

Re: Human brain on an evolutionary sprint!

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From: Jim McGinn (jimmcginn_at_yahoo.com)

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Paul Crowley wrote:

> *"Jim McGinn" wrote:*
>
> > *But there is a lot of evidence that indicates*
> > *woodland, especially lacustrine (lake-side,*
> > *stream-side) woodland. And this evidence seems*
> > *to be confirmed by A'pith fossil evidence that*
> > *seems to indicate that they maintained some*
> > *degree of climbing adaptations.*
>
> *I don't buy that. Their ancestors had*
> *such adaptations and, other things*
> *being equal, they would have retained*
> *them for as long as they could. (Tree-*
> *climbing is always useful.) But other*
> *things were not equal, and the need*
> *for effective progress on land would*
> *have been too much of a conflict.*

Before you indicated that they were laying claim to defensible garden locations (you know, your ". . . particularly safe [and fertile] sites,"). (And you were right about this even though you did not comprehend/explicate the reasons why you were right, which, as explained in my hypothesis, involve the emergence of monsoon climate/habitat and the geographic and faunal implications thereof.) This would suggest a more stationary existence, as we see in modern humans, and not the constantly roving lifestyle of apes. And, IMO, it suggests that your thinking is inconsistent. I think it should be obvious to you now, if it wasn't always before, that if they adopted a new form of locomotion (and one that is so plainly less proficient than they one they abandoned) that it could only happen if the new lifestyle afforded an overall reduction in the requirement of mobility.

The classic mistake that PA makes is to assume that the adoption of a new behavior (in this case locomotion) must involve increased proficiency of the behavior. In hominids the adoptions of bipedalism involves a compromise with other behaviors (freeing of the hands) and therefore can most likely be associated with a reduction of the proficiency of that behavior at that time.

> > *(It's not like this is all that surprising,*
> > *after all we are talking about a descendent of*
> > *tree dwelling apes.)*
>
> *Those adaptations went at some*
> *point. They probably went during*
> *the big switch-over to bipedalism.*
> *Any other time is unparsimonious.*

Parsimony is on my side of this issue.

> > > *It is very likely that early paleo-populations*
> > > *generally had _much_more_serious_*
> > > *problems with predators than do modern*
> > > *ones, especially those not in Africa. The*
> > > *only remotely likely answer that I can see is*
> > > *very large groups in dense occupation of*
> > > *particularly safe (and fertile) sites, with the*
> > > *whole group working together to fend off*
> > > *attacks.*
> >
> > *I assume you mean attacks from predators only.*
>
> *Basically yes. But whenever predators*
> *ceased to be a serious problem, wars*
> *would start.*

Uh, eventually. But not until much later, like 3 mya at the earliest.

> *They'd have much the*
> *same effect, from an evolutionary point*
> *of view -- in the way they'd favour the*
> *largest, most cohesive groups with the*
> *better capacity for languages.*

You're getting way ahead of the game. You really haven't described the selective (and practical) reasons why group's would maintain cohesion. What's missing from your hypothesis is the group selective aspects which are explicated in detail in my hypothesis. In this respect, your hypothesis

is a car without an engine. (I might suggest that you read up on an ethologist named Richard Alexander.)

- > > > *(That is, they could do little about*
- > > > *nocturnal attacks, as such. They'd have to*
- > > > *patrol a large area by day, killing or driving*
- > > > *away any large predator located.)*
- > >
- > > > *With such a system, we have the basis for*
- > > > *hominid language and society and for the*
- > > > *social and _physical_ features to evolve*
- > > > *(i.e. the large brain, etc.)*
- > > >
- > > > *Without such a system, we have nothing.*
- > >
- > > *Well, I wouldn't call it a system. Or, at least,*
- > > *not yet. So far it's more of a conjecture. I*
- > > *think there are a lot of objections that have to*
- > > *be considered. For example Val mentioned one*
- > > *that involved resource availability. I don't*
- > > *think this is something that should be dismissed.*
- >
- > *We can use chimp density as a guide.*
- > *Band territories can be as small as 5 sq km*
- > *(according to Val). If that's a standard*
- > *band of around 30 adults, then we can*
- > *have very large hominid bands -- of say*
- > *1000 adults in an area of 170 sq km; i.e.*
- > *a circle with a radius of 4.6 miles.*
- > *Of course, that's only a calculation and*
- > *possibly a theoretical maximum.*
- > *But getting rid of baboons, and/or using*
- > *digging sticks to exploit roots would*
- > *expand the extent of resources.*

I think you are missing Val's point that in the context of constant competition from many other species the large groups that we are theorizing would not be sustainable. Unless they were able to deal with this competition it's inconceivable that large groups could emerge.

- > > *Epecially in the context of the highly*
- > > *competitive ecology of late miocene east Africa.*
- > > *What Val's saying has to be taken very, very*
- > > *seriously. It's hard to imagine groups of early*
- > > *hominids forming into large groups*
- >
- > *Those groups that could do it were*
- > *successful, and prospered. Those*
- > *that couldn't died out. It would not*

- > *take too long for the right 'instincts'*
- > *or behaviour to evolve.*

Obviously.

- > > *and maintaining*
- > > *their unity when faced with constant competition*
- > > *from the numerous food competitor species*
- > > *that existed back then.*
- >
- > *That would help rather than hinder*
- > *But what competitor species?*

Any and all that ate the same things that they ate.

- > > *More specifically, how can large hominid groups*
- > > *have persisted at their, what you describe as,*
- > > *". . . particularly safe (and fertile) sites,"*
- > > *when faced with constant competition from the*
- > > *relatively aggressive food competitors of late*
- > > *miocene Africa?*
- >
- > *What species? We are talking here*
- > *about chimp food plus baboon food.*

(See above.)

- > > *"They'd have to patrol a*
- > > *large area by day, killing or driving away any*
- > > *large predators." I'm wondering to what degree*
- > > *the behavior you indicate here might have also been*
- > > *wielded to maintain a front against encroaching,*
- > > *infiltrating large food competitor species.*
- >
- > *What species? I can't conceive of any.*
- > *The patrolling I envisage is against*
- > *predators.*

Any and all browsing and grazing species whose food choices overlap those of chimps and that might be dissuaded by a group or groups of stick wielding, rock throwing apes. The list of species would be long.

- > > *The idea being, of course, that if they can*
- > > *maintain some degree of exclusive access to the*
- > > *resources in the area then this might better*
- > > *explain how large groups could persist and thrive*
- > > *in the face of constant competition from food*
- > > *competitors.*
- >

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- > *They'd have to keep out chimps, but*
- > *I don't think that would be a major*
- > *problem, once a large hominid group*
- > *got established.*

They were chimps. And you've yet to fully explicate the selective factors that we must presume underlie the emergence of large hominid groups.

Jim