

Appendix 6: the coding system and code frequencies

System to be governed		Governing system		Governance interactions	
Features of socio-ecological systems	Frequency	Images, values, principles, vision (meta order)	Frequency	Instruments, tools, actions (first order)	Frequency
diversity	85	governance vision and principles	127	hunting licenses in Greenland	6
complexity	54	economic value of whale ES	134	support for local businesses in Greenland	6
change/dynamics	243	employment opportunities	24	improving and limiting whaling methods	7
Human-environment interactions		symbolic/socio-cultural value	134	customary/traditional rules	22
perceptions of whale ES	177	nutritional value and food security Greenland	59	product diversification	17
over-exploitation	33	Actors		taxes and charges	11
Ecosystem services		hunters	138	adaptation to social-ecological change	13
aesthetics	12	tourists	30	infrastructure development	27
education	27	local citizens	69	marine protected areas	16
regulating and maintenance	7	fishing	34	sustainable tourism	10
recreation and tourism	92	industry	16	collaboration between actors	49
provisioning	194	museums	37	whale sanctuaries	4
whale ecosystem disservices	9	whale watching operators	93	whaling quotas	49
External influences	72	whale watching guides	40	research	
Uncertainty	67	NGOs	18	scientific monitoring of whale populations	5
		other pressure groups	9	educational campaigns	24
		Actor needs/problems		code of conduct	33
		general	275	education in tourism	4
		conflicts and trade-offs	296	governance recommendations by actors	71
		synergies	21	Governance modes	
		Institutions (second order)		hierarchical governance	60
		local institutions	121	co-governance	100
		national institutions	57	self-governance	118
		international organizations	34	Power relations between actors	43
		research institutions	23	Temporal and spatial scales	
		Nested hierarchy of the system	27	local	167
		Social, political and cultural traditions	51	national	45
				international	33
				short-term	2
				long-term	13
				scale mismatch	24