

# Scha's Parallel Lines

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## 1 Introduction

Scha (1981) has a famous example illustrating some remarkable constraints on the readings of plural NPs. What's striking is that some kinds of groupings are available, others aren't.

## 2 The Sentences and Corresponding Pictures

Sentence (1) is about figure 1, sentence (2) is about figure 2.

- (1) The sides of  $R_1$  run parallel to the sides of  $R_2$ .
- (2) The single lines run parallel to the double lines.

## 3 Code for Figure 1

```
\begin{figure}
\centering \setlength{\unitlength}{.5in}
\begin{picture}(6,4)
% first square
\put(0,4){\line(1,0){4}}%
\put(0,1){\line(1,0){4}}%
\put(0,1){\line(0,0){3}}%
\put(4,1){\line(0,0){3}}%

\put(.5,1.5){R$_1$}
\put(1.5,.5){R$_2$}

% lower square
\put(1,0){\line(1,0){5}}%
\put(1,1.5){\line(1,0){5}}%
\put(1,0){\line(0,0){1.5}}%
\put(6,0){\line(0,0){1.5}}
```

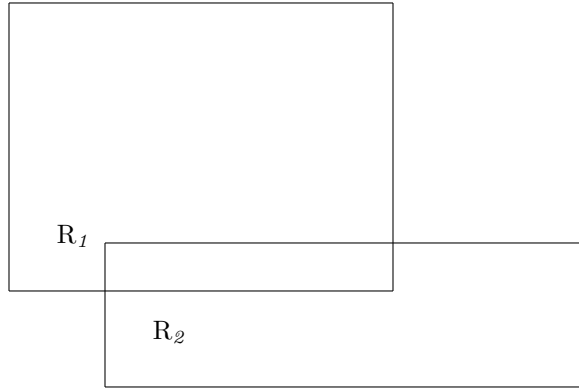


Figure 1: Rectangles

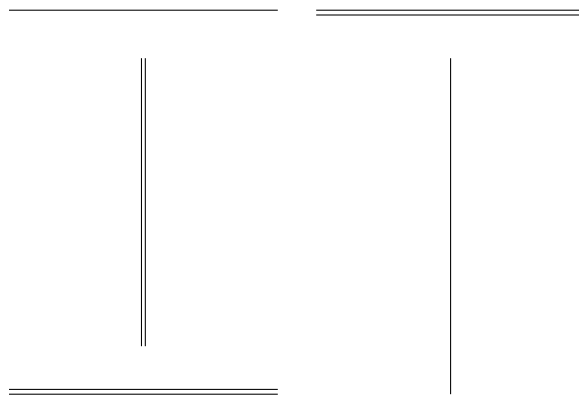


Figure 2: Lines

```

\end{picture}
\caption{Rectangles}
\label{fig:rec}
\end{figure}

```

## 4 Code for Figure 2

```

\begin{figure}
\centering \setlength{\unitlength}{.5in}
\begin{picture}(6,4) \put(0,4){\line(1,0){2.8}}

\put(0,0){\line(1,0){2.8}}
\put(0,.05){\line(1,0){2.8}}

\put(1.38,0.5){\line(0,0){3}}
\put(1.42,0.5){\line(0,0){3}}

\put(3.2,4){\line(1,0){2.8}}
\put(3.2,3.95){\line(1,0){2.8}}

\put(4.6,0){\line(0,0){3.5}}
\end{picture}
\caption{Lines}
\label{fig:lines}
\end{figure}

```

## References

Scha, R. “Distributive, Collective, and Cumulative Quantification”. In J. Groenendijk, T. Janssen, and M. Stokhof, eds., *Truth, Interpretation, and Information (GRASS 2)* (Dordrecht: Foris, 1981).