

Notes on **Multiagent Learning**

(Chapter 11 of Multiagent Systems by *Gerhard Weiss*)

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1 Introduction

The term multiagent planning is ambiguous as it can mean several things. This chapter focuses on the following.

- Multiagent plan: A plan consisting of multiple agents.
- Multiagent plan formation: The way a plan is formed. Either in a centralized way or a decentralized way.

2 Coordination Prior to Local Planning

We can develop interaction rules to help form multiagent plans.

2.1 Social Laws and Conventions

1. Identify joint states that should be avoided (or sought).
2. Work backwards through agent's joint actions to identify possible precursor states to these states.
3. Impose constraints on agents' action choices in the precursor states to prevent (or) require accordingly.