Psychohistory: a primer

H. Seldon<sup>a,\*</sup> and G. Dornick<sup>b</sup>

<sup>a</sup>Psychohistory laboratory, Streeling university, Trantor

<sup>b</sup>Mathematics laboratory, Synnax University, Synnax

Abstract

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assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et.

Keywords: Psychohistory, Encyclopedia

1. Introduction

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\*Corresponding author. E-mail address: hari.seldon@str.edu

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#### 2. Foundations

Psychohistory depends on the idea that, while one cannot foresee the actions of a particular individual, the laws of statistics as applied to large groups of people could predict the general flow of future events. Asimov used the analogy of a gas: An observer has great difficulty in predicting the motion of a single molecule in a gas, but with the kinetic theory can predict the mass action of the gas to a high level of accuracy [1]. Seldon applied this concept to the population of the Galactic Empire, which numbered one quintillion, by defining two axioms:

- the population whose behaviour was modelled should be sufficiently large to represent the entire society.
- the population should remain in ignorance of the results of the application of psychohistorical analyses because if it is aware, the group changes its behaviour.

Ebling Mis added these axioms:

• there would be no fundamental change in the society human reactions to stimuli would remain constant.

Golan Trevize in Foundation and Earth added this axiom:

• humans are the only sentient intelligence in the galaxy.

#### 2.1. Probability and Psychohistory

Psychohistory relies on the Seldon central limit theorem¹:

$$\sqrt{n} \frac{\bar{X}_n - \mu}{\sigma} \to \mathcal{N}(0, 1), \tag{1}$$

where  $\dots$ 

2.2. Features

2.2.1. Table

Below is Table 1.  $\,$ 

Table 1: Example

Substance	Subcritical °C	Supercritical °C
Hydrochloric Acid	12.0	92.1
Sodium Myreth Sulfate	16.6	104
Potassium Hydroxide	24.7	

## 2.2.2. Figures

#### Below is Fig. 1.

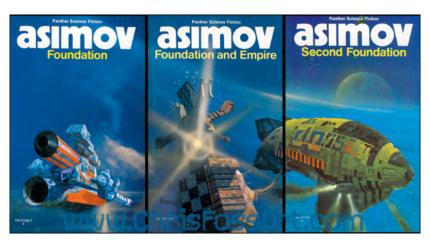


Figure 1: Books cover

 $<sup>^1\</sup>mathrm{It}$  is actually the classical central limit theorem  $\ensuremath{\mathfrak{S}}$ 

## 2.2.3. Subfigures

Below are Fig. 2a and Fig. 2b.



Figure 2: (a) Left image and (b) Right image





(a) (b)

Figure 3: (a) Left image and (b) Right image

# A. Appendix A

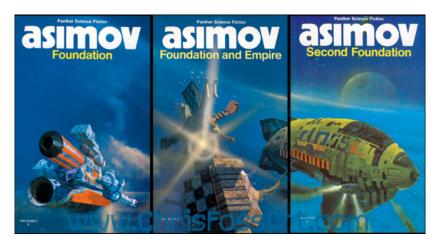


Figure A.1: Books cover

In Fig. A.1

$$y = f(x) \tag{A.1}$$

In Table A.1

Table A.1: Example

Substance	Subcritical °C	Supercritical °C
Hydrochloric Acid	12.0	92.1
Sodium Myreth Sulfate	16.6	104
Potassium Hydroxide	24.7	

# B. Appendix B

In Eq. (B.1)

$$y = f(x) \tag{B.1}$$

Below are Fig. B.1a and Fig. B.1b.



Figure B.1: (a) Left image and (b) Right image

## References

[1] H. Seldon, "The mathematics of Psychohistory,"  $Universal\ Journal\ of\ Psychohistory$ , pp. 1–10, 1210.