

What a mess!

- Putting some Order in Person Memory -

rui soares costa
ISCTE, Lisbon University Institute, Portugal

leonel garcia-marques
University of Lisbon, Portugal

jeff sherman
University of California, Davis, US

Summary

What a mess! Putting some order in person memory

introduction

impression formation
memory for serial order
paradigm

experiment 1

hypotheses
method
results

experiment 2

hypotheses
method
results

experiment 3

hypotheses
method
results

discussion

INTRODUCTION

Introduction

Ok, but what is the big deal about **order information**, is it really important?

The order by which information is encoded (or events take place) plays an **important role in the inferences that are drawn** in relation to the target about who people are forming an impression

person memory
impression formation

human memory
memory for serial order

memory for order in person memory

What a mess! Putting some order in person memory

introduction
experiment 1
experiment 2
experiment 3
discussion

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruisoarecosta.it

Person Memory

What a mess! Putting some order in person memory

introduction

experiment 1

experiment 2

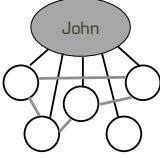
experiment 3

discussion

IMPRESSION

An IMPRESSION is a COGNITIVE REPRESENTATION of SOMEONE.

- 1) coherent representation
- 2) encoding: each new item is integrated with the items previously encoded in the emergent impression
- 3) network of inter-item associations



+ organization → + recall

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruisoarecosta.it

Human Memory

What a mess! Putting some order in person memory

introduction

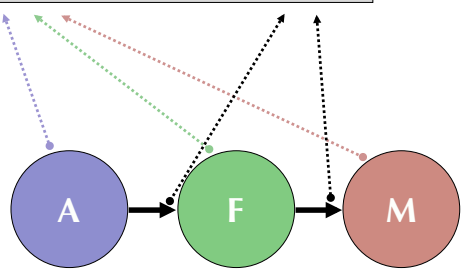
experiment 1

experiment 2

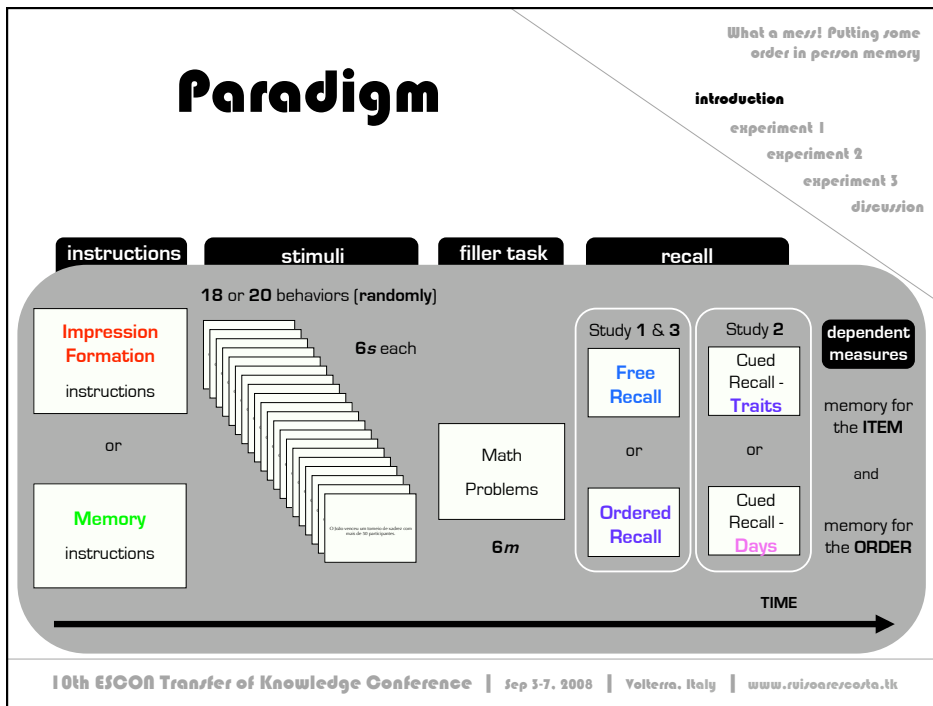
experiment 3

discussion

item information ≠ order information



10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruisoarecosta.it



EXPERIMENT I

hypotheses

Hypotheses

What a mess! Putting some order in person memory

- introduction
- experiment 1**
- experiment 2
- experiment 3
- discussion

memory for the ITEM

Impression Formation > Memory

memory for ORDER

Impression Formation < Memory

Free Recall < Ordered Recall

IF < M IF = M

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruizorecosta.tk

EXPERIMENT I

method

Method

What a mess! Putting some order in person memory

introduction
experiment 1
experiment 2
experiment 3
discussion

participants 103 undergrad students from UC Davis

design

- 2 Processing goal: **Impression Formation - IF** **Memory - M**
- 2 Recall: **Free Recall - FR** **Ordered Recall - OR**

material 20 behaviors describing a single target were randomly present

John

intelligent	friendly	extraverted	adventurous
intelligent	friendly	extraverted	adventurous
intelligent	friendly	extraverted	adventurous
intelligent	friendly	extraverted	adventurous
intelligent	friendly	extraverted	adventurous

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruisoarecosta.it

EXPERIMENT I

results & discussion

Results & Discussion

What a mess! Putting some order in person memory

introduction
experiment 1
 experiment 2
 experiment 3
 discussion

memory for the ORDER

$F(1,99) = 2,62, p < 0,11$ (two-tailed)

recall	IF	M
FR	~0.60	~0.78
OR	~0.80	~0.86

index of order

recall

IF M

· t(99) = 10,72, p < 0,00 ··· t(99) = 12,38, p < 0,00
 ·· t(99) = 1,09, p < 0,30 ···· t(99) = 1,68, p < 0,20

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruisoarecosta.tk

Results & Discussion

What a mess! Putting some order in person memory

introduction
experiment 1
 experiment 2
 experiment 3
 discussion

memory for the ITEM

$F(1,99) = 16,35, p < 0,00$

processing goals	IF	M
IF	~8.4	
M		~6.2

number of items recalled

processing goals: IF M

· t(99) = 10,72, p < 0,00 ··· t(99) = 12,38, p < 0,00
 ·· t(99) = 1,09, p < 0,30 ···· t(99) = 1,68, p < 0,20

memory for the ORDER

$F(1,99) = 9,49, p < 0,00$ $F(1,99) = 11,76, p < 0,00$ $F(1,99) = 2,62, p < 0,11$

processing goals	IF	M
IF	~0.68	
M		~0.82

recall	FR	OR
FR	~0.68	
OR		~0.82

recall	IF	M
FR	~0.60	~0.78
OR	~0.80	~0.86

index of order

processing goals: IF M

recall: FR OR

recall: FR OR

IF M

IF M

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruisoarecosta.tk

EXPERIMENT 2

hypotheses

Hypotheses

What a mess! Putting some order in person memory

- introduction
- experiment 1
- experiment 2**
- experiment 3
- discussion

memory for the ITEM

Impression Formation > Memory Recall: Trait > Recall: Day

memory for ORDER

Impression Formation < Memory Recall: Trait < Recall: Day

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruivoarecosta.it

EXPERIMENT 2

method

Method

What a mess! Putting some order in person memory

introduction

experiment 1

experiment 2

experiment 3

discussion

participants 110 undergrad students from UC Davis

design

- 2 Processing goal: Impression Formation - IF Memory - M
- 2 Recall: Cued Recall - Trait Cued Recall - Day

material 20 behaviors describing a single target were randomly present

John

intelligent	friendly	extraverted	adventurous	
intelligent	friendly	extraverted	adventurous	
intelligent	friendly	extraverted	adventurous	MO 1 2 3 4 TU 5 6 7 8 WE 9 10 11 12 TH 13 14 15 16 FR 17 18 19 20
intelligent	friendly	extraverted	adventurous	
intelligent	friendly	extraverted	adventurous	

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruivoarecosta.it

EXPERIMENT 2

results & discussion

Results & Discussion

What a mess! Putting some order in person memory

- introduction
- experiment 1
- experiment 2**
- experiment 3
- discussion

memory for the ORDER

$F(1,106) = 4,17, p < 0, 04$

recall:	IF	M
R-T	0.05	0.10
R-D	0.35	0.30

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruisoarecosta.it

EXPERIMENT 3

hypotheses

Hypotheses

What a mess! Putting some order in person memory

- introduction
- experiment 1
- experiment 2
- experiment 3**
- discussion

memory for the ITEM

Impression Formation > Memory Congruent < Incongruent

memory for ORDER

Impression Formation < Memory

Free Recall < Ordered Recall

IF < M IF = M

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruivoarecosta.it

EXPERIMENT 3

method

Method

What a mess! Putting some order in person memory

introduction

experiment 1

experiment 2

experiment 3

discussion

participants 185 undergrad students from UC Davis

design

2 Processing goal: Impression Formation - IF Memory - M

4 Expectancy: Intelligent Friendly Stupid Unfriendly

2 List: Congruent - C Incongruent - I

2 Recall: Free Recall - FR Ordered Recall - OR

material 18 behaviors describing a single target were randomly present

John

intelligent	friendly	stupid	unfriendly	irrelevant	irrelevant
intelligent	friendly	stupid	unfriendly	irrelevant	irrelevant
intelligent	friendly	stupid	unfriendly	irrelevant	irrelevant
intelligent	friendly	stupid	unfriendly	irrelevant	irrelevant
intelligent	friendly	stupid	unfriendly	irrelevant	irrelevant
intelligent	friendly	stupid	unfriendly	irrelevant	irrelevant

4 congruent lists:

-6 I + 12 IRR -6 S + 12 IRR

-6 F + 12 IRR -6 UF + 12 IRR

2 incongruent lists:

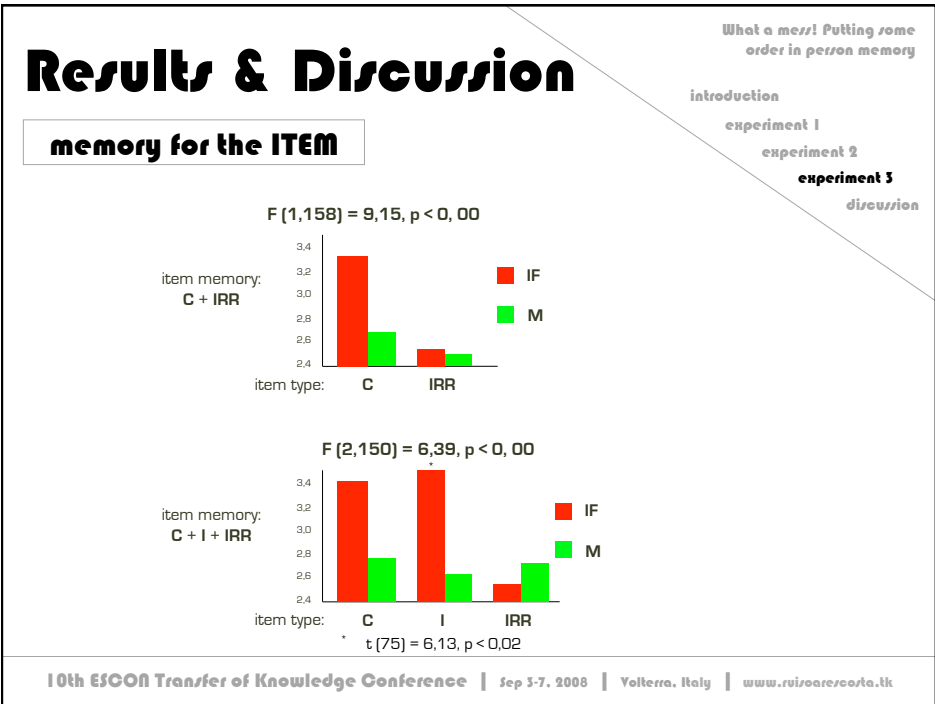
-6 I + 6 S + 6 IRR

-6 F + 6 UF + 6 IRR

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruizore/costa.tk

EXPERIMENT 3

results & discussion

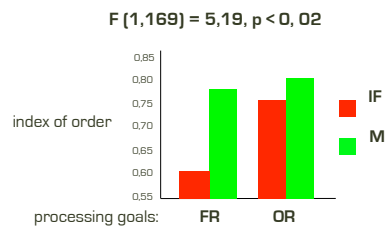


Results & Discussion

What a mess! Putting some order in person memory

- introduction
- experiment 1
- experiment 2
- experiment 3**
- discussion

memory for the ORDER



DISCUSSION

What a mess! Putting some order in person memory

introduction

experiment 1

experiment 2

experiment 3

discussion

Discussion

impression formation

- the processes involved in impression formation are able to keep track of order information
- participants that have formed impressions, however, do not spontaneously retrieve order information. But when directly asked to retrieve order information, those who have formed impression are still able to access order information
- order information is encoded even in situations where order information is useless to make sense about the target

order information in person memory

- trait - makes it easier to retrieve **item information** and makes it more difficult to access order information
- day - makes it easier to retrieve **order information** and impairs the access to item information
- trait facilitates the retrieve of item information, and the **day** facilitates the retrieval of order information

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruivoarecosta.tk

What a mess! Putting some order in person memory

introduction

experiment 1

experiment 2

experiment 3

discussion

Acknowledgments

. SOGAS - social cognition research group

Thanks for your attention!

10th ESCON Transfer of Knowledge Conference | Sep 3-7, 2008 | Volterra, Italy | www.ruivoarecosta.tk