

## ON THE IMPERTURBABILITY OF ELEVATOR OPERATORS : LVII

S CANDLESTICKMAKER *Institute for Studied Advances, Old Cardigan, Wales* (Communicated by John Sykes; received October 19, 1910)

### ABSTRACT

In this paper the theory of elevator operators is completed to the extent that is needed in the elementary theory of Field's. It is shown that the matrix of an elevator operator cannot be inverted, no matter how rapid the elevation. An explicit solution is obtained for the case when the occupation number is zero.

### 1. INTRODUCTION

In an earlier paper (Candlestickmaker 1954q; this paper will be referred to hereafter as 'XXXVIII') the simultaneous effect of a magnetic field, an electric field, a Marshall field, rotation, revolution, translation, and retranslation on the equanimity of an elevator operator has been considered. However, the discussion in that paper was limited to the case when incivility sets in as a stationary pattern of dejection; the alternative possibility of overcivility was not considered. This latter possibility is known to occur when a Marshall field alone is present; and its occurrence has been experimentally demonstrated by Shopwalker and Salesperson (1955) in complete disagreement with the theoretical predictions (Nostradamus 1555). The possibility of the occurrence of overcivility when no Marshall field is present has also been investigated (Candlestickmaker 1954t); and it has been shown that with substances such as U and I it cannot occur. It is therefore a matter of some importance that the manner of the onset of incivility be determined. This paper is devoted to this problem.

### 2. THE REDUCTION TO A TWELFTH-ORDER CHARACTERISTIC VALUE PROBLEM IN CASE OPERATORS A, B AND C ARE LOOKING IN THE SAME DIRECTION

The notation is more or less the same as in XXXVIII.

#### Definitions

- $\gamma$  = first occupant,      $B_\eta$  = second occupant,
- $g_g$  = third occupant,      $O$  = operator,
- $a$  = acceleration of elevation of the conglomeration,
- $\Omega_{21}$  = critical Étage number for the onset of incivility,
- $\Omega_{212} = \Omega_{21}/\pi^{11/7}$ ,      $m(o)$  = matrix of operator.

The basic equations of the problem on hand are (cf. XXXVIII, eqs. [429] and [587])

$$\frac{\partial \alpha}{\partial \beta} = \gamma \omega + n \nabla^2 j, \tag{1}$$

$$(5 + \pi) B_\eta = a + b + c, \tag{2}$$

$$x = x, \tag{3}$$

and

$$g_g + \frac{1}{2} m v^2 = 1. \tag{4}$$

Using also the relation (Pythagoras - 520)

$$3^2 + 4^2 = 5^2, \tag{5}$$

we find, after some lengthy calculations,

$$|m| = 0, \tag{6}$$

which shows that the matrix of the operator cannot be inverted. The required characteristic values  $\Omega_{21}$  are the solutions of equation (6). From the magnitude of the numerical work which was already needed for obtaining the solution for the purely rational case (cf. Candlestickmaker and Canna Helpit 1955) we may conclude that a direct solution of the characteristic value problem presented by equation (6) would be downright miraculous. Fortunately, as in XXXVIII, the problem can be solved explicitly in the case when the occupation number is zero. This is admittedly a case which has never occurred within living memory. However, from past experience with problems of this kind one may feel that any solution is better than none.