

Trivial Notes 2025

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Welcome to the Era of Experience

Silver and Sutton 2025

In key domains such as mathematics, coding, and science, the knowledge extracted from human data is rapidly approaching a limit. And a sketch chronology of dominant AI paradigms is presented where era of *experience* is to arrive after era of *simulation* (RL) and *human data* (LLM).

The Era of Experience

Agents will inhabit streams of experience, rather than short snippets of interaction. This will allow them to take actions to achieve future goals, and to continuously adapt over time to new patterns of behaviour.

Their actions and observations will be richly grounded in the environment, rather than interacting via human dialogue alone.

Their rewards will be grounded in their experience of the environment, rather than coming from human prejudgement. Relying on human prejudgement usually leads to an impenetrable ceiling on the agent's performance: the agent cannot discover better strategies that are underappreciated by the human rater.

They will plan and/or reason about experience, rather than reasoning solely in human terms.

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References

Silver, David and Richard S Sutton (2025). “Welcome to the Era of Experience”. In: *Preprint of a chapter to appear in Designing an Intelligence, edited by George Konidaris, MIT Press (forthcoming)*.