Lines of Enquiry - Hayden Lorimer

By way of very brief introduction, I'm someone more used to thinking about the geographical imaginations which have been put to work in the making and mapping of mountains. Disciplinary backgrounds notwithstanding, my efforts to think awhile on the wonders of the geological imagination has been enjoyable and instructive...and you will most likely tell me not a little flawed.

In collaborative work with Kate and Duncan, I've been able to extend some on-going reflections concerning the ways that knowledge in the terrestrial sciences can be articulated as a visual language and a set of expressive practices. In short – and put much more simply – geologists are really very good with their hands, and arms...and when they're required other bits of their bodies too. Put more bluntly still: they don't half flail your arms around when they start to read the rocks.

I was first struck by this expressive aptitude on an undergraduate fieldcourse when my physical geography colleagues worked through explanations of landscape process (surface and sub-surface) with students. Fluid movements, sweeps and tugs, clamped fists, tensing forearms, and dipping shoulders: all formed a fascinating body language of gesture and gesticulation. It was a field performance far exceeding – far more avantgarde – anything that I or my equally self-conscious human geography colleagues might attempt in public. It was a most creative approach to "knowledge-transfer".

Such explanation *in the field*, aligning verbal reasoning with bodily performance, pairing dialogue with probabilistic insight, is a cornerstone of

disciplinary conduct for learning earth scientists and experienced researchers alike. This is the claim of Thomas Raab and Robert Frodeman in a fascinating essay entitled 'What is it like to be a geologist?'. And I'm inclined to agree with them.

Correct me if I'm wrong but it seems such a norm, so seemingly instinctive, so habituated as ordinary teaching practice...that it goes largely unquestioned or unnoticed as a shared skill and competency. If I'm right, then it definitely merits greater attention. We might consider gesticulation (or signing) an inexpensive, non-technical, utterly transportable toolkit that does not threaten to wear out with age (perhaps only with arthritic limbs). Hands and arms are taken with you, anywhere, anytime. They can do "thrusting', 'sliding', 'moving' and 'colliding' at the drop of a rock hammer. Gesticulation animates and applies knowledge to the field, in the field.

In conversations with Kate I wondered if much the same sorts of expressive skill and techniques for communication were in evidence in Assynt, and if so, how best could they be captured visually. This was a tentative line of enquiry...among the aforementioned broader concern with the visual culture of geology as a subject.

What she has produced (ie drawings arranged in a concertina format) finds echoes in the standardised world of the technical instruction manual, but also ought be regarded a wonderful invitation too; I look at these drawings, and then feel immediately compelled to put my arms into the same positions, and exhibit the movements necessary to try to get between each. That's the lovely thing about them: the images work as an invitation to shadow movements, and (perhaps sometimes for those expert enough) by extension they can be a visual prompt to think harder about exactly what

earth matters, forces and processes they are designed to communicate. The skill of visualising processual events in distant time comes before, and happens after, the equally artistic task of mapping mountains.

It might also be appropriate to wonder on the timelessness, or indeed the possible obselescence, of these sorts of visual language, especially when new technologies of mapping/communicating seem to offer geologists very different kinds of promise and glittering prizes. Unanswerable questions suggest themselves? How would T.C. Clough (the Victorian geological surveyor) have explained polyphase deformation? How are these signs and gestures learned? Are there secretive classes, in smoky rooms full of special stratigraphic handshakes? Is gesticulating passed down generation to generation as a performative skill? An aid to three dimensional thinking, within the landscape, it has a different sense than in the studio - or lecture theatre - pointing to the formations - cross referencing from human action to what's on, under, the ground.