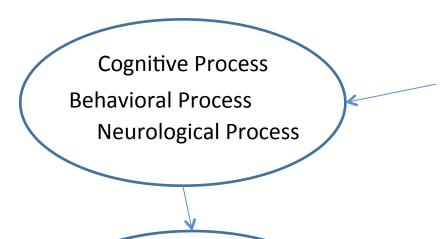


# Adapting Control Theory Approach for the Modeling of Pro-Environmental Consumer Behavior

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Behavior Energy and Climate Change Conference,
Sacramento CA
Nov(12), 2012

Control Theory	Decision Researc		Consumer Models
Cognitive Process		Decision Making	Behavioral Theory
Decision Process			
Cognitive Psychology		Neur	rological Process
Behavioral Process	Controller	Perceptions	Intuitions
		Cognitions	Memory
Social Influence		Sensation& Availability	
Social Psychology	Functionalistic Perspective of Brain		Willpower
Choice	Motivations Intention		Norms& Beliefs& Values
Experimental Psychology			Plant
Free Will	Logic	Neuropsychology	Platit
	Rationality	Causality	Feedback
Philosophy of Control Cybernetics			



Decision Research

Consumer Models

Decision Making

Behavioral Theory

Decision Process

Cognitive Psychology

(Neuropsychology)

Social Psychology

(Experimental

Psychology)

Perceptions Intuitions

Cognitions

Memory Sensation

"Functionalistic Perspective of Brain"

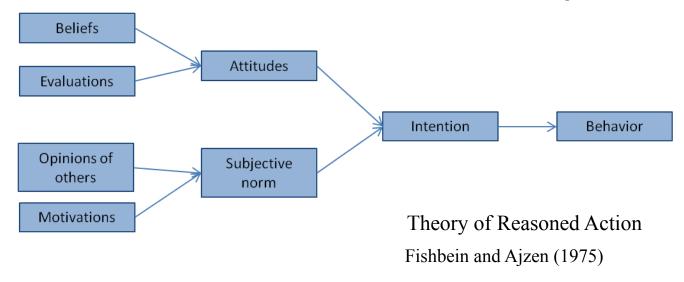
Free Will
Choice Rationality

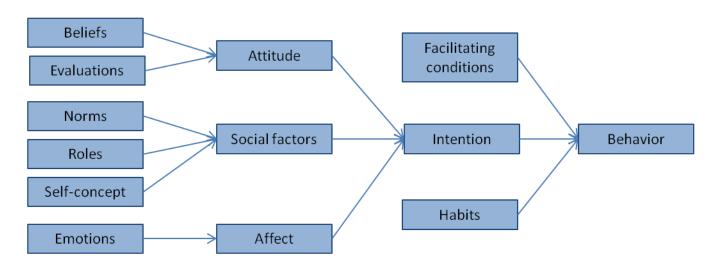
Philosophy of Control
Willpower Causality

Motivations
Norms& Beliefs& Values
Intention
Social Influence

Control Theory Plant Feedback
Cybernetics Controller

#### What is Behavioral Perspective?

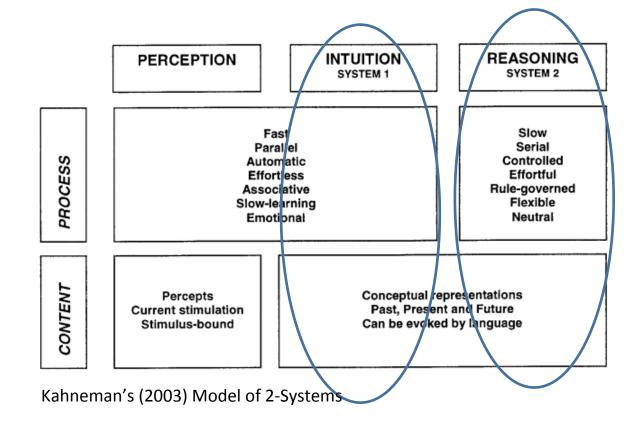




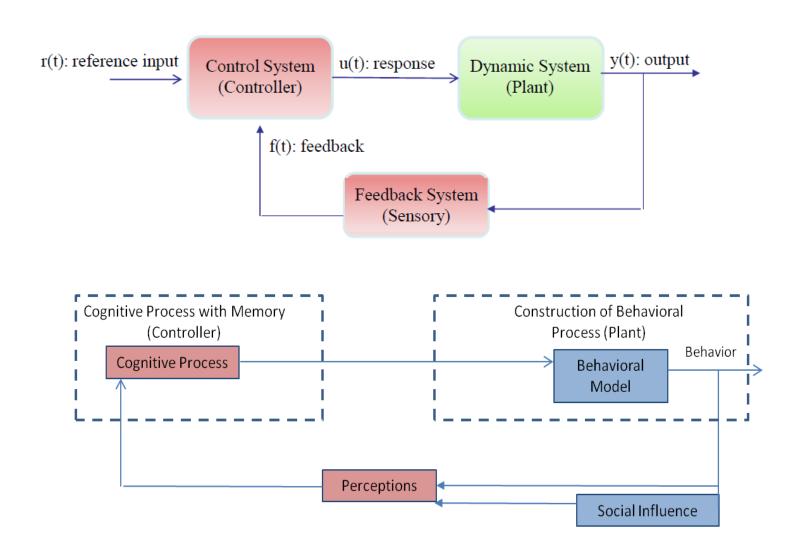
Theory of Interpersonal Behavior Triandis (1977)

#### What is Cognitive Perspective?

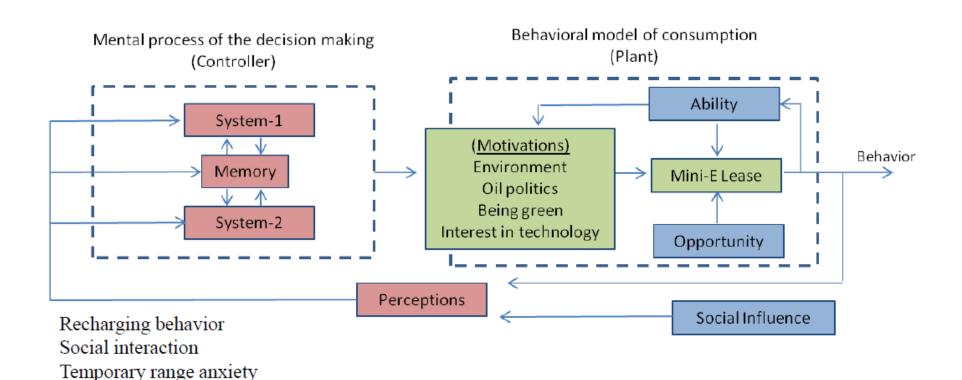




### What is Control Theory?



#### Application on "EV Purchase"



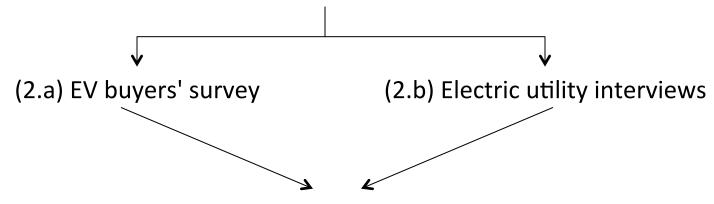
**Eco-driving habits** 

#### Challenges...

- Dual-Process theory is incomplete
  - The interaction between system-1 and system-2 is unknown.
  - The relationship of system-1 with the memory is interpreted differently in the literature.
  - The brain's ability to switch between two systems is not defined.
- Logical flow chart (LFC) model for the dualprocess theory is new to the literature.

## And the NEW DIRECTION: Electric Utilities in Supporting EV Adoption

(1) Literature Review(s): Behavioral models of consumption, EV-smart grid interactions, EV consumer studies, Utility sector in California



(3) Policy assessment and Design of a "model EV policy" for electric utilities

Applied, cross-sectional and mixed-mode research

#### Thanks...

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