
Supplementary Material

A TF-CoVR Statistics and Modification Lexicon

TF-CoVR Statistics We present detailed statistics on the distribution of video counts per label in *TF-CoVR*, which comprises a diverse set of 306 annotated sub-actions. Figures A1 and A2 show the label-wise video distribution for the *FineGym* [3] and *FineDiving* [6] subsets of *TF-CoVR*, respectively. Both distributions are plotted on a logarithmic scale to emphasize the long-tailed nature of label frequencies. In *FineGym*, many labels have several hundred to over a thousand associated videos, with a gradual decline across the distribution. This results in broad coverage of fine-grained sub-actions. By contrast, *FineDiving* exhibits a steeper drop in video count per label, primarily due to its smaller dataset size. Nevertheless, a substantial number of labels still contain more than 30 samples, preserving enough diversity to support *temporal fine-grained composed video retrieval*. *TF-CoVR* thus serves as a strong benchmark for learning and evaluating fine-grained temporal reasoning in the composed video retrieval task.

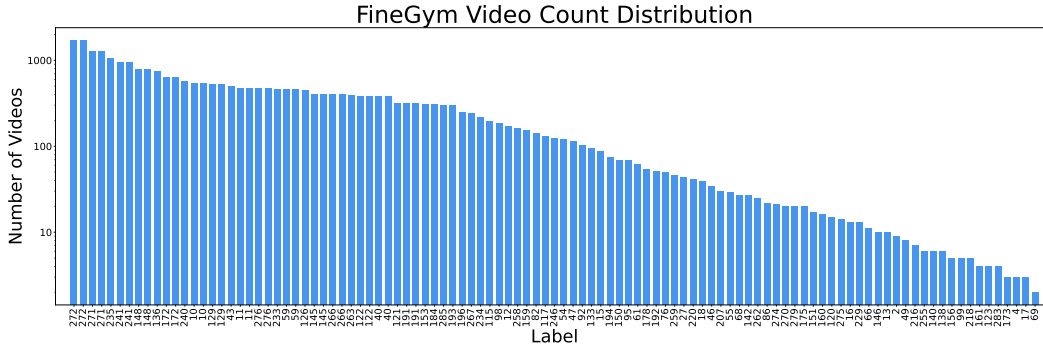


Figure A1: Label-wise video count distribution in the *FineGym* subset of *TF-CoVR*. A logarithmic scale is used on the y-axis to highlight the steep drop in video counts per label due to the smaller dataset size. Note that only a subset of all labels is shown for clarity.

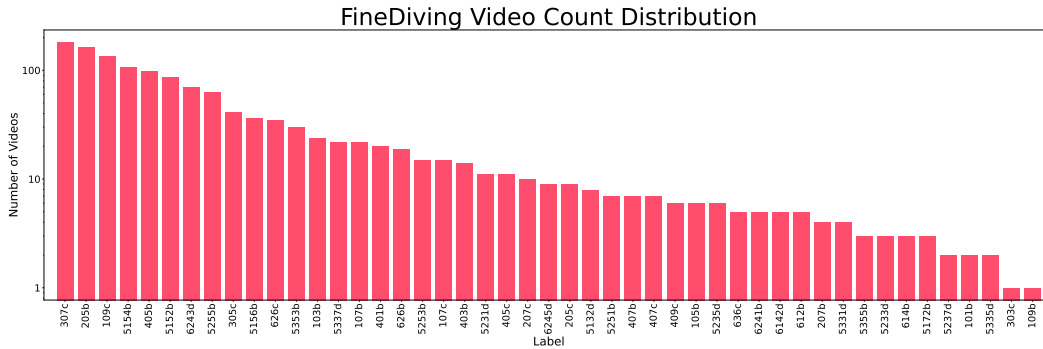
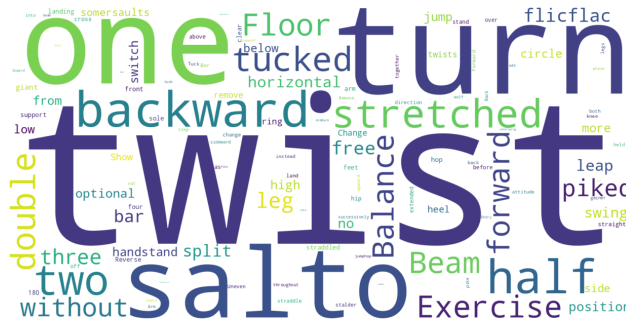


Figure A2: Label-wise video count distribution in the *FineDiving* subset of *TF-CoVR*. The y-axis is plotted on a logarithmic scale to highlight the steep drop in video counts per label due to the smaller dataset size, while still preserving label diversity.

Modification Lexicon Figure A3 presents a word cloud visualization of the most frequently occurring terms in the modification texts of *TF-CoVR*. Prominent terms such as *twist*, *turn*, *salto*, *backward*, *tucked*, *stretched*, and *piked* highlight the fine-grained, motion-centric nature of these

In this appendix, we provide more details, experimental results, qualitative visualization of our new *TF-CoVR* dataset and our two-stage *TF-CoVR-Base* method.

To support *TF-CoVR* modification generation, we craft domain-adapted prompting strategies for GPT-4o [2], addressing the unique structure of gymnastics and diving videos. Given the structural differences between *FineGym* [3] and *FineDiving* [6], we developed separate prompts for each domain. *FineGym*, with its substantially larger examples to better capture the diving-in-context examples for *FineDiving*.



Prompt and In-Context Examples To support accurate modification generation for *TF-CoVR*, we designed prompt templates and in-context examples that align with the linguistic and structural characteristics of the gymnastics and diving domains.

You are an expert in designing tasks that require understanding the transformation between two description, specifically for video descriptions. Your goal is to ensure that the instructions you provide are concise, accurate, and focused on the necessary modifications between the source and target description.

1. Analyze the given source and target description.
2. Identify the changes between the source and target description.
3. Write an instruction that describes only the transformation required to achieve the target description from the source.
4. Ensure the instruction is as short as possible, focusing on actions. Mention objects only when absolutely necessary.
5. Do not describe objects or actions common to both descriptions. Use pronouns when appropriate.
6. Your response should focus only on the transformation, without extraneous details or repetitions.

- Keep the instruction concise and focus only on the transformation required.
- Avoid redundant details or describing elements unchanged between source and target descriptions.

In-Context Examples:

Source Description: Inward, 3.5 Soms.Tuck, Entry
Target Description: Inward, 4.5 Soms.Tuck, Entry
Modification text: Show with 4.5 somersaults Tuck.

Source Description: Inward, 3.5 Soms.Tuck, Entry
Target Description: Inward, 2.5 Soms.Tuck, Entry
Modification text: Show with 2.5 somersaults Tuck.

Source Description: Back, 1.5 Twists, 2.5 Soms.Pike, Entry
Target Description: Back, 2.5 Twists, 1.5 Soms.Pike, Entry
Modification text: Show with 2.5 twists and 1.5 somersaults.

Source Description: Forward, 3.5 Soms.Pike, Entry
Target Description: Forward, 1.5 Soms.Pike, Entry
Modification text: Show with 1.5 somersaults.

Source Description: Arm.Back, 2.5 Twists, 2 Soms.Pike, Entry
Target Description: Arm.Back, 1.5 Twists, 2 Soms.Pike, Entry
Modification text: Show with 1.5 twists.

Modification Generation Prompt for FineGym

You are an expert in designing tasks that require understanding the transformation between two description, specifically for video descriptions. Your goal is to ensure that the instructions you provide are concise, accurate, and focused on the necessary modifications between the source and target description.

Instructions:

1. Analyze the given source and target description.
2. Identify the changes between the source and target description.
3. Write an instruction that describes only the transformation required to achieve the target description from the source.
4. Ensure the instruction is as short as possible, focusing on actions. Mention objects only when absolutely necessary.
5. Do not describe objects or actions common to both descriptions. Use pronouns when appropriate.
6. Your response should focus only on the transformation, without extraneous details or repetitions.

Remember:

- Keep the instruction concise and focus only on the transformation required.
- Avoid redundant details or describing elements unchanged between source and target descriptions.

In-Context Examples:

Source Narration: (VT) round-off, flic-flac with 0.5 turn on, stretched salto forward with 1.5 turn off.

Target Narration: (VT) round-off, flic-flac with 0.5 turn on, stretched salto forward with 0.5 turn off.

Instruction: show with 0.5 turn.

Source Narration: (VT) round-off, flic-flac with 0.5 turn on, stretched salto forward with 1.5 turn off.

Target Narration: (VT) round-off, flic-flac with 0.5 turn on, stretched salto forward with 1 turn off.

Instruction: show with 1 turn.

Source Narration: (VT) round-off, flic-flac with 0.5 turn on, stretched salto forward with 1.5 turn off.

Target Narration: (VT) round-off, flic-flac with 0.5 turn on, 0.5 turn to piked salto backward off.

Instruction: show 0.5 turn with spiked salto backward.

Source Narration: (VT) round-off, flic-flac with 0.5 turn on, stretched salto forward with 1.5 turn off.

Target Narration: (VT) round-off, flic-flac with 1 turn on, piked salto backward off.

Instruction: show flic-flac with 1 turn and piked salto backward.

Source Narration: (VT) round-off, flic-flac with 0.5 turn on, stretched salto forward with 0.5 turn off.

Target Narration: (VT) round-off, flic-flac with 0.5 turn on, stretched salto forward with 1.5 turn off.

Instruction: show with 1.5 turn.

Source Narration: (VT) round-off, flic-flac with 0.5 turn on, piked salto forward off.

Target Narration: (VT) round-off, flic-flac with 0.5 turn on, stretched salto forward with 1.5 turn off.

Instruction: show stretched salto forward with 1.5 turn.

Source Narration: (VT) round-off, flic-flac with 0.5 turn on, piked salto forward off.

Target Narration: (VT) round-off, flic-flac with 1 turn on, piked salto backward off.

Instruction: show flic-flac with 1 turn and piked salto backward.

Source Narration: (VT) round-off, flic-flac with 1 turn on, piked salto backward off.

Target Narration: (VT) round-off, flic-flac with 0.5 turn on, piked salto forward off.

Instruction: show flic-flac with 0.5 turn and piked salto forward.

Source Narration: (VT) tsukahara stretched with 2 turn.

Target Narration: (VT) tsukahara stretched with 1 turn.

Instruction: show with 1 turn.

Source Narration: (VT) tsukahara stretched with 2 turn.

Target Narration: (VT) tsukahara tucked with 1 turn.

Instruction: show tucked with 1 turn.

Source Narration: (VT) tsukahara stretched salto.
Target Narration: (VT) tsukahara stretched without salto.
Instruction: show without salto.

Source Narration: (FX) switch leap with 0.5 turn.
Target Narration: (BB) switch leap with 0.5 turn.
Instruction: show on BB.

Source Narration: (FX) switch leap with 0.5 turn.
Target Narration: (FX) split jump with 0.5 turn.
Instruction: show a split jump.

Source Narration: (FX) switch leap with 0.5 turn.
Target Narration: (FX) switch leap.
Instruction: show a switch leap with no turn.

Source Narration: (FX) switch leap with 1 turn.
Target Narration: (BB) split leap with 1 turn.
Instruction: show a split leap on BB.

Source Narration: (FX) stag jump.
Target Narration: (FX) stag ring jump.
Instruction: show with ring.

Source Narration: (FX) tuck hop or jump with 1 turn.
Target Narration: (FX) wolf hop or jump with 1 turn.
Instruction: show wolf hop.

Source Narration: (FX) pike jump with 1 turn.
Target Narration: (BB) straddle pike jump with 1 turn.
Instruction: show straddle pike jump on BB.

Source Narration: (UB) (swing forward) salto backward stretched.
Target Narration: (UB) (swing backward) double salto forward tucked with 0.5 turn.
Instruction: show (swing backward) double salto forward tucked with 0.5 turn.

Source Narration: (UB) (swing forward) double salto backward stretched with 1 turn.
Target Narration: (UB) (swing forward) salto backward stretched with 2 turn.
Instruction: show salto backward stretched with 2 turn.

C Limitations of Existing Captioning Models

We present a detailed comparison between the captions generated by existing video captioning models and the structured descriptions curated for our *TF-CoVR* dataset. As *TF-CoVR* is designed around triplets centered on fine-grained temporal actions, it is essential that captioning models capture key elements such as action type, number of turns, and the apparatus involved. Our analysis shows that current models, such as LaVila [7] and VideoXL [4], often fail to identify these fine-grained details, underscoring their limitations in handling temporally precise and action-specific scenarios.

Caption Generation Template for VideoXL To generate technically accurate captions for gymnastics and diving routines, we supply VideoXL with domain-specific prompts tailored to each sport. These prompts incorporate specialized vocabulary and structured syntax to align with official judging terminology. In both sports, subtle variations, such as differences in twist count, body position, or apparatus, convey distinct semantic meaning. To capture this level of granularity, we apply strict formatting constraints and exemplar-based guidance during prompting. While this structured approach helps VideoXL focus on fine-grained action details, the generated captions still exhibit inconsistencies and often fail to capture critical aspects of the routines with sufficient reliability.

VideoXL Caption Generation Prompt for FineGym

You are an expert gymnastics judge.

Your task is to provide a **strictly formatted, concise technical caption** for the gymnast's routine. Use **official gymnastics vocabulary only** (e.g., round-off, flic-flac, salto, tuck, pike, layout).

DO NOT describe emotions, strength, balance, or control.

DO NOT explain what it "shows" or "demonstrates."

DO NOT use generic verbs like "move", "flip", "spin", "pose", etc.

Include:

- Entry move (e.g., round-off)
- Main move (e.g., double back salto)
- Body position (e.g., tuck, layout, pike)
- Number of twists or somersaults (e.g., 1.5 twists, triple salto)
- Apparatus name if identifiable

Only output a **single-line caption**, no lists, no bullets, no extra sentences.

Format: [Technical move sequence with turns and position].

(Apparatus: [FX / VT / BB / UB / Unknown])

Examples:

- Round-off, flic-flac, double tuck salto with 1.5 twist. (Apparatus: FX)
- Back handspring to layout salto with full twist. (Apparatus: BB)
- Stretched salto backward with 2.5 twists. (Apparatus: VT)

VideoXL Caption Generation Prompt for FineDiving

You are an expert **diving judge**.

Your task is to provide a **strictly formatted, concise technical caption** for the diver's routine based on official diving terminology. Use terms defined by **FINA** and standard competition vocabulary.

DO NOT describe emotions, grace, beauty, or control. DO NOT narrate or explain what it "shows" or "demonstrates."

DO NOT use vague verbs like "moves", "flips", "spins", or any stylistic language.

Include:

- Takeoff direction (e.g., forward, backward, reverse, inward, armstand)
- Number of somersaults (e.g., 1.5, 2.5, 3.5)
- Number of twists (if any)
- Body position (tuck, pike, layout, free)
- Entry type if clear (e.g., vertical entry, feet-first)
- Platform or springboard (if inferable), e.g., 10m platform, 3m springboard

Only output a **single-line caption**, no bullets, no extra explanation.

Format:

[Takeoff type], [# somersaults] somersaults, [# twists if any] twists, [body position].

(Platform: [10m / 3m / Unknown])

Examples:

- Backward takeoff, 2.5 somersaults, tuck. (Platform: 10m)
- Reverse takeoff, 1.5 somersaults, 1 twist, pike. (Platform: 3m)
- Armstand, 2.5 somersaults, layout. (Platform: Unknown)

Caption Generation Template for LaViLa As an alternative to VideoXL, we also experimented with LaViLa [7], a general-purpose multimodal model, to generate captions for both query and target videos. We selected LaViLa based on its prior application in EgoCVR [1], a task closely related to CoVR. However, the captions produced by LaViLa lacked the fine-grained detail and domain-specific terminology needed to accurately describe gymnastics and diving routines. This gap is illustrated in Table C1 and Table C2, which compare the official label descriptions from *FineGym* [3] and *FineDiving* [6] with captions generated by LaViLa and VideoXL.

Table C1: Comparison between ground-truth action labels from FineGym and the captions generated by LaViLa and VideoXL. The examples illustrate the inability of both models, particularly LaViLa, to capture fine-grained, domain-specific details such as action type, twist count, and apparatus, which are critical for tasks like *TF-CoVR*.

Ground-Truth Label	LaViLa Caption	VideoXL Caption
(Vault) round-off, flic-flac with 0.5 turn on, stretched salto forward with 0.5 turn off	#O A man Y walks around the game	Action: Back Handstand, Turns: 2
(Vault) round-off, flic-flac on, stretched salto backward with 1 turn off	#O person X runs on the ground	Action: Flip, Turns: 3
(Floor Exercise) switch leap with 0.5 turn	#O The woman A runs towards the woman Y	Action: Flip on the floor, Turns: 3
(Floor Exercise) switch leap with 1 turn	#O The man Y jumps down from the wall	Action: Handstand walk with hand release, Turns: 3
(Floor Exercise) johnson with additional 0.5 turn	#O The man Y runs towards the man X	Action: Flip, Turns: 0, Action: Dive, Turns: 0
(Floor Exercise) 2 turn in back attitude, knee of free leg at horizontal throughout turn	#O The woman B falls to the floor	Action: Twirl, Turns: 0
(Floor Exercise) 3 turn on one leg, free leg optional below horizontal	#O The woman Y walks away from the woman X	Action: Flip, Turns: 1
(Floor Exercise) salto forward tucked	#O The woman A raises her hands up	Action: Handstand, Turns: 4
(Floor Exercise) salto forward stretched with 1 twist	#O The woman X throws the ball with the tennis	Action: Handstand on Rungs, Turns: 15
(Floor Exercise) salto backward stretched with 3 twist	#O The man Y throws the slate in his right hand to the ground	Action: Jump from Bar, Turns: 2

Table C2: Comparison between ground-truth action labels from FineDiving and captions generated by LaViLa and VideoXL. The examples highlight both models' limitations in capturing critical diving-specific details such as somersault count, twist degree, and entry type. While VideoXL occasionally identifies general action categories, it often fails to reflect the structured semantics required for fine-grained tasks like *TF-CoVR*.

Ground-Truth Label	LaViLa Caption	VideoXL Caption
Arm.Forward, 2 Soms.Pike, 3.5 Twists	#O The man X jumps down from the playground slide	Action: Diving, Backflip, Half Turn, T-Walk, Kick flip, Handstand, Turns: 3
Arm.Back, 1.5 Twists, 2 Soms.Pike, Entry	#O The girl X jumps down from the playhouse	Action: Flip, Turns: 2
Arm.Back, 2.5 Twists, 2 Soms.Pike, Entry	#O The man X walks down a stair with the rope in his right hand	Action: Gymnasty Turn, Turns: 4
Inward, 3.5 Soms.Pike, Entry	#C C looks at the person in the swimming	Action: Backflip, Turns: 2
Forward, 3.5 Soms.Pike, Entry	#C C shakes his right hand	Action: Dive, Turns: 2

Although LaViLa performs well on general video-language benchmarks, it lacks the domain-specific understanding necessary to capture the structured and fine-grained nature of *TF-CoVR* videos. In contrast, targeted prompting with VideoXL produces more consistent and detailed captions, yet it still falls short in accurately identifying the specific actions depicted in *TF-CoVR*.

D Experimental Setup

We evaluate *TF-CoVR* using retrieval-specific metrics, namely mean Average Precision at K ($mAP@K$) for $K \in \{5, 10, 25, 50\}$. All models are trained and evaluated on the *TF-CoVR* dataset using varying video-text encoding strategies and fusion mechanisms.

Video and Text Input Settings. We sample 12 uniformly spaced frames from each video and resize them to fit the input dimensions of the pretrained visual backbones. For text input, the modification texts are tokenized using the tokenizer corresponding to each text encoder (e.g., CLIP or BLIP) and passed to the model without truncation whenever possible.

Text Encoder Evaluation. To evaluate the impact of different text encoders on the *TF-CoVR-Base* model, we conducted experiments using two popular pretrained vision-language models: CLIP and BLIP. Both models were used to encode the *modification text* inputs, while the visual backbone and fusion mechanism were held constant (MLP-based fusion with 12-frame video inputs). As shown in Table D3, BLIP consistently outperforms CLIP across all $mAP@K$ metrics, suggesting a stronger ability to capture the semantic nuances of the modification texts. Each experiment was repeated five times, and we report the mean and standard deviation to ensure robustness.

Table D3: Evaluation of *TF-CoVR-Base* fine-tuned on *TF-CoVR* with different text encoders using $mAP@K$ for $K \in \{5, 10, 25, 50\}$. We ran each experiment five times and report mean and standard deviation in the following table

Modalities		Model	Text Encoder	Fusion	#Query Frames	#Target Frames	mAP@K ($\uparrow$)			
Video	Text						5	10	25	50
✓	✓	TF-CoVR-Base	CLIP	MLP	12	12	18.30 $\pm$ 0.35	20.59 $\pm$ 0.30	22.89 $\pm$ 0.27	23.64 $\pm$ 0.27
✓	✓	TF-CoVR-Base	BLIP	MLP	12	12	20.62 $\pm$ 0.25	23.17 $\pm$ 0.34	25.17 $\pm$ 0.28	25.88 $\pm$ 0.25

Fusion Module. We use a lightweight multi-layer perceptron (MLP) with two hidden layers and ReLU activation to combine visual and textual features, enabling efficient multimodal fusion while preserving architectural simplicity.

Training and Evaluation Protocols. We fine-tune each model using the AdamW optimizer with a learning rate of 1×10^{-4} and a batch size of 512. Each model is trained for 100 epochs. All configurations are evaluated across five random seeds to ensure statistical reliability.

Hardware Configuration and Training Time. All experiments were conducted on four NVIDIA A100 GPUs, each with 80 GB of memory. Stage 1 pretraining, performed on two datasets using a single A100 GPU, takes approximately four days, while Stage 2 fine-tuning completes in about six hours.

E TF-CoVR Visualization

TF-CoVR (Figure E4) offers a clear, structured visualization of the Composed Video Retrieval (CoVR) task, specifically designed for fine-grained temporal understanding. Unlike prior CoVR benchmarks such as WebVid CoVR [5] and EgoCVR [1], which often rely on broad scene-level changes or object variations, *TF-CoVR* centers on subtle, motion-centric transformations. These include variations in the number of turns, transitions between salto types (e.g., *tucked*, *piked*, or *stretched*), and the inclusion or omission of rotational components in gymnastic leaps.

Each row in the figure illustrates a triplet: the left column displays the *query video*, the right shows the corresponding *target video*, and the center presents the *modification text* describing the transformation required to reach the target. *TF-CoVR* emphasizes action-specific, apparatus-consistent changes, where even subtle variations in movement or rotation denote semantically distinct actions. By controlling for background and scene context, the figure isolates fine-grained motion differences as the primary signal for retrieval. This makes *TF-CoVR* a strong benchmark for assessing whether models can accurately retrieve videos based on instruction-driven, temporally grounded modifications. Additional visualizations of *TF-CoVR* are provided in Figures E5 and E6.

F Institutional Review Board (IRB) Approval

TF-CoVR uses publicly available videos from the *FineGym* and *FineDiving* datasets. Access to these videos is subject to the licensing terms specified by the respective dataset providers. To support reproducibility, we released the video and text embeddings generated during our experiments.

References

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- [7] Yue Zhao, Ishan Misra, Philipp Krähenbühl, and Rohit Girdhar. Learning video representations from large language models. In *Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, pages 6586–6597, 2023.

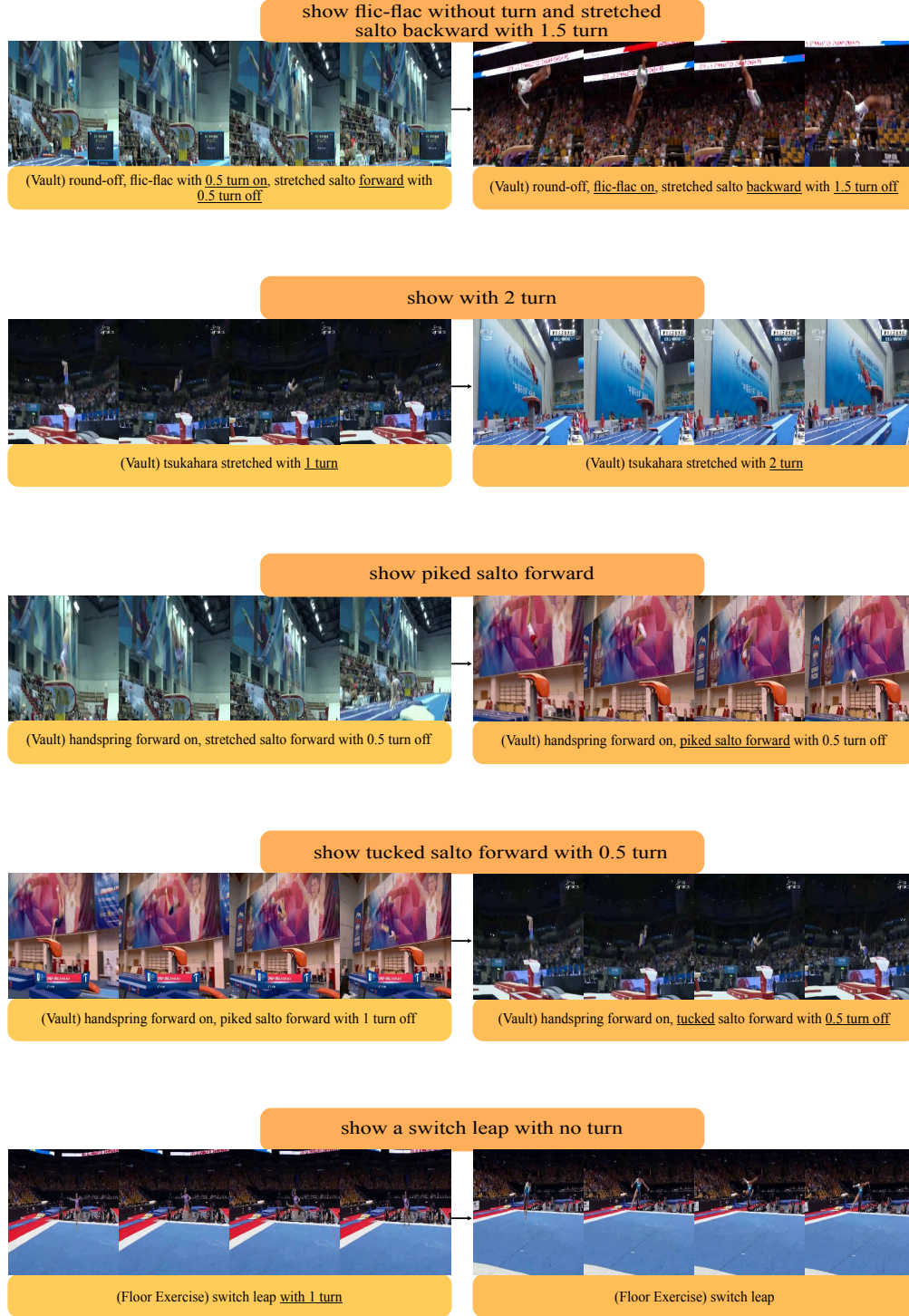


Figure E4: Qualitative examples from *TF-CoVR* showcasing motion-centric transformations for fine-grained temporal action retrieval. The examples span diverse gymnastic events such as *vaults* and *floor exercises*, where subtle differences in execution such as changing from a *stretched* to a *tucked salto*, increasing the number of turns from *one* to *two*, or removing rotation in a *switch leap* define the compositional shift. The captions explicitly highlight these movement attributes, enabling precise instruction-based retrieval grounded in temporal dynamics rather than visual appearance or scene context. This focus on action semantics and minimal visual distraction distinguishes *TF-CoVR* from prior CoVR datasets.



Figure E5: Additional examples from *TF-CoVR* demonstrating temporally grounded modifications across multiple apparatuses. Each triplet reflects precise motion-based transformations driven by modification instructions, such as “show with 3 turn”, “show on Balance Beam with 0.5 turn in side position”, or “show backward”.



Figure E6: *TF-CoVR* triplets from diving events demonstrating precise compositional modifications based on somersault count, twist count, and direction. Examples include transformations such as “Show with 4.5 somersaults,” “Change direction to inward”, “Change direction to inward and show with 1.5 somersaults”, “Show with 2 twists”, and “Change direction to forward”. Each caption specifies critical motion semantics like entry type, direction (*forward* or *inward*), somersault type (*Tuck* or *Pike*), and twist count, enabling controlled retrieval grounded in temporally fine-grained action variations.

Label 1	Caption 1	Label 2	Caption 2	Label 3	Caption 3
0	(Vault) round-off, flic-flac with 0.5 turn on, stretched salto forward with 1.5 turn off	1	(Vault) round-off, flic-flac with 0.5 turn on, stretched salto forward with 0.5 turn off	2	(Vault) round-off, flic-flac with 0.5 turn on, stretched salto forward with 1 turn off
3	(Vault) round-off, flic-flac with 0.5 turn on, stretched salto forward with 2 turn off	4	(Vault) round-off, flic-flac with 0.5 turn on, 0.5 turn to piked salto backward off	5	(Vault) round-off, flic-flac with 0.5 turn on, piked salto forward with 0.5 turn off
6	(Vault) round-off, flic-flac with 0.5 turn on, piked salto forward off	7	(Vault) round-off, flic-flac with 0.5 turn on, tucked salto forward with 0.5 turn off	8	(Vault) round-off, flic-flac with 1 turn on, stretched salto backward with 1 turn off
9	(Vault) round-off, flic-flac with 1 turn on, piked salto backward off	10	(Vault) round-off, flic-flac on, stretched salto backward with 2 turn off	11	(Vault) round-off, flic-flac on, stretched salto backward with 1 turn off
12	(Vault) round-off, flic-flac on, stretched salto backward with 1.5 turn off	13	(Vault) round-off, flic-flac on, stretched salto backward with 0.5 turn off	14	(Vault) round-off, flic-flac on, stretched salto backward with 2.5 turn off
15	(Vault) round-off, flic-flac on, stretched salto backward off	16	(Vault) round-off, flic-flac on, piked salto backward off	17	(Vault) round-off, flic-flac on, tucked salto backward off
18	(Vault) tsukahara stretched with 2 turn	19	(Vault) tsukahara stretched with 1 turn	20	(Vault) tsukahara stretched with 1.5 turn
21	(Vault) tsukahara stretched with 0.5 turn	22	(Vault) tsukahara stretched salto	23	(Vault) tsukahara stretched without salto
28	(Vault) tsukahara tucked with 1 turn	28	(Vault) handspring forward on, stretched salto forward with 1.5 turn off	28	(Vault) handspring forward on, stretched salto forward with 0.5 turn off
29	(Vault) handspring forward on, stretched salto forward with 1 turn off	28	(Vault) handspring forward on, piked salto forward with 0.5 turn off	31	(Vault) handspring forward on, piked salto forward with 1 turn off
32	(Vault) handspring forward on, piked salto forward off	33	(Vault) handspring forward on, tucked salto forward with 0.5 turn off	34	(Vault) handspring forward on, tucked salto forward with 1 turn off
35	(Vault) handspring forward on, tucked double salto forward off	36	(Vault) handspring forward on, tucked salto forward off	37	(Vault) handspring forward on, 1.5 turn off
38	(Vault) handspring forward on, 1 turn off	40	(Floor Exercise) switch leap with 0.5 turn	41	(Floor Exercise) switch leap with 1 turn
42	(Floor Exercise) split leap with 0.5 turn	43	(Floor Exercise) split leap with 1 turn	44	(Floor Exercise) split leap with 1.5 turn or more
45	(Floor Exercise) switch leap	46	(Floor Exercise) split leap forward	47	(Floor Exercise) split jump with 1 turn
48	(Floor Exercise) split jump with 0.5 turn	49	(Floor Exercise) split jump with 1.5 turn	51	(Floor Exercise) split jump
52	(Floor Exercise) johnson with additional 0.5 turn	53	(Floor Exercise) johnson	54	(Floor Exercise) straddle pike or side split jump with 1 turn
55	(Floor Exercise) straddle pike or side split jump with 0.5 turn	56	(Floor Exercise) straddle pike jump or side split jump	57	(Floor Exercise) stag ring jump
58	(Floor Exercise) switch leap to ring position with 1 turn	59	(Floor Exercise) switch leap to ring position	60	(Floor Exercise) split leap with 1 turn or more to ring position
61	(Floor Exercise) split ring leap	62	(Floor Exercise) ring jump	63	(Floor Exercise) split jump with 1 turn or more to ring position
65	(Floor Exercise) stag jump	66	(Floor Exercise) tuck hop or jump with 1 turn	67	(Floor Exercise) tuck hop or jump with 2 turn
68	(Floor Exercise) stretched hop or jump with 1 turn	69	(Floor Exercise) pike jump with 1 turn	70	(Floor Exercise) sheep jump
71	(Floor Exercise) wolf hop or jump with 1 turn	73	(Floor Exercise) wolf hop or jump	76	(Floor Exercise) cat leap
77	(Floor Exercise) hop with 0.5 turn free leg extended above horizontal throughout	78	(Floor Exercise) hop with 1 turn free leg extended above horizontal throughout	81	(Floor Exercise) 3 turn with free leg held upward in 180 split position throughout turn

Label 1	Caption 1	Label 2	Caption 2	Label 3	Caption 3
82	(Floor Exercise) 2 turn with free leg held upward in 180 split position throughout turn	83	(Floor Exercise) 1 turn with free leg held upward in 180 split position throughout turn	84	(Floor Exercise) 3 turn in tuck stand on one leg, free leg straight throughout turn
85	(Floor Exercise) 2 turn in tuck stand on one leg, free leg straight throughout turn	86	(Floor Exercise) 1 turn in tuck stand on one leg, free leg optional	88	(Floor Exercise) 2 turn in back attitude, knee of free leg at horizontal throughout turn
89	(Floor Exercise) 1 turn in back attitude, knee of free leg at horizontal throughout turn	90	(Floor Exercise) 4 turn on one leg, free leg optional below horizontal	91	(Floor Exercise) 3 turn on one leg, free leg optional below horizontal
92	(Floor Exercise) 2 turn on one leg, free leg optional below horizontal	93	(Floor Exercise) 1 turn on one leg, free leg optional below horizontal	94	(Floor Exercise) 2 turn or more with heel of free leg forward at horizontal throughout turn
95	(Floor Exercise) 1 turn with heel of free leg forward at horizontal throughout turn	97	(Floor Exercise) aerial cartwheel	98	(Floor Exercise) arabian double salto tucked
99	(Floor Exercise) double salto forward tucked with 0.5 twist	100	(Floor Exercise) double salto forward tucked	101	(Floor Exercise) salto forward tucked
102	(Floor Exercise) arabian double salto piked	105	(Floor Exercise) double salto forward piked	104	(Floor Exercise) salto forward piked
105	(Floor Exercise) aerial walkover forward	106	(Floor Exercise) salto forward stretched with 2 twist	107	(Floor Exercise) salto forward stretched with 1 twist
108	(Floor Exercise) salto forward stretched with 1.5 twist	109	(Floor Exercise) salto forward stretched with 0.5 twist	110	(Floor Exercise) salto forward stretched, feet land successively
111	(Floor Exercise) salto forward stretched, feet land together	112	(Floor Exercise) double salto backward stretched with 2 twist	113	(Floor Exercise) double salto backward stretched with 1 twist
114	(Floor Exercise) double salto backward stretched with 0.5 twist	115	(Floor Exercise) double salto backward stretched	116	(Floor Exercise) salto backward stretched with 3 twist
117	(Floor Exercise) salto backward stretched with 2 twist	118	(Floor Exercise) salto backward stretched with 1 twist	119	(Floor Exercise) salto backward stretched
120	(Floor Exercise) salto backward stretched with 3.5 twist	121	(Floor Exercise) salto backward stretched with 2.5 twist	122	(Floor Exercise) salto backward stretched with 1.5 twist
123	(Floor Exercise) salto backward stretched with 0.5 twist	124	(Floor Exercise) double salto backward tucked with 2 twist	128	(Floor Exercise) double salto backward tucked with 1 twist
126	(Floor Exercise) double salto backward tucked	128	(Floor Exercise) salto backward tucked	128	(Floor Exercise) double salto backward piked with 1 twist
129	(Floor Exercise) double salto backward piked	133	(Balance Beam) split jump with 0.5 turn in side position	134	(Balance Beam) split jump with 0.5 turn
135	(Balance Beam) split jump with 1 turn	136	(Balance Beam) split jump	137	(Balance Beam) straddle pike jump with 0.5 turn in side position
138	(Balance Beam) straddle pike jump with 0.5 turn	139	(Balance Beam) straddle pike jump with 1 turn	140	(Balance Beam) straddle pike jump or side split jump in side position
141	(Balance Beam) straddle pike jump or side split jump	142	(Balance Beam) stag-ring jump	143	(Balance Beam) ring jump
144	(Balance Beam) split ring jump	145	(Balance Beam) switch leap with 0.5 turn	146	(Balance Beam) switch leap with 1 turn
147	(Balance Beam) split leap with 1 turn	148	(Balance Beam) switch leap	150	(Balance Beam) split leap forward
151	(Balance Beam) johnson with additional 0.5 turn	152	(Balance Beam) johnson	153	(Balance Beam) switch leap to ring position
154	(Balance Beam) split ring leap	155	(Balance Beam) tuck hop or jump with 1 turn	156	(Balance Beam) tuck hop or jump with 0.5 turn
158	(Balance Beam) stretched jump/hop with 1 turn	159	(Balance Beam) sheep jump	160	(Balance Beam) wolf hop or jump with 1 turn
161	(Balance Beam) wolf hop or jump with 0.5 turn	162	(Balance Beam) wolf hop or jump	163	(Balance Beam) cat leap

Label 1	Caption 1	Label 2	Caption 2	Label 3	Caption 3
165	(Balance Beam) 1.5 turn with free leg held upward in 180 split position throughout turn	166	(Balance Beam) 1 turn with free leg held upward in 180 split position throughout turn	167	(Balance Beam) 1.5 turn with heel of free leg forward at horizontal throughout turn
168	(Balance Beam) 2 turn with heel of free leg forward at horizontal throughout turn	169	(Balance Beam) 1 turn with heel of free leg forward at horizontal throughout turn	170	(Balance Beam) 2 turn on one leg, free leg optional below horizontal
171	(Balance Beam) 1.5 turn on one leg, free leg optional below horizontal	172	(Balance Beam) 1 turn on one leg, free leg optional below horizontal	173	(Balance Beam) 1 turn on one leg, thigh of free leg at horizontal, backward upward throughout turn
174	(Balance Beam) 2.5 turn in tuck stand on one leg, free leg optional	175	(Balance Beam) 1.5 turn in tuck stand on one leg, free leg optional	176	(Balance Beam) 3 turn in tuck stand on one leg, free leg optional
177	(Balance Beam) 2 turn in tuck stand on one leg, free leg optional	178	(Balance Beam) 1 turn in tuck stand on one leg, free leg optional	179	(Balance Beam) jump forward with 0.5 twist and salto backward tucked
180	(Balance Beam) salto backward tucked with 1 twist	181	(Balance Beam) salto backward tucked	182	(Balance Beam) salto backward piked
183	(Balance Beam) gainer salto backward stretched-step out (feet land successively)	184	(Balance Beam) salto backward stretched-step out (feet land successively)	185	(Balance Beam) salto backward stretched with 1 twist
186	(Balance Beam) salto backward stretched with legs together	187	(Balance Beam) salto side-ward tucked with 0.5 turn, take off from one leg to side stand	188	(Balance Beam) salto side-ward tucked, take off from one leg to side stand
189	(Balance Beam) free aerial cartwheel landing in side position	191	(Balance Beam) free aerial cartwheel landing in cross position	192	(Balance Beam) arabian salto tucked
193	(Balance Beam) salto forward tucked to cross stand	194	(Balance Beam) salto forward piked to cross stand	195	(Balance Beam) salto forward tucked (take-off from one leg to stand on one or two feet)
196	(Balance Beam) free aerial walkover forward, landing on one or both feet	197	(Balance Beam) flic-flac with 1 twist, swing down to cross straddle sit	198	(Balance Beam) flic-flac, swing down to cross straddle sit
207	(Balance Beam) arabian double salto forward tucked	208	(Balance Beam) salto forward tucked with 1 twist	209	(Balance Beam) salto forward tucked
210	(Balance Beam) salto forward piked	211	(Balance Beam) salto forward stretched with 1.5 twist	212	(Balance Beam) salto forward stretched with 1 twist
213	(Balance Beam) salto forward stretched	214	(Balance Beam) double salto backward tucked with 1 twist	215	(Balance Beam) double salto backward tucked
216	(Balance Beam) salto backward tucked with 1 twist	217	(Balance Beam) salto backward tucked	218	(Balance Beam) salto backward tucked with 1.5 twist
219	(Balance Beam) double salto backward piked	220	(Balance Beam) salto backward stretched with 3 twist	221	(Balance Beam) salto backward stretched with 2 twist
222	(Balance Beam) salto backward stretched with 1 twist	223	(Balance Beam) salto backward stretched	224	(Balance Beam) salto backward stretched with 2.5 twist
228	(Balance Beam) salto backward stretched with 1.5 twist	226	(Balance Beam) salto backward stretched with 0.5 twist	228	(Balance Beam) gainer salto backward stretched with 1 twist to side of beam
228	(Balance Beam) gainer salto tucked at end of beam	229	(Balance Beam) gainer salto piked at end of beam	228	(Balance Beam) gainer salto stretched with 1 twist at end of beam
231	(Balance Beam) gainer salto stretched with legs together at end of the beam	232	(Uneven Bar) pike sole circle backward with 1.5 turn to handstand	233	(Uneven Bar) pike sole circle backward with 1 turn to handstand
234	(Uneven Bar) pike sole circle backward with 0.5 turn to handstand	235	(Uneven Bar) pike sole circle backward to handstand	236	(Uneven Bar) pike sole circle forward with 0.5 turn to handstand
237	(Uneven Bar) giant circle backward with 1.5 turn to handstand	238	(Uneven Bar) giant circle backward with hop 1 turn to handstand	239	(Uneven Bar) giant circle backward with 1 turn to handstand
240	(Uneven Bar) giant circle backward with 0.5 turn to handstand	241	(Uneven Bar) giant circle backward	242	(Uneven Bar) giant circle forward with 1 turn on one arm before handstand phase

Label 1	Caption 1	Label 2	Caption 2	Label 3	Caption 3
243	(Uneven Bar) giant circle forward with 1 turn to handstand	244	(Uneven Bar) giant circle forward with 1.5 turn to handstand	245	(Uneven Bar) giant circle forward with 0.5 turn to handstand
246	(Uneven Bar) giant circle forward	247	(Uneven Bar) clear hip circle backward with 1 turn to handstand	248	(Uneven Bar) clear hip circle backward with 0.5 turn to handstand
249	(Uneven Bar) clear hip circle backward to handstand	280	(Uneven Bar) clear hip circle forward with 0.5 turn to handstand	281	(Uneven Bar) clear hip circle forward to handstand
282	(Uneven Bar) clear pike circle backward with 1 turn to handstand	285	(Uneven Bar) clear pike circle backward with 0.5 turn to handstand	284	(Uneven Bar) clear pike circle backward to handstand
285	(Uneven Bar) clear pike circle forward to handstand	286	(Uneven Bar) staldler backward with 1 turn to handstand	287	(Uneven Bar) staldler backward with 0.5 turn to handstand
288	(Uneven Bar) staldler backward to handstand	289	(Uneven Bar) staldler forward with 0.5 turn to handstand	260	(Uneven Bar) staldler forward to handstand
262	(Uneven Bar) counter straddle over high bar with 0.5 turn to hang	263	(Uneven Bar) counter straddle over high bar to hang	264	(Uneven Bar) counter piked over high bar to hang
266	(Uneven Bar) (swing backward or front support) salto forward straddled to hang on high bar	267	(Uneven Bar) (swing backward) salto forward piked to hang on high bar	268	(Uneven Bar) (swing forward or hip circle backward) salto backward with 0.5 turn piked to hang on high bar
269	(Uneven Bar) (swing backward) salto forward stretched to hang on high bar	280	(Uneven Bar) (swing forward) salto backward stretched with 0.5 turn to hang on high bar	281	(Uneven Bar) transition flight from high bar to low bar
282	(Uneven Bar) transition flight from low bar to high bar	285	(Uneven Bar) (swing forward) double salto backward tucked with 1.5 turn	284	(Uneven Bar) (swing forward) salto with 0.5 turn into salto forward tucked
285	(Uneven Bar) (swing forward) double salto backward tucked with 2 turn	286	(Uneven Bar) (swing forward) double salto backward tucked with 1 turn	287	(Uneven Bar) (swing forward) double salto backward tucked
288	(Uneven Bar) (swing backward) double salto forward tucked	289	(Uneven Bar) (swing backward) salto forward with 0.5 turn	280	(Uneven Bar) (swing backward) double salto forward tucked with 0.5 turn
281	(Uneven Bar) (under-swing or clear under-swing) salto forward tucked with 0.5 turn	282	(Uneven Bar) (swing forward) double salto backward piked	283	(Uneven Bar) (swing forward) double salto backward stretched with 2 turn
284	(Uneven Bar) (swing forward) double salto backward stretched with 1 turn	285	(Uneven Bar) (swing forward) double salto backward stretched	286	(Uneven Bar) (swing forward) salto backward stretched with 2 turn
287	(Uneven Bar) (swing forward) salto backward stretched	407c	Inward, 3.5 Soms.Tuck, Entry	5285b	Back, 1.5 Twists, 2.5 Soms.Pike, Entry
107b	Forward, 3.5 Soms.Pike, Entry	6245d	Arm.Back, 2.5 Twists, 2 Soms.Pike, Entry	207c	Back, 3.5 Soms.Tuck, Entry
5152b	Forward, 2.5 Soms.Pike, 1 Twist, Entry	5285b	Back, 2.5 Twists, 2.5 Soms.Pike, Entry	6243d	Arm.Back, 1.5 Twists, 2 Soms.Pike, Entry
109c	Forward, 4.5 Soms.Tuck, Entry	626c	Arm.Back, 3 Soms.Tuck, Entry	287c	Reverse, 3.5 Soms.Tuck, Entry
207b	Back, 3.5 Soms.Pike, Entry	5156b	Forward, 2.5 Soms.Pike, 3 Twists, Entry	407b	Inward, 3.5 Soms.Pike, Entry
409c	Inward, 4.5 Soms.Tuck, Entry	6142d	Arm.Forward, 1 Twist, 2 Soms.Pike, 3.5 Twists	285c	Reverse, 2.5 Soms.Tuck, Entry
405b	Inward, 2.5 Soms.Pike, Entry	205b	Back, 2.5 Soms.Pike, Entry	5235d	Back, 2.5 Twists, 1.5 Soms.Pike, Entry
612b	Arm.Forward, 2 Soms.Pike, 3.5 Twists	105b	Forward, 1.5 Soms.Pike, Entry	405b	Inward, 1.5 Soms.Pike, Entry
101b	Forward, 0.5 Som.Pike, Entry	5331d	Reverse, 0.5 Twist, 1.5 Soms.Pike, Entry	5132d	Forward, 1.5 Soms.Pike, 1 Twist, Entry
614b	Arm.Forward, 2 Soms.Pike, Entry	5231d	Back, 0.5 Twist, 1.5 Soms.Pike, Entry	5154b	Forward, 2.5 Soms.Pike, 2 Twists, Entry

Label 1	Caption 1	Label 2	Caption 2	Label 3	Caption 3
5281b	Back, 1.5 Twists, 2.5 Soms.Pike, Entry	107c	Forward, 3.5 Soms.Tuck, Entry	105b	Forward, 2.5 Soms.Pike, Entry
6241b	Forward, 0.5 Twist, 2 Soms.Pike, Entry	5237d	Back, 3.5 Twists, 1.5 Soms.Pike, Entry	5353b	Reverse, 1.5 Twists, 2.5 Soms.Pike, Entry
5337d	Reverse, 3.5 Twists, 1.5 Soms.Pike, Entry	5355b	Reverse, 2.5 Twists, 2.5 Soms.Pike, Entry	405c	Inward, 2.5 Soms.Tuck, Entry
5335d	Reverse, 2.5 Twists, 1.5 Soms.Pike, Entry	5172b	Forward, 3.5 Soms.Pike, 1 Twist, Entry	636c	Arm.Reverse, 3 Soms.Tuck, Entry
205c	Back, 2.5 Soms.Tuck, Entry	626b	Arm.Back, 3 Soms.Pike, Entry	401b	Inward, 0.5 Som.Pike, Entry
5233d	Back, 1.5 Twists, 1.5 Soms.Pike, Entry	109b	Forward, 4.5 Soms.Pike, Entry	285c	Reverse, 1.5 Soms.Tuck, Entry