P.2. $$\sum_{r=0}^{n} |{}^{n}T_r^*| = |{}^{n+1}T_0^*| \qquad (= 1 \text{ for } n = 0).$$

REMARKS. We wish to draw attention to the fact that we obtained Tribonacci Numbers from Stanton and Cowan's Diagram. Such a generalization to higher dimensions may be possible but it is very complicated as it is exceedingly difficult to picture these numbers. However there are other ways of obtaining these numbers as for example Tribonacci numbers from the expansion of $(1+x+x^2)^n$ [4].

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4. V. E. Hoggatt, Jr., and Marjorie Bicknell, "Generalized Fibonacci Polynomials," *The Fibonacci Quarterly,* Vol. 11, No. 5 (1973), p. 457.

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(6) $$\begin{cases} C_1R_1 + C_2R_2 + C_3R_3 = 1 \\ C_1R_1^2 + C_2R_2^2 + C_3R_3^2 = 3 \\ C_1R_1^3 + C_2R_2^3 + C_3R_3^3 = 6, \end{cases}$$

whose determinant is

(7) $$D = \begin{vmatrix} R_1 & R_2 & R_3 \\ R_1^2 & R_2^2 & R_3^2 \\ R_1^3 & R_2^3 & R_3^3 \end{vmatrix} = (R_1 - R_2)(R_1 - R_3)(R_2 - R_3) = 7.$$

Thus, using Cramer's rule, one obtains constants as

(8) $$\begin{cases} C_1 = \frac{1}{7} R_2R_3(R_3 - R_2)[6 - 3(R_2 + R_3) + R_2R_3] \\ C_2 = \frac{1}{7} R_1R_3(R_1 - R_3)[6 - 3(R_1 + R_3) + R_1R_3] \\ C_3 = \frac{1}{7} R_1R_2(R_2 - R_1)[6 - 3(R_1 + R_2) + R_1R_2], \end{cases}$$

which reduce simply to the fixed numbers

(9) $$C_1 = \tfrac{1}{7}(3 - R_3), \qquad C_2 = \tfrac{1}{7}(3 - R_1), \qquad C_3 = \tfrac{1}{7}(3 - R_2)$$

when many discovered relations between the three roots are taken into account. These involve the following.

Relations between the roots and the coefficient of the cubic gives

(10) $$R_1 + R_2 + R_3 = 2, \quad R_1R_2 + R_1R_3 + R_2R_3 = -1, \quad R_1R_2R_3 = -1,$$

while from the discriminant we have

(11) $$(R_1 - R_2)(R_1 - R_3)(R_2 - R_3) = \sqrt{49} = 7.$$

Use of these and the relation $R_1^2 + R_2^2 + R_3^2 = 6$ furnish, after some manipulation,

(12) $$\begin{cases} R_1R_3^2 + R_2R_1^2 + R_3R_2^2 = 4 \\ R_1R_2^2 + R_2R_3^2 + R_3R_1^2 = -3. \end{cases}$$

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