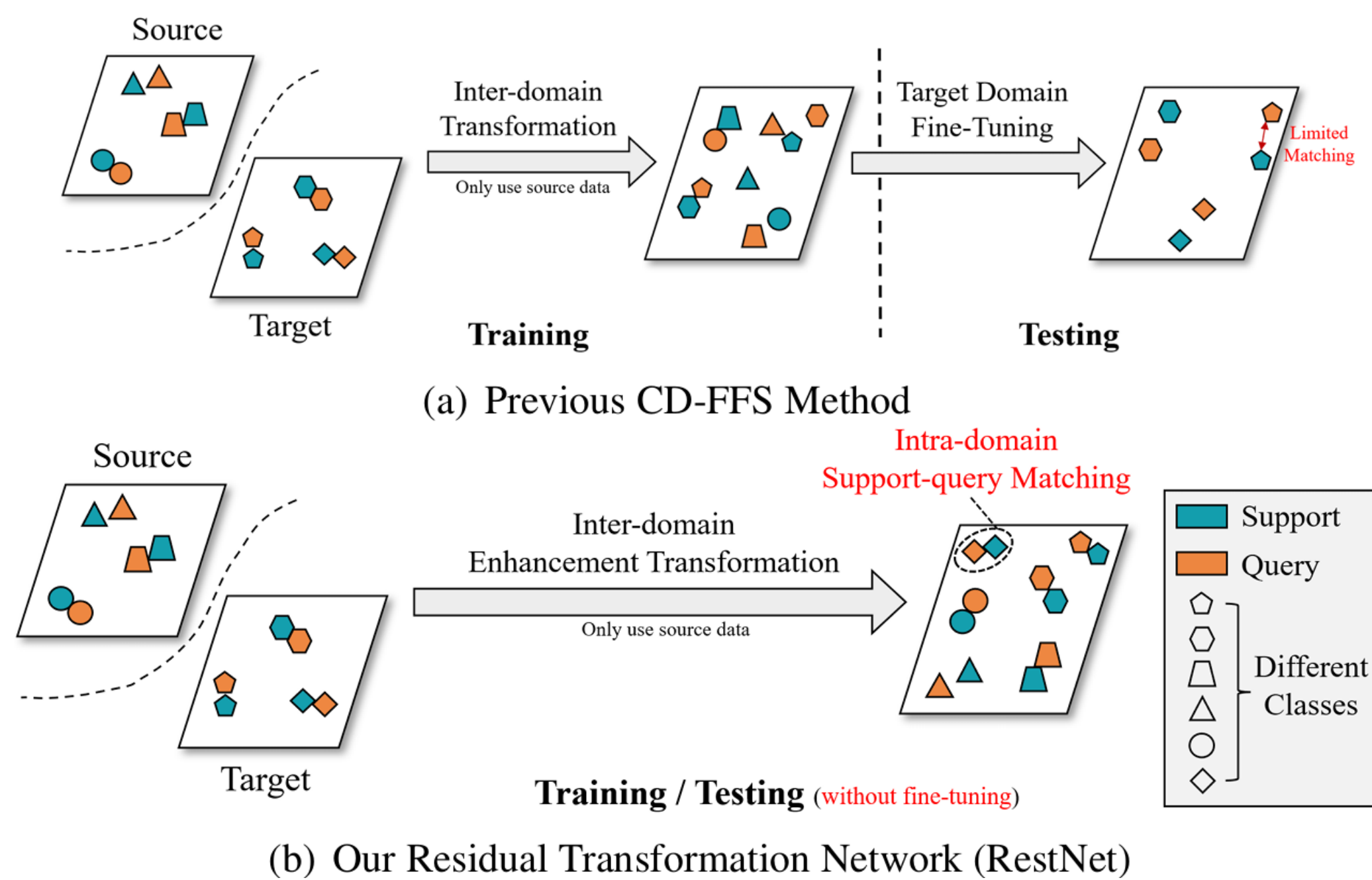


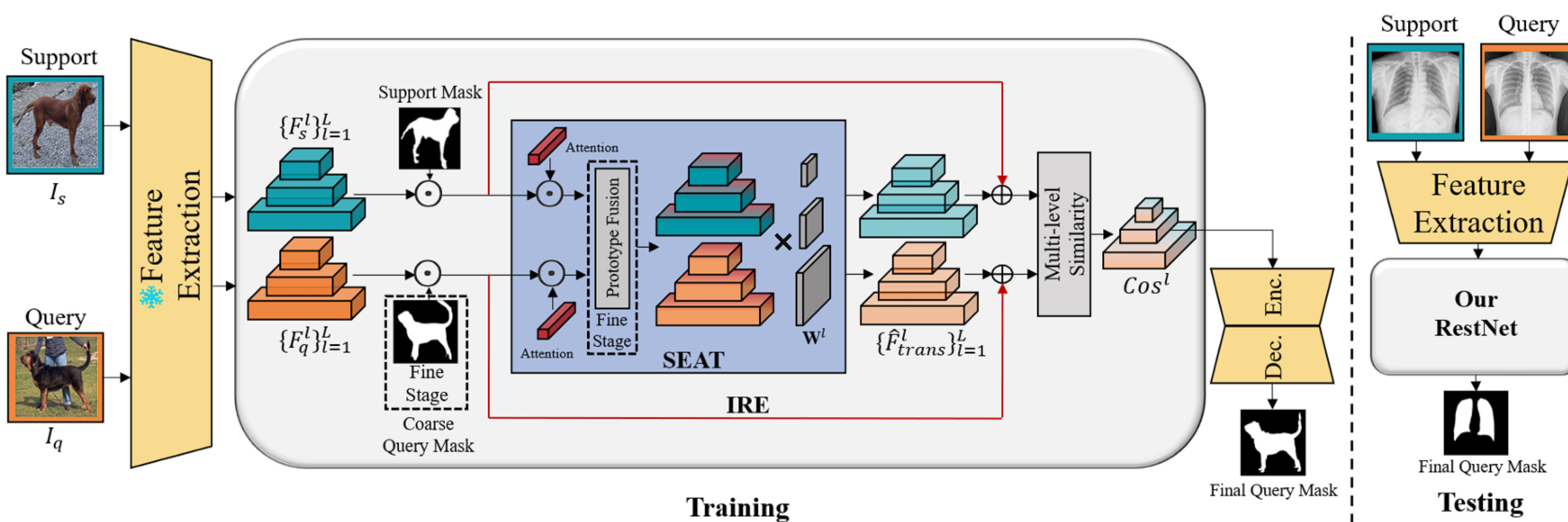
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The comparison between the previous cross-domain few-shot segmentation method and our RestNet.



Our RestNet learns knowledge from both inter-domain and intra-domain. It performs cross-domain enhancement transformation while preserving the intra-domain matching information.

The structure of our RestNet.



- The model maps support and query features to a new domain-independent space using Semantic Enhanced Anchor Transform (SEAT).
- The Intra-Domain Residual Enhancement (IRE) module is designed to preserve the matching information of the original feature space in the new space.
- The final mask is obtained by a prototype fusion mechanism in the fine stage.

Experimental results

Methods	Backbone	ISIC		Chest X-ray		FSS-1000		Average	
		1-shot	5-shot	1-shot	5-shot	1-shot	5-shot	1-shot	5-shot
Few-shot Segmentation Methods									
AMP	VGG-16	28.42	30.41	51.23	53.04	57.18	59.24	45.61	47.56
PGNet	ResNet-50	21.86	21.25	33.95	27.96	62.42	62.74	39.41	37.32
PANet	ResNet-50	25.29	33.99	57.75	69.31	69.15	71.68	50.73	58.33
CaNet	ResNet-50	25.16	28.22	28.35	28.62	70.67	72.03	41.39	42.96
RPMMS	ResNet-50	18.02	20.04	30.11	30.82	65.12	67.06	37.75	39.31
PFENet	ResNet-50	23.50	23.83	27.22	27.57	70.87	70.52	40.53	40.64
RePRI	ResNet-50	23.27	26.23	65.08	65.48	70.96	74.23	53.10	55.31
HSNet	ResNet-50	31.20	35.10	51.88	54.36	77.53	80.99	53.54	56.82
Cross-domain Few-shot Segmentation Methods									
PATNet	VGG-16	33.07	45.83	57.83	60.55	71.60	76.17	54.17	60.85
RestNet (Ours)	VGG-16	37.00	43.10	62.03	62.41	75.20	78.81	58.08	61.44
PATNet	ResNet-50	41.16	53.58	66.61	70.20	78.59	81.23	62.12	68.34
RestNet (Ours)	ResNet-50	42.25	51.10	70.43	73.69	81.53	84.89	64.74	69.89

- In the case of a large gap between the fields in the source domain dataset, our model achieves SOTA in all results for Chest X-rays.
- In ISIC, the mIOU of VGG-16 increased by 3.93% (1-shot), and the mIOU of ResNet-50 increased by 1.09% (1-shot).
- For FSS-1000, which has a relatively small gap from the source domain dataset, our model surpasses all existing methods and validates its advantages in CD-FSS.

Additional results

