

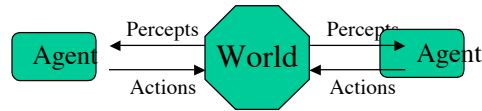
Future of General Game Playing

Proposed Changes to GDL

- Arithmetic, e.g. +, *, >
- ++ Persistent Connections (as an option)
- + Step count in messages
- ? Game ids and player ids
- Tournament standings

Partial Information Games

Percept Action Model



Situation calculus

```
true(s,N) :- does(P,a,M) & true(r,M) & succ(M,N)
true(r,N) :- sees(P,p,N) & true(q,M)
```

Notes:

- Always possible to simulate with another player
- In current development plan but not scheduled
- No plans at present for probabilistic track
(though players may use probabilities in playing)

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Inductive General Game Playing

Unlike GGP, players *do not* receive complete rules at runtime, only definitions of possible percepts and actions.

On the other hand, players *do* receive multiple legal game histories.

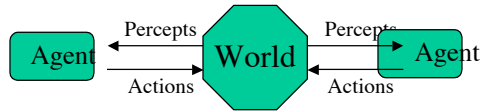
Goal of the player is to induce the rules and then play the game effectively. Alternatively, it may skip straight to learning Q-functions. Interesting to see which approach works best.

Longer Start Clock

4

Really General Game Playing

Percept-Action Model for Agent



Player is provided

- Enumeration/definition of percepts and actions
- One of the percepts is a “happiness” percept
- Performance measure is aggregate over steps

Discussion

- Bit more difficult
- Gets at issues of conceptualization of world

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Competition Strategies

6

Most Important Suggestion

Make sure it works.

7

Second Most-Important Suggestion

Make sure it works.

8

Third Most-Important Suggestion

Make sure it works.

9



