Johnson and Earle 1987), does not incorporate the crucial variables of the other two perspectives. None of them takes into consideration that different types of social organization may solve the problem of scarcity in different ways. This one-dimensional point of view has still another consequence, as it obscures the fact that causal relationships may exist between the central variables of the different approaches. If this should be the case, statistical tests denying this fact may easily produce false correlations or may even be unable to unmask existing ones.

Technically spoken, a distinction has to be drawn between (1) the causal relationships of the independent variables pertaining to the three approaches, and (2) the causal effect these independent variables have on violent conflict.

Causal relationships between the independent variables

The central independent variables of the three approaches are population density, food stress and social stratification (see Table 1). A bundle of hypotheses exists about the causal relationships between them, which will be briefly discussed below.

Table 1. Independent variables

SCCS	Variable	Quellen		Source
64	Population density (persons per sqm)	1 = 1 per 5 sqm 2 = 1 per 1–5 sqm 3 = 1–5 4 = 1–25	5 = 26–100 6 = 101–500 7 = over 500	Murdock & Wilson 1972
678	Food stress	1 = food constant 2 = occasional hunger 3 = periodic or chronic hunger 4 = starvation		Sanday 1981
270	Class stratification	1 = absence among free men 2 = wealth distinctions 3 = elite 4 = dual (hereditary aristocracy) 5 = complex (social classes)		Murdock 1967

Population density and social stratification. Among evolutionary theorists it is a commonly shared view that rising population densities lead to social stratification (Johnson and Earle 1987: 16–18; Dumond 1972; McNetting 1972: 235; Hammel and Howell 1987: 147). According to these studies, population growth, which is viewed to be an inherent trait of human und animal populations alike, causes population pressure. Human societies face this situation by intensifying their production. This allows the generation of surplus, which is the basis of stratification. A positive relationship between the two variables can be expected even if rising population densities are not valid as a measure of scarcity, as suggested by some scholars.[4] According to a hypothe-

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[4] For a more lengthy discussion of this topic see Wittek 1990: 56–58.