

zero	0	THE OPPOSED PRINCIPLES
one	1	Ralph Beard, October 1161; (1945.)
two	2	Members of the Duodecimal Society are somewhat accustomed to the mention of the Principle of Least Change, and the Principle of Separate Identity. But comment from the members seems to show that a clearer exposition of these principles would be appreciated.
three	3	Since it is important that these principles, and the divergence which they represent, be thoroughly understood so that they may be advantageously applied, an attempt will be made to bring these principles into better definition.
four	4	Duodecimal proposals divide themselves, readily, into two groups. These groups are named for the principle which typifies each.
five	5	CLASSIFICATION UNDER THE PRINCIPLE OF LEAST CHANGE
six	6	Most duodecimal proposals are conceived with the fundamental purpose of making that specific proposal most acceptable to the mind of the general public. They are quite easily characterized as embodying the Principle of Least Change.
seven	7	Least change They usually contemplate no change in the names and the symbols for the first nine numbers, and sometimes propose to retain the customary names for ten and eleven when used duodecimally.
eight	8	They exhibit a similar approach to the duodecimal weights and measures. The sizes and names of the accepted Anglo-American standards are retained as faithfully as possible, and these are adjusted by minor changes into a duodecimally unified metric system.
nine	9	CLASSIFICATION UNDER THE PRINCIPLE OF SEPARATE IDENTITY
dek	X	The outstanding characteristic of duodecimal proposals that fall within this group, is that they are designed to prevent any possible confusion with decimal quantities of measures. They generally propose entirely new symbols for all numbers and new names for these numbers.
el	Σ	Since they already embrace the necessity for complete change, they afford the opportunity for the suggestion of every novel practice and method that may seem to improve our current procedures. New practices in grouping, denominating, and punctuating numbers are typical.

Figure 1: A least change symbol set, this by William Dwiggins

There is a corresponding revisionary attitude as to the weights and measures. These are generally to be based upon some specific method of determining a new unit of length, and around this unit is erected a conformal duodecimal metric system.

Traits typical of this group, then, are the general disregard of customary methods and practices, and the proposal of radical and novel procedures in numeration, notation, nomenclature and metrology.

RATIONALE

These classifications seem simple and clear. But confusion will continue unless it is comprehended that this separation means more than at first appears. There is a fundamental difference in ideologies involved.

As one becomes more familiar with duodecimals, and duodecimal proposals, one begins to perceive that there are supporting factors for both groups. One begins to see that in some applications there would be greater advantage in the one type of system than in the other. And that under other conditions, the reverse would be true, and that what had been considered essential had become secondary.

As an analogy, the general public makes little use of the Kelvin Temperature Scale which is based on Absolute Zero, but prefers a scale emphasizing the freezing and boiling points of water. For some scientists, however, there are advantages in the use of the Kelvin Scale which makes it indispensable.

It must be realized that it is from the proposals under the Principle of Separate Identity that the innovations and inventions are developed which constitute progress. And these new ideas are valuable. But to the general public, the idea of changing all the names and symbols for numbers would be simply repulsive, and entirely unthinkable, and proposals involving as little change as possible are required.

So both systems are necessary. It should be the responsibility of the Society to develop both. And when a practical degree of unanimity is expressed in a proposal under either of the two principles, that proposal should be endorsed by the Society. It must be clear that the endorsement does not mean acceptance of the one principle and the suppression of the other. Nor does it imply the necessity of blending both principles into a single solution. Both are necessary. Both are important. But they are opposed, and relatively unblendable.

Different necessities, different viewpoints, different logics, are inherent in each. We will only create confusion and useless dissension if

0	zero
J	yun
⚡	dow
Ψ	tri
†	kaw
λ	vin
✗	hex
¶	sef
‡	okt
ℳ	non
Ἑ	xen
Ἑ	elf

Figure 2: A separate identity symbol set by P. D. Thomas

we apply to some proposal under the Principle of Least Change the arguments and critiques that are entirely proper to the Principle of Separate Identity. And the reverse. This just won't work. Since opposed lines of thought are involved, there must be a corresponding change of attitude as we consider the one or the other.

Since each of these groups has its own definite factors of preference, it would be well to avail ourselves of these advantages intelligently, — to analyze each new proposal from the viewpoint specifically proper to it, — and to aid in the development of a consensus as to each, by making our judgments known.

"there will be unbiased presentation of all such proposals" Recently there has been a considerable amount of discussion of the duodecimal terms and symbols used by the Society. Perhaps it would be well to set forth the Society's attitude in the matter.

When formal organization of the society was undertaken, it was decided that we would continue to use the Dek (X), El (Σ), and Do, which, over a period of some eight or nine years, had become accepted as the usage of the informal society.

All of the Society's duodecimal material, currently in the hands of the public, employs this usage. Moreover, there is a solid basis for its preference. The symbol "X" for ten, was used exclusively throughout western civilization from early Roman days until the last years of the thirteenth Century. And all European names for ten are derived from the Latin "decem," pronounced "dekem."

A review of all duodecimal proposals has shown that there is a preponderance of preference for these terms, Dek and El, over any other names and symbols. No other terms which have been considered can marshall an equal weight of argument. Since confusion of the public mind is to be avoided if duodecimals, and the Society, are to make solid progress, this usage is not to be lightly changed.

When the weight of preference shifts to some other usage, and we can be confident of unanimity and finality in that choice, then the change should be made through official action of the Society. This possibility is not to be neglected. For this reason, there will be unbiased presentation of all such proposals, and the adoption of an accepted usage by the Society does not in the least preclude consideration of any and every proposal under the Principle of Least Change.

For our personal use, of course, we shall employ those terms and symbols preferable to each of us. When any of our papers are selected for publication it will be easy to substitute the accepted usage. ■■■

☞ See our *Bulletin*, VOL. 1 № 3 pp. Σ;—11; for Mr. Beard's original article.

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Got a friend into numbers who would appreciate a sample copy of our *Bulletin*?
Send in his or her name and address—we'll send one their way.

EUGENE MAXWELL "SKIP" SCIFRES

DSA MEMBER № 11; ~ REST IN PEACE

Lt. Eugene M. Scifres, a Reconnaissance Officer in the U.S. Army Air Corps, was born on the thirteenth day of February in 1916. The Duodecimal Society of America was founded in 1944, and in 1945 "Skip" became our thirteenth member (№. 11;) of our fledgling Society. A baker's dozen—twelve plus one—was certainly a lucky number for the DSA.

His nickname, Skip, was bestowed upon him when his schoolmates and teachers had trouble with his surname, "Scifres".

In 1963 he was elected to our Board of Directors joining the illustrious Class of 1966, whose other members were the dozenal stalwarts F. Emerson Andrews, a founder and first President who later had served as Board Chair; Henry C. Churchman, Vice President who later edited our *Bulletin* for many years; and Jamison "Jux" Handy, who served as assistant editor and editor at various times. Skip served on the Board for 1½ dozen years. In 1965 he was elected to the position of Treasurer, an office he held for a dozen years.

Skip was an engineer, a pioneer computer programmer and systems analyst, and a prize winning photographer.

For many years Skip belonged to the Two by Two Fellowship at Washington Park Community Church (now Washington Park United Methodist), serving as their president in 1957. Later he attended Calvary Temple, where he belonged to a Bible study group, served as an usher and volunteer (doing computer projects, of course).

He was devoted to his family and is survived by his daughter Beverly, his granddaughters, Meghan and Robin, his great granddaughter, Lola, his wife Georgette and her children, Melanie and Dean, as well as four nephews, Bill, Dennis, Wally and Rick Scifres.

Skip was a wonderful man—always kind, loving, helpful, positive, and interesting. Having lived almost eight dozen years, he outlived a great many of his friends, but those that remain will mourn his passing including all of us in the DSA who knew him. ■■■

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☞ See the Problem Corner, page 23; of this issue for a problem that Skip submitted to us 18; (20.) years ago.

