

# Designing Open Source Licenses\*

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## Abstract

Open source licenses are noted for often being self-referential. The two most prominent examples of open source licenses are GPL and BSD. GPL says the next developer cannot go proprietary, and can only go open source with the same license, namely GPL. BSD says the next developer can go proprietary, and can also go open source with any open source license, including BSD. We provide a framework to study other potentially self-referential open source licenses. We construct the universal space of all possible open source licenses that allow finitely many options for the next developer, and explain why GPL and BSD naturally stood out from other licenses as the two most prominent choices for developers going open source.

KEYWORDS: open source, licenses, self-referential, GPL, BSD, universal space

JEL CLASSIFICATIONS: L86, O36

## 1 Introduction

After a software developer develops a software, there are at least two ways to distribute it. The first way is to go proprietary, meaning that she sells copies of the binary code for a profit. Since binary code is difficult to interpret, it deters the others from disabling its security device and making illegal copies. But it also makes it difficult for future

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