cycle Highway “Comber Greenway” refers to the National Cycle Network.

identity

Scale

Europe

State

Region

Cityregion

Route

Scale of branding

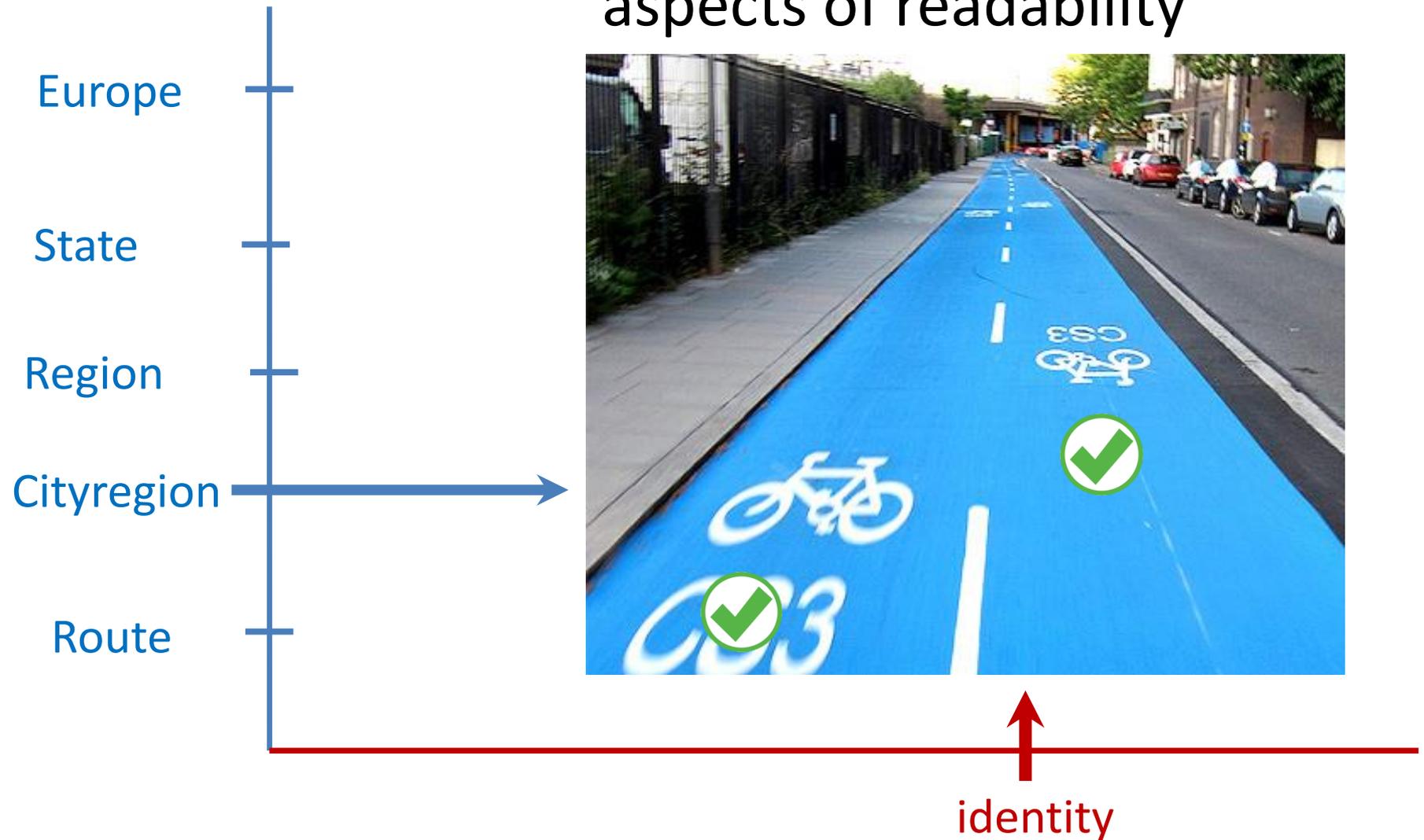


Good integration of both aspects of readability

identity

Scale

Good integration of both aspects of readability



Scale

Good integration of both aspects of readability

Europe

State

Region

Cityregion

Route



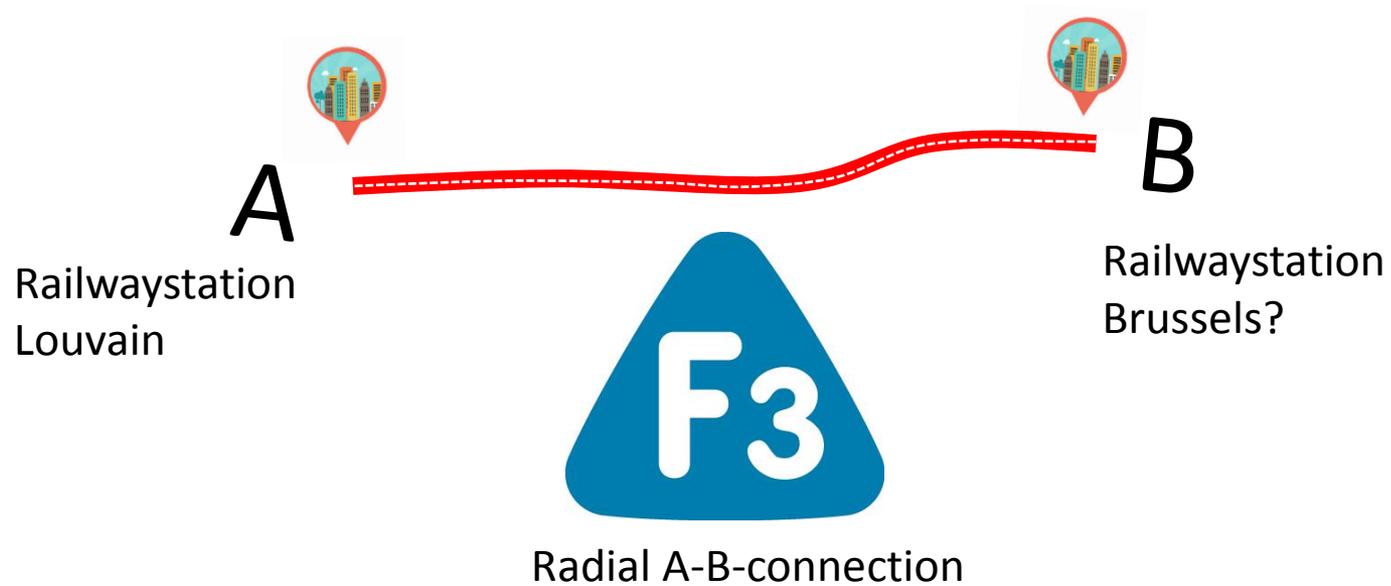
Forvaringsmarkering, 200 x 20 cm med 10 cm høje bogstaver.

Pile som navigationsanvisning med brug af mindre informationsrondel til bekræftelse og forvaring.

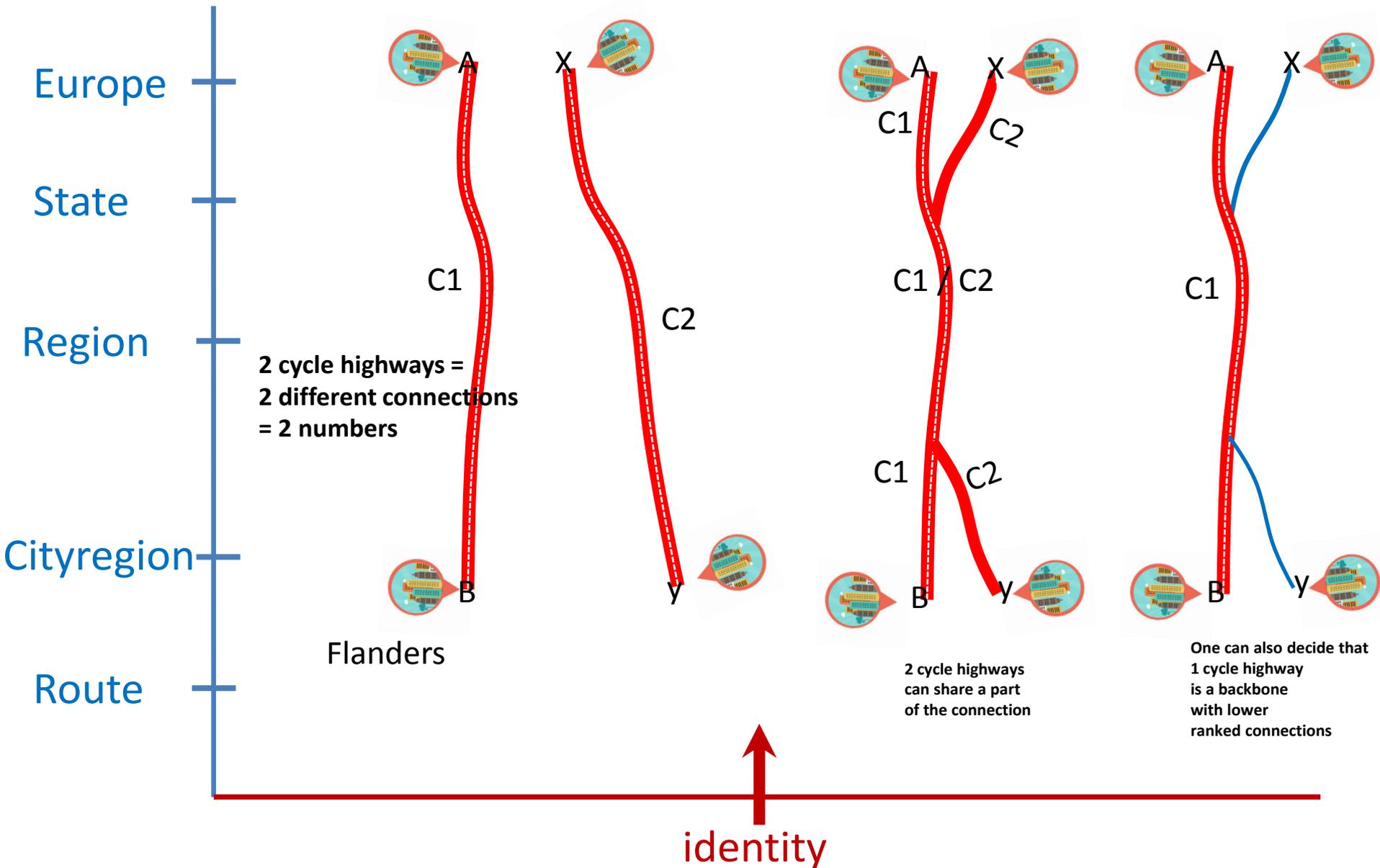
Et eksempel på hvordan det kan vises at to ruter deler sig.

identity

Identity issues go further than a logo...



Readability tool Flemish-Brabant: Numbering A to B connections



Another challenge for the readability toolbox:



How big is our toolbox?

How do we select all the tools we need?

Solution

Compare making the toolbox with making a playlist

Europe

State

Region

Cityregion

Route



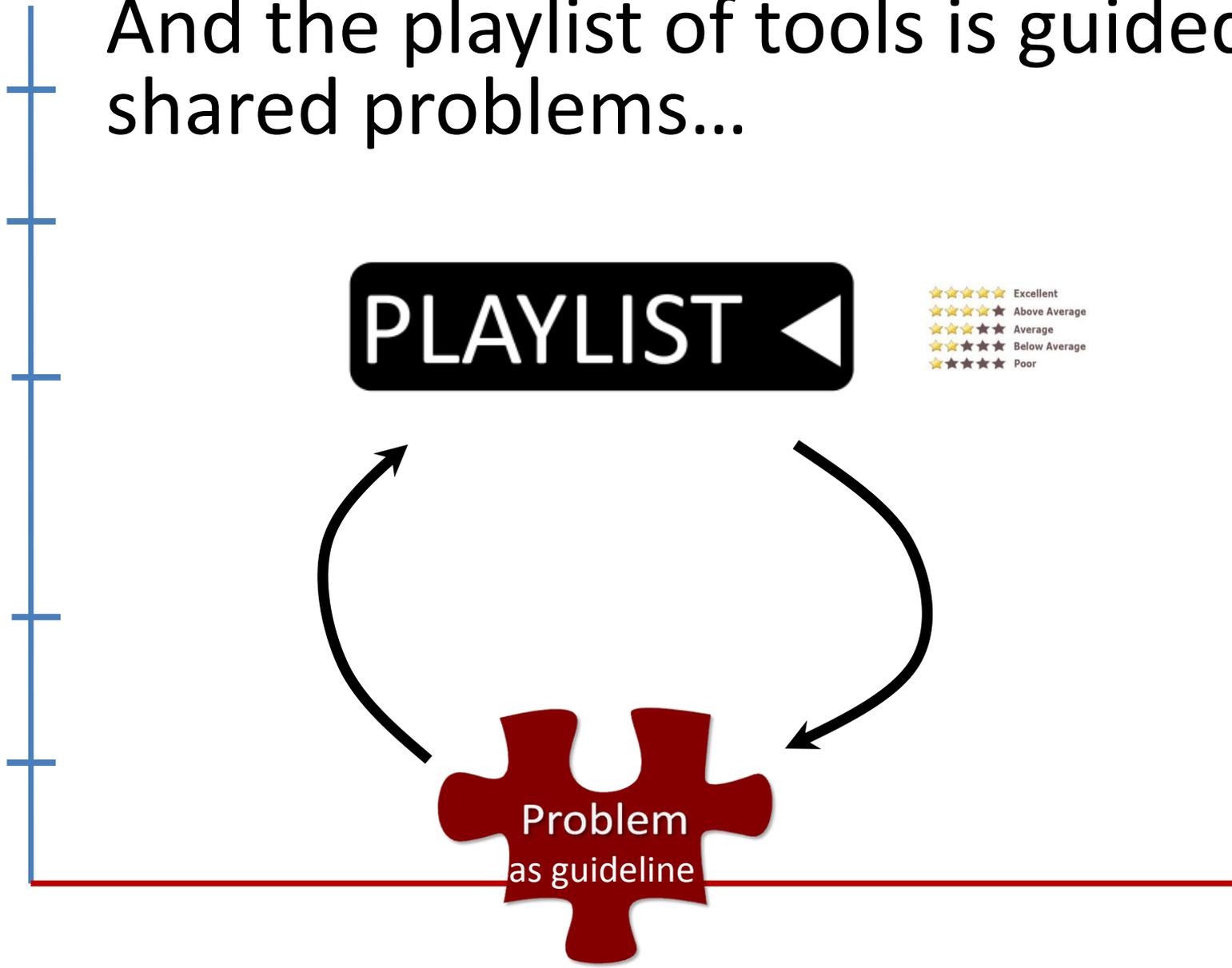
PLAYLIST ◀

See it as a trial and error process!

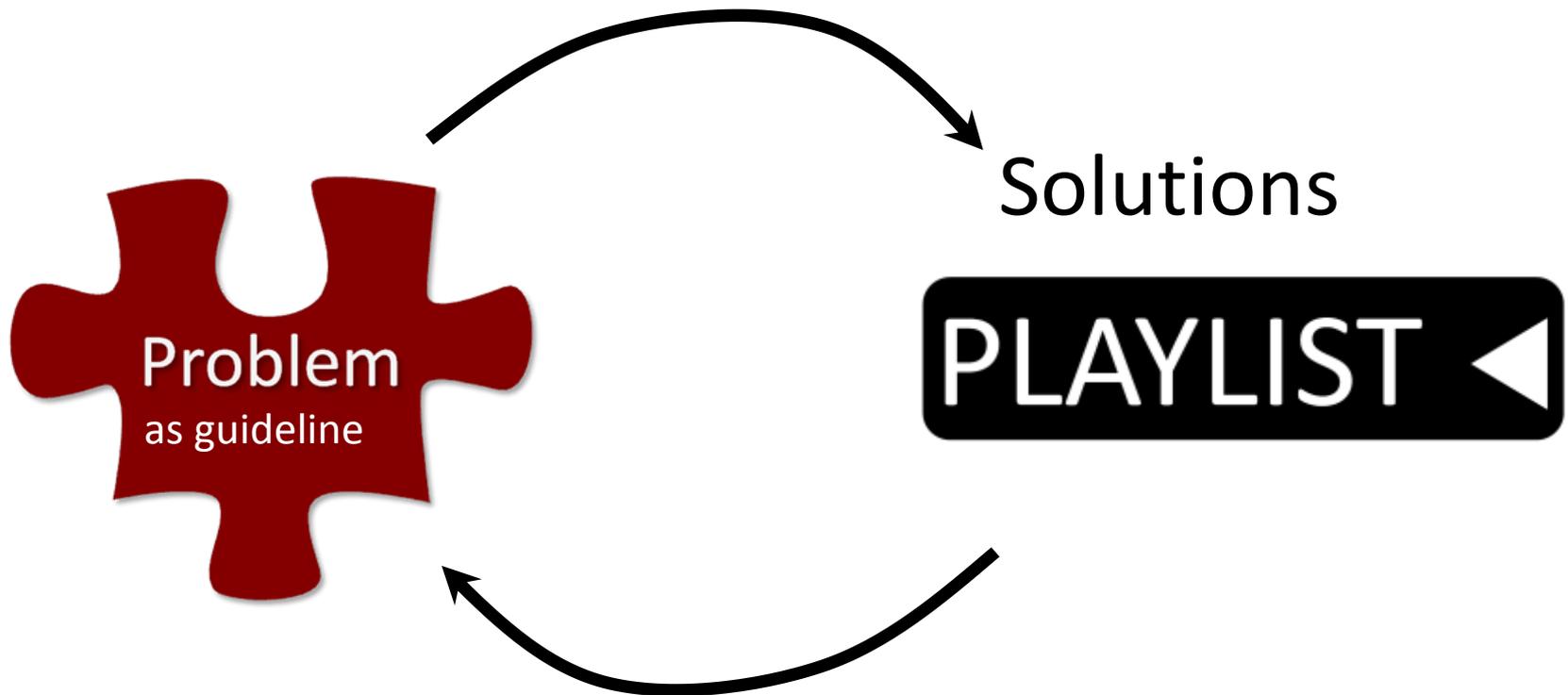
1. **Just start** with a couple of 'songs' (tools)
2. Ask people/experts to **add** their tools and ideas
3. **Discover** the popular tools (maybe rate the tools)
4. **Kick out**/replace the tools you never use
5. **Learn:** if you like this, you might also like...
>>> 1>5 add new (improved) tools



And the playlist of tools is guided by shared problems...



But if we see the toolbox as a playlist of existing solutions...

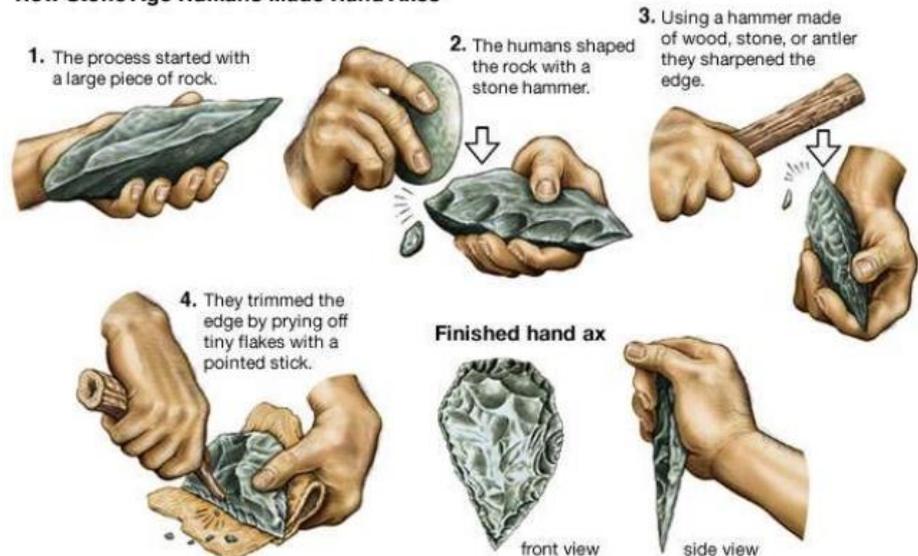


Who's going to release new 'songs' for our playlist?

Maybe we only have tools of the stoneage?
Maybe the best is yet to come?

- They adapted to their environments by making simple tools.

How Stone Age Humans Made Hand Axes



We not only need...

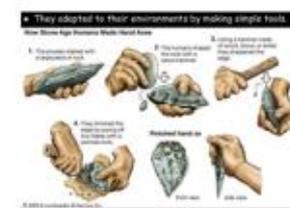
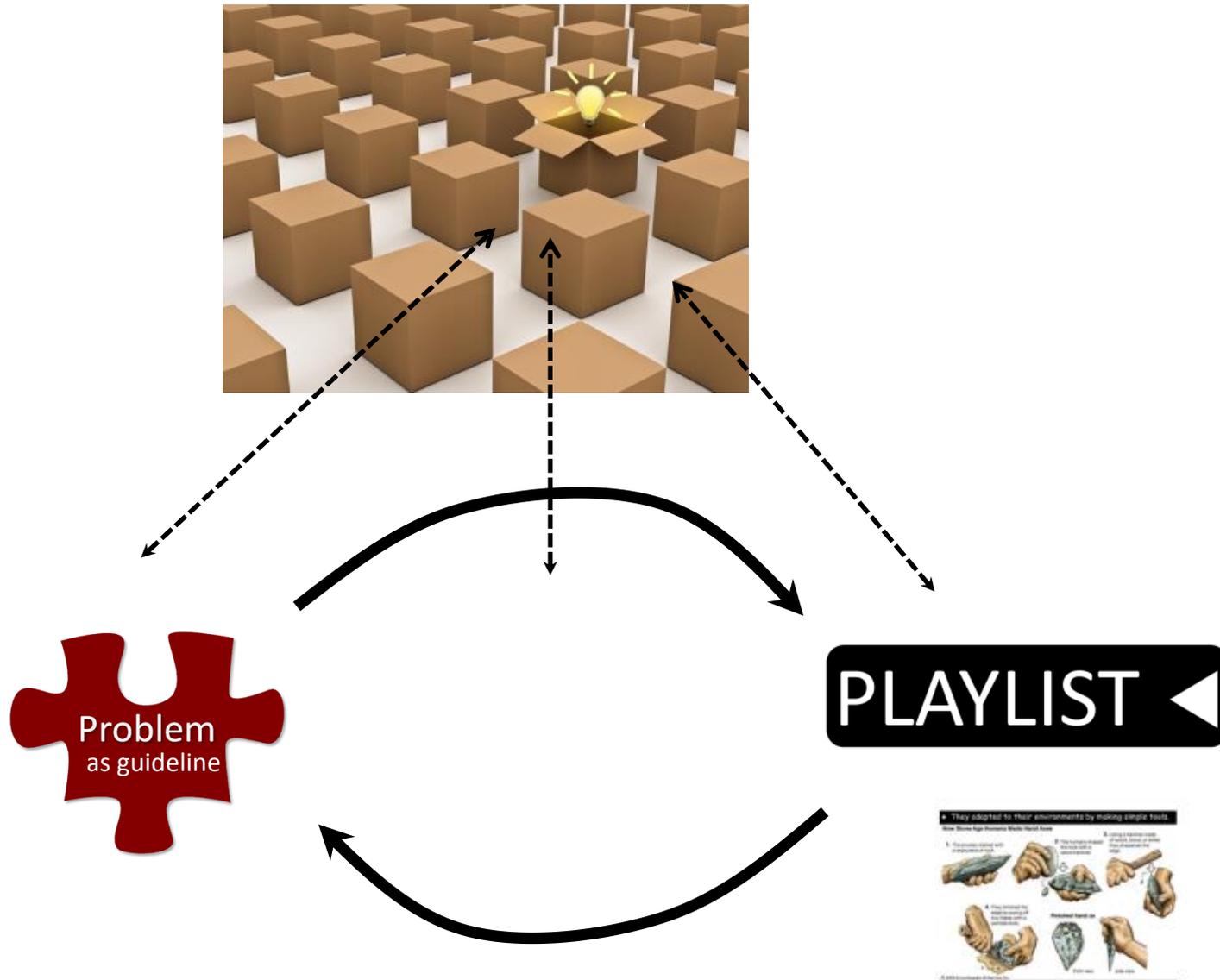


a toolbox
a problembox

+ an “out of the box”



But how could this “out of the toolbox” look like?



Solution:

We build the toolbox as a matrix that visualises the gaps and we ask everyone to **mind the gap**



MIND THE GAP

Gapmapping = visualising empty spaces in the playlist of solutions



Summary of the concept:

Scale

Europe

State

Region

Cityregion

Route



shared readability challenges
“problems as guidelines”

Problem

Let's make the
toolbox more
concrete...



Europe

State

Region

Cityregion

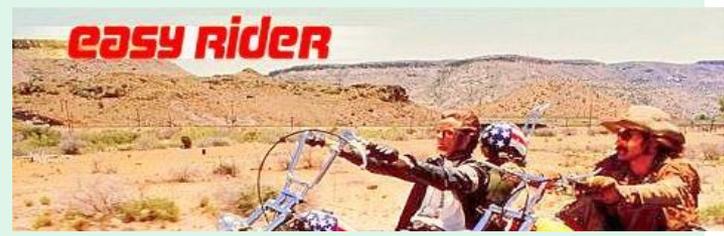
Route

Tools for not-yet users

Identitytools
Exposure tools...

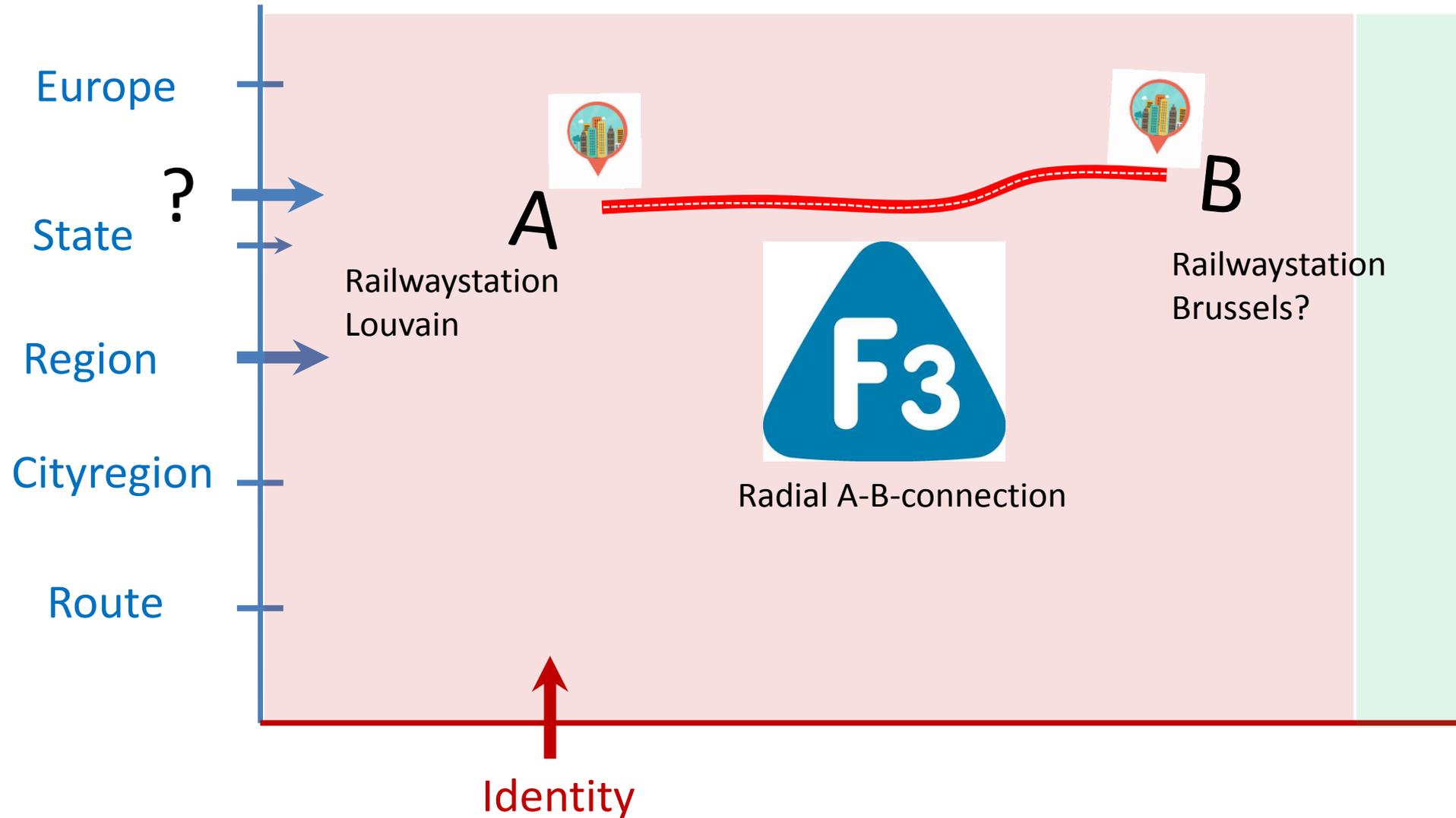
Tools for (new) users

tools for guidance & orientation

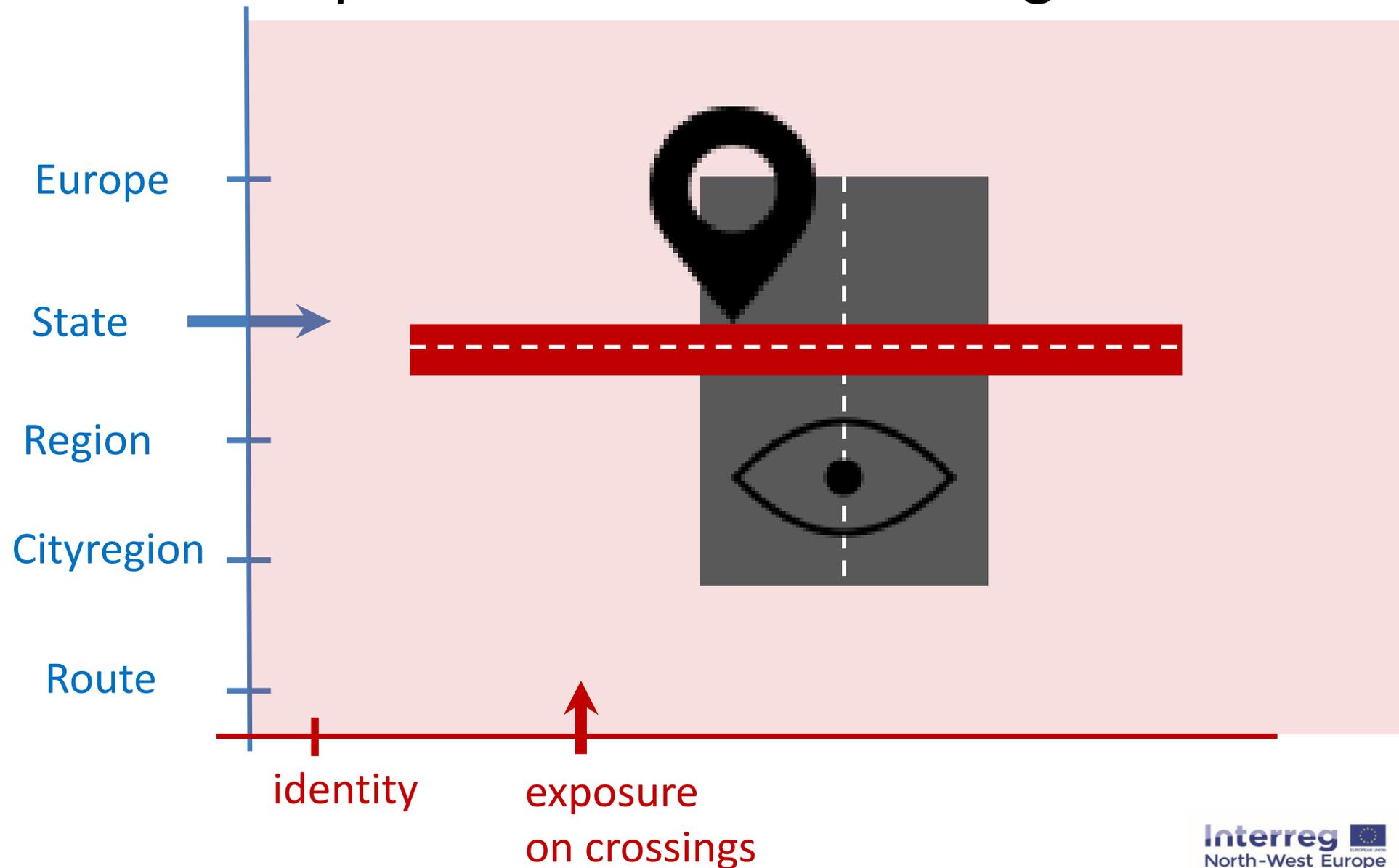


Naming strategy of province Flemisch Brabant

Clear start/enpoint: preferable a railway station



Exposuretools on a crossing



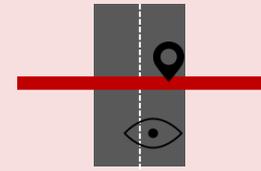
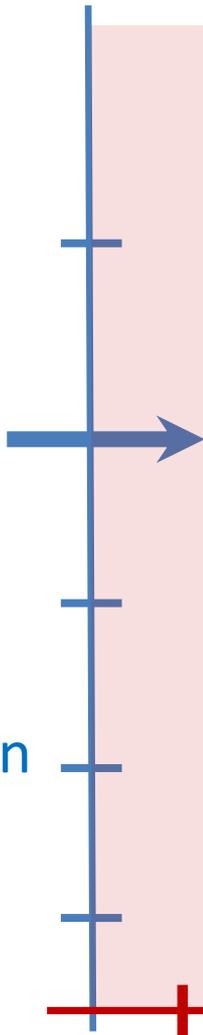
Europe

State

Region

Cityregion

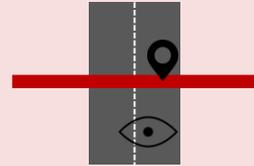
Route



identity

exposure
on crossings

Concept based on a crossing on a cycle highway in Breda



Europe

State

Region

Cityregion

Route



identity

exposure
on crossings

Inspiration from other products



Concept of a shop window strategy for a passerby on a crossing

Europe

State

Region

Cityregion

Route

identity

↑
exposure
on crossings

Are there elements (like traffic lights) we can reuse?

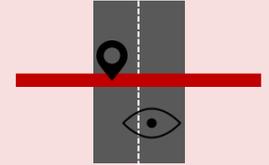
Europe

State

Region

Cityregion

Route



Identity

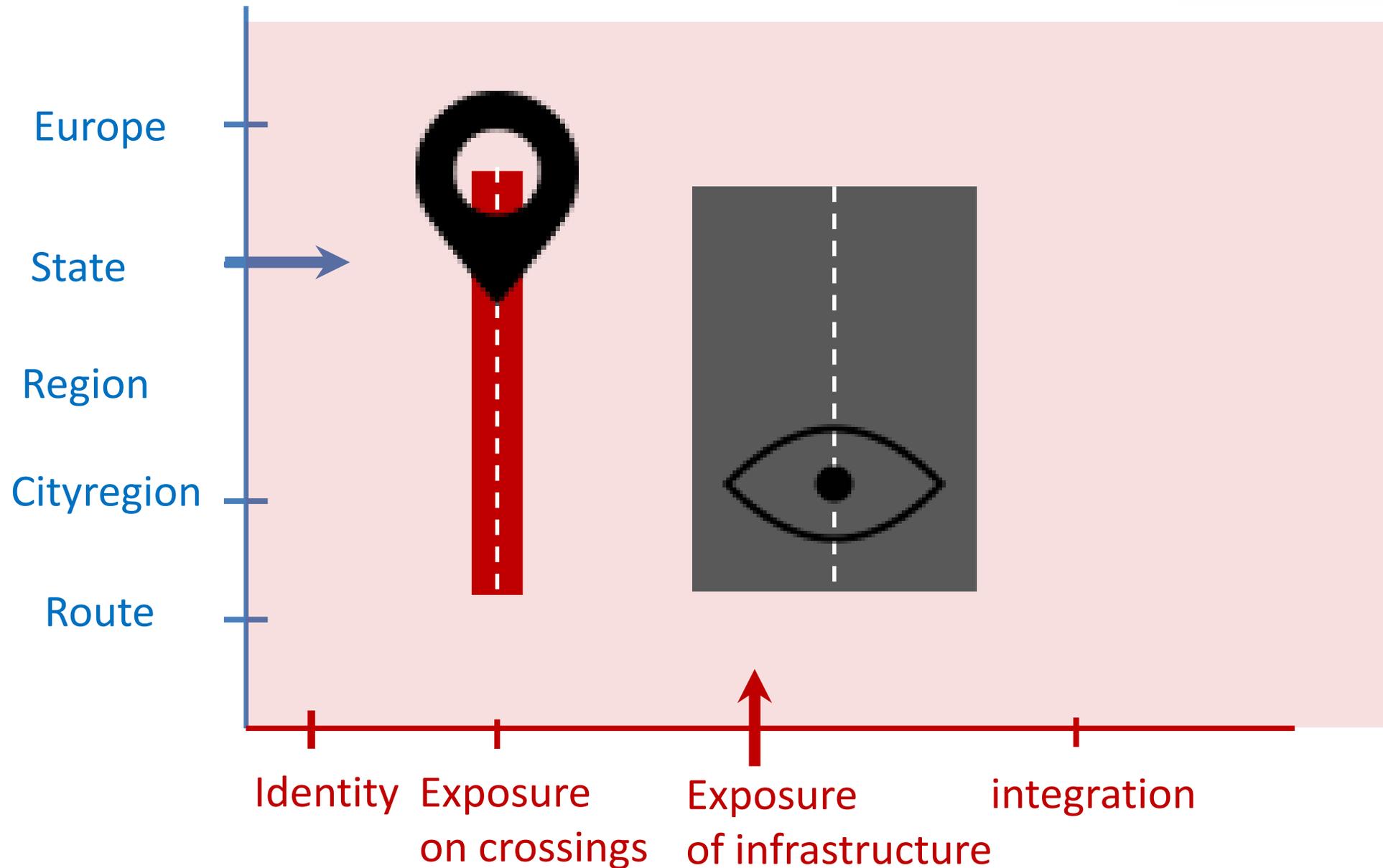
Exposure
on crossings

Exposure

of infrastructure

integration

Exposure of infrastructure



Exposure with a landmark

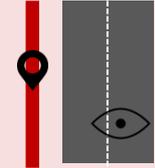
Europe

State

Region

Cityregion

Route



Concept:
add a cycle highway product
brand on the cycle highway
landmark visible for users of
the motorway

Identity

Exposure
on crossings

Exposure
of infrastructure

integration

Exposure with lighting

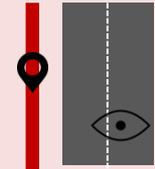
Europe

State

Region

Cityregion

Route



The consequent integration of a logo in the infrastructure results in a series of landmarks that make the infrastructure highly visible to car users. In this way potential users are triggered (Rijnwaalpad, Gelderland)

Identity

Exposure
on crossings

Exposure

of infrastructure

integration

Exposure of infrastructure

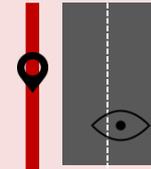
Europe

State

Region

Cityregion

Route



London:
In London the CS3 cycle highway is made visible for carusers through a coherent blue infrastructure in combination with measures like icons and a code or name

Identity

Exposure
on crossings

Exposure
of infrastructure

integration

Exposure of infrastructure

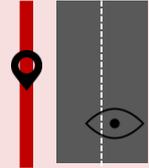
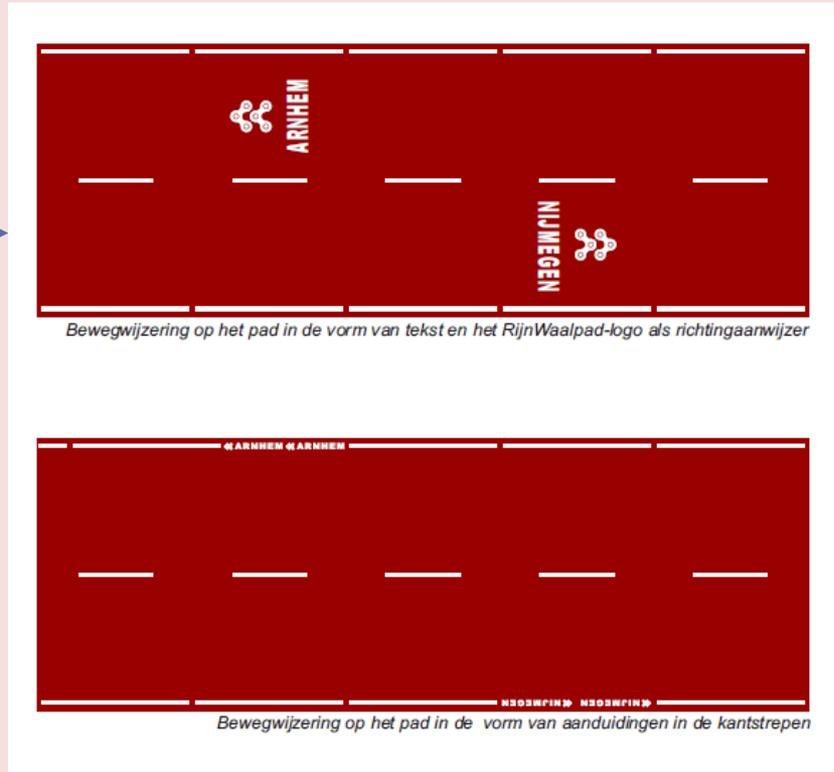
Europe

State

Region

Cityregion

Route



+ F-number

Identity

Exposure
on crossings

Exposure
of infrastructure

integration

Don't forget the awareness aspect

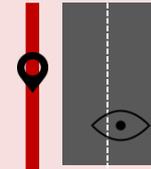
Europe

State

Region

Cityregion

Route



Concept:

Adding a cycle highway product brand can make the product visible for pedestrians under the bridge

Identity

Exposure
on crossings

Exposure
of infrastructure

integration

Integration of the mobility product in other touchpoints f.i. routeplanning devices

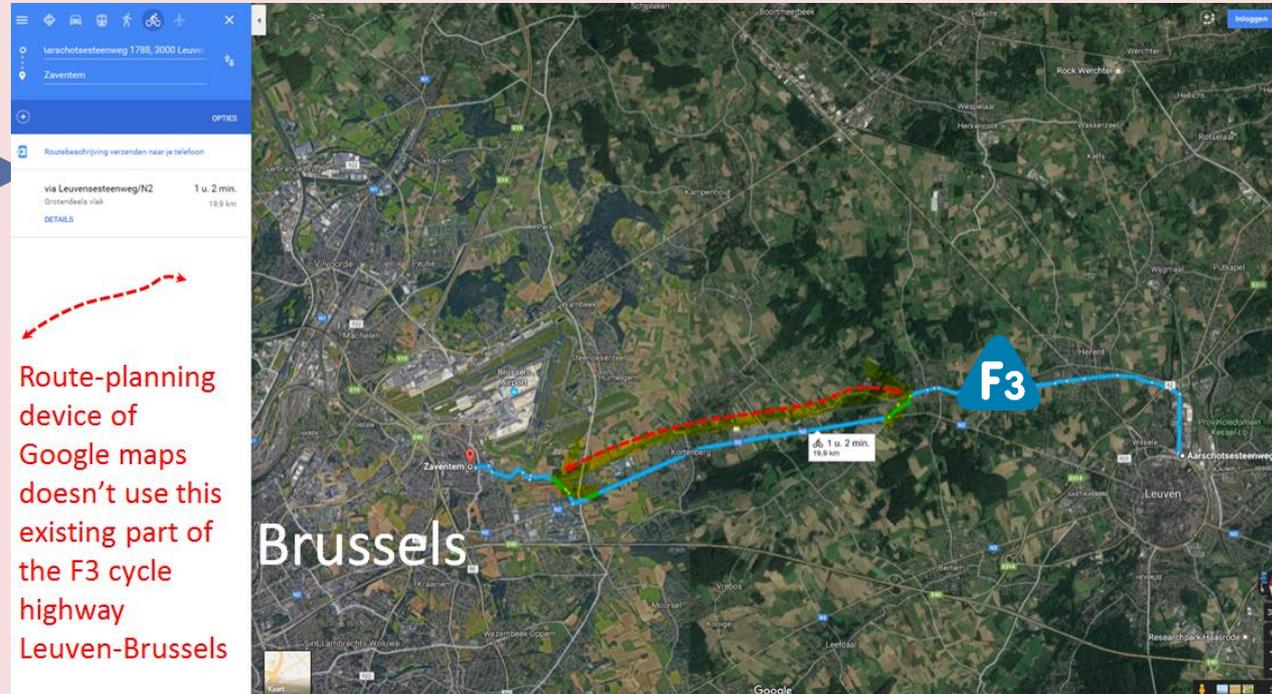
Europe

State

Region

Cityregion

Route



Identity Exposure
on crossings

Exposure
of infrastructure

integration

Product placement on the Belfast Bikes

Europe

State

Region

Cityregion

Route



Identity

Exposure
on crossings

Exposure
of infrastructure

integration

Integration of the mobility product in a bus station or on public transport maps...

Europe

State

Region

Cityregion

Route



Identity Exposure on crossings

Exposure of infrastructure

integration

Extreme integration ;-)

Europe

State

Region

Cityregion

Route



Identity

Exposure
on crossings

Exposure
of infrastructure

integration

Europe

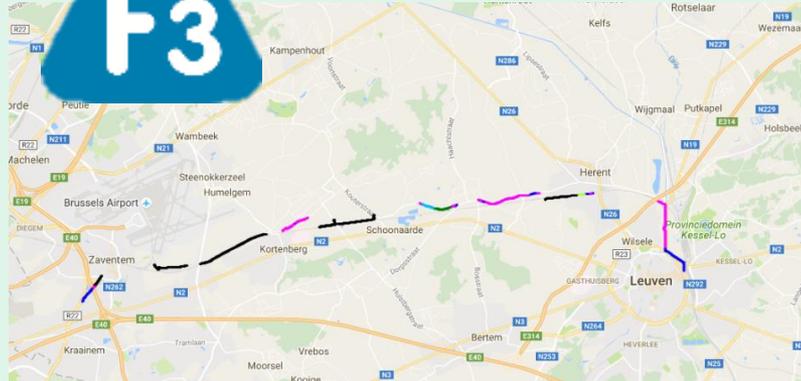
State

Region

Cityregion

Route

Tools for (new) users

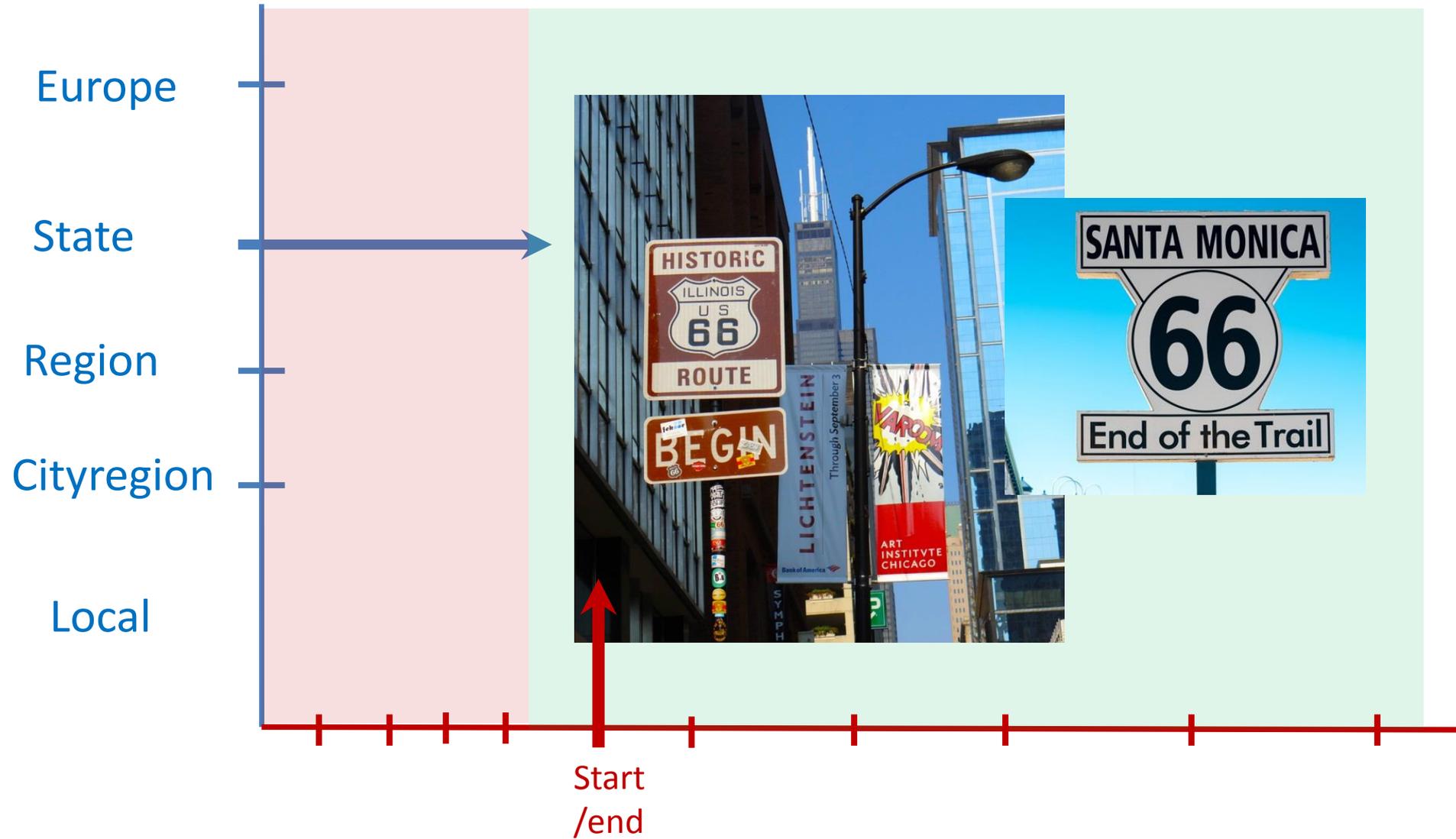


- █ Vrijgkend verhoogd/met verhoogde boord
- █ Jaagpad
- █ Vrijgkend niet verhoogd/licht verhoogd
- █ Losliggend fietspad (fietsweg of fietsdoorsteek)
- █ Aanliggend normaal verhoogd/met verhoogde boord
- █ Aanliggend licht verhoogd
- █ Aanliggend niet verhoogd

Trackpoint Informatie
 Klik op een trackpoint voor meer informatie..

Different buildingblock to glue the pieces together...

A clear starting point



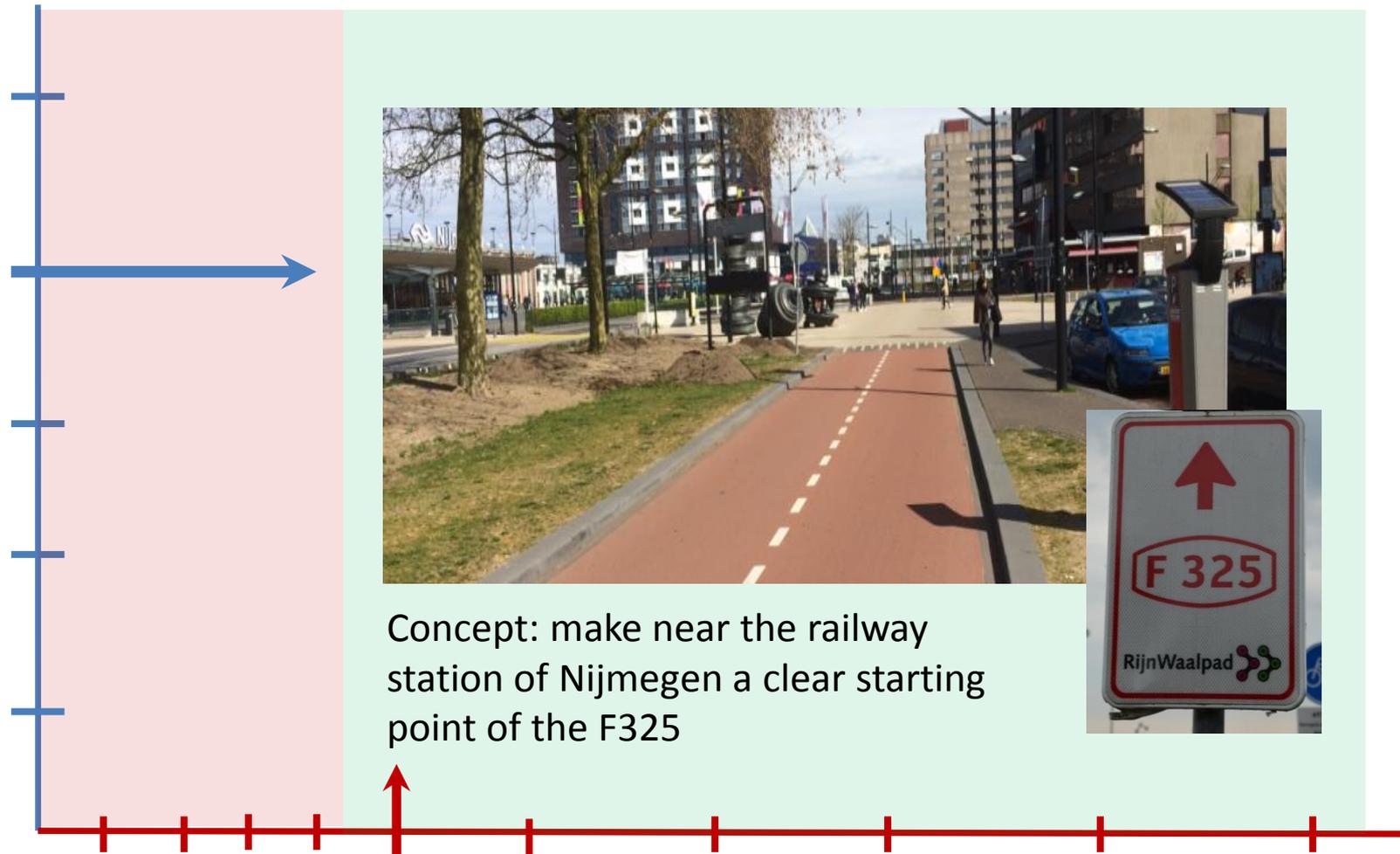
Europe

State

Region

Cityregion

Route



Concept: make near the railway station of Nijmegen a clear starting point of the F325

Start /end

Europe

State

Region

Cityregion

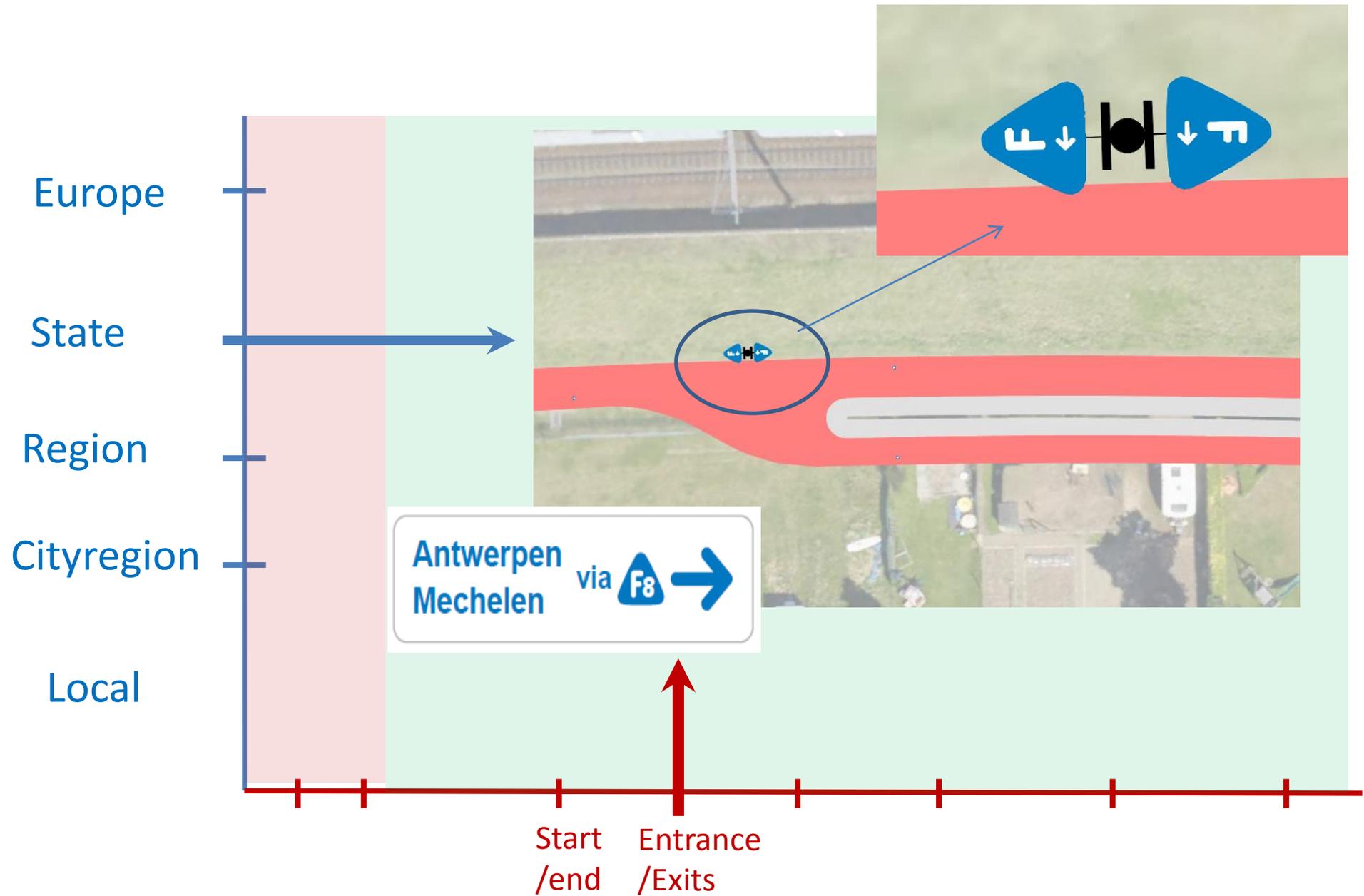
Route



A Strategy in Tilburg: Choose trainstation as starting point

A bike friendly café (near the train station) with some services could be used as the official starting point. Or we could use a bike tunnel under the train station not only as a shelter, but also as an easy explainable/findable starting point.

Start
/end



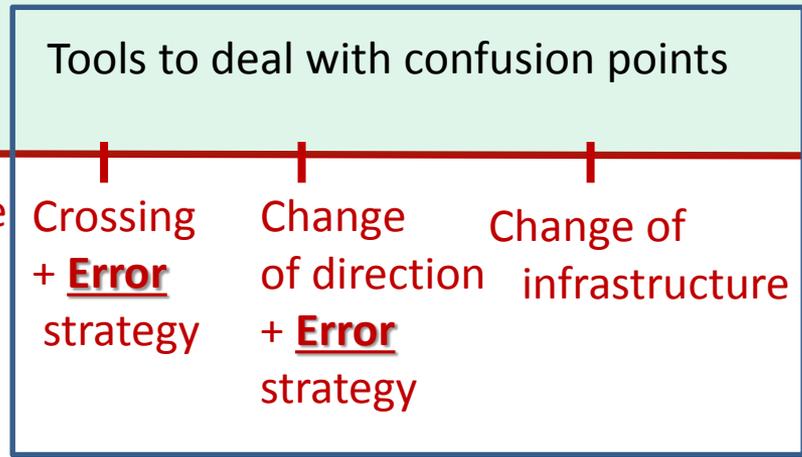
Europe

State

Region

Cityregion

Route



Start /end

Entrance /Exits

Crossing + **Error** strategy

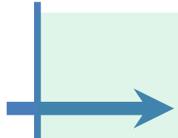
Change of direction + **Error** strategy

Change of infrastructure

orientation

services

Europe



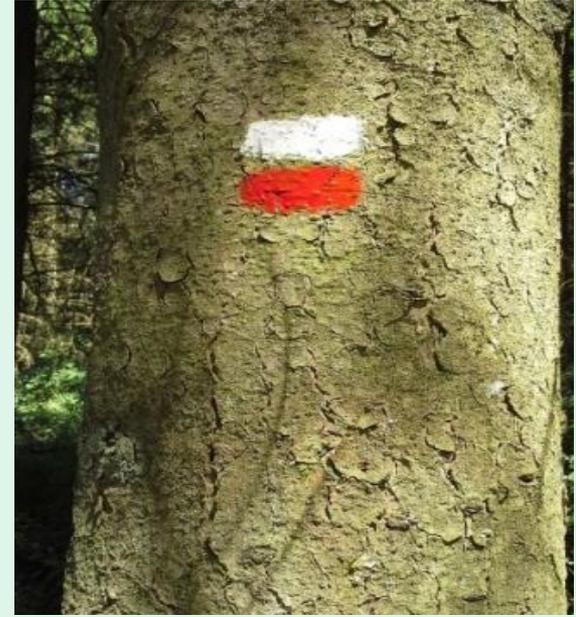
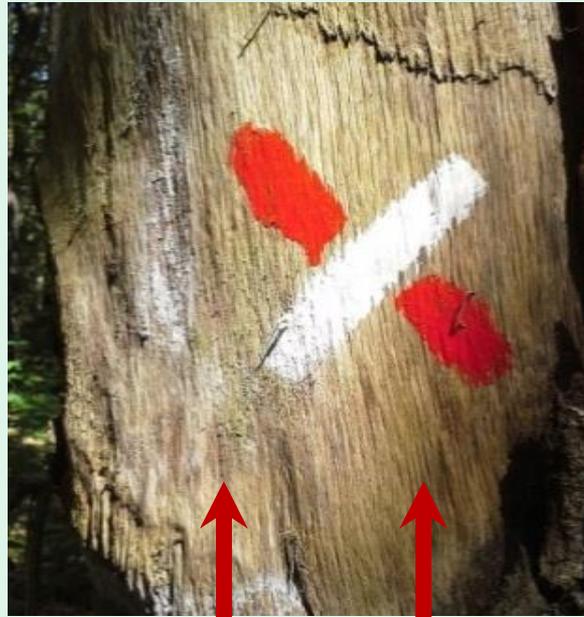
The European GR hiking routes are made readable by a simple sign. There is also a sign to indicate you are wrong (error-strategy)

State

Region

Cityregion

Route



Start /end

Entrance /Exits

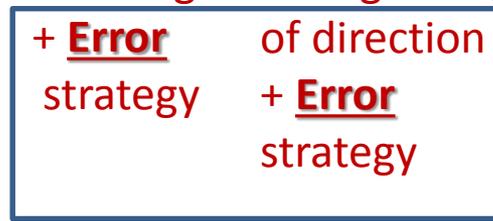
Crossing
+ **Error**
strategy

Change
of direction
+ **Error**
strategy

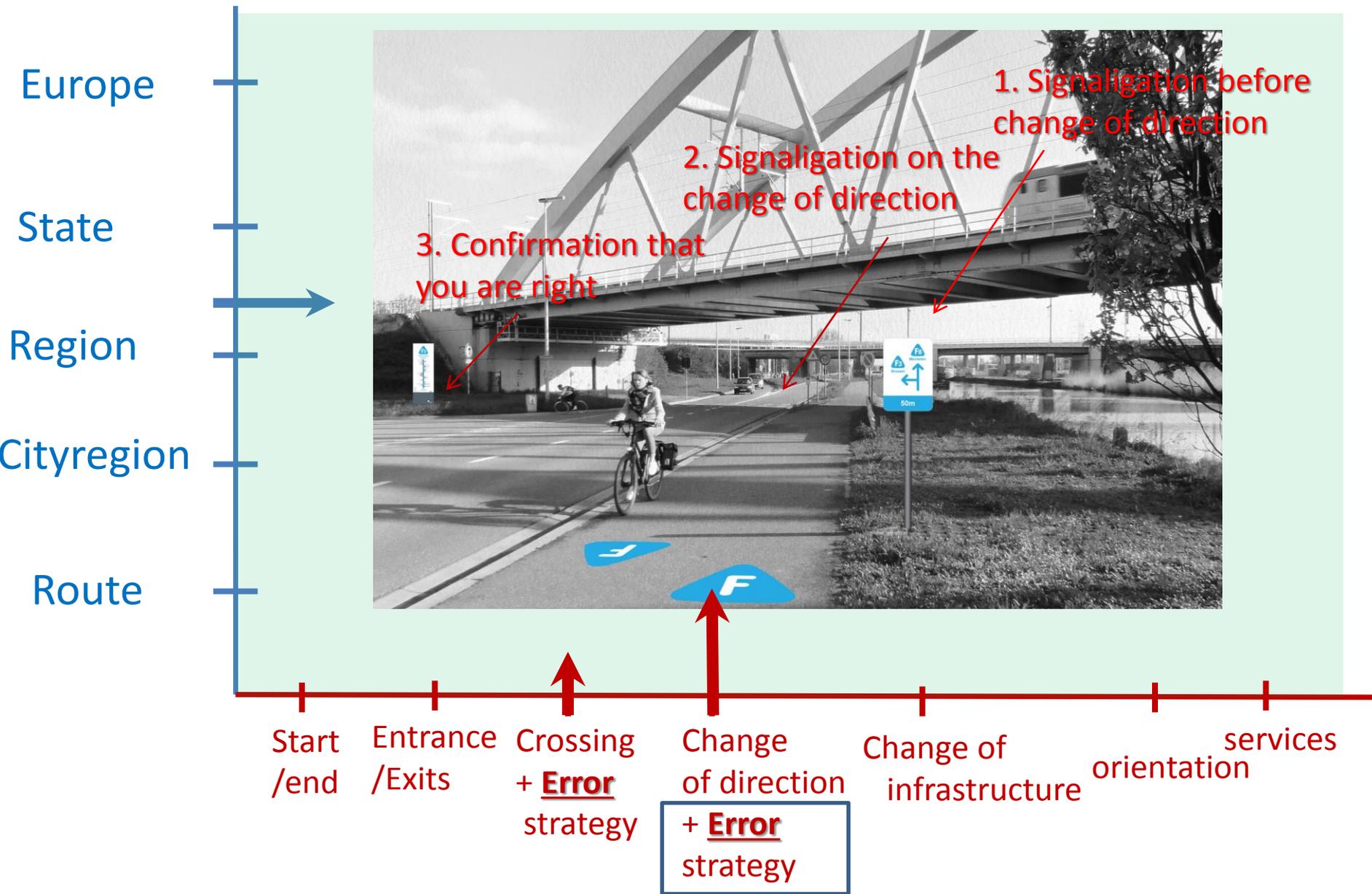
Change of
infrastructure

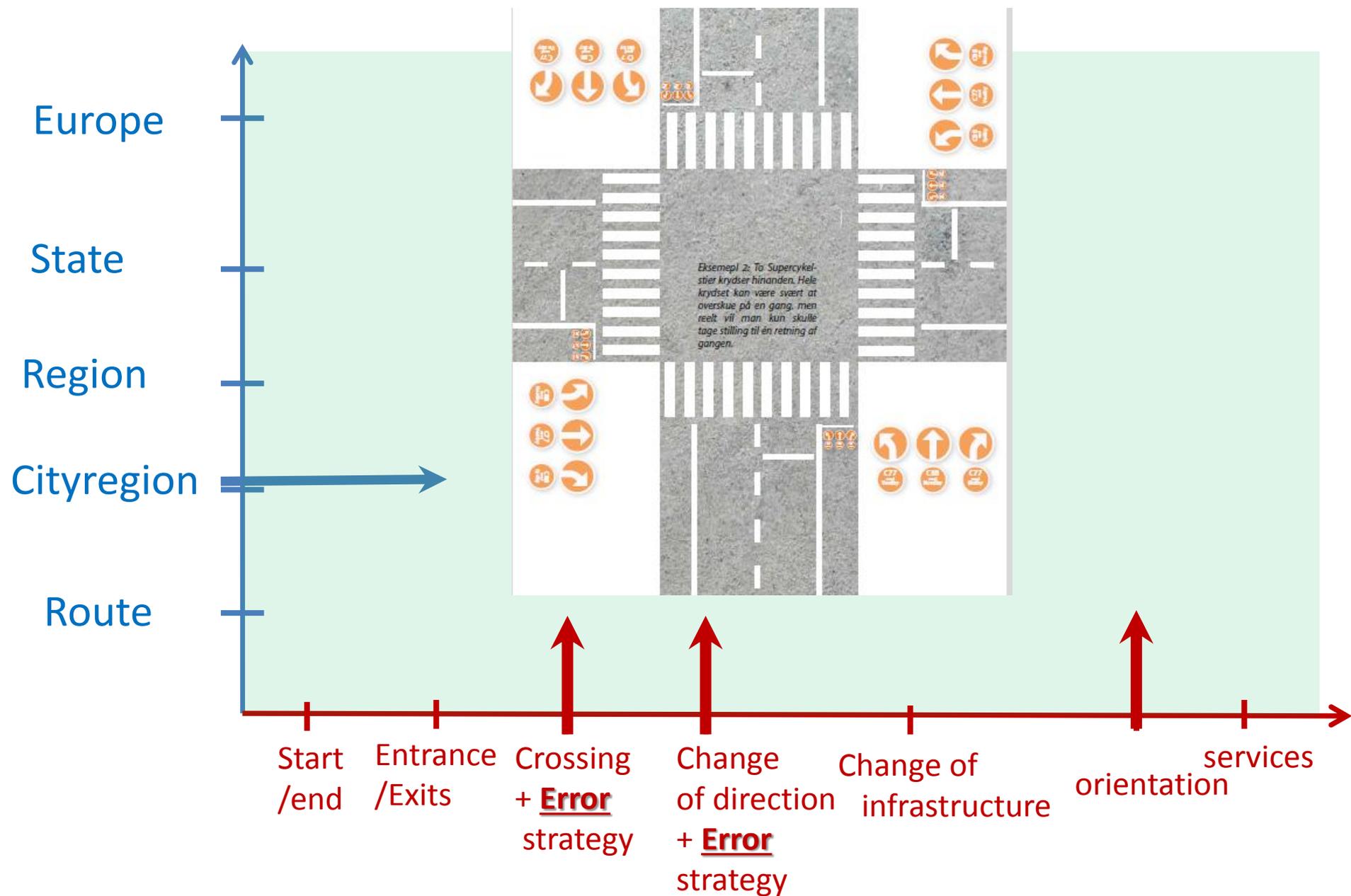
orientation

services



Signalisation strategy Province of Flemish-Brabant





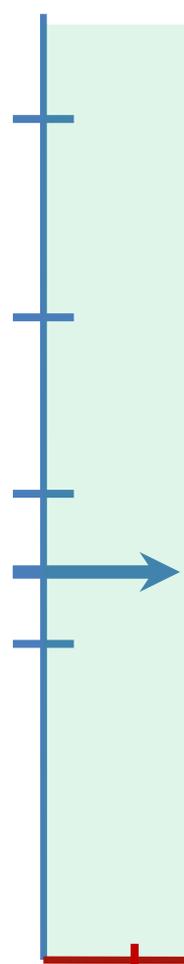
Europe

State

Region

Cityregion

Route



Start /end

Entrance /Exits

Crossing + **Error** strategy

Change of direction + **Error** strategy

Change of infrastructure

services orientation



Column with road overview

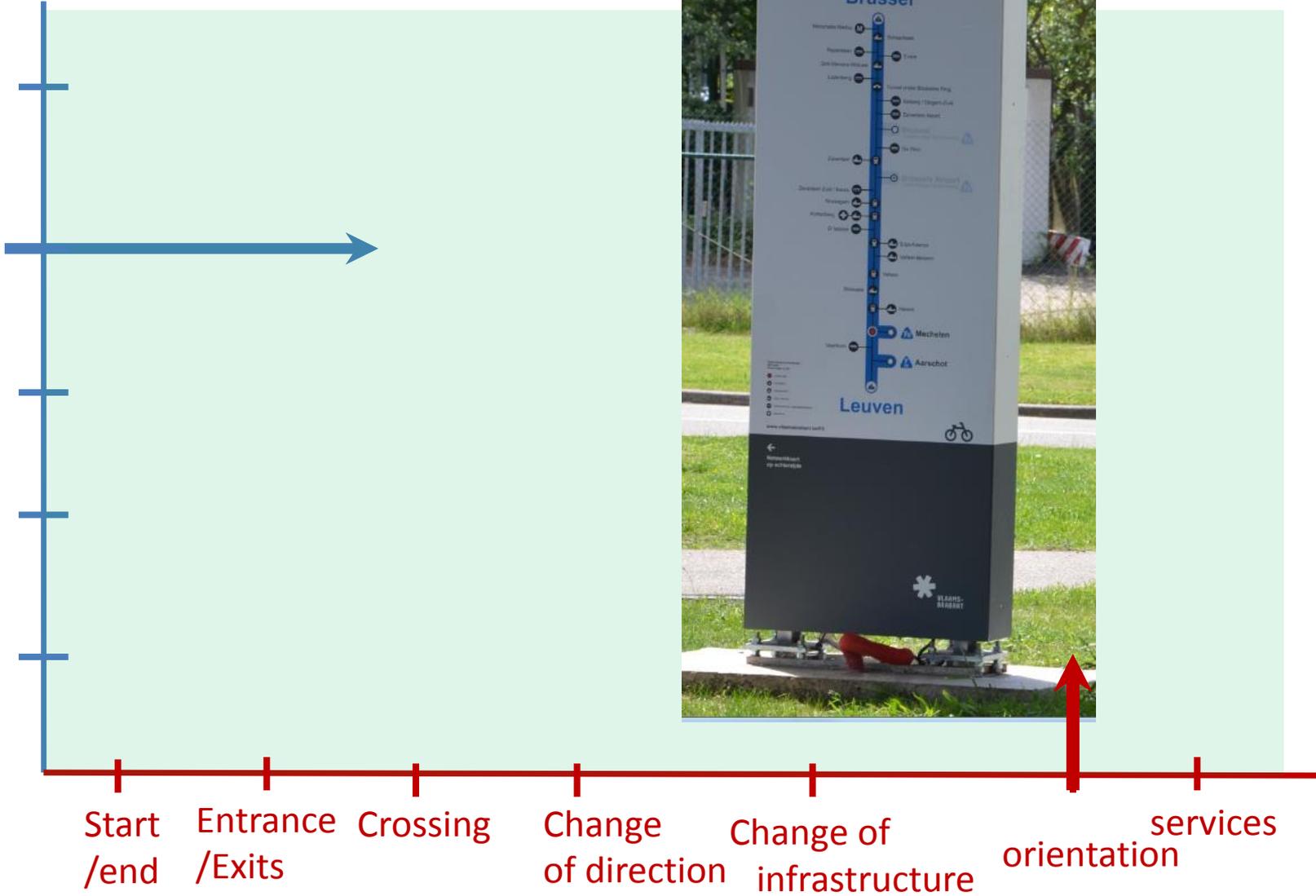
Europe

State

Region

Cityregion

Route



Europe

State

Region

Cityregion

Route



services



services

Or we can recycle an old vintage service station...





services



services

We start with...

1. A game as a warming up to discuss...

2. CHIPS's vision on "readable CH's"

Then we are ready to look at concrete...

3. Tools from CHIPS' readability toolbox

This structured framework will enable us to play

4. A second game that might end with...

5. New input for the readability toolbox?



Think about the different hiding strategies you found

Can you formulate a new readability tool?



Reflect on the readability toolbox:
Important gaps in the (axis of) the matrix?

