Stuck in the present?

The use of the historical present in constructed narratives of patients with bilateral hippocampal damage

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Re-experiencing Memories

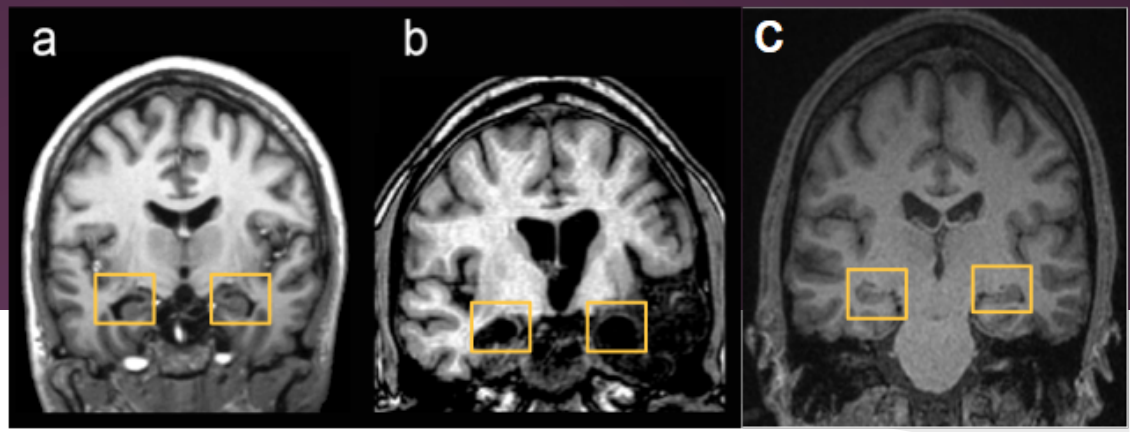
- "Reliving memories" - Mental Time travel

- Looks at use of present tense in past recollection

- Indicates emotional change and switch between Internal and External thoughts
- Brain structure and memory

- Amnesia vs. Temporal Lobe Epilepsy (Park et al., 2012)

Participants



Participant	Sex	Age	Ed	Etiology	Chronicity	FSIQ	WMS-III GMI	MQ-Diff
1606	M	61	12	Anoxia	18	91	66	25
1846	F	45	14	Anoxia	15	84	57	27
1951	M	56	16	HSE	18	106	57	49
2308	M	52	16	HSE	9	98	45	53
2363	M	52	16	Anoxia	10	98	73	25
2563	M	52	16	Anoxia	8	94	63	29
Amnesic Average	N/A	53.2 (5.3)	15.0 (1.7)	N/A	13.0 (4.6)	95.2 (7.4)	60.2 (9.6)	34.5 (12.9)
Comparison Average	N/A	53.5 (5.5)	15.0 (2.4)	N/A	N/A	109.7 (10.6)	N/A	N/A

Comparison participants matched pair-wise to amnesic participants. No significant differences in age (p = 0.96), or education (p = 1.0).

Gathering the data

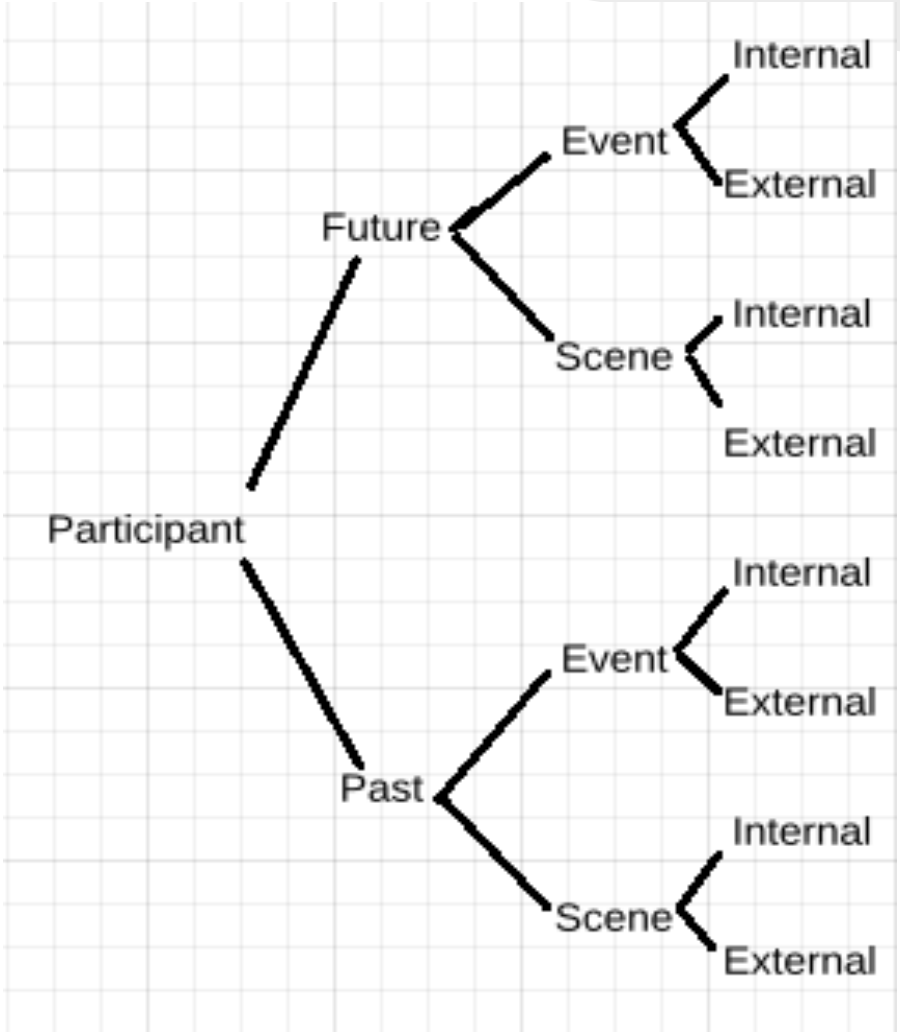
- Using the Adapted Autobiographical Memory Interview (Levine et al., 2002)

- Given a neutral word and a time period in which to construct a memory

- Two time periods (Past and Future)

- Event (i.e movie trailer) vs. Scene (pressing pause - experiencing: time, place, people etc.)

Transcript Groups



Coding Methods

Memory Analysis

- Analyzed for Internal and External Details using the Adapted Autobiographical Memory Interview (Levine et al., 2002)

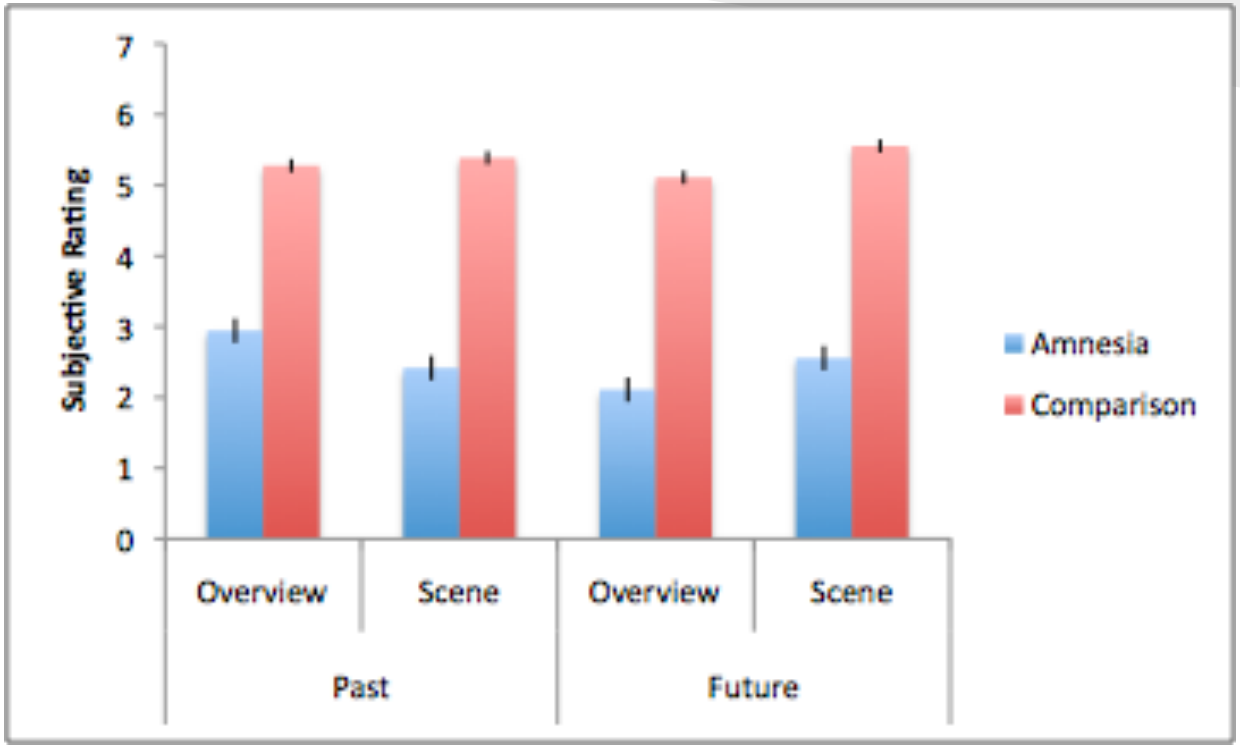
Language Analysis

- Tense of verbs coded - Past, Present, Present Exception

Subjective Ratings

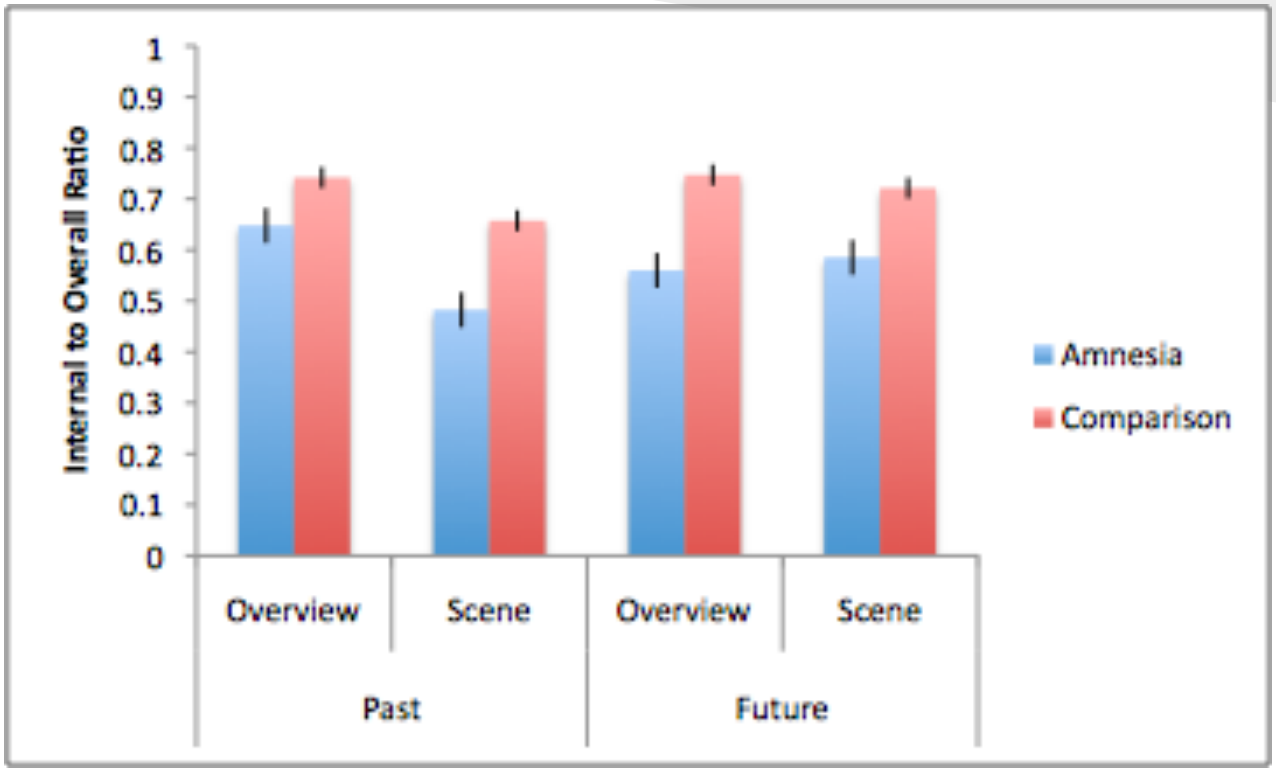
- "How good is this story?"

Subjective Ratings



Amnesic participants were rated lower than comparison participants ($F(1, 40) = 74.42$, $p < 0.001$) on the question, "How good was this story?"

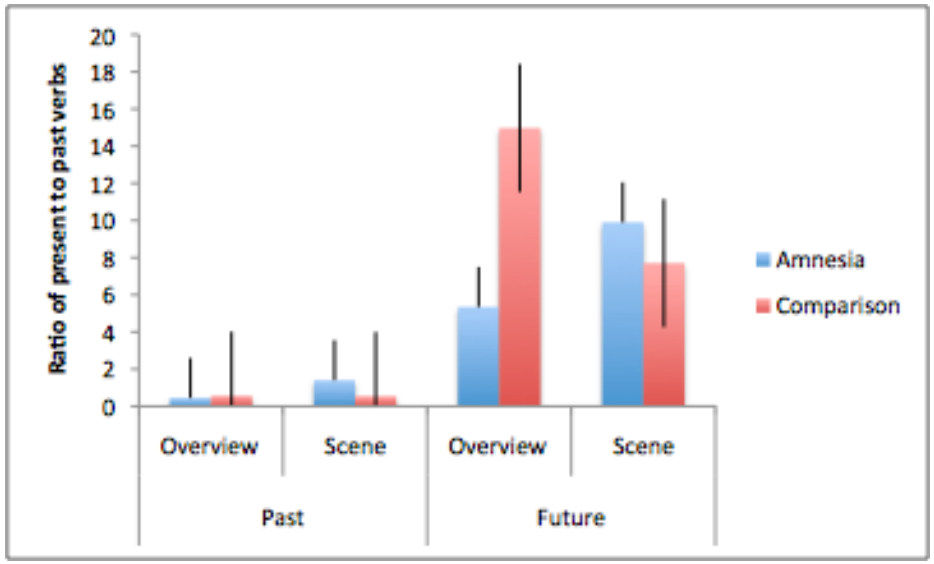
Memory Analysis



Amnesic participants were rated lower than comparison participants ($F(1, 40) = 18.41$, $p < 0.001$) on the ratio of internal (episodic) to external (semantic) details. This means the amnesic's stories had, on average, less episodic like details in their stories, creating more general or less personal stories.

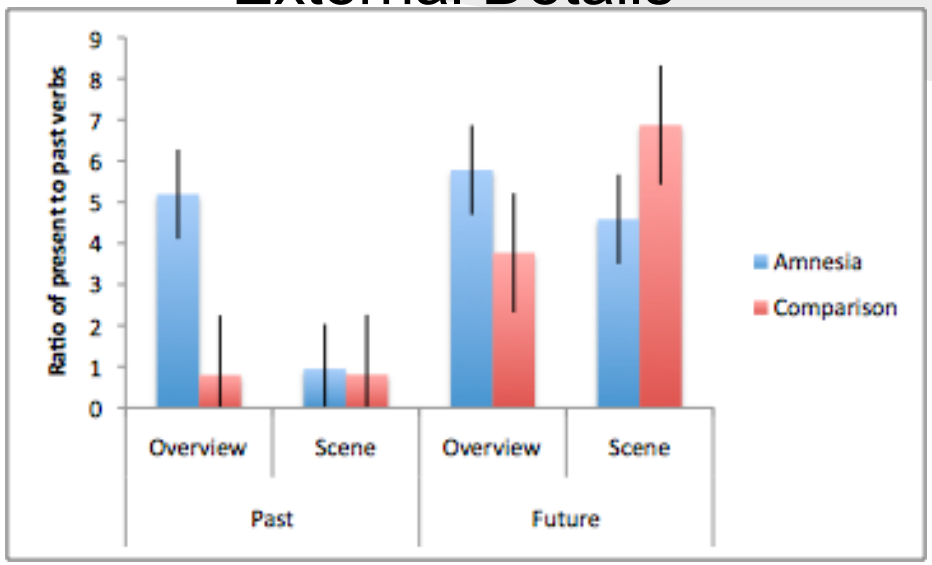
"Historical Present" Analysis

Internal Details



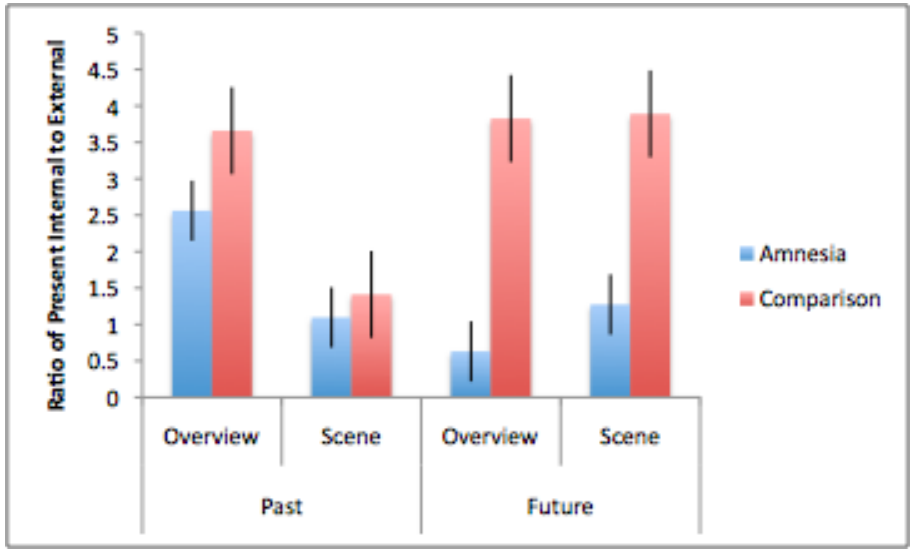
There was no group difference ($F(1, 40) = 0.93$, $p = 0.34$) on the ratio of present verbs to past verbs, but there was a significant effect of time ($F(1, 40) = 8.34$, $p < 0.01$), where both groups produced a higher ratio of present tense verbs when imagining the future.

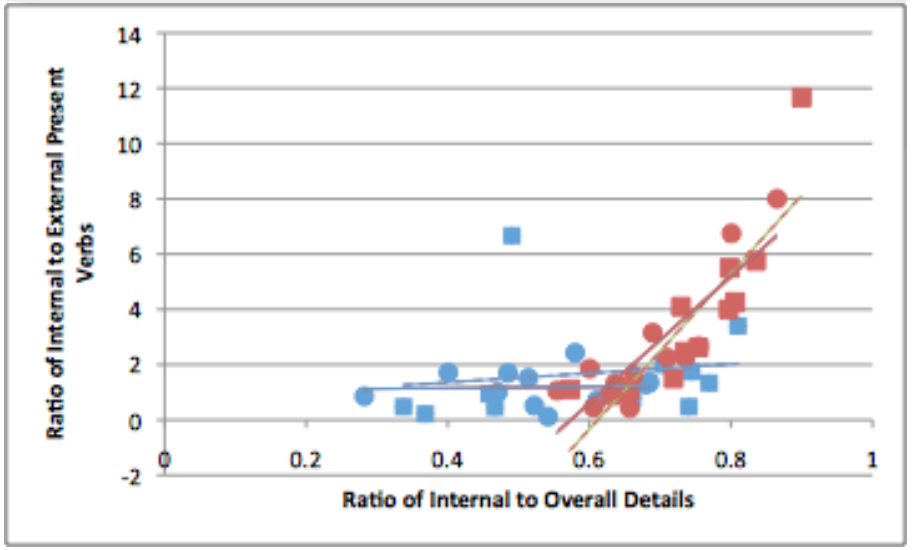
External Details



There were no significant effects found on the ratio of present verbs to past verbs, including group ($F(1, 40) = 0.35$, $p = 0.56$) or time ($F(1, 40) = 0.35$, $p = 0.56$) indicating that both groups produced comparable ratios of present tense to past tense verbs in their external details.

"Historical Present" Analysis





Amnesic participants were rated lower than comparison participants ($F(1, 40) = 8.296$, $p < 0.01$) on the ratio of present tense verbs in internal (episodic) to external (semantic) details. This means the amnesic's stories used, on average, less present tense verbs to describe the experiences of their stories, creating more general or less personal stories.

There was a significant relationship between the ratio of internal to overall details and ratio of present tense verbs in internal versus external details ($t(1, 45) = 4.78$, $p < 0.0001$; $r^2 = 0.58$) indicating that memory and the use of the present tense are related

Thank you, questions and comments can be addressed now.

References

Duff, M. C., & Brown-Schmidt, S. (2012). The hippocampus and the flexible use and processing of language. Frontiers in Human Neuroscience, 1–13.

Levine, B., Svoboda, E., Hay, J. F., Winocur, G., & Moscovitch, M. (2002). Aging and autobiographical memory: Dissociating episodic from semantic retrieval. Psychology and Aging, 17(4), 677–689.

Park, L., St-Laurent, M., McAndrews, M. P., & Moscovitch, M. (2011). The immediacy of recollection: The use of the historical present in narratives of autobiographical episodes by patients with unilateral temporal lobe epilepsy. Neuropsychologia, 49(5), 1171–1176.