Dear Youri and Pedro and All,

Please excuse me the mixup: it was Youri to be congratulated for the Picture 1 and Pedro for getting it past the FIS server.

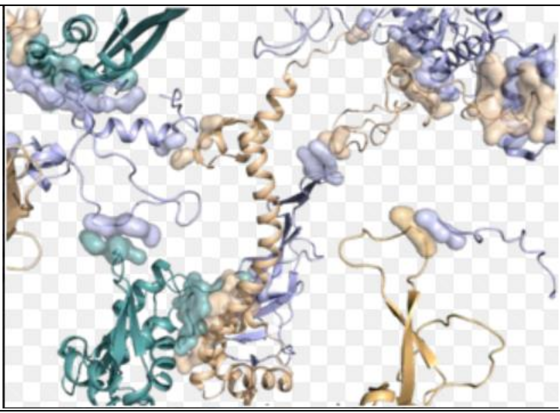
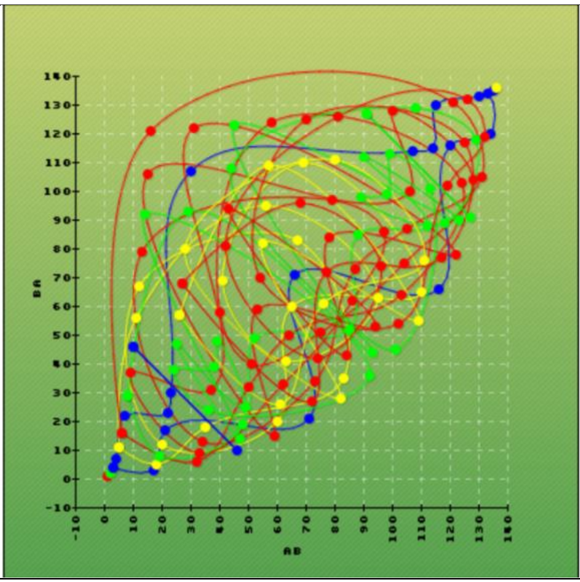
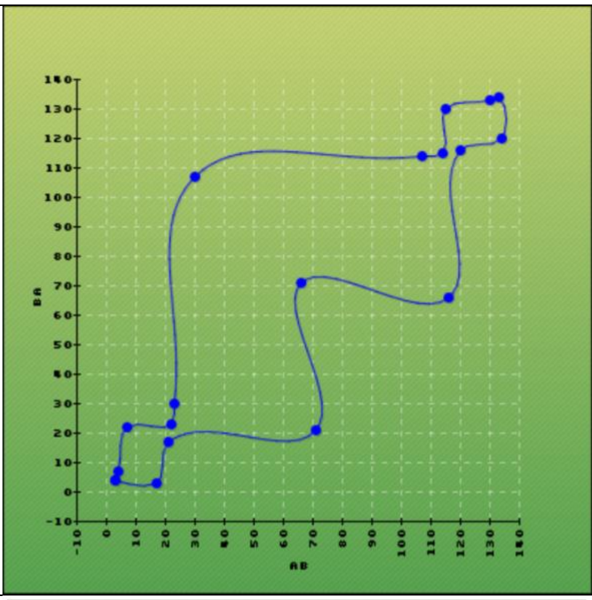
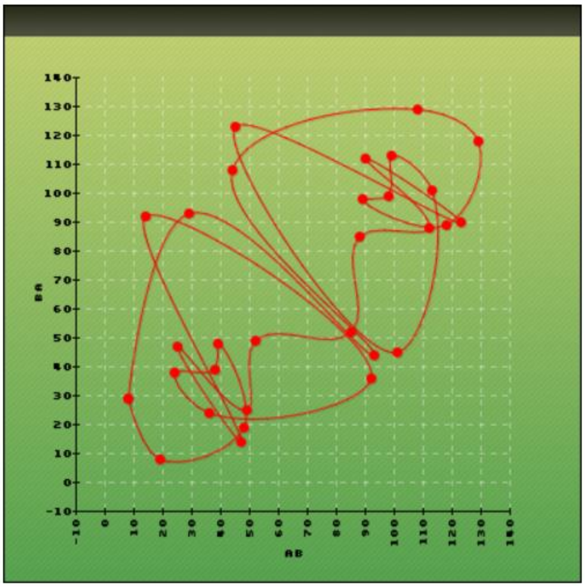
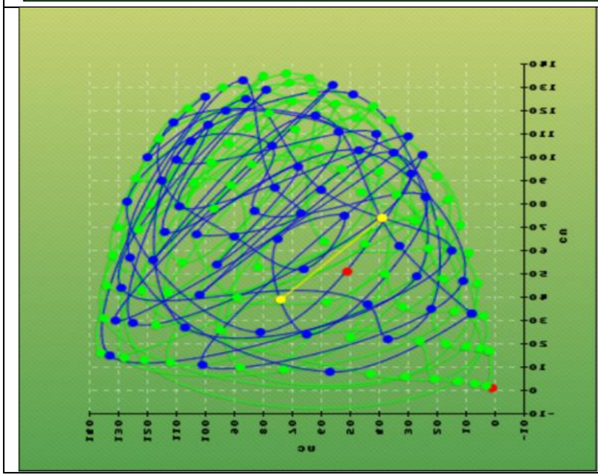


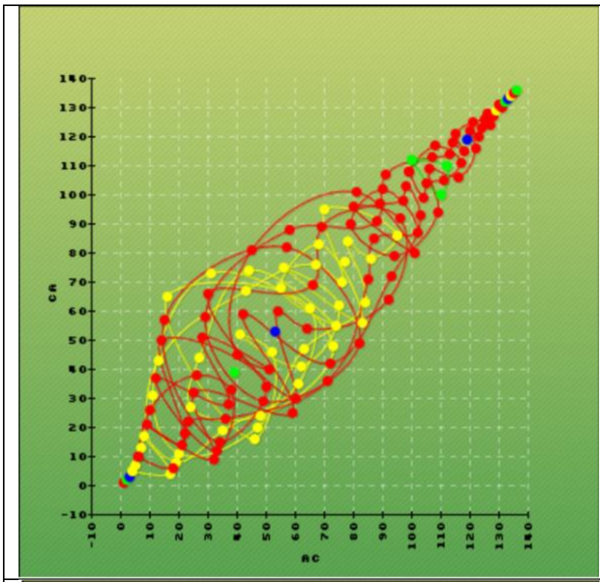
Figure 1 shows Molecular synapses and wires in the bacterial large subunit r-protein network. The tiny interfaces (the molecular synapses) between r-proteins are represented by surfaces
(From Youri)

Please allow me to show some pictures relating to pairs of natural numbers ("logical primitives", © Marcus Abundis) that are subject to diverse reorderings.

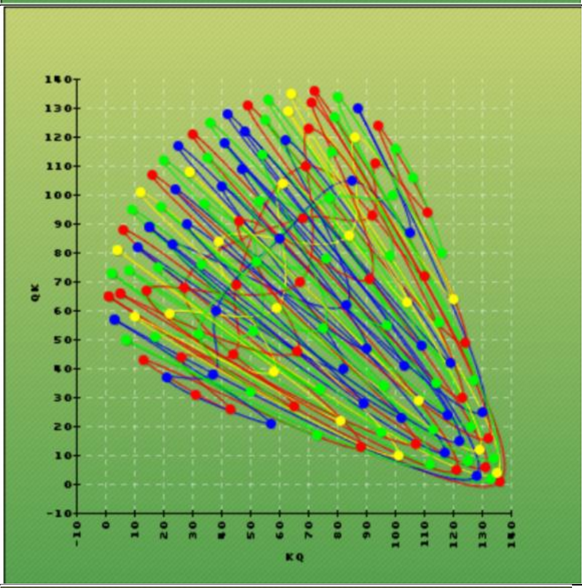


Pic ab_ba16 is one of the most elementary ones. It shows all cycles that emerge as constituents of a reorder [ab]↔[ba]. (Sorted on ab: (1,1),(1,2),(1,3),(1,4),….; sorted on ba: (1,1),(1,2),(2,2),(1,3),(2,3),…)

	Cycle 3 of [ab] ↔ [ba] with 18 members does show a schematic form which is seen often in biologic surrounding
	Cycle 6 of [ab] ↔ [ba] with 30 members is rendered in red for better visibility. The schematic form is rather explicitly biologic.
	The static picture of the reorder [a+b, a-b] ↔ [a-b, a+b] shows two main cycles of 74, 57 members next to 4 remaining cycles.

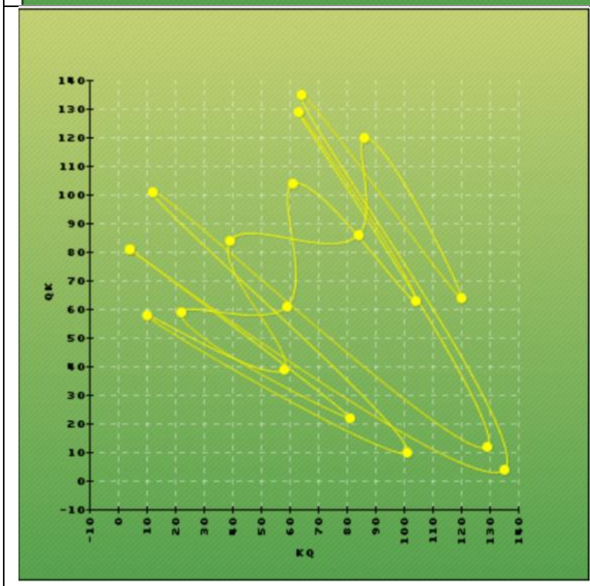


The reorder [a, a+b] ↔ [a+b, a] consists of 18 cycles, Nr 5 with 73 members and Nr 4 with 39 members being the longest among them.

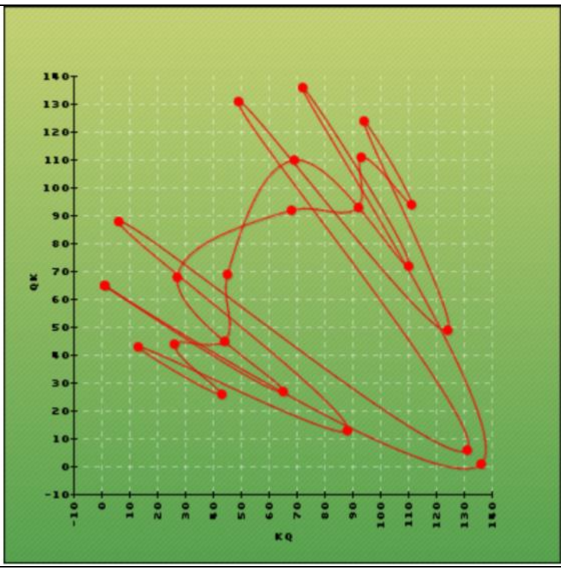


The cycles of the reorder [a-2b,b-2a] ↔ [b-2a,a-2b] are also fundamental. (Here they are abbreviated into [kq]↔ [qk]. This plane crosses the axis [a+b]. The axis of similarity (aka ‘gravitation axis’) crosses the plane of diversity, of which the two axes are a measure on how one part relates to the double of the other part.

This reorder consists of 10 cycles with lengths: 22, 18, 26, 18, 14, 26, 8, 2, 1, 1.



Nr 4 with 18 members of the reorder [a-2b,b-2a] ↔ [b-2a,a-2b] does resemble a module of a double helix. The most regular form is in the area of the most common planar region (the most usual case being that this central area is being crossed).

	No 1 of the reorder [a-2b,b-2a] ↔ [b-2a,a-2b] with 22 members is also well suited to be a blueprint for a construction module. The task is only to find that aggregate form of matter which is diverse in itself in such a measure. One may be sure even as an outsider, that molecules have properties on which they can be classified as *i-th* with respect to *b-2a* while being concurrently *j-th* with respect to *a-2b.*

The pictures suggest that there are some Laws of Nature based on Facts. Formulating these supposedly existing Laws is today as difficult as was difficult for Mendel to express his ideas.

Let us compare the communicative tasks:

Mendel said and wanted to say (implicated)	Today's formulation of the same idea
I recognise statistical interdependences (in the form of color of garden peas)	I recognise numerical interdependences (in the form of elements creating cycles)
These implicate some Laws, the carriers of which are specific material on specific places (I can't say genomes, because the word is not invented yet)	These implicate some Laws, the carriers of which are specific material on specific places (I can't say space-matter tenacity, because the word is not invented yet)
The behaviour of my plants unfolds from a dormant state (I can't say chromosomes, because the thing has not been observed yet)	The behaviour of my primitives unfolds from a dormant state (I can't say concurrently running cycles, because such has not been observed yet)
The rule for what comes where (which colour peas come from which colour parent peas) is a temporal process of growth. Although the unfolding is temporal, the properties of the peas are present – as potentialities – in the information carrying something within the pea itself.	The rule for what comes where (which constellations of lower-level coincidences are assembled next to which constellations of lower-level coincidences) is temporal, is a *sequence.* Although the assemblage into cycles is temporal, the properties of the elements are immanent to the elements.
There are types of genetic material which go together and then some which do not go together. (Peas can't be crossed with cucumbers.) There exist *types* of biologic material.	There are constellations of lower-level coincidences. Their most archaic forms are called *logical archetypes:* these represent the chemical elements. Some of these go together with some others, building molecules and then there are some which do not go together, creating Fällungsreaktion ot similar. Molecules are compositions of archetypes. Compositions of molecules have *types.*
You have trouble understanding me, because it is simpler than you think: the	You have trouble understanding me, because it is simpler than you think: the

invisible hand of God is nothing else but simple rules of what you shall call *genetic*, and the rules are nowhere else but in the matter itself and are basically a problem of combinatorics.	invisible hand of Nature is nothing else but simple rules of what you shall call *tautomatic*, and the rules are nowhere else but in the numbers themselves and are basically a problem of combinatorics.
You are already looking at all pieces of the puzzle. Go find those material carriers which act in certain ways to bring forth specific peas.	You are already looking at all pieces of all puzzles. Go find those cycles that run concurrently, undo the effects of offset differences, and see which elements of which cycles are contemporary, and tabulate which specific occurrences shall appear to the spectator as specific pieces of which puzzle, *types of reality*.

Summarising:

There is a strict order within Nature. Our counting system is – in its monoaural utilisation – not quite suited to depict the patterns which result from the existence of order. It is necessary to imagine *two* parts of the whole which interact, more or less happily. The rules of the interaction may be explained by a) assuming periodic changes that influence where is which element during which periodic change, b) observing saturation limits of relations on objects. If the objects count n, there can exist no more than $L_{max} = f(n)$ distinct logical relations that the collection can be subject to, c) $f^{-1}(L_{max})$ gives us the number n of objects that are minimally necessary to accommodate L_{max} logical relations, d) there are slightly differently many logical relations possible on n objects, when the relations state diversities relative to when the relations state similarities among the elements of the collection, e) this additional twist – sneak creates miracles of objects coming into or disappearing from existence, in dependence of the density of logical relations. The interdependence has many details. The pictures show a static state.

Hopefully you can utilise the pictures to envision a general explanation of interaction in the field of proteins.

Respectfully:

Karl