



We remember
Kitamura-sensei

Shoichiro Nakayama
Kanazawa University



Supervisor

Prof. Ryuichi Kitamura (Kitamura-sensei)
supervised me for 6.5 years

Undergraduate 1 year

Master course 2 years

Ph.D. course 3 years

Dissertation: Drivers' learning &
network behavior

Post Doctor 0.5 year

Imperial College: 5 months

Kanazawa Univ. 8 years



First Impression & Japanese

I took the lecture of Transportation Engineering

I forgot the lecture's contents, but remembered he did not write Kanji (Chinese characters) well.

After I joined the laboratory,
he sometimes pointed out inappropriate grammar
of the sentences in my Japanese paper.

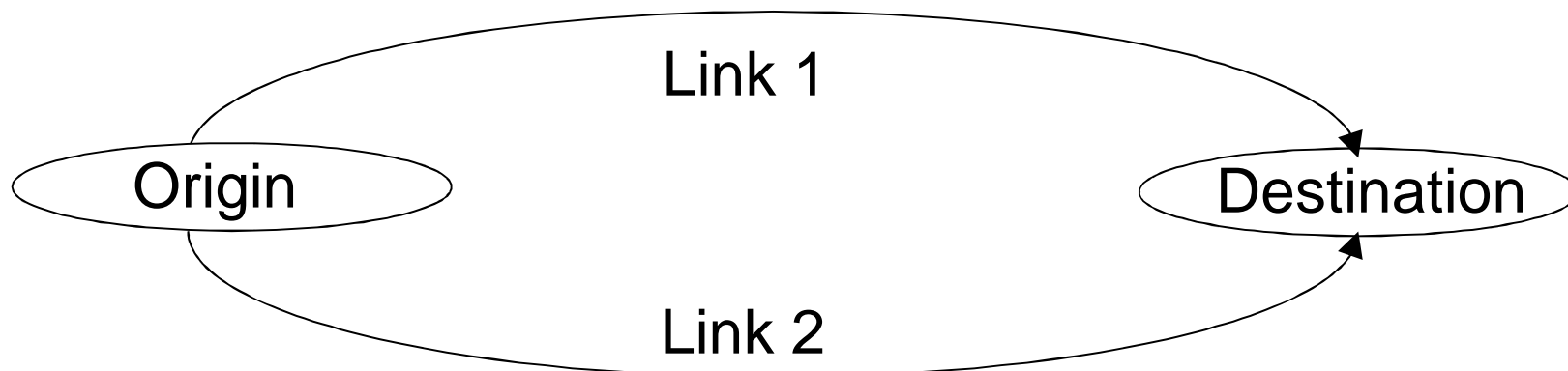


One of Studies with Kitamura-sensei

Simulation Analysis with Drivers' Learning

Nakayama, Kitamura, Fujii (1999)

- n 200 drivers choose one of the two link daily on the two-link network
- n They learn how to choose their routes through the experiences





Route Choice & Learning

- n Route choice is made based on their cognitive travel times (CTT)
- n The CTTs are given as a weighted average of experienced travel times
- n The weights are updated by the genetic algorithms

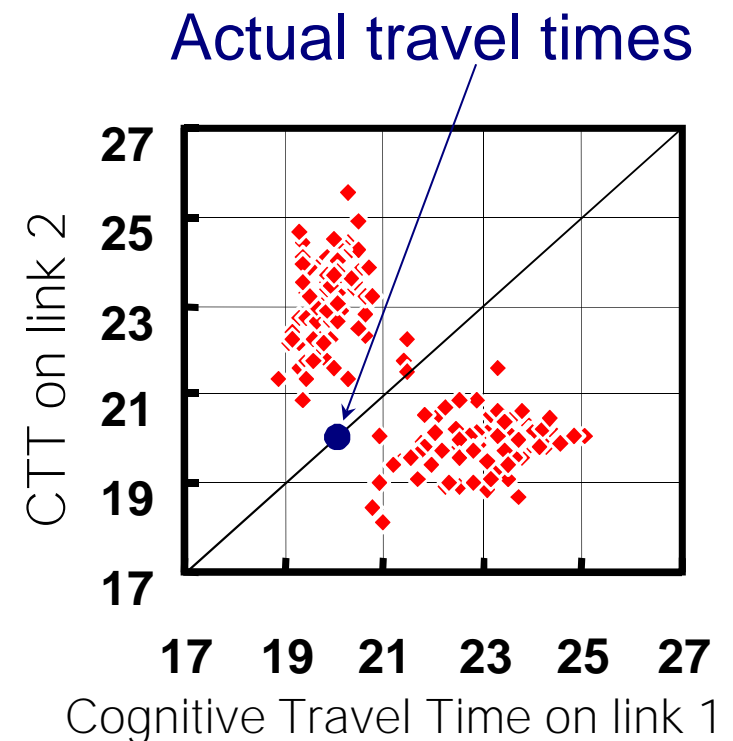


Deluded Equilibrium

In case of limited information, drivers sometimes form incorrect understanding.

The oscillation makes drivers have excessive travel time on one route. The excessive travel time is imprinted in the memory, and they won't choose that route again. So, they are deluded forever.

- Deluded equilibrium





Delusion

Ordinary understanding of user equilibrium (UE):

Drivers have complete information and choose the route which has the minimum travel time. Then, UE is formed.

Antithesis of UE (SUE)

In deluded equilibrium, drivers have **systematically incorrect recognitions**.

But, another stable equilibrium is formed.



Photo and Movie

I would like to share a photo and a short video of Kitamura-sensei at my wedding party with you. Kitamura-sensei made a short speech and gave me some lessons.



Photo (Speech in my wedding party, 2000)





What I learned via Kitamura-sensei

- n Uniqueness, Extraordinariness
 - Studies, Policy, Life...
- n Innovator, Challenging
- n Internationality
- n Smart Style
- ...



Photo 2





Kanazawa University

founded in 1862

