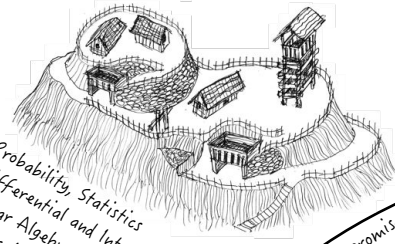


# Mandala of Statistics



Secret and not for sale!  
Final revision on 19 Nov. 2004  
Further revised on 07 July 1995  
Revised on 09 Nov. 1994  
Started on 10 Dec. 1993 by N. Minaka

## Basic Requirements to be a statistic human beings

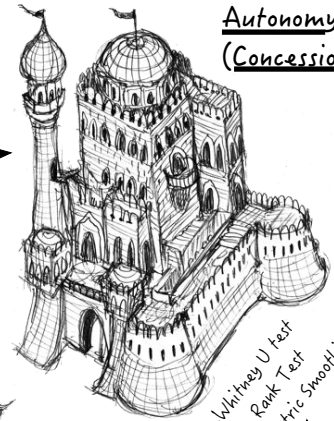


Probability, Statistics  
Differential and Integral Calculus,  
Linear Algebra, Geometry Algebra,  
Vector Analysis



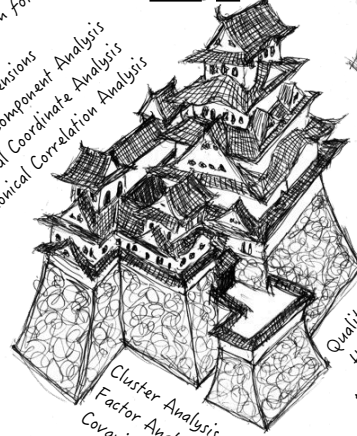
Artificial Life

## Nonparametric Autonomy (Concession)



Man-Wilcoxon U Test  
Wilcoxon Rank Test  
Nonparametric Smoothing

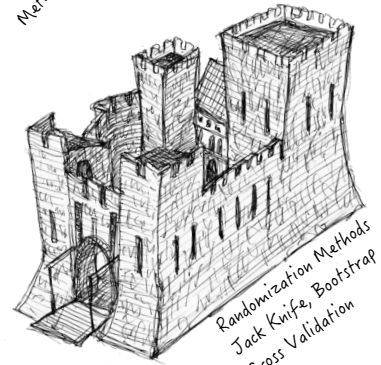
## Multivariate Analysis



Reducing Dimensions  
Principal Component Analysis  
Principal Coordinate Analysis  
Canonical Correlation Analysis

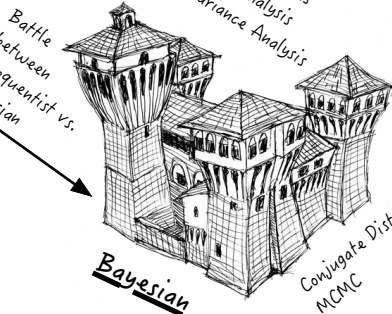
## Computational Statistics

Qualitative Data Analysis  
Hayashi's Quantification  
Methods (Very Very Japanese!)



Randomization Methods  
Jack Knife, Bootstrap  
Cross Validation

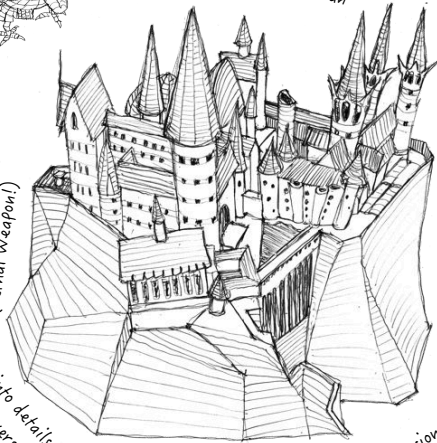
Statistical Tests



## Bayesian

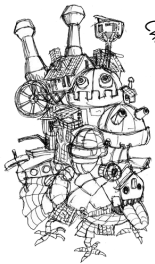
Battle between  
Frequentist vs.  
Bayesian

Conjugate Distri.  
MCMC



ANOVA, post hoc comparison  
Generalized Linear Models  
Discriminant Analysis  
Simple Regression  
Multiple Regression

## Nobel Empire of Normal Distri.



Neural Network  
Chaos

Binomial Distri.  
Poisson Distri.

Battle Royale among  
Neymann-Pearson  
Fisher  
Bayesian

Central Limit Theorem  
(Lethal Weapon)

Go into details  
Risk averse  
Hate Nonparametric



10-12 Oct. 2014 Univ. Tsukuba Hall, Ibaraki, Japan

# Annual Meeting of the Society of Population Ecology

第30回個体群生態学会大会 2014年10月11-12日 @ 筑波大学会館



## Two plenary sessions Statistics and Population Ecology

Yamamura, K. Dorazio, R.M.



Taper, M.L.

## Scaling from Life History Traits to the Population Dynamics

Bjornstat, O.N. Yamanaka, T.



Nelson, W.A.

Yamamichi, M.

詳しくはWebで!  
Go to Web for details!

## Three organized symposia

Comprehensive Understanding of Population Ecology by Multidisciplinary System

Research of the West Indian Sweet Potato Weevil by Kumano, N.

To Save Our Dining Tables with a Variety of Foods: Population Ecology of Crop  
Pollination and Pest Control by Yokoi, T. and K. Ohashi

Rice, Bugs, and Egrets by Mashiko, M.



and Clinics on Statistics by N. Minaka and E. Kasuya