

THE FLUCTUATION OF THE NUMBER OF PERSONS ATTENDING THE LECTURE CYCLES ORGANIZED IN THE “GRIGORE ANTIPA” MUSEUM OF NATURAL HISTORY

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On établit 3 périodes dans le cadre du cycle de conférences 1974—1980 ce qui pourra permettre à l'avenir l'utilisation d'un test de structure et d'opinion du public ainsi qu'une planification plus efficace des thèmes d'un cycle.

Within the framework of the relationship of the « Grigore Antipa » Museum with the public, the Sunday lectures offer additional scientific information in an every day language. The museologists undertook several studies analysing the structure of the audience, its constancy degree as well as its preferences to various subjects (Dumitrescu, Murariu, Manoleli, 1975; Dumitrescu, 1976, 1977). Examined were also the organization of the lecture cycles, their popularization, the role of the lecture title as well as of the speaker in attracting the public (Dumitrescu, Murariu, Găldean, Manoleli, 1979).

In the present paper, we would like to show the audience distribution during the 1974—1980 period. The identification of the periods of maximum and minimum affluence is useful, in our opinion, in the organization of the lecture cycles.

MATERIAL AND METHOD

The data used concerning the lecture audience refer only to the last 6 lecture cycles, because before 1974 the museographers on duty did not give, when drawing up the daily reports, detailed information about the public attending the lectures.

We calculated the percentage of listeners for each lecture as compared to the total number of listeners along the whole cycle. The comparison of the yearly dynamics of these percentages allowed the identification of four periods; two of them proved to be insignificantly different and we reunited them into a single one (period A) with two subperiods (A_1 and A_2) (Tab. 1). The three periods were compared through the comparison of the average number of attending persons (except those who came uniquely for the film galas) by using a method taken from G. W. Snedecor's paper (1968).

$$t = \frac{\bar{X}_1 - \bar{X}_2}{S_{\bar{X}_1 - \bar{X}_2}}$$

t = the value of Student distribution
 X = a variable
 \bar{X} = the arithmetic mean of a variable
 $S_{\bar{X}_1 - \bar{X}_2}$ = the estimate of standard deviation of the difference between arithmetic means (for equal number of elements of equal samples and standard deviation)

TABLE I

The time limits of the periods (A,B and C) established for the 1974 — 1980 lecture cycles

Lecture cycle	Period			
	A ₁	B	C	A ₂
1974—1975	30.XI—8.XII	15.XII—12.I	19.I—23.III	30.III—27.IV
1975—1976	23.XI—7.XII	14.XII—11.I	18.I—28.III	4.IV—25.IV
1976—1977	24.X —5.XII	12.XII—9.I	16.I—27.II	interruption 4. III earthquake
1977—1978	27.X —4.XII	11.XII—8.I	15.I—26.III	2.IV—23.IV
1978—1979	22.X —3.XII	10.XII—7.I	14.I—25.III	1.IV—15.IV
1979—1980	21.X —2.XII	9.XII—6.I	13.I—23.III	3.IV—20.IV

RESULTS AND DISCUSSION

The three identified periods registered distinct means in two cases: 1. mean A different from mean C and mean B different from mean C, for $P < 0.01$; 2. their difference is debatable: A higher or equal to B, $P < 0.2$ (Tab. 2). However, we kept the insignificantly distinct periods A and B, as period B included the winter holidays when the obvious decrease of the audience number required the introduction of a film gala meant to enliven this activity of the museum. On the other hand, as the number of lecture cycles involved in this analysis is small, it is highly possible that an exception might influence the arithmetic mean of a period.

It results from tables 2, 3 and 4 that the order of the mean values of the three periods is the following: C higher than A and A higher or equal to B.

It is worth mentioning that the average number of lectures was 8.5 for period A, 4.2 for period B and 10.1 for period C. During periods A and C, the arithmetic means of the number were influenced by the interruption of the 1976—1977 lecture cycle because of the 4th of March 1977 earthquake.

TABLE 2

Values used in the calculation of t_{A-B} ($t_{A-B} = 1.49$, $t_{0.2} = 1.372$) DF = degrees of freedom

	Nr.	DF	\bar{X}	$\Sigma (X-\bar{X})^2$
A	6	5	80	1282.30
B	6	5	69.57	3246.22
A-B	12	10	18.43	4528.60

TABLE 3

Values used in the calculation of t_{A-C} ($t_{A-C} = 3.64$, $t_{0.01} = 3.169$)

	Nr.	DF	\bar{X}	$\Sigma (X-\bar{X})^2$
A	6	5	88	1282.38
C	6	5	121.84	1301.24
A-C	12	10	33.84	2583.62

TABLE 4

Values used in the calculation of t_{B-C} ($t_{B-C} = 4.23$, $t_{0.01} = 3.169$)

	Nr.	DF	\bar{X}	$\Sigma (X-\bar{X})^2$
B	6	5	69.57	3246.22
C	6	5	121.84	1301.24
B-C	12	10	52.21	4547.46

CONCLUSIONS

The identification of the above mentioned periods may be useful when taking bearings concerning the structure of the public and its opinions, stratified in accordance with the period. We consider that it is necessary to take bearings because the last identification of the above mentioned characteristics was made during the 1973-1974 lecture cycle (Dumitrescu, Murariu, Manoleli, op. cit.). Moreover, we think that the three periods must be taken into consideration when planning the lectures within the future cycles. In this sense, the subjects according to which are grouped

the lectures should be distributed in the three periods to the total number of lectures of that period. Moreover, this distribution should not be preferential. The application of this method will supply more precise information on the preferences of the audience to the various subjects.

FLUCTUAȚIILE NUMĂRULUI DE AUDITORI ÎN CICLURILE DE CONFERINȚE ORGANIZATE LA MUZEUL DE ISTORIE NATURALĂ «GRIGORE ANTIPA»

REZUMAT

Lucrarea are ca obiect stabilirea unei metode mai precise de comparare a temelor aparținând unui ciclu de conferințe.

Autorii au stabilit procentul pe care îl reprezintă o conferință din totalul ciclului, în cadrul a 6 cicluri succesive (1974—1980). Compararea dinamicii anuale a acestor procente a relevat trei perioade în intervalul de timp al unui ciclu (A, B și C).

Compararea mediilor auditorilor din fiecare perioadă a relevat diferențe semnificative.

Determinarea perioadelor cu public puțin numeros sau mai numeros este utilă în efectuarea unui sondaj de structură și opinie a publicului și la programarea conferințelor în ciclurile viitoare.

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