

---

# Contents

<b>1</b>	<b>Introduction</b>	1
1.1	Quantification – a Stringent Necessity	1
1.2	Remarks on Nomenclature	4
<b>2</b>	<b>Case Histories, Geomorphological Facts</b>	7
2.1	Introductory Remarks	7
2.2	Pandemonium Creek	12
2.3	Blackhawk	26
2.4	Köfels	32
2.5	Val Pola	49
2.6	Vaiont	60
2.7	Huascarán	80
2.8	Synopsis of Results	102
<b>3</b>	<b>Comments on Mechanisms of Release</b>	107
3.1	Causes and Signals – a Pragmatic Approach	107
3.2	From Cohesion to Motion	114
3.3	Particular Mechanisms	130
<b>4</b>	<b>Mechanisms of Disintegration</b>	145
4.1	Static Disintegration	145
4.2	Dynamic Disintegration	152
<b>5</b>	<b>Mechanisms of Displacement</b>	161
5.1	Coherent and Disintegrated Motion	161
5.2	Consequences of Velocity-dependent Resistance	171
5.3	Falling, Rolling, Bouncing	177
5.4	Unlubricated Sliding	193
5.5	Lubrication	204
5.6	Fluidisation	218
5.7	Various Mechanisms	229
<b>6</b>	<b>From Analysis to Prediction</b>	241
6.1	Some Fundamentals	241
6.2	How to Determine Velocity?	243
6.3	The Size Effect – a Useful Tool	253
6.4	Improvements – Possibilities and Limitations	265

<b>7 Secondary Effects .....</b>	277
7.1 Flood Waves .....	277
7.2 Damming Effects .....	285
7.3 Various Secondary Effects .....	289
<b>Review of Highlights .....</b>	293
<b>References .....</b>	297
<b>Index .....</b>	307