

VI. Appendix

	1. <i>Research in General</i> Principles	
	2. <i>Language Education</i> 2HA and Universal Grammar	
	2HA and Corpus Research	
	Halliday and Polarity	
	Scientific Literature and Nominalization	
	Rhetorical Devices and the 2HA	
	Poetic Look at the Strata Problems	
	3. <i>Something Deeper</i> Bipolarities of Humans, Universe, and Nature	
	Five Secondary Polarities	
	Everything is Two	
	4. <i>2HA Supplements</i> Adjuncts	
	Verbal Retro Clause Referral	
	More About the <i>Other</i> Kind of Word	
	More Ideas for the Classroom	
	30 Word List Categories	
	Words Have Wings	
	More Sample Student Compositions	
	Order of Achievement and Value Chart	
	Perceived Negativity About Silence	
	5. <i>On the Web</i> Online Text Sources	
	Some Less Simplified Online English Grammars	
	Linguist Creed	

Appendix 1: Principles



Initial Sampling of Guiding Principles for a New Approach

Researchers, authors, and teachers should spell out their guiding principles, and the principles should lead to something useful.

Too many times what is thought to be a breakthrough is only a new psychological slant on the learning process, or a new perspective on a certain aspect of language such as something about grammar or vocabulary or discourse.

These days, *some* of the language theorists (i.e. Nunan, Richards) are writing books for prominent publishing companies, and those books *may* eventually impact on the learning of students *somewhere*. For that, we should be thankful for designs that do have some practical merit.

Robins (1989) mentions that the science of linguistics “*deals with a specific body of material, namely spoken and written language, and that it proceeds by operations that can be publicly communicated and described, and justified by reference to statable principles and to a theory capable of formulation.*” He then mentions three canons of science that should be used as guiding principles:

1. **exhaustiveness** – *adequate treatment of all the material*
2. **consistency** – *the absence of contradiction between the different parts of the total statement*
3. **economy** – *whereby (other things being equal) a shorter statement or analysis employing fewer terms is preferred to one that is longer or more involved. This is sometimes referred to as the “capturing of generalizations”.* (Robins 1989)

Medieval philosophy called the third principle above, the *Theory of Ockham’s Razor*, named after William of Ockham. In cybernetics and systems science, this principle is called the **Principle of Parsimony**.

If science has only three canons, then the criteria for a language teaching method should exemplify those three principles at least. But upon serious reflection, many more than the three are apparent. What follows is a list of 25 such principles. Any new approach to language should reflect all these new principles to be adequate, but the components of the Approach itself should be few, according to the principle of economy or parsimony stated above. These components, however, should be able to generate a rich variety of possibilities and operations.

If you look at simple systems in nature and human culture, we observe that a few fundamental forms can be employed to produce multiple combinations of tremendous variety.

Appendix 1: Principles

Area	Constituent Forms	Range of Variant Expression
1. Alphabet	26 letters ¹	all words of the English dictionary
2. Genetics	4 nitrogen bases	DNA coding for all animal, plant, bacterial, fungal species
3. Proteins	20 amino acids (but actually only 5 are enough. See footnote ² below.)	20 are needed to give all proteins, but five are enough to give functional folding proteins (three can give an <i>alpha helix</i>).
4. Music	8 tones	all melodies, symphonies, etc
5. Computer Screen Color	red-green-blue light	16.8 million RGB colors
6. Sentences	10 + 1 forms	132 sub-forms; infinite variations within its framework and in the new innovative forms to which it can give birth

Contemporary systems theory (as stated at the *Principia Cybernetica* website) calls this characteristic of systems, the **Law of Requisite Variety**, which it states as follows:

The larger the variety of actions available to a control system, the larger the variety of perturbations it is able to compensate.

Or, in plainer language, *we should always try to maximize its internal variety (or diversity), so as to be optimally prepared for any foreseeable or unforeseeable contingency.*

And every language teacher knows that language is filled with unforeseen contingencies.

¹ In 1446, when King Sejong of Korea and his scholars designed the Korean alphabet, it had 28 symbols – the same as the number of teeth in the young human (not counting the four wisdom teeth). Was this coincidence? I have heard nothing that would lend support to or falsify any such claim. Korean now employs 24 symbols.

² See C. Wu's article *An alphabet for a letter-perfect protein* in Science News Vol 152 p.214 1997.10.4). Researchers have found that a reduced alphabet of only five amino acids is enough to make a working protein.

Here, therefore, are **25 principles** which any new language paradigm should incorporate:

- **simple to complex**
It should proceed from the simple to the complex, a gradual progression.
- **familiar to unfamiliar**
It should proceed from what is familiar and known to what is unfamiliar and what is unknown. The more widely known the starting reference points, and the more widely known the navigational compasses used, the more universal will be the appeal of the paradigm.
- **manageable number of parts**
Ockham's Razor states that *all else being equal, the simpler theory is preferable*. In other words, the system must not lead us into a labyrinthine collection of abstruse terms or rules. The remote control must not have too many buttons. It must be manageable.
Modern psychological research maintains that there is a limit to the number of items that are retainable at one time in human memory. The suggested number of items is from seven to ten, or alternatively it should offer a simpler binary, tertiary, or other number system that incorporates multiple numbers under it in an easy and memorable way.³
- **simple logic for each part**
The system should have an easy way to facilitate recall of the few (not many) parts that compose it. It should be easy to learn and easy to remember.
- **an underlying principle of balance and maturity**
The system should have balance and maturity. Although mature, it should also be simple enough for upper middle school or high school students to learn. It should not present a frightening maze to the student.
- **communicative**
It should encourage communication between students, teachers, cultures, classrooms, citizens, and netizens.
- **authentic**
It should reflect real life experiences, be they trite or overwhelming. It should be rooted in grassroots (read *student*) experiences, not the experiences of teenagers imagined by an older textbook writer.
- **personal meaning**
It should allow students to find meaning, self-expression, and even self-actualization. It should provide a means for development of maximum potential through the understanding of human nature and the world around us.
- **social meaning**
Through interaction and sharing of work with others (peer group, mentor or teacher, literary greats) the work should give opportunities for students to collectively share ideas and experiences. It should develop a sense of local, national, and world community
- **open-ended**

³ We are here listing 25 principles - which would appear to violate the recommendation of a limit of seven to ten, but these principles *justify* the system and *are not the component parts* of the system itself. They prove the system's validity, but no one needs to memorize them once they have justified the system.

Appendix 1: Principles

The system should be open-ended. Print publications (like software) fall quickly into obsolescence. There needs to be a means to allow for fresh input and frequently updated information and materials.

■ human-centered

It must be rooted in something human. Ideally it should inspire, motivate, uplift, instruct, and interest human beings.

■ holistic

Ideally, it should include material or methods touching on all the dimensions of human experience: physical, mental, social, and spiritual.

■ interpersonal

It should allow for interpersonal opportunities. The more personal the content, the higher is the chance for students to become interested in one another and to remember what they have learned.

■ interactive

It should have a multi-sensory or multi-modal aspect. Are students always sitting stationary in their seats? Is there a computer aspect to the system? Is there a tactile component?

■ contemporary

The newer the material, the more appeal it will have. It should reflect the problems, issues, and triumphs of the times.

■ cumulative or integrative or entirely original

It should develop a totally new perspective on the science of language, and it should incorporate the best aspects of all the earlier theories.

■ socially relevant

The more it directs itself to the problems or state of the world around us, the more appeal it will have.

■ systematic and proportional

It should look organized, have image and structure, balance and proportion. A haphazard motley collage of ideas with no direction, continuity, cohesion, or proportion will not connect with students or teachers.

■ practical and visible, demonstrating tangible outcomes

It should lead the students to a certain level of fluency. It should generate hard copy evidence that it is working. Success should be visible from the early parts of the program, be visible to all, and be gladly shared by all.

■ learner friendly

Students should report that the program is interesting and enjoyable. The level and pace of instruction should be organized in such a way that all the students' capabilities and experiences are challenged and imaginatively and spontaneously employed, but not in an overwhelming, embarrassing, or unduly stressful manner.

■ task-based

It should provide a variety of tasks that allow for initiative, independence, and individuality.

■ learner generated

The more it encourages students to tap into their own creative potential and experience, the more meaningful, memorable, and successful it will be. It should reach into the students' experiential memory banks, teaching by student examples. It should also teach using examples from famous EFL writers – all of whom had to go through the difficult process of learning and writing in a second language.

■ economical use of both money and time

It should not be too costly nor should it be too time-consuming. It should be readily accessible to the non-English speaking masses, especially in an age when English is becoming an almost universal language.

■ **theoretical superstructure, or underlying experiential and metaphysical foundation of the theory**

Our attempt to distill language to its essence or wrap language in the cosmic folds of the universe is an attempt alluded to by Beaugrande (1994) when he states that: “*new approaches will require a theoretical superstructure in keeping with a stated cognitive interest*”. The word *superstructure* is an inadequate and improper characterization of what a language theory should be. The word *superstructure* implies something added to and exterior to language itself. It even connotes adding an awkward and cumbersome bureaucracy of theory on top of a simple and essential human function. It suggests all that is noxious and unmanageable, unintelligible and impractical about modern academic theories. Any *valid* theory inseparably ties language to the experiential, metaphysical, and observable reality of the immediate world and the greater cosmos.

Language theory, moreover, should also be rooted in and find validation in the contemporary discoveries in the fields of cybernetics, psychological learning, general systems theory, philosophy, and brain research.

Modern researchers do not agree on a foundation, but try to stand out. Common sense is not encouraged, and fields of learning are not integrated. Insights are not accumulated, but instead the attempt is made to overturn established truths, contradict them, or try to get something completely new, at the cutting edge. They don't sufficiently correlate or integrate their discoveries with the above-mentioned areas of research. Their discoveries are eccentric, peculiar, and limited in their importance and their application.

■ **useful for non-native English teachers**

Dubin (1986) mentions that *most English language teachers in the world are non-native*. Although the English school teachers whom I have met are highly intuitive, imaginative, and hard-working, I find that most of them do not have time to wade through journals, or to try to translate the research (both literally and practically) into their own language, cultural context, and instructional setting. They inevitably end up guessing what will work, experimenting here and there by changing the types of classroom activities once in a while, but for the most part they remain stuck with the prescribed text and curriculum in a decreasingly successful battle to win student's confidence and attention. They certainly long for a pared-down paradigm.