

KILLING HANDEDNESS

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Handedness is **neuro-behavioural** laterality
(laterality : asymmetry)

Handedness is **manual** specialisation .

Are you ready to attribute 'neurobehavioural' as a qualifier to inanimate such a cordage or a knot ? Well I was certainly never ready for that so egregious I find the very idea.
Handedness is fortunately without equivalent word in French we use "latéralisation" instead. The word does not even exist in correct English if I am to believe my Cambridge and Oxford dictionary. Must be a "colonial" monster.

Why this persistence in using 'handedness' ?

Using the word 'handedness' even in the study of animals (human primates, non-human primates, or non primates) instead of the word 'lateralization' just makes it easy for another confusion of concept and logical planes to happen :

handedness hides that it is necessary to separate what is **strict lateralization** (neurological, anatomical, structural...) from **preference** (psychological choice, taboo, social arbitrary, behaviour what ever the source).

Manual lateralization, specialisation, has two components : '**preference**' and '**performance**' .

It does not seem to me so good an idea, around knots, to use a "reference point" resident in the speaker instead of taking it in a larger frame common to all interacting persons.

This is self-reference or auto-reference, one of the faster road leading to paradoxes and fallacies.

How would you like to be issued road maps with "Front, Back, Left, Right" instead of North, South, West, East ?

Do not guffaw at my preposterous proposal please.
Using 'handedness' for cordage and knots is indeed issuing such maps !

It seems to me to make better sense to put points of reference in a large external frame. Result will be as if it was a 'constant' for those inside this frame.

At least use a mean not depending on the 'internal' attributes of the observer, or acting person but on something 'external' that can be thought 'non changing' because it applies in an identical manner to all parties.

The 'concept' behind the misnomer 'handedness' is that despite change of its position, an entity that truly has 'chirality' can always be 'put in the correct attitude' thanks to its 'in-built' characteristics.

Right and Left are not very "robust" to change of perspective.

Clockwise/anticlockwise are a bit more robust, Compass points (magnetic) are still more ...

DOES IT REALLY MAKE SENSE TO USE "RIGHT" OR "LEFT" ABOUT A KNOT : JUST TWO EXAMPLES !

'Right' I define as being the side where most people have their dominant (most often used) hand. Still some (10-15%) are "Left" ;-)

Instead of handedness, better use :

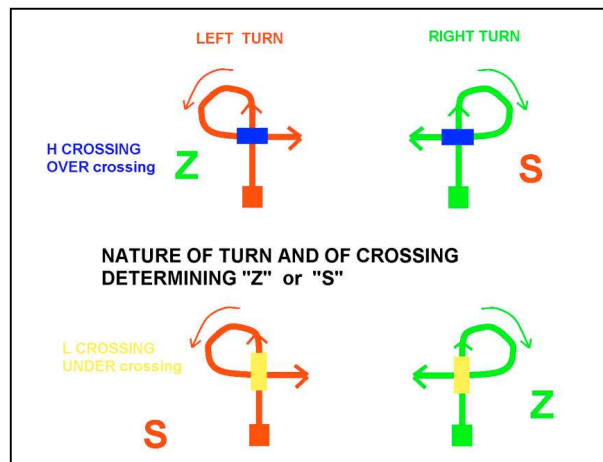
- "Z" / "S"
or even
- Indirect (that is clockwise) / "Direct or Trigonometric or counter-clockwise... rotation, migration, lateralization , anything but...

I am personally fond of 'direct' / 'indirect' as it takes minds off their set ways with left / right or clockwise / anti-clockwise and forces to 'think anew'.

"Z / S" is a "standardisation of direction" that any specialist working in the field of "textiles" is using with no second thought to avoid any misunderstanding.

Why not use **Z/S** as everyday language for our technical discussions about cordages and knots ?

"Z" / "S" are not just a question of looking solely at the direction of 'turns' as this simple



example show. clove lateralization shows it too
Fig.1

It is the conjunction of 'turning' **PLUS** 'altitude' (High / Low - Over/Under) of the crossing that leads to the correct answer.

I feel it is very important to be quite at ease with direction of 'rotation' and direction of 'progress of successive rotations'

The more so when battling the misnamed "handedness" of cordages and knots.

Fig.2

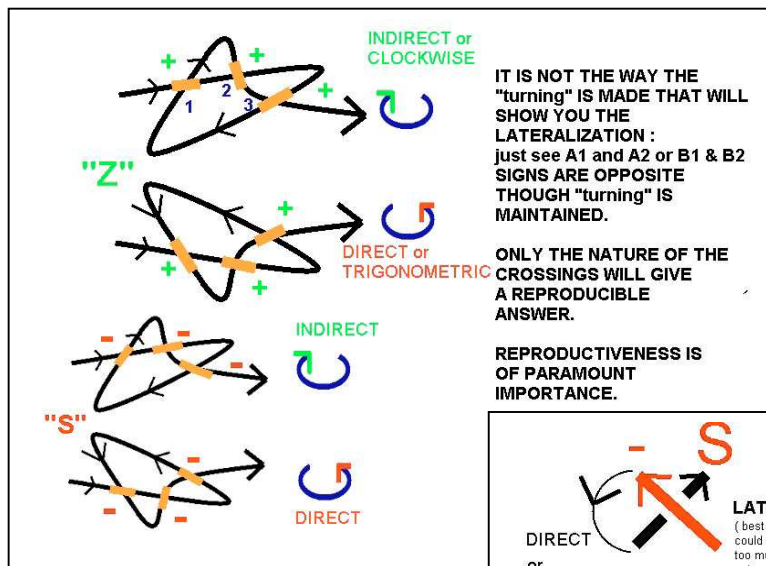
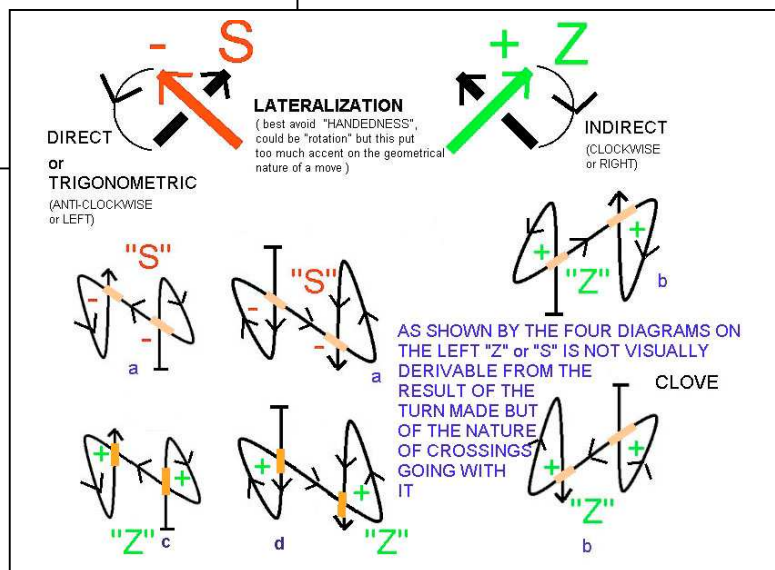
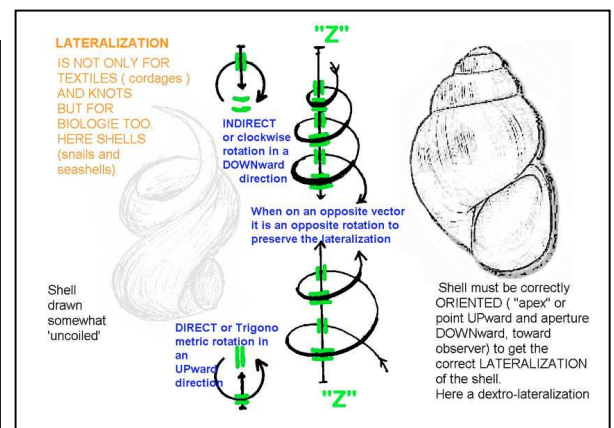
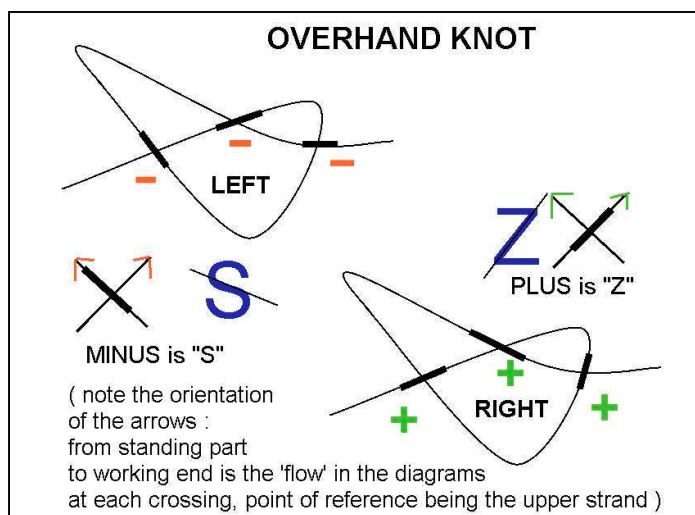


Fig.3



- about overhand Fig.4 (Spart on the Left Wend on the Right as if writing)



- about bowlines. A slight problem is that an inside tail bowline, so called "right" can be either a "Z" or an "S" one.

Just shows that the present notion of knot handedness is a bit queer and not handy at all !

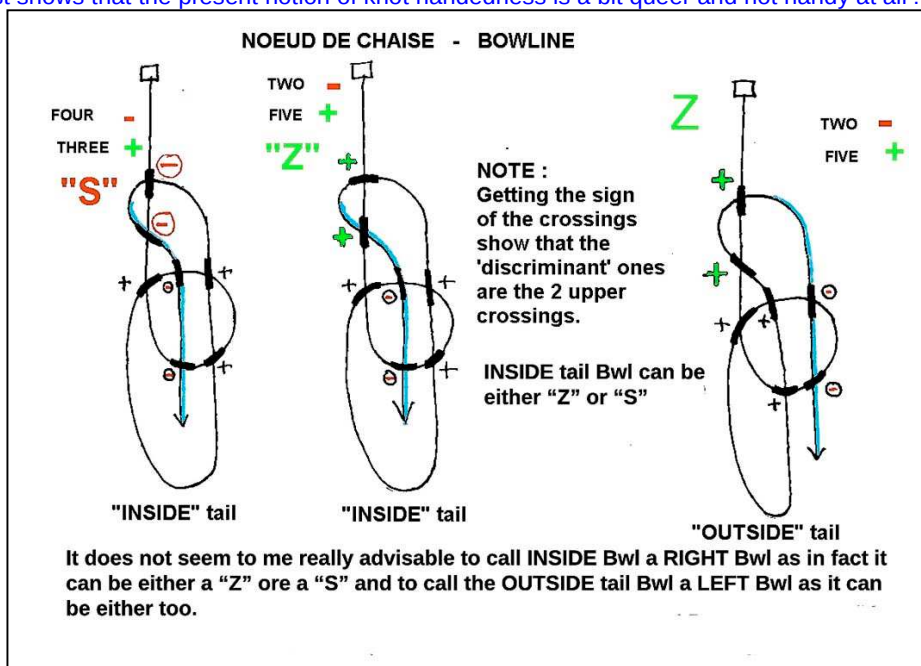


Fig.5

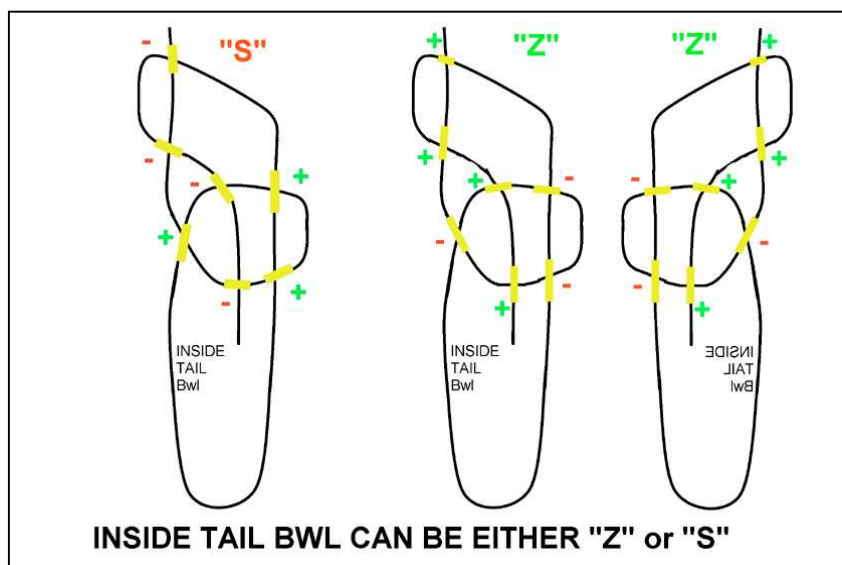
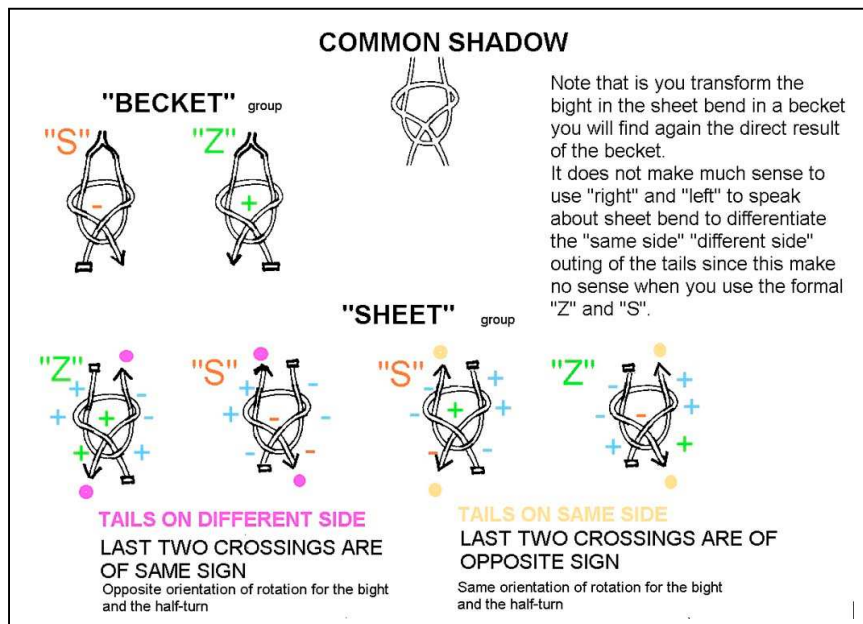
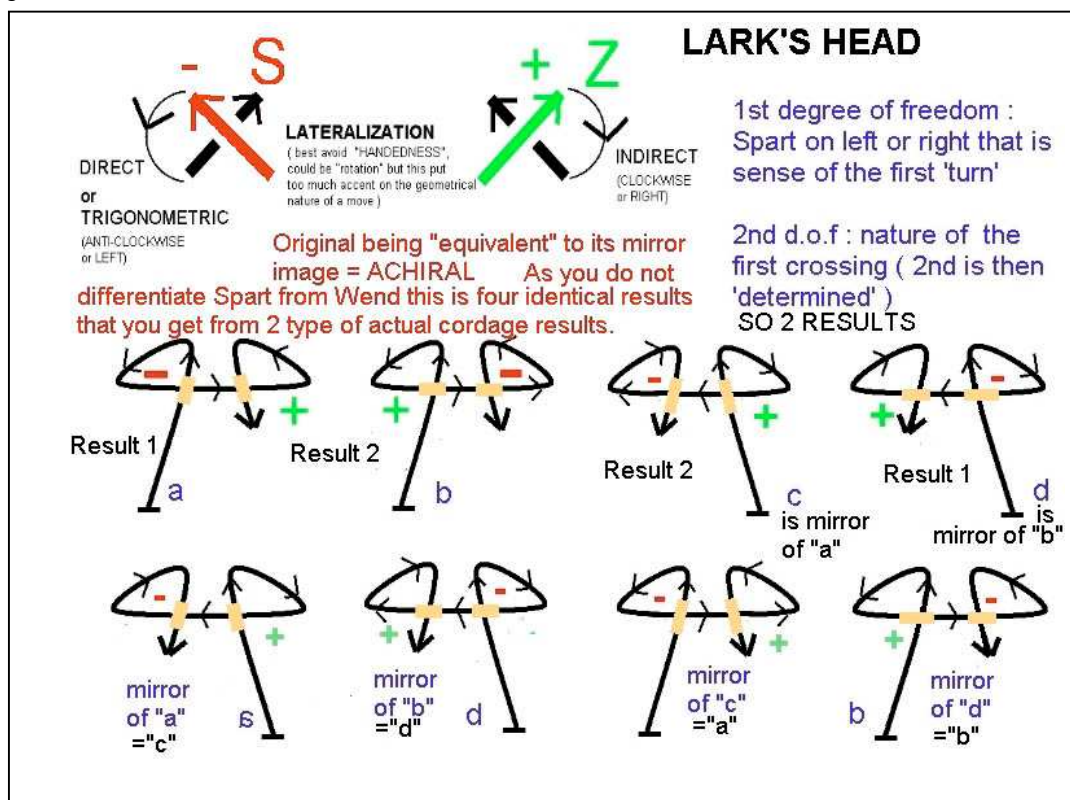


Fig.6



- about **lark's head**

Fig.8



About **sheet and becket bend** è you should be convinced that it is better to leave all mention of "right" / "left" in favour of "Z" and "S".

Fig.9

Sheet bend study and becket compared to Lap/Lapp bend

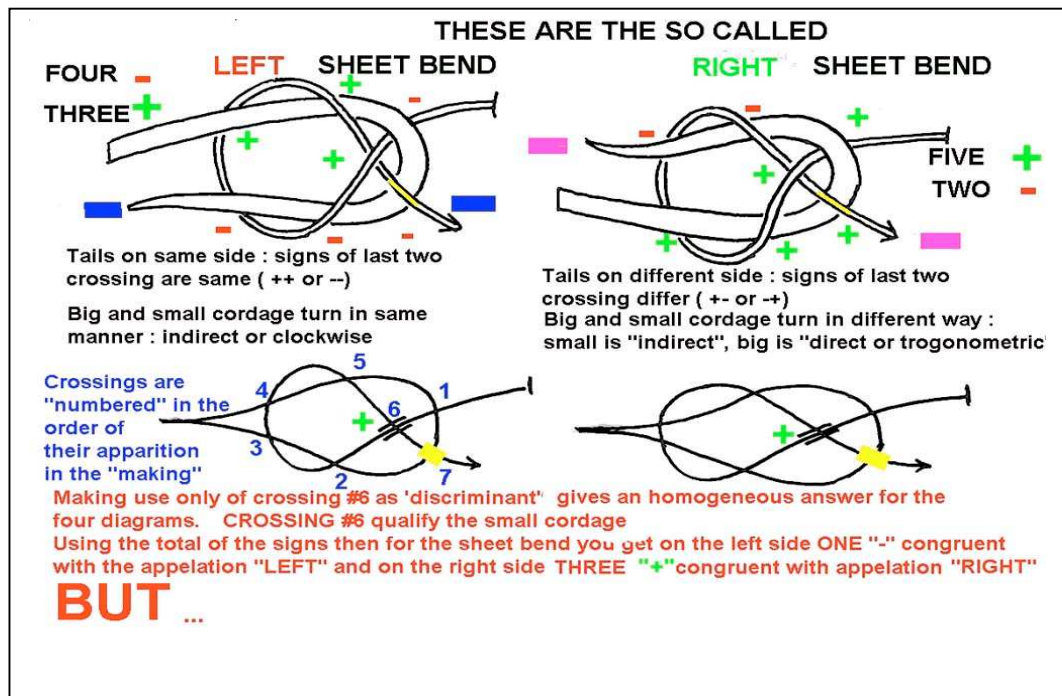
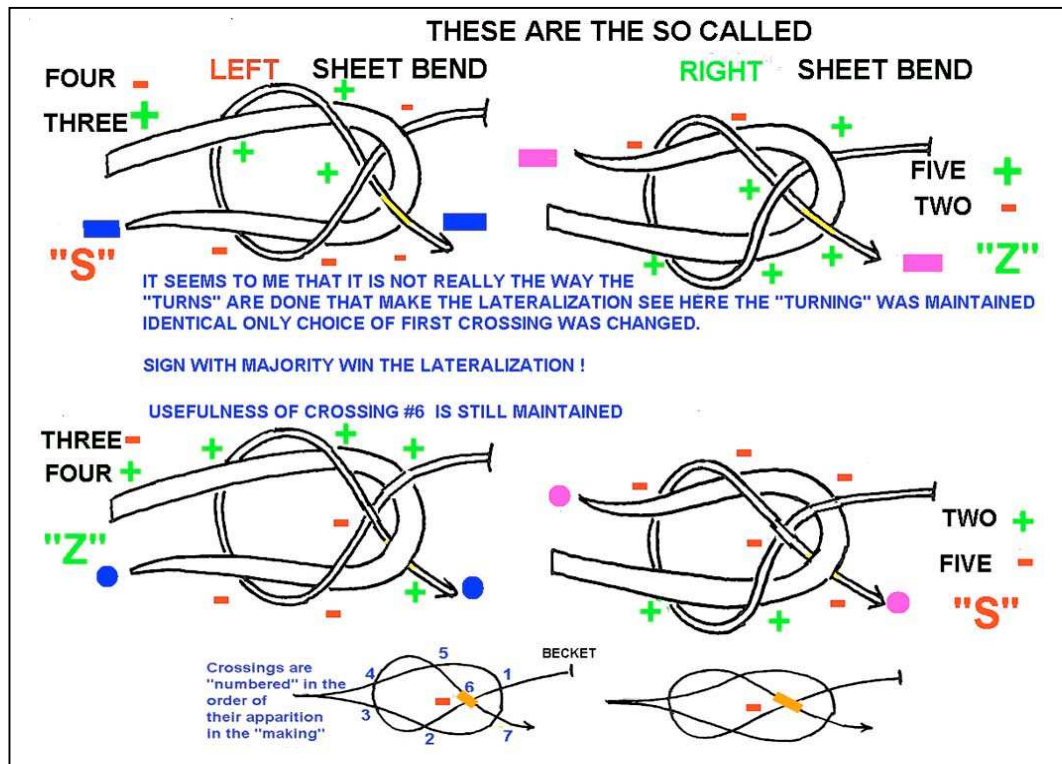
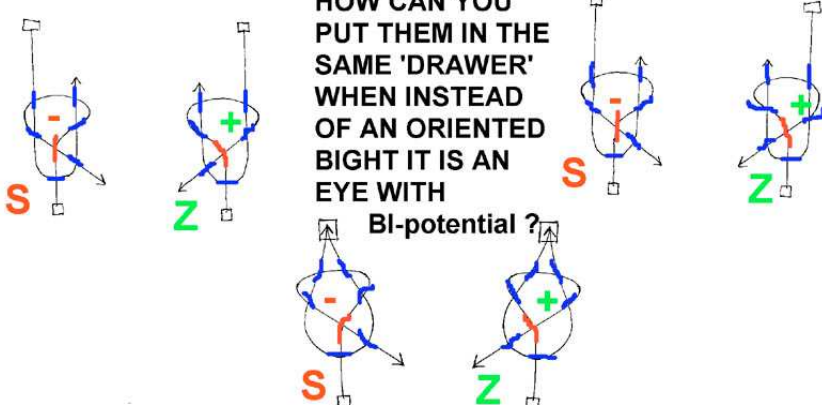


Fig. 10 & Fig.11



HOW CAN YOU PUT THEM IN THE SAME 'DRAWER' WHEN INSTEAD OF AN ORIENTED BIGHT IT IS AN EYE WITH BI-potential ?



QUITE SIMPLE IT IS : YOU SIGN THE CROSSING OF THE LOWER CORDAGE.

SHEET BEND AND BECKET BEND -

LATERALIZATION OF SHEET BEND

As it is readily seen "SIGN" leading to "Z" or "S" lateralization is not about turning here in one direction and a fter that turning elsewhere in a different direction.
It is about sign of discriminant crossing(s).

Case of Becket bend makes it valid to chose the crossing that do makes the turn a crossing turn and discriminant.

THESE WERE JUST AS "CONTROLS" THEY ARE MIRROR IMAGE

ABOVE SAME SIDE TAILS

UNDER DIFFERENT SIDE TAILS

THESE WERE JUST AS "CONTROLS" THEY ARE MIRROR IMAGE

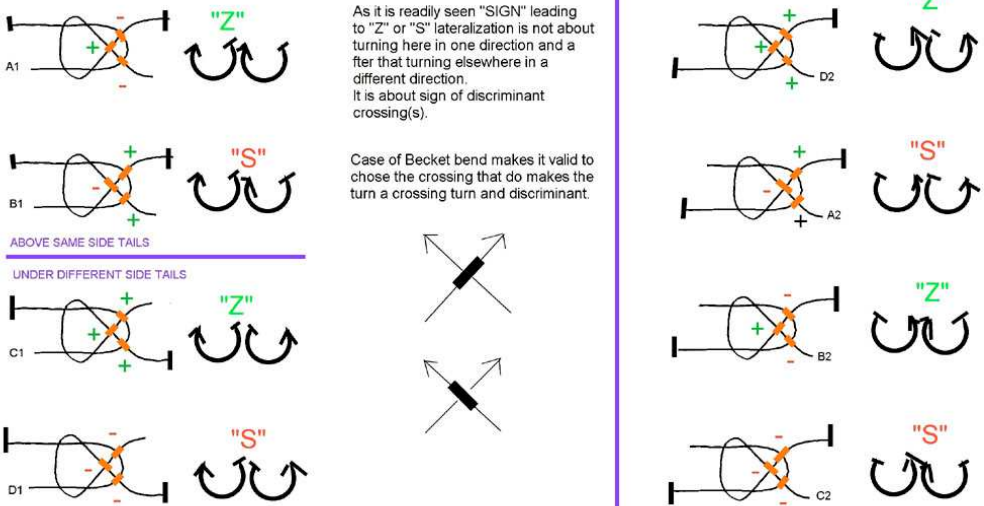


Fig.13 & Fig.14

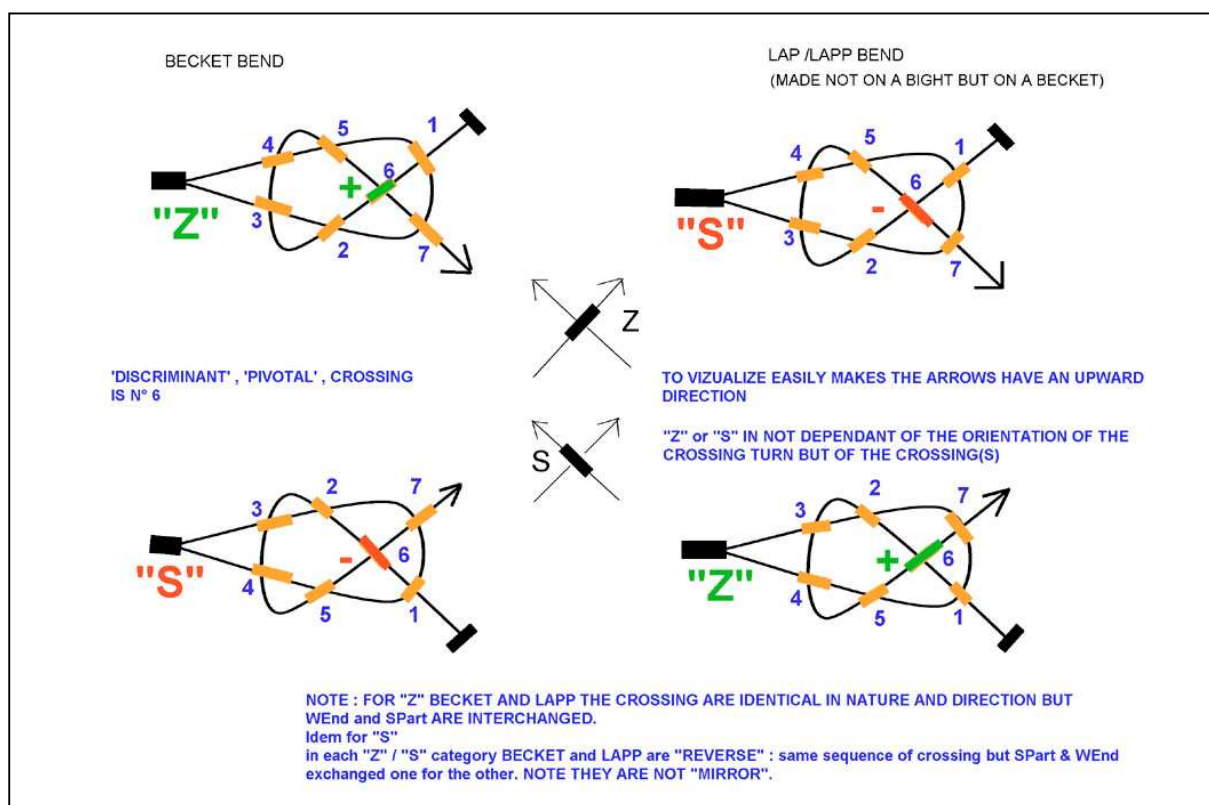


Fig.15

a particular case : Fig-8 , an **achiral or amphichiral/amphicheiral knot**.

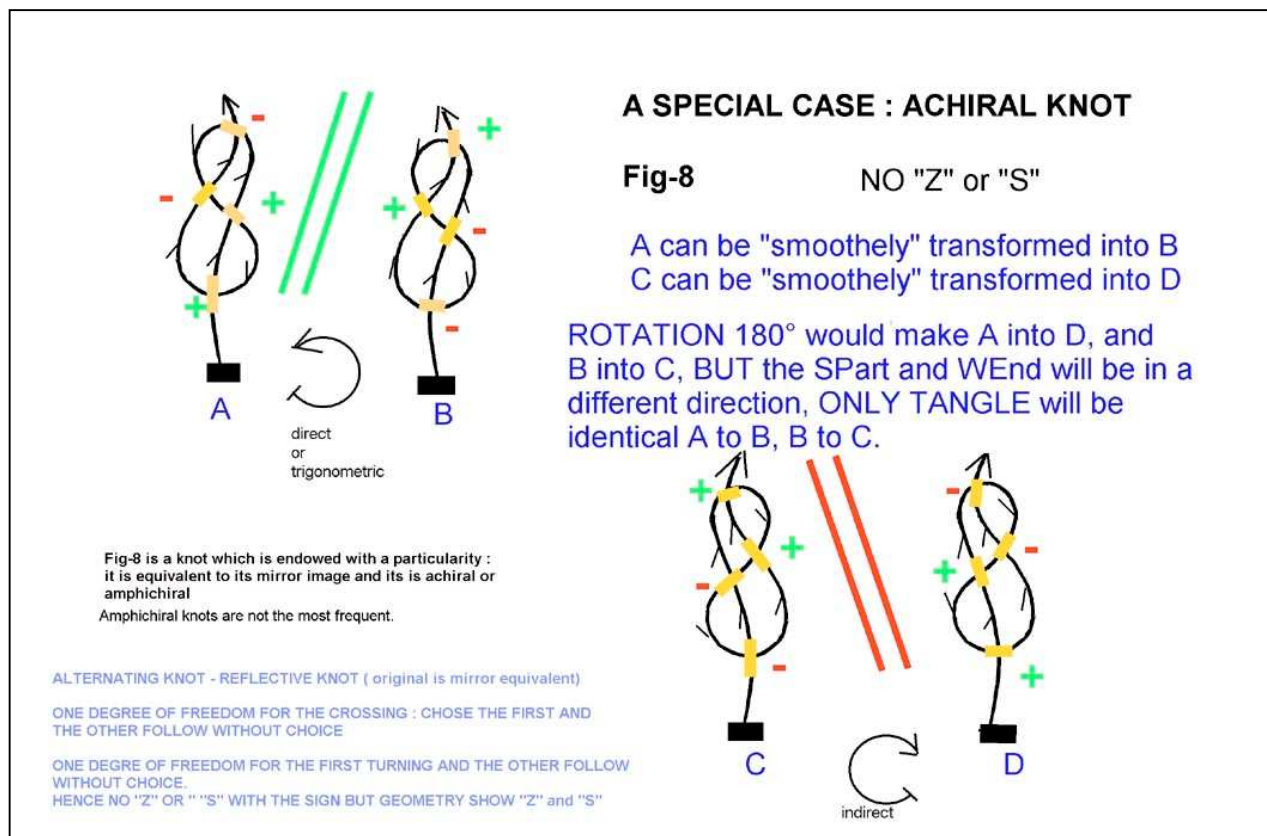


Fig.16

- another achiral knot.

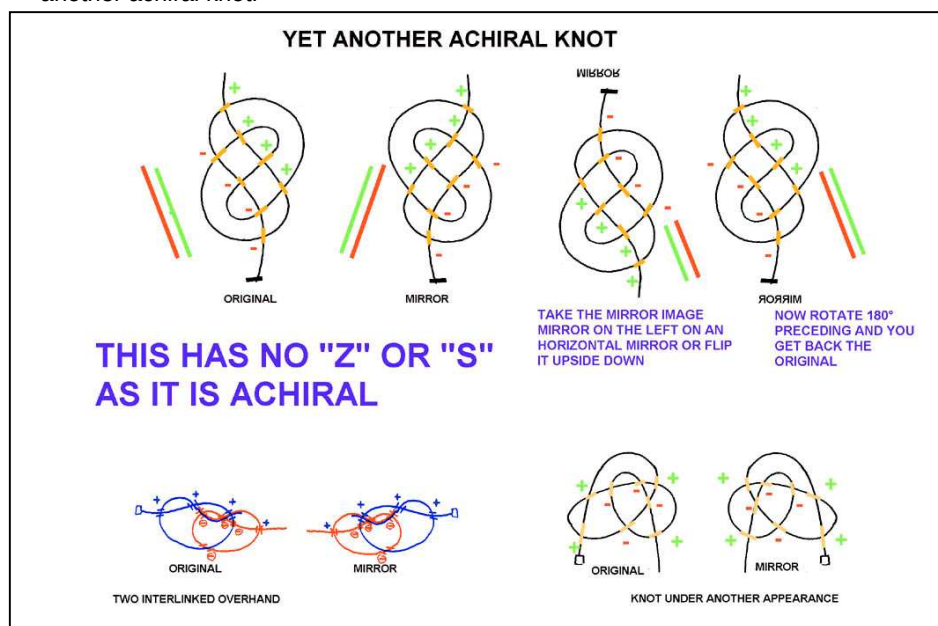
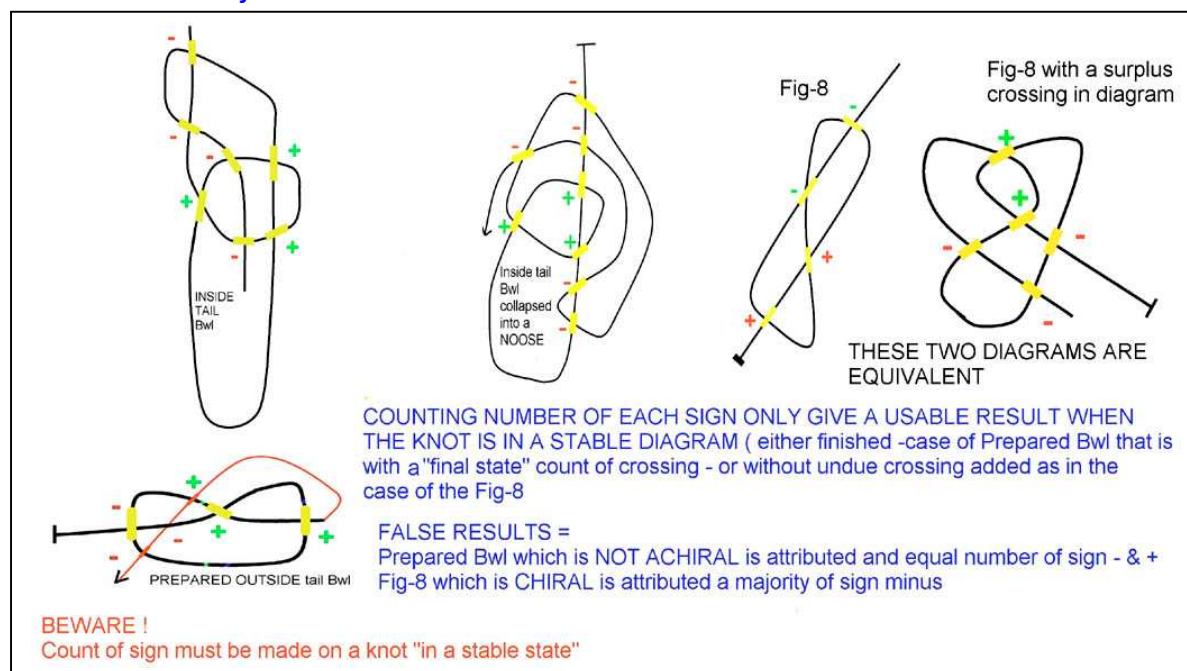


Fig.16

**Rule : sign all the crossing , then sign with highest frequency is the lateralization.
Equality of "+" and "-" = achirality.**

Note : count can only be done with correct answer on a "final stable state" knot.



(subject to contradiction by reality)