Be chill and enjoy the string.

It's a zine. You know what to do.

You can find LOOP online here:

`https://catscradle.club/`

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You can also reply by snail mail (and that would warm my heart) at:

LOOP #2

Parker Glynn-Adey

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1 Introduction

Welcome to another issue of LOOP! I decided to print this one in colour and add a fancy cover. The custom envelopes were an interesting challenge. I hope this makes the zine feel a bit more substantial. I've been corresponding with some zinesters, and they've encouraged me to go all out. Let me know what you think of the formatting changes. All my contact information is on the back cover. Fred Argoff, in particular, has really shown me the next level of zine-ing. He has three zines in circulation: *Brooklyn!*, *Watch The Closing Doors*, and *Anachronisms*. If you want copies, write to him at:

Fred Argoff
Penthouse L
1170 Ocean Pkwy.
Brooklyn, NY 11230

This issue of LOOP is a bit of a mixed bag: an artful string-figure coaster, "butterflying" strings, a figure from the Red Book, a write-up about teaching string figures at an Esperanto gathering, loop-braiding, and a friend's thesis.

Recently, I've been thinking a lot about loop-braiding. It's an art form adjacent to string figure making. I find the repetitive nature of braiding very meditative and relaxing. In both art forms, one is shifting and manipulating loops of string with the fingers. At the end of this issue, I give some instructions for doing one-handed loop-braiding in the style of string figures. The Esperanto gathering proved to be a very fruitful place to teach string figures. There are now two more string figure enthusiasts in Germany. They're both teachers, and I look forward to hearing what their students are doing.

I'm holding off on writing about Louisa Bufardeci's recent thesis publication: *tacking and a tactical methodology: moving towards a different politics for art* (Bufardeci, 2025) until I've actually read it. It is about (among many other things) the practice of making string figures in relationship with others. The cover art is included at the end of this issue.

I hope that you enjoy this issue of LOOP. It has been a pleasure to put together, and to document all my string-y endeavours. If you have any feedback, please let me know. I'm also open to collaborating, if you want any material added to LOOP.

— Parker Glynn-Adey

7 Louisa's Thesis

My friend, Louisa Bufardeci, a string figure enthusiast and artist-scholar in Australia, has recently published her PhD thesis as a book. It is about "tacking" or creating string figures in partnership with others. I'm deeply honoured by her choice of image for the cover. It is a watercolour that I painted in 2016 of Ron Read's re-construction of *Utoi*. You can find the re-construction in BSFA #8 (1982). The figure was originally published by the Swedish ethnographer Stig Rydén in "South American string figures" (Göteborg's Museum, Ethnographical Department, 1934).

RESEARCH / ART / WRITING   BRILL
Louisa Bufardeci
tacking and a tactical methodology
moving towards a different politics for art
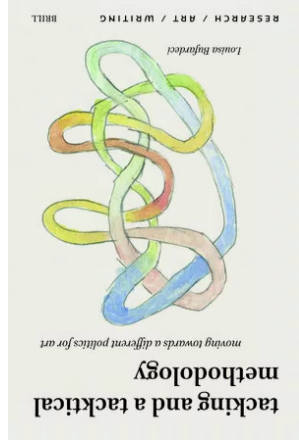
References

[1] E. Benns, G. Barrett, and B. Library. *Tak V Bowes Departed: A 15th Century Braiding Manual Examined.* Soper Lane, 2005.

[2] P. Buck. *Samoan Material Culture.* Bernice P. Bishop Museum Bulletin. Kraus reprint, 1971.

[3] N. Speiser and J. Boutrup. *Old English Pattern Books for Loop Braiding.* Speiser, Noémi, 2000.

[4] N. Speiser and J. Boutrup. *Loop Manipulation Braiding Basic Instructions.* Jennie Parry, 2002.

2   A Lovely Gift

My dear friend, Alex Fink, made me a wonderful string figure inspired coaster. Alex is fellow mathematician and co-author, with his partner Sai, of a constructed language with a non-linear writing system:

https://s.ai/unlws/
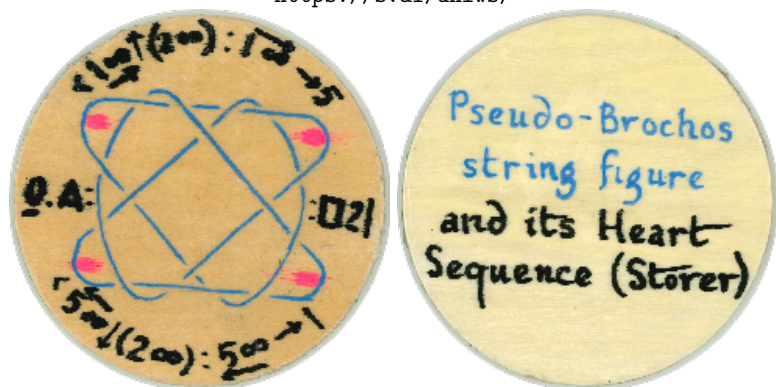
The coaster has a clever non-linear aspect. The manipulation sequences above and below the string figure are meant to be perfomed *simultaneously*. In String Figure Calculus, this is denoted by stacking the notation and surrounding it with braces.

$$\underline{O}.A : \left\{ \begin{array}{c} < \underset{\longrightarrow}{1\infty} \uparrow (2\infty) : \overrightarrow{1\infty} \to 5 \\ < \underset{\longleftarrow}{5\infty} \downarrow (2\infty) : \underline{5\infty} \to 1 \end{array} \right\} : \square 2|$$

This is a very abstract view of the construction. It is not practical to transfer these loops simultaneously. And so, we need to re-work the figure a bit to get an actual construction. Here is a way of creating the figure that is pretty close to the heart sequence (or loop manipulation) given above. The instructions are given in terms of moving and manipulating loops. There are many ways to accomplish these moves, but the simplest is to use both hands to pick up and manipulate the loops. This is what Eric Vandendriessche calls the "basic fingering" of a heart sequence.

Flat Four-Ridge Braid
　② R5n = near right little finger string
　⑤ R1n = near right thumb string
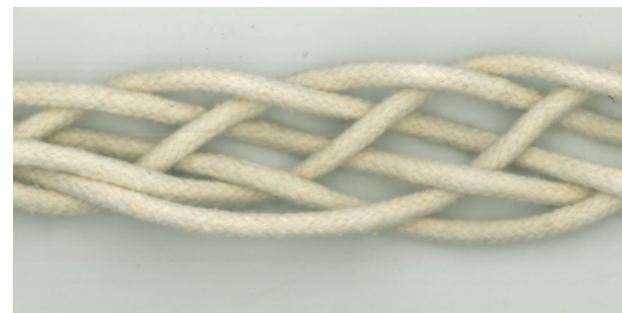
Twin Two-Ridge Braids
　② R5f = far right little finger string
　⑤ R1n = near right thumb string

One can make a charming friendship bracelet with a buckle as follows. First, start braiding the twin braids. This will make a small loop at the top of the bracelet. Second, braid the flat braid (or tubular braid) until you have enough length for a bracelet. Last, finish with more twin braids. This will create some strands to tie through the loop at the top.

1. Form Opening A.

2. Rotate the thumb loop a half-turn towards you, pass it from below through the index loop, and then place it on the ring fingers.

3. Rotate the little finger loop a half turn towards you, pass it over all intermediate strings, and place it from above through the index loop, and finally to put it on the thumbs.

4. Transfer the ring finger loops to the little fingers.

5. Release the index fingers, and extend.

Alex also made this coaster which shows a lovely string figure motif which served as something like a logo for my marriage. It makes me think of two people facing each other and holding hands when seen from above. The inner loops represent their heads, and the sides of the hearts represent their crossed arms. It would be lovely to have a nice string figure construction of the motif!

6.1.2   Variations on the Four-Ridge Tubular Braid

In steps ② and ⑤ there are highlighted pick up moves which we can vary to produce different braids. By altering which strings on the R1 and R5 are picked up, we get three possible braids.

Four-Ridge Tubular Braid
This is the original braiding pattern described above.
② R5n = near right little finger string
⑤ R1f = far right thumb string

The obverse of the braid visible from above while braiding.

The reverse of the braid visible from below while braiding.
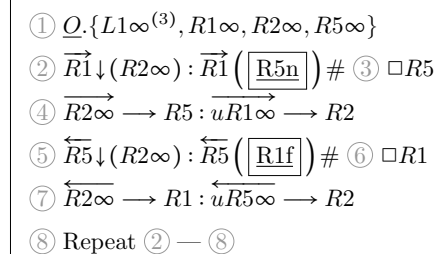
3   Winding A String

This diagram is from Camilla Gryski's *Friendship Bracelets* (1993). It shows how to "butterfly" a string for convenient storage. I've been storing my string in my pocket this way for ages; I initially learned it from *Ayatori: The Traditional String Figures of Japan*, by Tama Saito (BISFA #11). She writes:

> A string bundle formed in this manner never tangles because of the 8-shaped moves that are used to form the crossings. In some places this type of hand work is called *tegara*, *tegarako*, *tegara-maki*, or *tegase*, and string figures are likewise called *tegara* [35: at Yamaguchi] and *tegarako* [33: at Nishiawakura, Katsuta].

A couple years ago, I visited a fabric shop looking for string. When I found some suitable string, the cashier butterflied it and handed it to me. I suppose that this method of wrapping string in to a skein is pretty common. I wonder: what do people in the textile and fabric industry call this move?

I love the term "to butterfly" a string. It's entered my idiosyncratic vocabulary of string figuring along with: "to honor" a figure, meaning to adjust the tensions and arrange a figure. The term is in honour of Honor Maude. Another bit of vocab which I picked up somewhere is the "intension" of a figure, meaning a figure's intended form under tension.

6.1.1   The Four-Ridge Tubular Braid

$$\boxed{\begin{array}{l} ① \; \underline{O}.\{L1\infty^{(3)}, R1\infty, R2\infty, R5\infty\} \\[4pt] ② \; \overrightarrow{R1}\!\downarrow(R2\infty) : \overrightarrow{R1}\left(\boxed{R5n}\right) \# \; ③ \; \square R5 \\[4pt] ④ \; \overrightarrow{R2\infty} \longrightarrow R5 : \overrightarrow{uR1\infty} \longrightarrow R2 \\[4pt] ⑤ \; \overleftarrow{R5}\!\downarrow(R2\infty) : \overleftarrow{R5}\left(\boxed{R1f}\right) \# \; ⑥ \; \square R1 \\[4pt] ⑦ \; \overleftarrow{R2\infty} \longrightarrow R1 : \overleftarrow{uR5\infty} \longrightarrow R2 \\[4pt] ⑧ \; \text{Repeat } ② - ⑧ \end{array}}$$
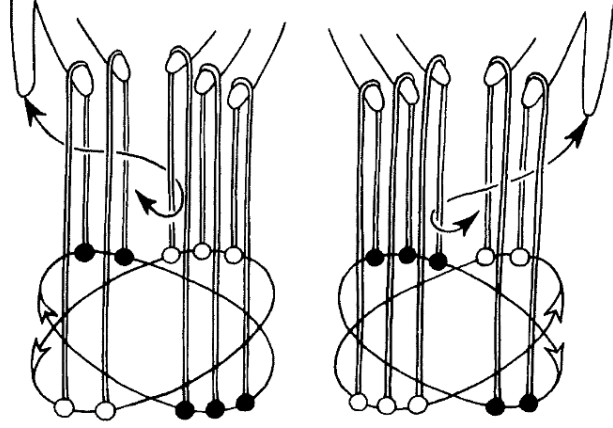
1. Triple your loop and place it in the following opening position: a triple loop on the left thumb, with single loops on the right thumb, index, and little finger.

   Note: All the manipulations in the rest of the construction will be performed by the right hand, so we omit the word "right" in the following description.

2. Pass the thumb away from you, from above through the index loop, and pickup the <u>near little finger string</u>. Return the thumb to normal position.

3. Release the little finger loop.

4. Shift the loops: the index loop goes to the thumb, the upper thumb loop goes to the index.

5. Pass the little finger towards you, from above through the index loop, and pickup the <u>far thumb string</u>. Return the little finger to normal position.

6. Release the thumb loop.

7. Shift the loops: the index loop goes to the thumb, the upper little finger loop goes to the index.

8. Repeat steps ② — ⑧.

4 Figures from the Red Book

4.1 Duck's Feet II: String Figure Calculus

Handwritten note:

> Duck's Feet II : $\overline{O}.A : 2\infty \rightarrow 1$:
> $> \ell 1\infty (N1) \rightarrow 3 \#| \ \overrightarrow{5}\uparrow (3\infty):$
> $\overleftarrow{5} \ (\overline{5m}) \# \ N5 \ \boxed{\ }$

$$\boxed{\begin{array}{l} \text{①} \ \overline{O}.A : \text{②} \ 2\infty \rightarrow 1 \\ \#|\ 3 \rightarrow \ell(N1)\infty > \ \text{③} \\ 1 \ \square : N5 \ \text{⑤} \ \#(\overline{5m}) \ \text{⑤} \ \overleftarrow{5} : (3\infty) \ \text{④} \uparrow \overrightarrow{5} \end{array}}$$

4.2 Duck's Feet II: Rivers-Haddon-Jayne

This figure appears as "Second Variation" of *fa'ave pato* (Duck's Feet, Fig. 297, p. 558) in *Samoan Material Culture* by Te Rangi Hiroa [2]. Hiroa notes that, in Samoa, the game of string figure making is named after this figure.

1. Opening A.
2. Transfer the index finger loop to the thumbs.
3. Lift the lower thumb loop off the thumbs, rotate it half a turn away from you, and place it on the middle fingers. (In effect, this navahos the thumb lower loops on to the middle fingers.) Return to normal position, and extend to absorb slack.
4. Pass the little fingers towards you, down in to the middle finger loops from above, and pick up the near little finger string. Return to normal position.
5. Navaho the little finger loops. Release the thumb loops, and extend fully.

In Hiroa's construction, Opening A is formed with the middle fingers as is done in Japan. In the Red Book, Storer uses $\overline{O}.A$ in place of $\overline{O}.JA$. In writing this figure for LOOP, I added □ to Storer's notation for ⑤. This added step agrees with Hiroa's construction.
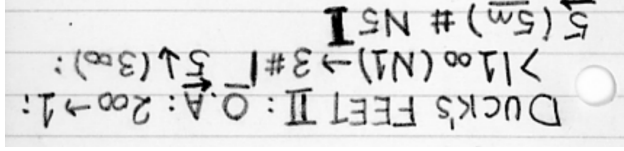
6 Loop Braiding

6.1 One Handed Loop-Braiding

Loop-manipulation braiding, or loop-braiding, is a textile technique with world-wide distribution. One manipulates a collection of loops using the fingers to form elaborate braids. The loops can be twisted, passed over each other, or through one another. The shanks of the loop can act as distinct elements in the braid, or act in unison. This technique reached a high-point in seventeenth century England, where elaborate pattern books were written describing how to dozens of braids of braids [3, 1].

A Figure from Speiser's *Loop-Manipulation Braiding* [4]

We give a method of doing loop-braiding in the style of string figures. The method has a couple ⃞boxed⃞ or underlined moves. By altering these moves, we can form three distinct loop braids. Noémi Speiser, an author-ity on braiding, refers to these three braids as "The Trinity". In [4], she writes: "[these braids are] something like the ancestors of all loop-braided twill. When you understand them thoroughly, you have grasped the very essentials."

We begin with the Four-Ridge Tubular Braid. The usual two-handed five-loop procedure is shown in the diagram above. Isn't that a really *wild* looking diagram? What's the going on there? Try it and find out!

5   Green Stars and The *Verdaj Skoltoj*

— Adapted from my family newsletter, The Adey Shaw Reporter.

My kids speak Esperanto. There are only about ten native speakers in Canada and a few thousand in the whole world. Amazingly, there are families of native Esperanto speakers that go back three or four generations! Once a year, Esperanto families gather at *La Renkontiĝo de Esperantistaj Familioj* (The Gathering of Esperanto Families or REF) somewhere in Europe for a week of deep Esperanto immersion. This year, the gathering was in Geyer, a small town in rural Germany in August.

Parker gave a presentation — *Fadenfiguroj: La Plej Internaciaj Ludoj* (String figures: The Most International Games.) Esperantists love internationalism, learning about other cultures, playing games, and trying out new stuff. And so, I taught a number of string figures to the group. One participant was so enthusiastic that she immediately ordered a copy of *Schnurfiguren aus aller Welt* (String Figures from Around the Worlds) and some green paracord. She'll have all the gear she needs to learn string figures when she gets home.

(Swedish, Esperanto, and German sign "String Here" made by Freya, age 5.)

The *verdaj skoltoj* are a scout group similar to Boy Scouts and Girl Guides, but in Esperanto. They learn how to tie knots, make fires, and do various other outdoors-y things. They also have their own repertoire of campy songs in Esperanto. A few *verdaj skoltoj* went for a week long trip to Czechoslovakia before REF, then met up with us in Geyer. Some *skoltoj* were present at the presentation, and immediately fell in love with the star string figure that I taught them. The green star is the logo or symbol of Esperanto. At the *interkulturala vespero* (intercultural evening)

which traditionally ends any Esperanto gathering, the *skoltoj* showed off their newly learned green star string figure. I wish that I could have seen their presentation, but we left for the airport too early to take part in the *interkulturala vespero*. Hopefully, in the years to come, I will see some *skoltoj* making green stars with string.

fadeno thread or string

figuro figure or diagram

fadenfiguro string figure

buklo loop