

THE ECONOMIC THEORY OF PRODUCTION CONCEALS OPPORTUNITIES FOR SUSTAINABILITY IMPROVEMENT

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ABSTRACT

In analyses of action options regarding sustainability, the economic theory of production is often used as a conceptual starting point. We contend that this theory is deficient, even counterproductive. Especially, we argue that effective options exist for sustainability improvement that are not visible in this theory, and thus will not be taken into consideration when comparing alternative options based on it.

We argue that the fundamental problem of the economic theory of production is that it cannot explain the formation of either cost or value in an adequate way. This situation seems to have been caused by the foci and assumptions of the “marginalist turn” of economics, starting from 1870, especially the denial to consider any internal organization of production other than that caused by prices and costs, the assumption of optimal efficiency, and the assumption of ends as given.

The shortcomings of the economic theory of production are demonstrated through a case study on plasterboard (also known as drywall) installation. We show how practices for installation of these products, as advocated in lean construction, would not have been suggested or visible in a “sustainability” analysis based on economic theory.

KEY WORDS

Theory of production, economics, sustainability, lean production, waste, plasterboard, drywall, installation.

INTRODUCTION

In analyses of action options regarding sustainability, the economic theory of production is often used as a conceptual starting point. It is well known that this theory of production has been challenged from the sustainability point of view, especially regarding the omission of links to the biophysical world (Georgescu-Roegen 1970), and improved versions of it have been proposed. However, we contend that in spite of these purported corrections and improvements, serious deficiencies remain (Koskela, in print), such as:

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