

Re: THE THREE BEARS OF PLATE TECTONICS

Source: <http://sci.tech-archive.net/Archive/sci.geo.geology/2004-07/0150.html>

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Date: 07/04/04

Date: 4 Jul 2004 02:40:20 -0700

"Carsten Troelsgaard" <carsten.troelsgaard@mail.dk> wrote in message
news:<40e6b2ab\$0\$258\$edfadb0f@dread12.news.tele.dk>...
> "don findlay" <don@tower.net.au> skrev i en meddelelse
> news:5f164087.0407021748.29c407b5@posting.google.com...
> > "Carsten Troelsgaard" <carsten.troelsgaard@mail.dk> wrote in message
> news:<40e51ed9\$0\$158\$edfadb0f@dread11.news.tele.dk>...
> > > "don findlay" <don@tower.net.au> skrev i en meddelelse
> > > news:5f164087.0407012112.3e379d0@posting.google.com...
> > >
> > > *snip*
>
> > > > *warms up etc. We're home Don. It fits. In reverse order.*
> > > >
> > > > *Sort of, ...yes.. New perspectives are always like that.*
> > >
> > > *How are you going to explain it to the physisists?*
> >
> > *No. They're supposed to explain it to us. We just do the geological*
> > *bit.*
>
> *They have given viable explanations to PT.*

What do mean "viable explanations"? It's PT they have given us, not explanations of it. Do you think it was cooked up by geologists? They can't answer simple questions any self-respecting geologist puts to them.

> > > *Now, this is the question I would like to settle:*
> > >
> > > > *It's rocks with a sedimentary origin that tumbles off. Why do you*
> *not*
> *see*
> > > > *this flaw in your genesis of the earth?.. should I remind you, that*
> *it's*
> > > > *supposed to be something comming up from the inside of the earth?*
> > > >
> > > > *No,...no flaw on that score. The top of the mantle is the floor of*

> > > *the diapir;*
> > >
> > > *So here is where the real 'growing' of our earth is taking place?*
> >
> > *I've just deleted my "Yes" answer after reading further down where I*
> > *think you have the wrong idea about 'diapir'. But it's sort of 'yes'.*
> > *Growth was under the Himalayas – "The roof of the World" – but all of*
> > *that slipped off,*
>
> *It sneaks off above the mantle, but below the sedimentary cover? Don! Are*
> *you a geologist? Why shouldn't the sedimentary cover follow along on top of*
> *it?*

Ah, so you don't know either of the zone of decoupling between the crust and the mantle called the Moho – the Big-time equivalent of soling on listric faults? And the 'Weak zone', and the decoupling at the base of the lithosphere called the transition zone?

> *Or is this why you now have started asking 'Where did all those*
> *sediments come from – look at Everest'?*

I'm not asking where the sediments came from, though it's a good question. I'm just saying Mt Everest, sitting as it does right up against the so-called battering ram of India, is pretty flat and not crumpled. (That's a george-trick –putting words in my mouth. Shame on you!)

> *If this last situation is the case,*
> *then, welcome back to PT! It's nice to see you again.*
> *If it's not the case, then you certainly have some explaining to do. You've*
> *already overextended your 'observations' and reason for things being as you*
> *say.*
> *Taking your words 'as is' something slipped off and in consequence exposed*
> *what's beneath: Most of this can be observed as having a sedimentary origin.*
> *And the stuff that slipped off, where is it?*

The stuff that slipped off is (at the base) all the foldy stuff, and (above it) all the flat stuff (Everest etc). (What's difficult about this?) Did you read up on the gravitational collapse yet? (Do it before the Moho etc.)

>
> > *the Americas dilated,*
>
> *A dilation ought to be a straightforward, simple thing. If you should*
> *explain it, how complicated can you make it then? I assume that you use it*
> *as one of your own terms and that it's nothing that I ought to already know*
> *about. Taken 'as is' the Americas would be pretty budinaged, to say the*
> *least.*

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The American Cordilleras represent a slice through the one of the largest boudinage structures on the planet. (on the Continental crust that is)

- > > *and growth continued as the*
- > > *Pacific. So yes.*
- >
- > *Not clear. As the lower part of the globe, it doesn't seem to have 'grown'*
- > *much according to the logic of your localized growth/expansion of the globe.*

<<http://users.indigo.net.au/don/to/index.html>>

- > > > *collapse pulls/ pushes it ('downslope') over the craton*
- > > > *(e.g. ophiolite belts, lots of gabbros/ dolerites).*
- > > >
- > > > *ophiolite belts, lots of gabbros/ dolerites has been borne in this*
- > > > *stratigraphic position?*
- > >
- > > *The mantle diapir rises, lifting the cover and sloughing it off.*
- >
- > *You've renounced any good knowledge of of Himalayn geology. Such ignorance*
- > *seems to be a requirement for understanding your ... you dont like to call*
- > *it theory, but prefer to cal it observation, observation, observation.*
- > *Ok, the cover is off and the mantle or mafics are exposed.*
- > *Apart from the PT scetch of events the link mentions:*
- > *'scattered occurrences of ophiolite'*
- >
- > <http://jan.ucc.nau.edu/~wittke/Tibet/Himalaya.html>
- >
- > *which hardly can be considered to be the mafic exposures after 'lifting the*
- > *cover and sloughing it off'. As you ask yourself 'where do those sediments*
- > *come from', it's obviously not mafics?*

(I think you'll find a lot of granitoids too). Boudinage. Base of the crust. Crust stretches, pulls apart, wholesale anatexis and gap-filled neosomes; mantle comes up; upper levels slip off (that 'high' and 'low' section-through-the-mountain-belt thing); (also Americas); middle level slips off (Indonesian – Australian detachment from Himalayas – India); mantle breaks through (Pacific) etc etc.

- > > *The*
- > > *main dislocation is the decoupling at the crust – mantle interface.*
- > > *Ophilites are just that interleaved 'contact' zone. I don't see why*
- > > *you see the sediments as a problem. Doesn't have to be sediments*
- > > *though, just whatever is overlying the mantle.*
- >
- > *'just whatever is overlying the mantle' is the concern of the geologist and*
- > *the structure of which you are trying to 'explain' by moving any dynamic*
- > *conviniently away from the same surface.*

Seems then I have a larger-scale conception of the 'surface' and 'contact zone'... There's all the mechanics in it for what you're talking about as regards deposition of sediments on mantle-crust; time and scale are the two considerations you need to include.

- > > *The base of the*
- > > *sequence in the Himalayas*
- >
- > *I don't think that anyone confronted the 'base'.*
- >
- > > *cites opiolites and harzburgites and a lot of*
- > > *granitic gneisses (don't rightly know, ..haven't looked, but they're*
- > > *of that ilk)*
- >
- > *So, in total you do not consider general geology of which*
- > *erosion/sedimentation is a major shaping factor.*

Give us a break! I told you I haven't looked at the Himalayas, beyond the Name and whatever else it was, height and flatness. For first-order that's all that's necessary. All of the detail will fall into place. There are armies doing all of that stuff. They'll piece it together, given a rough idea of where they're supposed to go with it, don't worry,

- > *In some secret way earth*
- > *grows from within.*

You mean like "differentiates"?

- > *What natural consequences that follow from that (that a*
- > *diapire 'really' breaks through) in terms of a new body that erodes and*
- > *sediments out to reshape earth, is nowhere considered in your account.*

I would say that the Pacific is resurfacing the planet in a way that has never before occurred – Like that bit on the Moon – the big Mares, that got stopped/ died..

- > *Sediments are sediments as they have always been and always will be.*

You mean that the planet aggregated from? ..all those boulders, rubbing against each other in a maelstrom of galactic agglomeration <giggle>

- > *Doesn't*
- > *it occur to you that, as a zone of growth, a diapire will, from its first*
- > *moment, be a localized spot for erosion and that it sooner or later will be*
- > *exposed, one way or another (another=your gravitational collapse) – and that*
- > *a considerable part (and not a rare ophiolite) of the globe should have a*
- > *subaerial exposure of it.*

Only if it gets up high enough. (Buoyancy, Carsten, ...buoyancy – but in it's proper place.) And that's exactly the point about ophiolites – they ARE rare. If plate tectonics operates there should be scads and scads of old ocean floors locked within continents. But no, Plate tectonics says it's always ALL subducted, in Panthalassic amounts. ALWAYS. That's the idea at any rate. But of course since the idea can't be wrong, that is why we never see them. ("Science")

> > <<http://users.indigo.net.au/don/ee/boudintro.html>>
> > *I don't see why you see this local 'sloughing off' due to uplift as a
> > problem.*
>
> *You should see it as a problem since the Himalayans seems to be extremely
> thick sequences of rocks of sedimentary origin.*

It's gets thick where it piles up. (I mean 'off'). The plateau is typified by extensional structure.

> > > > *If a diapire has broken through, it would be a simple thing to
> describe*
> *this*
> > > > *newborne matter of the globe. Since it's nowhere to be found, you
> have*
> *no*
> > > > *case.*
> > > >
> > > *Aww, *Carsten* (This is not the Pope, ...this sounds like stu!)*
> > >
> > > *You are evasive.*
> >
> > *Well, (again) the Pacific is a diapir lift in the mantle,*
>
> *Could be, except you describe the diapire as growing on top of the mantle,
> but let that be.*

Uh????? !! No not a blip on top of the mantle:– The diapir *IS* the mantle, breaking though the crust. Some pteros would use the language of 'hot-spots', but their thinking needs to be up-scaled.

> > *breaking out*
>
> *It does not seem to break out anywhere, except at the spreadingzones*
>
> > *along the axis of the circumglobal mountain belt loop. The uppermost
> > level is the Himalayas, the intermediate level is the roundness of the
> > Northern Pacific (Hawaiian Hotspot) and the lower level is the ridge.*
> > *I think.*
>
> *I don't understand that either*

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It's a big structure, and sure, when you see it through time, pretty complicated too. That's all the supporting infill to the description, But re-reading that bit, I have to say it's not very clear. I mean you're just looking at a section down through the crust: Himalayas, Indonesia, Pacific. Small step down is across the Owen Fracture zone (The 'Big Rip') <<http://users.indigo.net.au/don/re/bigrip1.html>>. A few in between, and then the really big one across the Tasman between Australia and antarctica which takes you into the Pacific (I haven't done that yet – there's a fair bit to it). The internal structure of the Pacific has never been looked at, but there's a lot in that too. (If people are going to look askance at the likes of 'Big Rip', I don't see much hurry for the others..)

>
> > *Their varied expression at the Earth's surface is a*
> > *consequence of lateral equilibration time (diachronous) ("skating").*
> >
>
> *'lateral equilibration time', it sounds very scientific, but what does it*
> *mean. One older than the other?*

One sitting on top of the other, but with time, the bottom bit being dragged out / the top slipping off, and them both attaining lateral equivalence in crustal level. Call it listric faulting and exhumation of the lower plate if you like.

> > > *This is talk about tectonic style. I address the question as to what is*
> > > *expulsed from your diapire, not how. It's obvious at the spreading-zone,*
> > *but*
> > > *from there you make a not very modest jump to the highest mountains of*
> > *the*
> > > *globe. It's not obvious to me that the diapire at this time still*
> > *expulses*
> > > *mafics (and in consequence has done it all the time). Where did those*
> > *mafic*
> > > *rocks go, or why did it turn into metamorphosed sedimentary equivalents?*
> >
> > *Oh, right, ..I see, ... I get you. I think you have the wrong idea*
> > *here. It's just 'bodily heave', bodily uplift, ... nothing gets*
> > *'squirted' out, if that's what you mean by 'explused'. Do you? The*
> > *mantle just lifts up and the crust just slips off.*
>
> *If it did, the mantle would be exposed, and it only is in the oceanic*
> *spreading-zone.*

But the entire ocean floor is the spreading zone. Two thirds of the Earth's surface. What do you mean?

> *And don't you exaggerate, to say the least, your expectations as to how*
> *large a part of a continent that will start this gravity sliding on a plane*
> *that hardly tilts ... in as much as it also has to push the rest of the*

> *globe aside at the same time?*

That's right. There has been some pretty big things going on, that just aren't accounted for in this piss-weak organ of plate tectonics. And the remnants of it are still there in the geoid:-

<<http://users.indigo.net.au/don/to/index.html>>

> > *That's all. It's*

> > *a competency interface thing, where both retain their respective domains. Nothing's getting 'expulsed' in the sense of stuff from the mantle adding to the crust in the sense of a squirty hose. We're just getting the WHoOole Lot 'emplaced' higher than it should be. Nothing's being 'expulsed' at the spreading ridges either come to that, except for the odd few volcanoes here and there (transform-controlled mostly), but they're just a peripheral detail (and yes I include the big lava fields in that). All we're seeing there is mostly exhumation of flat mantle layering as the crack keeps penetrating down against a lifting mantle,*

>

> *It's a crack and a growth-zone in unison?*

Yes. Growth low down in the 'melt' part; crack in the brittle overlying high-up part.

>

> > *as the Earth keeps being spherical. (like a hernia, ...or a sharp blade against a curve of rubber) That is, consolidation is not in high-level vertical dykes, but horizontal at the base of the mantle..*

>

> *So, growth and movement moved from above the mantle to the base of it.*

???) The mantle keeps moving up, and the crack keeps penetrating down, keeping the upwards movement 'honest' so to speak - keeping the integrity of the gravitational equilibrium surface of the outer skin of the Earth. Keeping the 'plimsol line' at the right height.

> > *Dyke? (??!) That would*

> > *be some huge dyke (!) Yes, you do occasionally see dykes, but they are almost always in the transforms. On the other hand the crack *must* be regularly uniformly global because of the thermal gradient and the (probably) more or less constant thickness of the crust *AND THE GROWTH* (the 'internal' propagation of the crack). If dykes were to be intruding the way they say, we probably wouldn't be here to look at them. What are they supposed to be feeding anyway?, these dykes? And how do they get transported all the way to subduction zones without even a flexure?*

>

> *If you ever put a consideration to what PT is, you wouldn't ask.*

Well I have considered it. And I am asking. George is not answering, ...will you? What are all these supposed 'dykes' supposed to be feeding? And then (the real question) what makes up the rodding of the ridges?

> > *...Messing with your mind, Carsten, ...but don't you think it makes a
> > better, and perhaps strangely (to you) more credible story than plate
> > tectonics? Give an inch? No?*
>
> *For the first time I've honestly doubted that you have any formal training
> as a geologist. That's how serious it is.
> PT, among other things, explains the distribution of continents and oceans,
> and why. You place a line across it all, to explain ... what? Certainly not
> the structure of the surface of the globe, which signifies the domain of the
> geologist. It does provide a tie between oceanic mafics and continental
> ekvivalents and perhaps other deeper strongly metamorphosed rocks, who's
> origin may not be very obvious. Any time, Don, I'll buy PT long long long
> before any of yours.*

...Well, you have 130-odd thousand versions to choose from, Carsten – all the same. I guess we won't be seeing you in the mall then. You're going to leave the money lying on the floor too?. You've got me worried. I thought George was the epitome of consensus, ...but...)

Reminds me of an article on the news the other day.. Wellington I think, New Zealand, Young girl, walking along the mall, handing out hundred dollar notes. No takers. Someone called the police. When they caught up with her she had spent \$6.40 at MacDonaldis. All the money was recovered intact, much to the relief of the person who owned the car she had stolen it from. But when she was handing them out noboy knew she had stolen it.. (What if it had been 'filthy leuchre' from an inheritance? or what if she had said "It's my last day on the planet, here, have some.") Nope, "there's something not right here"; "there's gotta be something wrong".

... What's wrong with "no subduction"? Money on a plate. It's ITS last day on the planet.

Cheers.