Summary
This thesis is a study of rhythm and timing in Norwegian traditional dance tunes called *pols* or *springar* in asymmetrical triple meter performed on the fiddle and Hardanger fiddle. This music is characterized by the following features: 1) The melody constitutes the basic groove-forming element. 2) The tempo is perceived as constant and the unfolding of rhythmic events corresponds to a triple-time dance meter. 3) The beat duration ratio is asymmetrical: all three beats within the measure have different lengths. 4) The rhythmic framework (the meter/groove) is highly flexible: measures and beats may vary considerably in length from one part of a performance to the next without compromising the experience of flow, tempo and groove.

The analytical ambition of the thesis is to understand how rhythmic-temporal variation is generated and patterned, thereby uncovering the principles by which musical time is organized and controlled. It is shown that the seemingly irregular patterns of durations are interrelated with aspects of musical structure (motivic and sectional division) and the use of expressive devices (ornamentation, dynamics, double stops) in ways that make the pols/springar performances internally consistent. Contrary to many prevailing approaches to the study of rhythm production, the temporal flow of events is not seen as structured and controlled mainly by an independent durational and accentual matrix (meter). Instead, performance timing is explained in terms of an interaction between what is termed top-down and bottom-up processes of temporal organization. The top-down process means that the timing of beats and measures is an intrinsic component of the melodic-rhythmic articulation of the larger phrase/motif of which they form a part. The bottom-up process concerns how the melodic and rhythmic architecture of individual rhythmic segments affect their duration.

A general finding is that time, the relationship between durations, is not an autonomous musical parameter with a system of its own. Instead, timing is closely integrated with other aspects of the musical material, forming part of larger wholes or gestalts, which in turn are shaped and evaluated according to criteria such as completeness and well-formedness. Related to this is the notion of *rhythm as process*, according to which the rhythmic framework is in a continuous state of becoming through performance, rather than being a predefined norm against which rhythmic behavior is oriented.