

# The *Values* of Nature

---

Vincent Chung

London School of Economics and Political Science

16<sup>th</sup> Sep 2025



Department of  
Geography and  
Environment



Data Science  
Institute



Global School of  
Sustainability



Grantham  
Research Institute  
on Climate Change  
and the Environment

# Why does nature matter?



Department of  
Geography and  
Environment



Data Science  
Institute



Global School of  
Sustainability



- For some, it's about beauty and wonder
- For some, it's about survival
- For some, it's about rights

# What are the general discourse in valuing nature?



Department of  
Geography and  
Environment



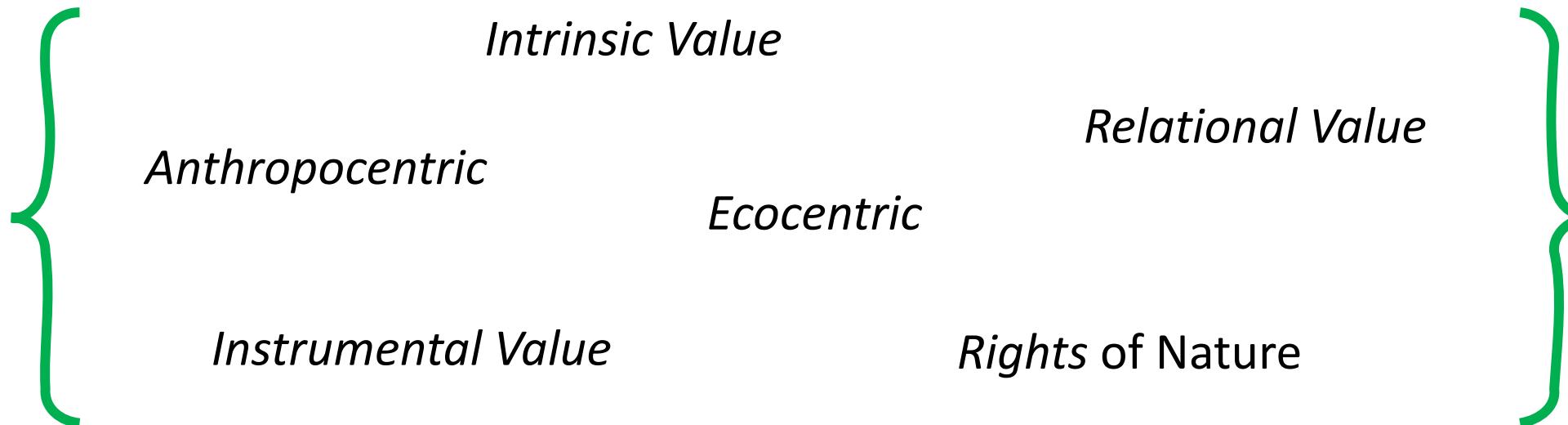
Data Science  
Institute



Global School of  
Sustainability



- Discuss in groups of 3 what are some different ways we can value nature
- In doing so, you may find these terms helpful:



# What are the general discourse in valuing nature?



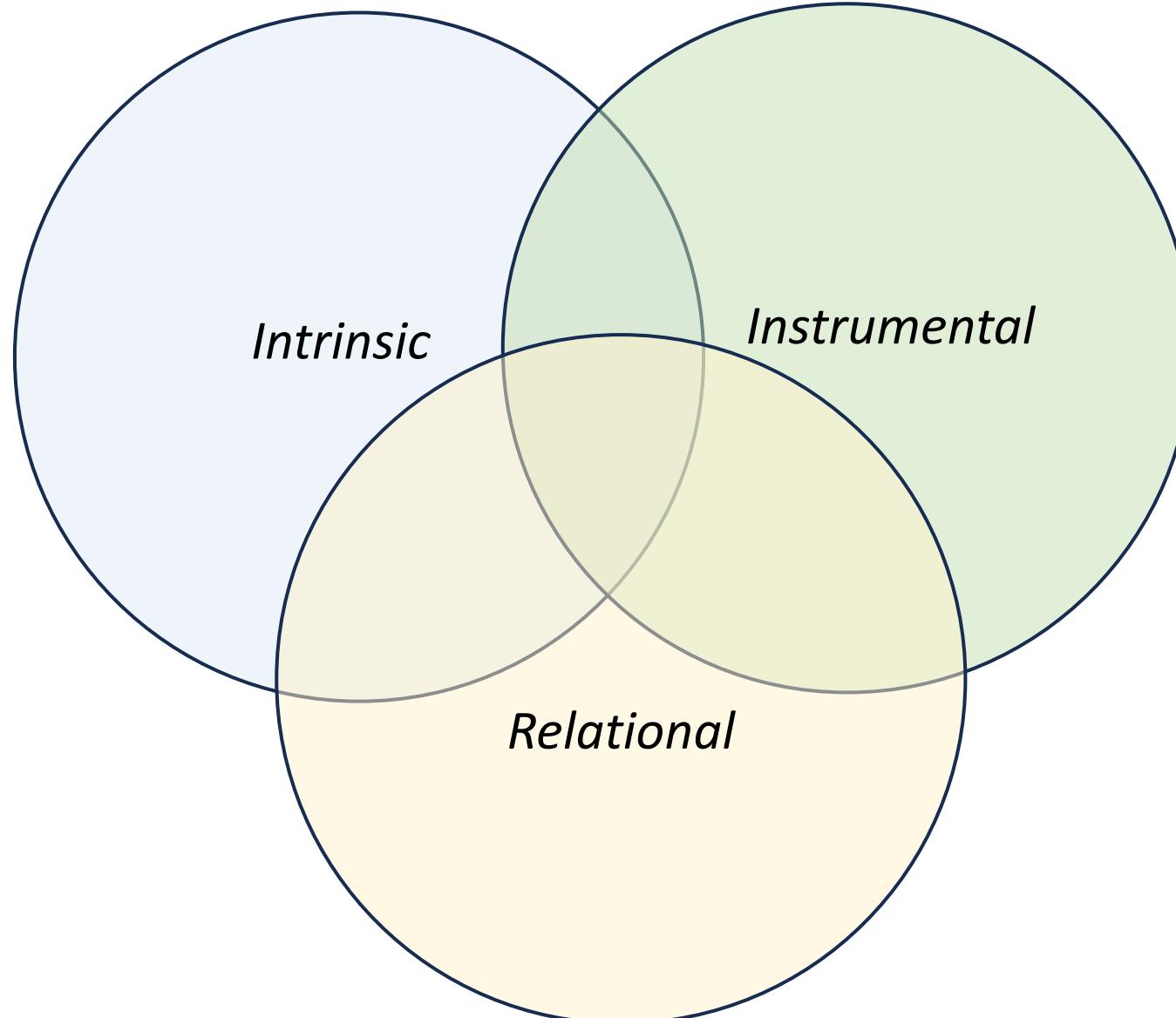
Department of  
Geography and  
Environment



Data Science  
Institute



Global School of  
Sustainability



# What are the general discourse in valuing nature?



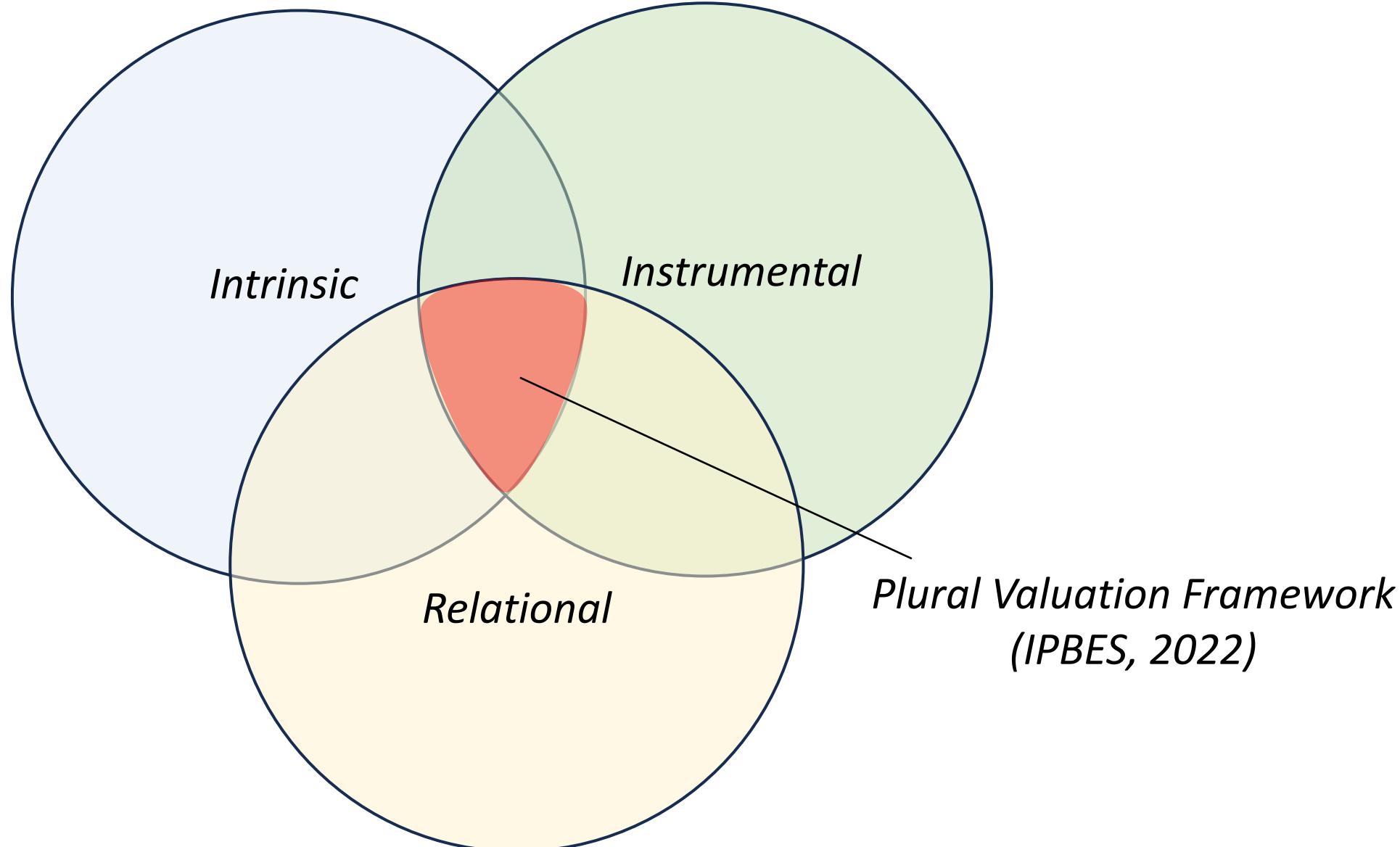
Department of  
Geography and  
Environment



Data Science  
Institute



Global School of  
Sustainability



# Why economic valuation?



Department of  
Geography and  
Environment



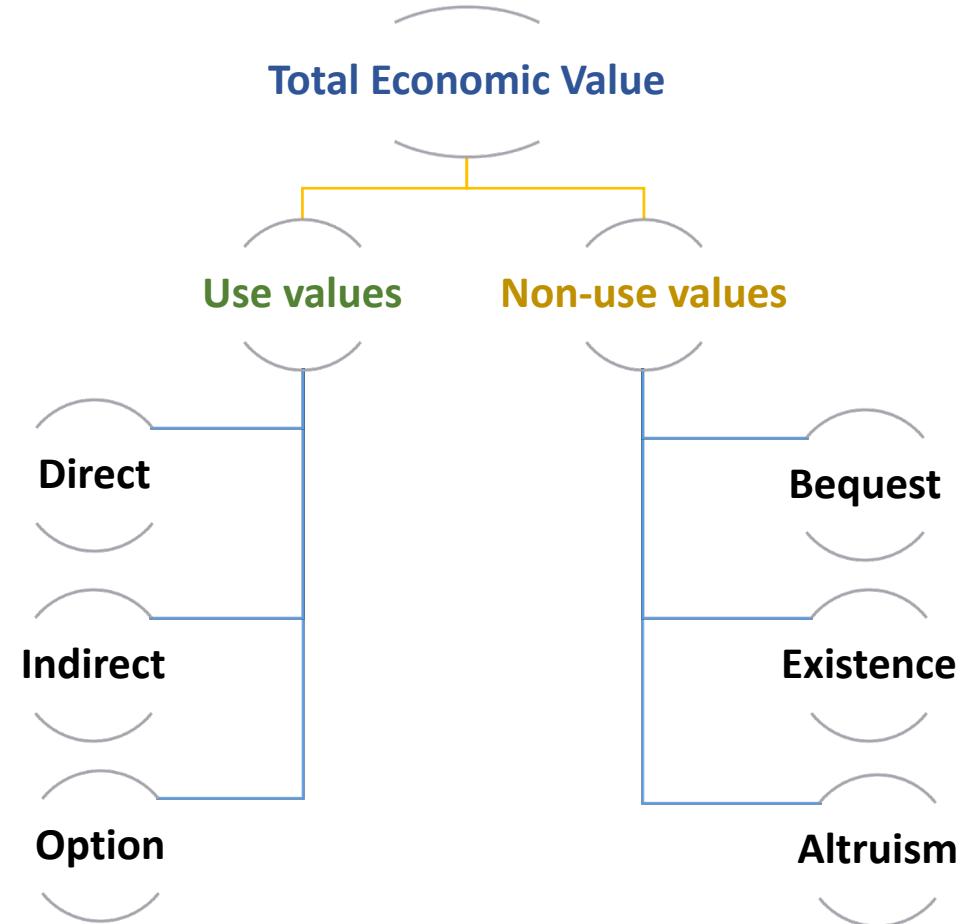
Data Science  
Institute



Global School of  
Sustainability



- A common metric for policy and decision making
- Revealed Preference Method
- Stated Preference Method



# What are some challenges with stated preference methods?



Department of  
Geography and  
Environment



Data Science  
Institute



Global School of  
Sustainability



- Hypothetical bias
- Scope insensitivity
- Distance decay effect
- This could lead to mismatch in the allocation of conservation funds, and undermining validity of estimates obtained by stated preference methods.

# Case Study – Coral Reefs



Department of  
Geography and  
Environment



Data Science  
Institute



Global School of  
Sustainability



Coral reefs are vibrant underwater ecosystems built by tiny coral animals over thousands of years. These "rainforests of the sea" support 25% of marine species despite covering less than 1% of the ocean.

They provide critical habitat for fish, protect coastlines from storms, and support millions of people through fishing and tourism. However, coral reefs are rapidly dying due to climate change, pollution, and overfishing - we've already lost about half of the world's reefs.



*A new conservation program could prevent the loss of 75% of remaining coral reefs over the next 20 years through protection and restoration efforts. What is the maximum amount you would be willing to pay per year to support this coral reef conservation program?*

# Case Study – Coral Reefs



Department of  
Geography and  
Environment



Data Science  
Institute



Global School of  
Sustainability



*A new conservation program could prevent the loss of 75% of remaining coral reefs over the next 20 years through protection and restoration efforts. What is the maximum amount you would be willing to pay per year to support this coral reef conservation program?*

# Case Study – Amazon Rainforest



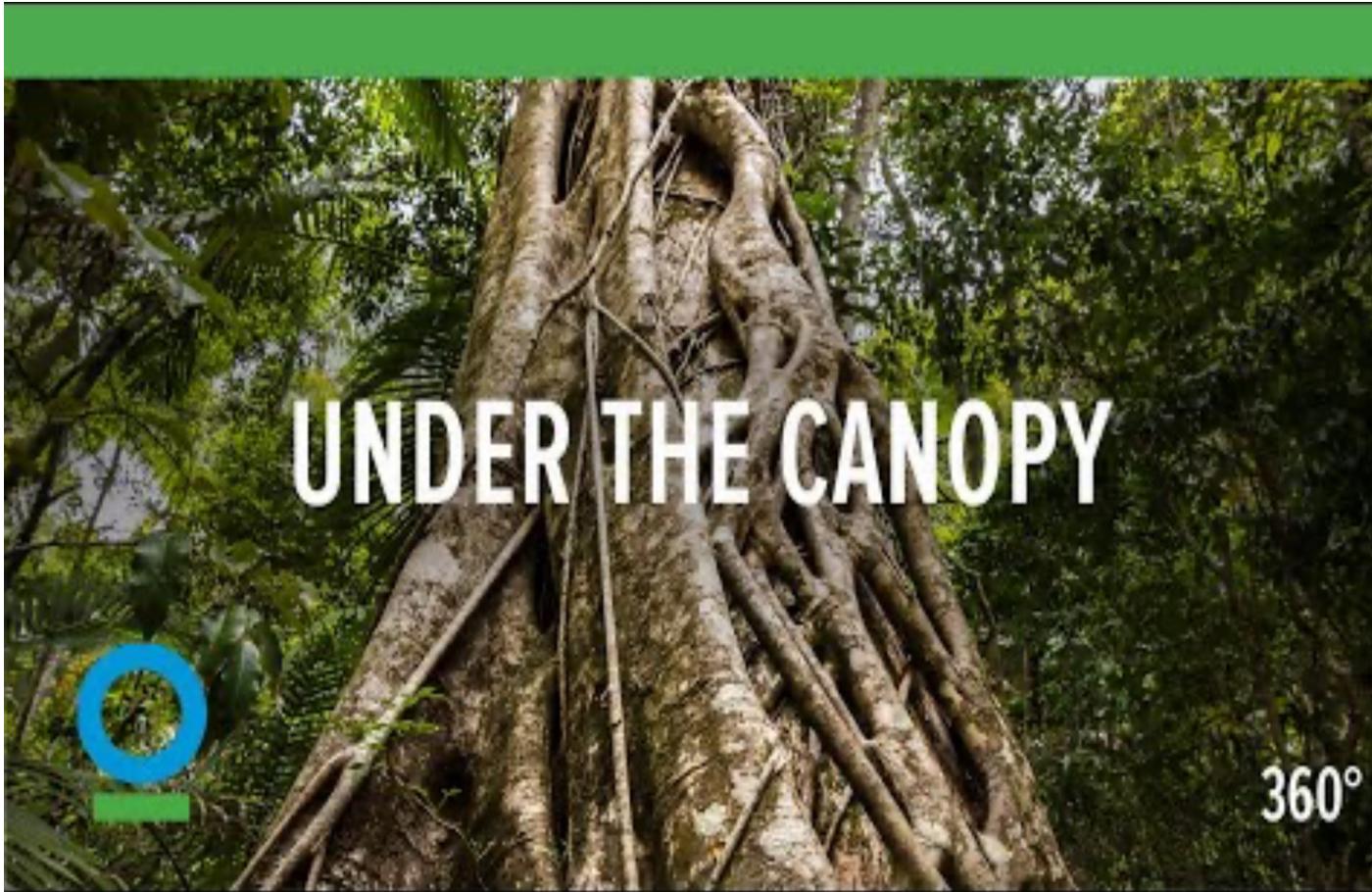
Department of  
Geography and  
Environment



Data Science  
Institute



Global School of  
Sustainability



- Fully immersive VR experience
- 32°C + 70% Humidity
- Petrichor scent administration

# In summary...



Department of  
Geography and  
Environment



Data Science  
Institute



Global School of  
Sustainability



- No one *best* framework
- But given existing limitations and construct of policy decision making, stated preference method represents the second-best solution
- Methodological advancement, such as VR, helps provide *most accurate* valuation