phil henshaw

From: Stanley Salthe [ssalthe@binghamton.edu]
Sent: Tuesday, July 29, 2008 3:38 PM
To: pfh@synapse9.com
Subject: RE: [Ottawadissenters] Re: Finding a way forward

Phil --

Stan,

Subject: RE: [Ottawadissenters] Re: Finding a way forward

Phil -- You have here a complex set of questions.

"Independent constraints" might be considered to be broad enough to include the other main categories that would do the trick, "self-constraints" and "satisfying the need". Maybe there are others too. I think we should at least distinguish between internal and external constraints, and not lump them all into external constraints. Maybe the special "internal constraint" of demand reduction because the appetite or other need is satisfied is not even really a "constraint". So, maybe in Stan's format it would be:

S: Here I give it a try at this myself: using the compositional hierarchy:

[external constraints [dynamics [internal constraints]]], with [higher level [lower level]]

[ph] yes, that's the temptation from the standard deterministic model, that all effects are determined by external constraints (which may be positive or negative 'constraints'), and there is no causation that develops locally. Isn't that how you're arranging it?

The dynamics will display possibilities generated by internal constraints, and these will be suppressed or encouraged (selected) by the higher level, external boundary conditions.

{Demand, {**Independent** { **needs** {internal {} {external {}}, {**constraints** {internal {} {external {} }}} {**Interdependent** {**needs** {internal {} {external {}}, {**constraints** {internal {} {external {} }}} **}**

Maybe it's easier to read as:

{Demand <-{ independent/interdependent <-{ needs/constraints <-{ internal/external } } }

The main question for science, of course, is still whether any category but "external constraints" exists in any meaningful way at all.

S: Here, using the subsumptive hierarchy, we can have

{internal material causes -> {system configuration -> {system needs}}} with {lower level {higher level}}

Combining this with the external forces by combining the hierarchies:

[[{internal material causes -> {system configuration -> {system needs}}}] affordances & demand]

[ph] I was going to comment on various things, but I think you're over my head on both the use of your notation and how you're classifying things.. Are we in general agreement on a need to look both inside and outside a system for the operative causes of events?

Yes, of course.

I was using 'needs' and 'constraints' to refer to the interaction between a thing and it's environment, the universal natural subjective point of view. No system contains it's own environment. Representing things that way as been productive for natural science, as it represents the universe as contained in our heads, I think. You don't end up doing that though, it seems.

These hierarchy formats work for any systems at all. They are the only two hierarchy formats known in logic. And I have found no hierarchy usages that don't fit them. But the two are often conflated.

We might also consider expanding the groups of operative causes one notch further:
{needs&opportunities | forces&constraints}

Whatever works.

STAN

Phil

STAN