

## A Simple Process for Creating Annotated Line Drawings and Photographs of Sign Language

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Asia-Pacific Congress on Deaf Education  
Tokyo, Japan

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## Objective

- Describe digital photographic, image manipulation and reproduction technologies to improve the reproduction of sign language drawings and photographs.



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## Sign Language Project

- Dr. Tang & Dr. Woodward are working to Develop Sign Language Dictionaries by Local Deaf Individuals in Viet Nam, Hong Kong, and Philippines
- Supported by the Nippon Foundation of Japan



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## Difficult to Document Sign Language

- Clear, notated images required to accurately show signs
- Most drawings/photos show annotation and many show initial and terminal position
- Most systems require artistic and technical skills
- Reproduction cost a significant issue

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## The Plan

- PEN-International to Work with Viet Nam and Hong Kong Centers
  - Review Existing Materials, find Ideal Format
  - Develop Processes, then Training for Both Locations
  - Present at APCD, then In-depth Training

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## Hong Kong Dictionary

- Sophisticated Image Manipulation in PhotoShop!
- Extremely High Quality Images
- Complex Photoshop Procedures



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## Viet Nam Dictionary

- Digital Photographs
- In PhotoShop
  - Convert to "Photocopy"
  - Erase
  - Draw - Redraw Lines
- Basis for Suggested Procedure
  - Subtractive Technique



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## Refined Viet Nam Technique

- Photograph on Green Background



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## Refined Viet Nam Technique

- Set Image Size



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## Refined Viet Nam Technique

- Set Image Size
- Remove Background



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## Refined Viet Nam Technique

- Set Image Size
- Remove Background
- Filter to Photocopy



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## Refined Viet Nam Technique

- Set Image Size
- Remove Background
- Filter to Photocopy
- Erase/Add



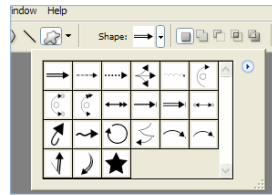
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## Added Notation System

- Custom Shapes from College of St. Benilde, Philippines
- Based on Thai Notation Marks



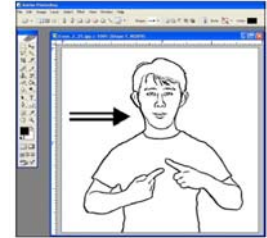
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## Added Notation System

- Simple to Add Critical Notation to Images



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## Produce Dictionaries in Word

- Word is Best Program for Producing Dictionaries
- Use Tables to Contain Images
- Autofit into Window



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## Future Work

- Share proposed system with experts for review
- Refine procedure for line drawings
- Begin review for photographic manipulation
- Offer training to members of the project team

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## Draft of Training Materials

[http://www.pen.ntid.rit.edu/pdf/ALL\\_Sign\\_Final.pdf](http://www.pen.ntid.rit.edu/pdf/ALL_Sign_Final.pdf)

- Entire Technique Available for Download



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