

Fighting AN

A non-linear case-exploration of a client-therapist
text message interaction

Bob Radstaak, MSc.

Anna M.T. Bosman, PhD.

Radboud University Nijmegen, the Netherlands

Department of Special Education & Behavioural Science Institute

Case

- 25-year old woman with a severe restricted type of Anorexia Nervosa that already lasts 12 years
- Slim prospects on recovery
- NB Dutch treatment for these patients is: drip-feeding until a non-life threatening weight (35 kg = 77 lbs) is obtained, then discharge from hospital. Clinics only take care of patients who do not have a life-threatening weight.

What to do?

Model of pathology: too constraint



Intervention under study

- Incorporate
 - Openness of psychological systems
 - self-sustaining structure

Therapist's goal:

Alternate between the extremes of this paradox

Thus alternate between

NO. I'M FOLLOWING YOU

IF THIS
MESSAGE
IS PRESENT
THIS IMAGE IS
BEING USED
WITHOUT
PERMISSION
©

MADDEN
COPYRIGHT
©

- CHRIS
MADDEN -

— You're fluent in twenty-four
programming languages,
but you can't even talk
about the weather with me!"

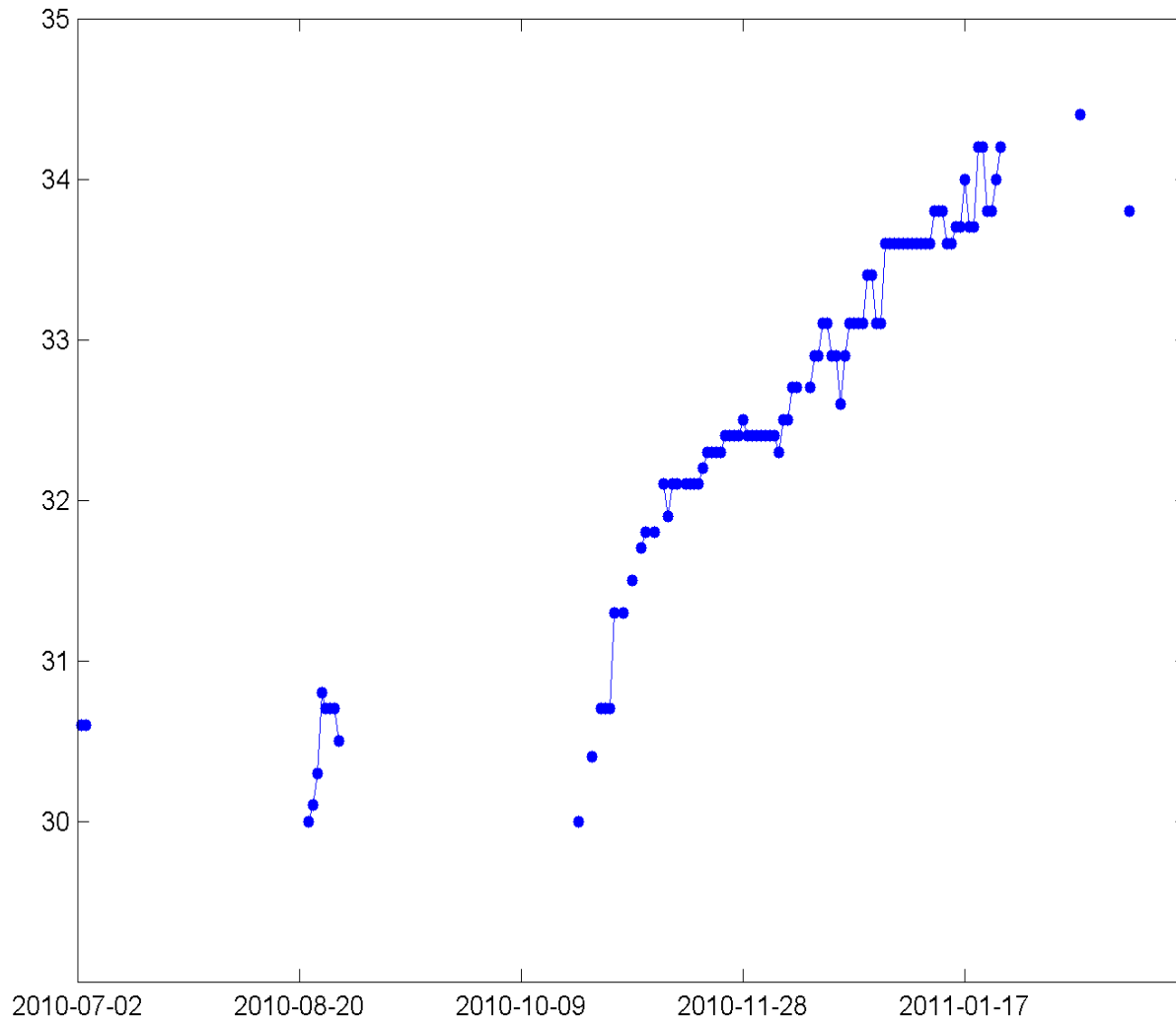
Igor Aleshin

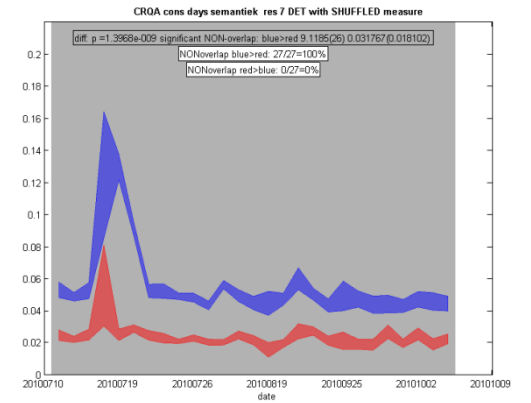
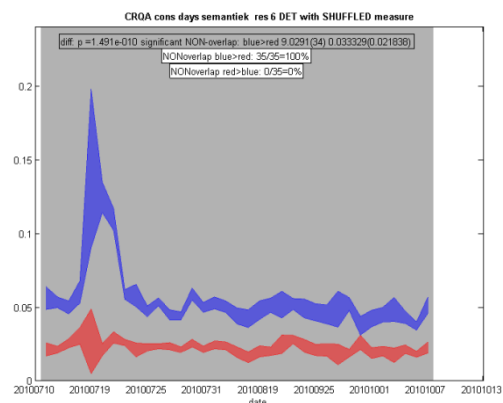
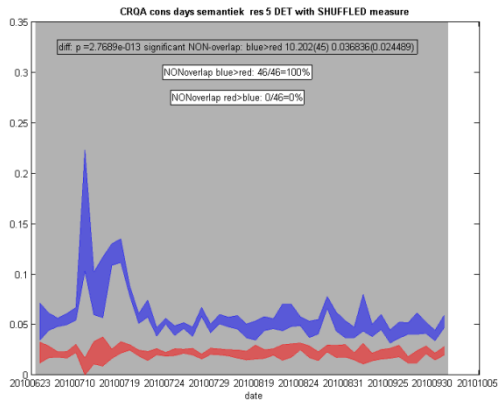
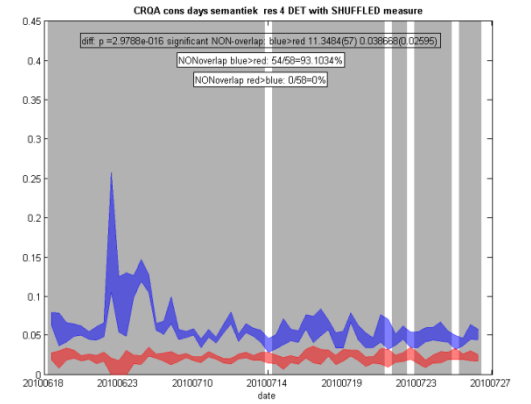
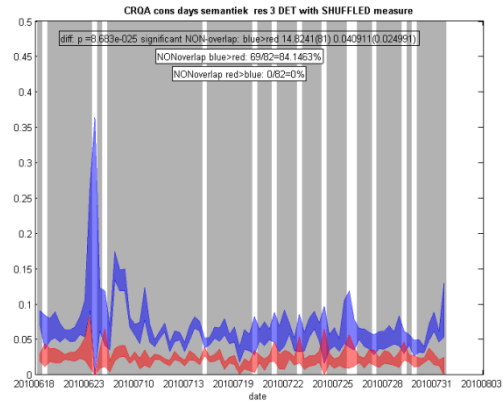
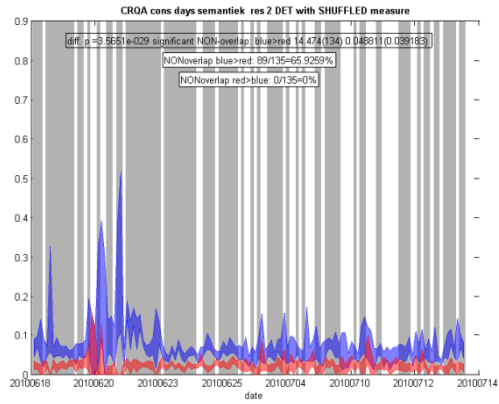
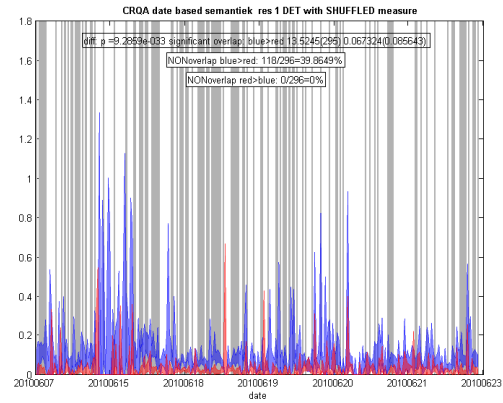
DATAART
Enjoy IT

Recurrence Quantification Analysis

- ARQA (auto) and CRQA (cross)
- Characters, words, semantics
- Resolution. The number of days that made up one data point: 1 – 7
- Recurrence rate (RR)
- Determinism (DET)

Weight development





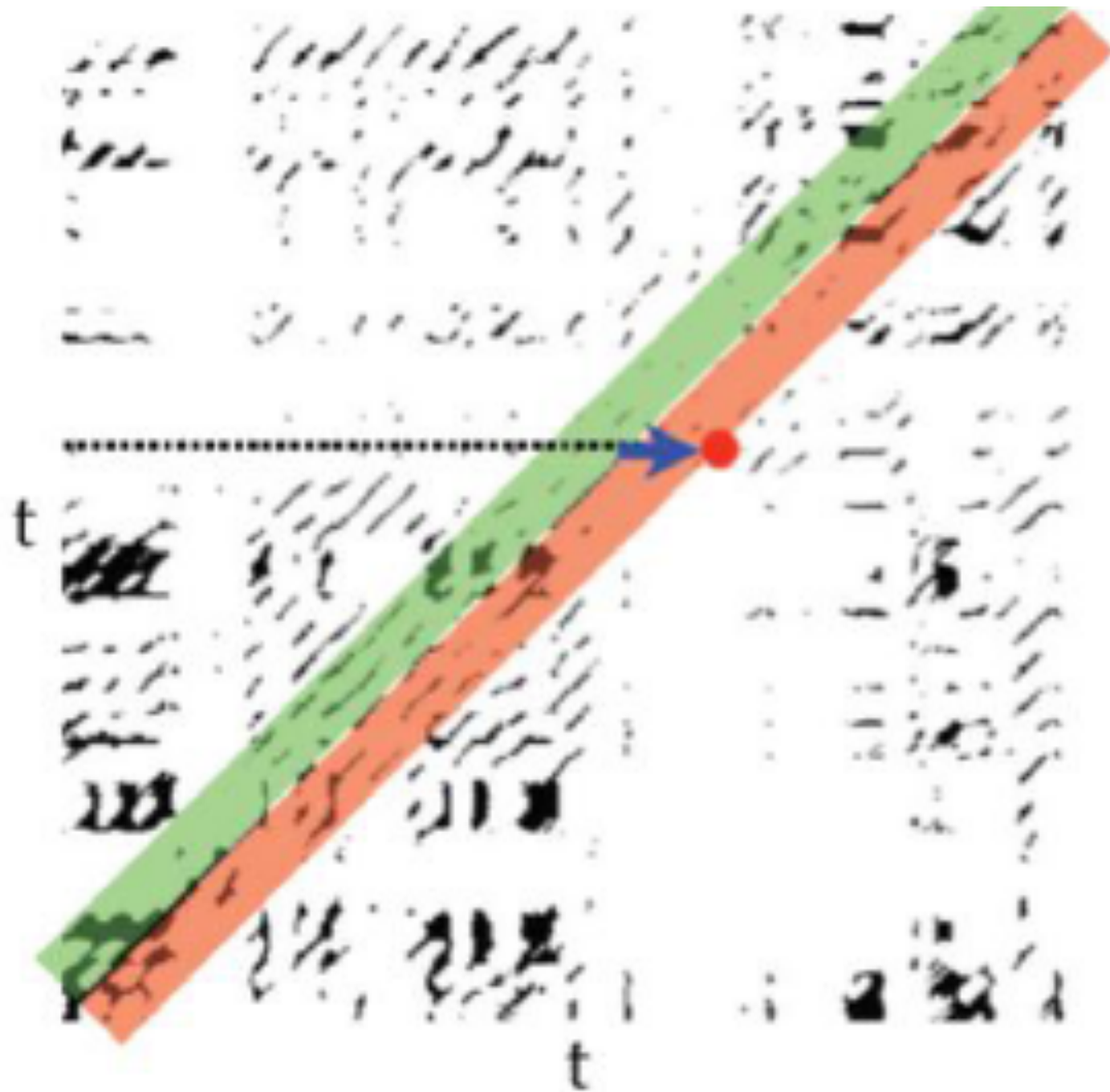
Recurrence and Determinism

	Recurrence Rate			Determinism	
Res	Data points	Difference Client-Therap	<i>R</i> Client-Therap	Difference Client-Therap	<i>R</i> Client-Therap
1	296	.20	.23	2.00	.13
2	135	.18	.30	1.89	.35
3	82	.16	.58	1.56	.54
4	58	.15	.66	0.82	.58
5	46	.16	.66	1.14	.69
6	35	.14	.75	0.87	.85
7	27	.16	.82	0.78	.86

* All red figures represent significant values

Le

ous



Leading and Following of Synchronous Behavior

- Generally: the diagonal of the RP
- Problem in texts: no continuous interaction
- Thus:

Person A

Hi! How are you?

Person B

I'm fine. How are you?



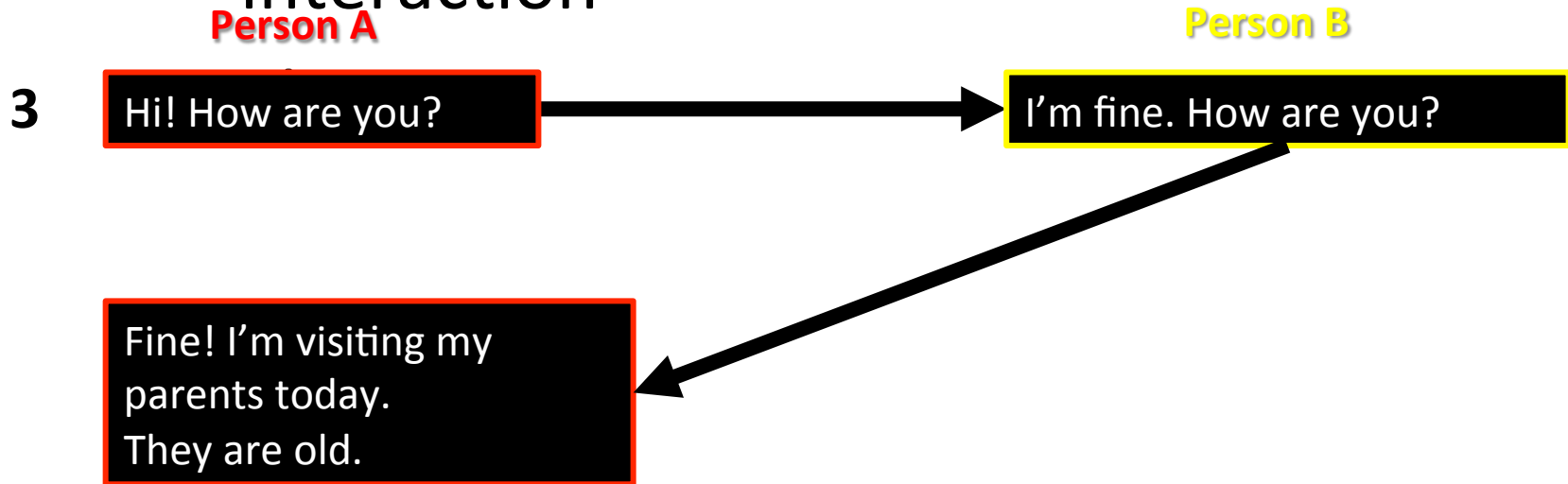
Leading and Following of Synchronous Behavior

- Generally: the diagonal of the RP
- Problem in texts: no continuous interaction
- Thus:



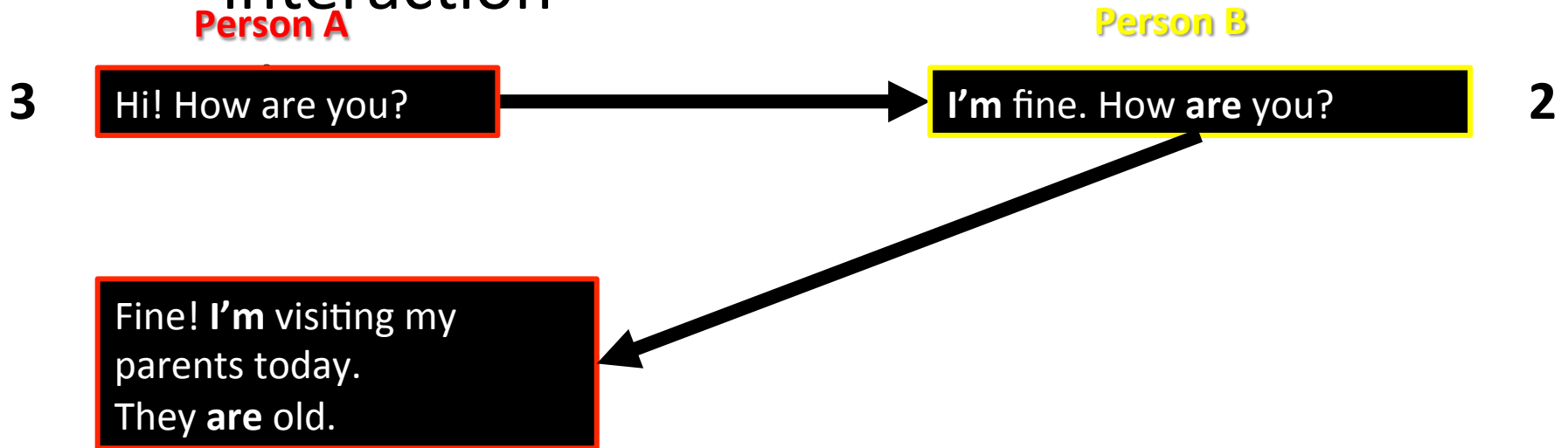
Leading and Following of Synchronous Behavior

- Generally: the diagonal of the RP
- Problem in texts: no continuous interaction



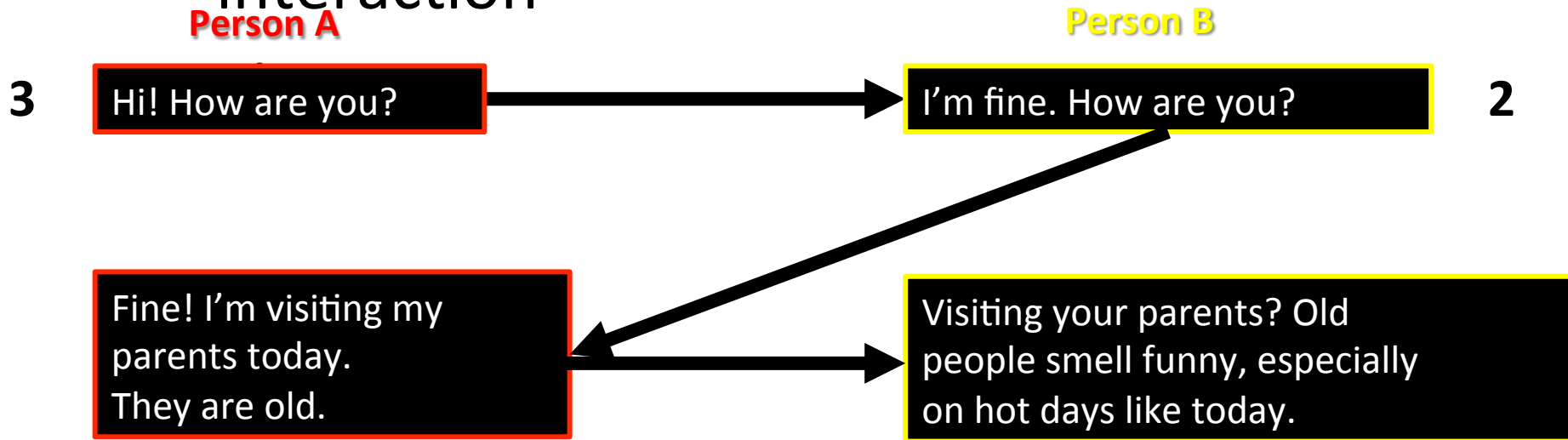
Leading and Following of Synchronous Behavior

- Generally: the diagonal of the RP
- Problem in texts: no continuous interaction



Leading and Following of Synchronous Behavior

- Generally: the diagonal of the RP
- Problem in texts: no continuous interaction



Leading and Following of Synchronous Behavior

- Generally: the diagonal of the RP
- Problem in texts: no continuous interaction

Person A

Person B

3

Hi! How are you?

2

I'm fine. How are you?

4

Fine! I'm **visiting** my
parents today.
They are **old**.

Visiting your **parents**? **Old**
people smell funny, especially
on hot days like **today**.

Synchronization * Weight

	ARQA					CRQA				Linell
	Client			Therapist						
Res	RR	DET		RR	DET		RR	DET	Difference in % leading	IR-diff
	<i>r</i>	<i>r</i>		<i>r</i>	<i>r</i>		<i>r</i>	<i>r</i>	<i>r</i>	<i>r</i>
1	n.s.	n.s.			n.s.		-.43	n.s.	-.40	-.46
2	-.54	n.s.		n.s.	n.s.		-.48	-.49	-.50	-.51
3	-.71	-.55		n.s.	n.s.		-.62	-.63	-.60	-.62
4	-.72	-.64		n.s.	n.s.		-.66	-.66	-.71	-.49
5	n.s.	n.s.		n.s.	-.70*		n.s.	-.72	-.74	n.s.
6	n.s.	n.s.		n.s.	n.s.		n.s.	-.82	-.77	n.s.
7	n.s.	-.82		n.s.	n.s.		n.s.	-.83	-.83	n.s.

* All red figures represent significant values

Conclusions

- Higher levels of recurrent behaviour correlated negatively with weight gain
- Why?
 - Adaptability of the client's system is low
 - Recurrence reflects the therapist tuning in
 - Gradually detuning, while staying in touch (coupled) appears to be key to therapeutic change

Epilogue

What we showed is not just a therapeutic attitude or position on top of which the “real” intervention is brought into action,

it **IS** the therapeutic intervention