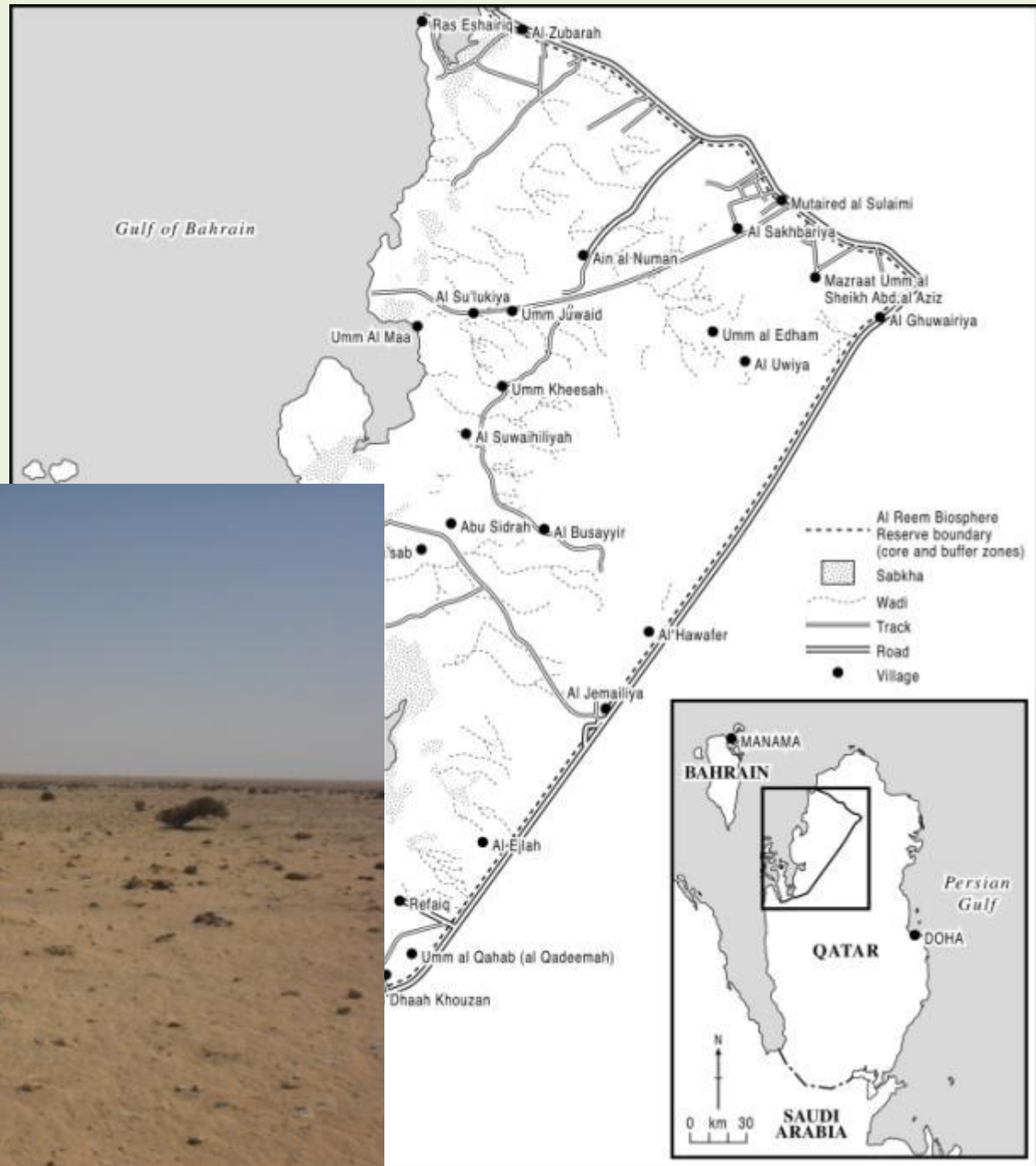


*Gottingen Workshop on (De)-constructing
Biodiversity, Sept 2011*

**SOME OBSERVATIONS ON (DE)-
CONSTRUCTING BIODIVERSITY &
CONSERVATION IN TWO CONTEXTS:
NEW GUINEA & ARABIA.**

PAUL SILLITOE

Qatar: Al Reem Biosphere Reserve



Opening position

- ‘Ethnographic determinism’ [‘ethno-det’ism’]
- Data gatherer [ethnographer] vs. analytical intellectual [anthropologist]
- Social science vs. social metaphysics
- Ethnographic present issues

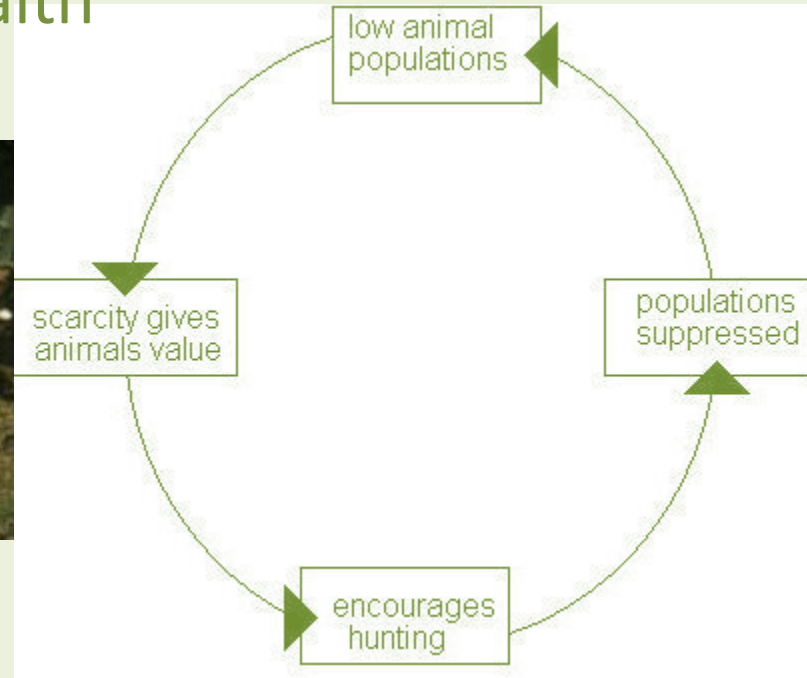
Demons & conservation



No 'ecologically noble' subsistence culture but large areas of forest intact

Hunting and conservation

Socio-political exchange of wealth

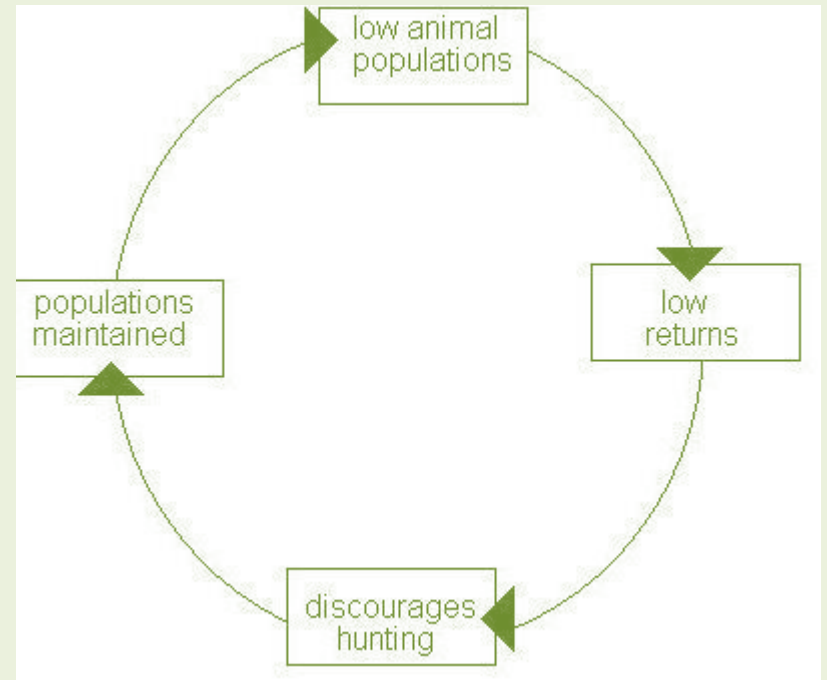


Negative feedback loop



Hunting returns = 12.6 grams per hour

Energy expenditure : return ratio = 25:1



Positive feedback loop

Prehistoric ecology



Overall energy expenditure : return ratio = 4:1

Food rich secondary re-growth

Kuk , Western Highlands, PNG



- hunter-gatherer and shifting-cultivator - too coarse categories
- humans have intervened in environment for millennia

Agriculture and environment



Patchwork quilt

Steel tools



Area cultivated for so long as anyone could recall

A Place Against Time

Land and Environment in the Papua New Guinea Highlands

Paul Sillitoe

STUDIES IN ENVIRONMENTAL ANTHROPOLOGY

A Place Against Time

Land and Environment in the Papua New Guinea Highlands

Paul Sillitoe

Popular support for Green causes evidences current widespread concern over environmental degradation, unsustainable agricultural practices, forest destruction and so on. While land management inevitably implies some modification of Nature's arrangements to meet human food needs, a crucial question is whether these interventions are sustainable in the long term or deplete her productive capacity.

A Place Against Time is an ethnographically focused environmental study of montane New Guinea, where people were among the world's first to cultivate crops some ten millennia ago, and where today an enduring agricultural tradition continues. It arranges its account of climate, vegetation, topography and geology according to their relationship with the soils of the region occupied by Wola speakers in the Southern Highlands Province of Papua New Guinea, in the Western Pacific.

The book breaks new intellectual ground as an ethno-environmental investigation with a soils perspective, ethno-pedology being a little researched topic to date. It is interdisciplinary, not only in covering a wide range of environmental science disciplines, but also in combining European natural science understanding of the environment with a Highland New Guinea culture's perspectives and practices, to further knowledge of their ecology. In addition it investigates the consequences of indigenous environmental knowledge and natural resource management strategies for local agricultural practices, which are intriguing in permitting a sustainable system of maize or kava permanent subsistence cultivation with no extended fallow periods nor outside inputs.

harwood academic publishers

PAUL SILLITOE

From Land to Mouth

The Agricultural "Economy" of
the Wola of the New Guinea Highlands

*Among the Wola people
in the Highlands region
of Papua New Guinea,*

such concepts as capitalism and market state were, and in many senses continue to be, alien. For these people, distribution is unnecessary; the producers of everyday requirements are the consumers: garden produce goes largely "from land to mouth," which is not to imply resources are scarce. Yet transactions, patently nonmarket, featuring valuable material things—which are scarce—are a prominent aspect of life. The relationship—or rather the disconnection—between these two domains is central to understanding the fiercely egalitarian political economy. In this detailed investigation of a Highland New Guinea agricultural "economy" and acephalous political order where sociopolitical exchange figures prominently—constituting the most thorough inquiry into such a tropical subsistence farming system ever undertaken—esteemed anthropologist Paul Sillitoe challenges assumptions about the universal relevance of key economic ideas in noncapitalist contexts and anthropological shibboleths such as the "gift." Furthermore, he makes a reactionary-cum-innovative contribution to ethnographic research methods and analysis notably in the use of advances in indigenous technology to



OM↓ N↓ P↓ K↓ =



sweet potato mono-crop

Mounding:



Rows but no Ψ :



Empiricists versus idealists

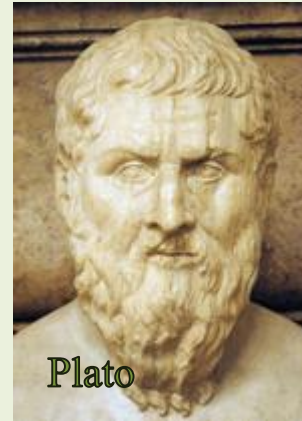
- Ethnocentric \equiv prohibits interdisciplinarity?

- Structuralist interpretation

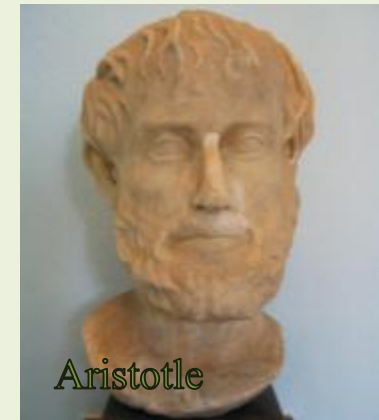


$\equiv \Psi?$

- Imagination vs. Facts



- Metaphysical vs. Empirical



- ecological approach to conservation vs. ethnographic interpretive approach
- neither innate conservationists nor forest destroyers – subtle tacit attitudes
- participatory rhetoric - use extant cultural channels to explore conservation priorities



Qatari Experiences

- Conservation areas to protect biodiversity

- Al Reem Reserve, West Qatar



- UNESCO Man and the Biosphere Reserve

- Co-management and participation



- Local knowledge and practices

- Bio-cultural diversity

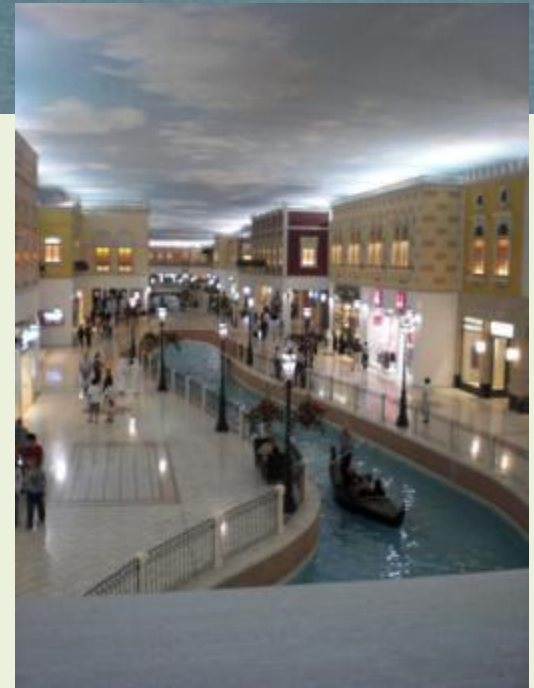
- *Qatar National Vision 2030*: to build “a bridge between the present and the future . . . [in a] prosperous country . . . in which nature and man are in harmony” and traditional Arab cultural values “provide our moral and ethical compass”.
- Challenging to convey tacit conservation behaviour

Rapid social and cultural change

From this:



To this:



Village animal numbers (*mazarah* rights) in Al Reem region.

[Total nos. villages & homesteads owning stock = 16 & 56]

	Camels	Cattle	Sheep	Goats
No. villages with	12	12	16	16
No. homesteads with	32	29	52	41
Total animals	728	272	4806	2653
Mean per homestead	22.8	9.4	92.4	64.7
Range by				
homesteads	1-99	1-90	2-402	3-220
Standard deviation	22.9	16.6	90.3	47.3

Stock-camp animal numbers (*azba* rights) in Al Reem Reserve.

[Total no. camps owning stock = 39]

	Camels	Cattle	Sheep	Goats
No. camps with	22	7	25	21
Total animals	803	57	2528	1059
Mean per camp	36.5	8.1	101.1	50.4
Range between				
camps	1-102	3-15	2-285	2-129
Standard deviation	27.8	4.2	75.4	36.7



Local views of Reserve

Survey questions:

- Know that Al Reem is a Reserve?
- Know what conservation is?
- Define conservation
- Good that Al Reem is a Reserve?
- View of planned management interventions?
 - Exclosures
 - Hima grazing system
 - Vehicular access
 - Restrictions on hunting

Responses by gender:

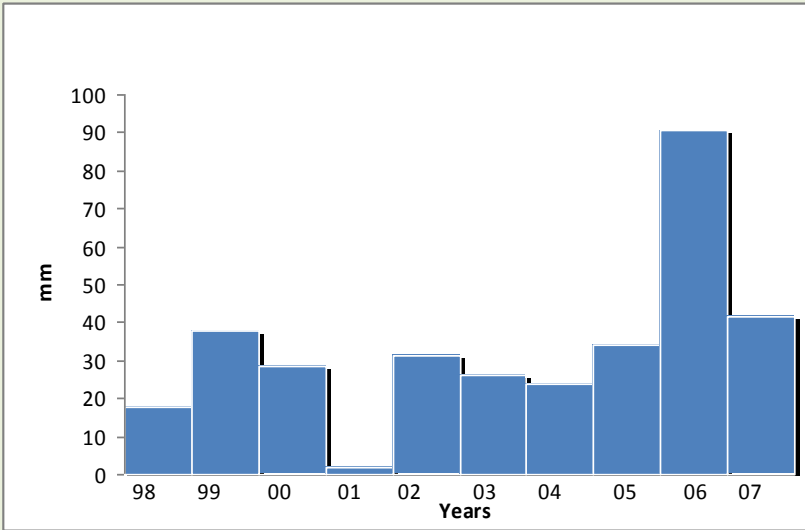
Gender	Number of responses	Know that Al Reem is a Reserve?		Know what conversation is?		Defined conservation	Good that Al Reem is a Reserve?		Know about planned management interventions		Exclosures		<i>Hima</i> grazing system		Vehicular access		Restrictions on hunting	
		Y	N	Y	N		Y	N	Y	N	G	B	G	B	G	B	G	B
F %	31	55	29	61	23	16	71	7	32	48	68	10	71	3	68	3	52	23
M %	84	71	24	77	17	13	76	11	35	44	45	30	51	17	55	18	51	23

Responses by age:

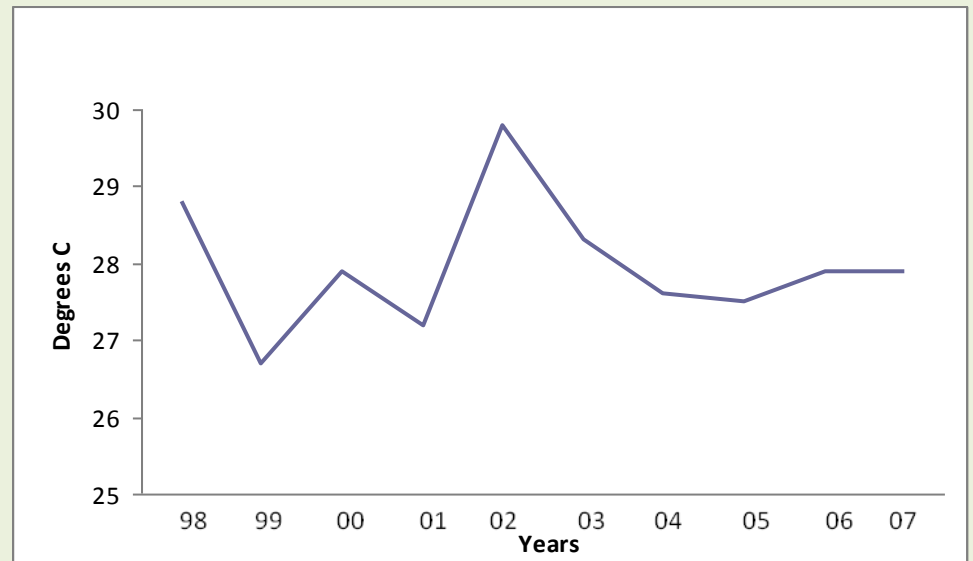
Age [yrs.]	Number of responses	Know that Al Reem is a Reserve?		Know what conversation is?		Defined conservation	Good that Al Reem is a Reserve?		Know of planned management interventions?		Exclosures		<i>Hima</i> grazing system		Vehicular access		Restrictions on hunting	
		Y	N	Y	N		Y	N	Y	N	G	B	G	B	G	B	G	B
15-24	16	69	13	69	13	13	63	0	44	44	44	38	50	25	63	13	31	56
25-44	71	66	24	73	16	13	72	14	30	44	49	25	56	13	56	16	54	18
45-59	22	59	41	73	27	18	86	5	41	46	73	5	64	0	68	5	64	9
>60	4	75	25	50	50	25	100	0	50	50	50	50	75	25	50	25	75	25

[Y = yes, N = no, G = good, B =bad]

Rainfall [total annual]



Temperature [mean annual]



Participation implications

- Local practices environmentally friendly or responsible for degradation?
- NIMBYISM - ‘not in my back yard’
- Back to centrally managed approaches?
- Worth effort making conservation connections known to policymakers?

Logging



Relativity of biodiversity

- Suspicion about calls for biodiversity conservation
- Cultural relativity of the idea of conservation
- Conservation as alien and to be resisted
- Scientific taxonomy vs local classification

- *taxis* 'arrangement' vs *politikos* 'arrangement'
- Whether cuscus a *hungnaip* or *yaeliyp* can agree on *sab* 'large furry animal'
- dynamic continuously negotiated classification
- Extinction a questionable idea?



Education for conservation

- Education to make bio-cultural diversity informed co-management a reality
- Use extant cultural channels
- Education for all parties
- Need to avoid 'brainwashing' approach