

# The Academic Synopticon

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## Part One.

### Writing and Literature

The origins of the academic disciplines lie in literature, which depended on writing, scribes, literary texts, and scholars. Nine conditions in all were responsible for producing Academia, permitting the Eight Academic Disciplines. In conceptual and chronological order, they are: (1) twelve praxis disciplines, (2) writing surfaces, (3) scribes, (4) logo-phonetic writing, (5) writing forms, (6) the activities of Scholia, (7) Sage, Occult, & Technical Literature, (8) the Twenty Disciplines, and (9) the components of Academia.

#### 1. Twelve Praxis Disciplines.

Proverbs 13:14: “The teaching of the wise is a fountain of life, so that one may avoid the snares of death.”

All societies have humanity’s Culture, and the core is composed of the twelve praxes: family, tribe, trade, games, morality, music, ritual, myth, language, teaching, techne, and art.

Neolithic settled societies advanced these praxes, and they valued the wise masters promulgating and promoting them. Their practices became disciplined, each conveying a mass of learning and skill to permit excellence. In a pre-literate society, the Twelve Praxis Disciplines are: Art critique, Technical arts, Pedagogy, Oratory criticism, Mythology, Ritual propriety, Music criticism, Moral wisdom, Sport training, Trade commerce, Tribal/State politics, Family counseling.

When masters and students began to have access to writing and texts, these praxis disciplines underwent development too.

**2. Writing Surfaces.** Availability of a writing system, and prepared and artficed materials able to be receptive to writing. Examples: standing stones, structural walls, pottery, clay seals and tablets, bronze items, papyrus, wood, bamboo, bark, leaves, bones, shells, skins, leather hide, knotting, weaving. Portable writing surfaces and inking (easier than etching, carving, or weaving) allowed for prolific and transmissible writing, such as ostraca, wood strips, fabric, paper, and parchment. The preservation of perishable organic-based texts was the next problem to overcome, calling for trained writing reproduction.

**3. Scribes.** A self-reproducing and lasting literate class, that puts more effort towards accurate inscription and clear writing (scribing) than just memorization and perfect recitation. The origins of writing in several civilizations meet organizational needs of manufacturing, trading, governing, or religious overseers and administrators in urban centers.

All writing is graphic (lasting marks on surfaces with meanings), symbolic (graphic markings to evoke the same meaning in many people), and systematic (uses many graphs that each conveys the same meaning for all readers). Because graphic markings, like paintings, can be found on rock walls, shells, and bones before 5,000 BCE (indeed, a few before 50,000 BCE), these are not classified as writing because they are isolated artifacts and likely the product of singular minds. Writing must be socially symbolic and systematic in order to convey thoughts also expressible in spoken language. Writing

therefore requires scribes. Symbolic representations less systematic and linguistic are classified as artistic instead.

Earliest writing was notational (abstract marks for amounts and relations) and pictographic (glyphs, ideograms, pictograms, icons). In a logogram, a symbol stands for a word or morpheme. Pictographic scripts appeared in these regions independently:

Sumer. Cuneiform c.3500 BCE–100CE

Egypt. Hieroglyphics c.3400 BCE, supplemented by Hieratic c.3000BCE–500BCE

Canaan-Palestine. Proto-Sinaitic c.1900BCE; followed by Proto-Canaan, and Phoenician c.1100BCE

Crete. Minoan Linear A c.1800–1450BCE; followed by Linear B c.1450–1200BCE

Indus Valley. Harappan c.3500 BCE

South America. Peruvian quipu c.2600 BCE

China. Oracle inscription c.1300 BCE; followed by Bronze script c.1100 BCE

Mesoamerica. Olmec c.900 BCE and Zapotec c.600 BCE; followed by Mayan c.300 BCE

All other known writing systems were inspired by or derived from, these first systems. Because the Egyptian, Minoan, Indus Valley, Mexican, and South American scripts went extinct, the world's current writing systems all descend from Canaanite or Chinese writing: either the Proto-Sinaitic script c.2000 BCE (e.g. Phoenician and Greek, and Brahmi in India) or the Qin clerical script c.300 BCE.

Writing's utility has never been in doubt, and its practicalities for complex settled societies are innumerable. Pictographic simplicity does not imply informational simplicity. Lists, registers, ledgers, and tabulations used notation and icons in order to maintain record-keeping and calculations about such matters as transactions and receipts, tribute and taxes, storage accounts, worker activities, censuses, calendars, calendrical and astronomical observations, and kinship dates (birth, marriage, death), kingly deeds, religious omens, and event annals. Logo-phonetic writing (below) permitted accumulated records to be set into narrative formats for storing recollections, lore, legend, and myth, and history.

In Egypt and Mesopotamia, gods were credited with the invention of writing. Humans were rarely credited with inventing anything – something new had to be divinely approved.

Britannica:

Oannes, in Mesopotamian mythology, an amphibious being who taught mankind wisdom.

Oannes, as described by the Babylonian priest Berosus, had the form of a fish but with the head of a man under his fish's head and under his fish's tail the feet of a man. In the daytime he came up to the seashore of the Persian Gulf and instructed mankind in writing, the arts, and the sciences. Oannes was probably the emissary of Ea, god of the freshwater deep and of wisdom.

Nabu, biblical Nebo, major god in the Assyro-Babylonian pantheon. He was patron of the art of writing and a god of vegetation. Nabu's symbols were the clay tablet and the stylus, the instruments held to be proper to him who inscribed the fates assigned to men by the gods.

Toth, (Greek), Egyptian Djhuty, in Egyptian religion, a god of the moon, of reckoning, of learning, and of writing. He was held to be the inventor of writing, the creator of languages, the scribe, interpreter, and adviser of the gods, and the representative of the sun god, Re. His responsibility for writing was shared with the goddess Seshat. The cult of Toth was centred in the town of Khmunu (Hermopolis; modern Al-Ashmūnayn) in Upper Egypt.

In China, legendary ancestors are credited with plenty of invention, so long as they were divinely-approved kings or in service to that respected king.

Wiki:

Cāngjié is a legendary figure in ancient China (c. 2667 BCE – 2596 BCE), claimed to be an official historian of the Yellow Emperor and the inventor of Chinese characters. Legend has it that he had four eyes, and that when he invented the characters, the deities and ghosts cried and the sky rained millet.

In all societies with writing, gods could unquestionably understand signs and writing – after all, humans figured that gods were signaling and messaging humans as much as humans were trying to write to gods. The Egyptian word for “hieroglyphs” simply meant “words of the gods”.

Furthermore, just as gods possessed supreme wisdom, those who communicated like the gods and could communicate with the gods had to be respected for wisdom as well. As the use of writing expanded, what is worth knowing became worthy of writing down. Only isolated exceptions are found around the world, where a priestly class tried to preserve status by committing core doctrine to memorization and recitation alone.

**4. Logo-phonetic Writing.** The availability of skilled scribes allowed writing to proliferate further, beyond records and memoranda. Pictorial/notational writing has lasted down to this day (e.g. insignia, monograms, seals, emblems, abstract glyphs, math and logic symbols, computer code, game play diagrams, dance choreography, public signage, graffiti, emojis). Complex ideas and thoughts require more complex writing. Pictographic writing (sequences of ideograms, such as hieroglyphics) is more flexible than either notation or drawing/painting for commendations of kingly accomplishments, dedications from generous patrons, markers for land boundaries, acclamations of pronouncements of political and military events, manipulations of public opinion, descriptions of celestial patterns, and messages for ancestors or deities.

Pictorial writing reaches its communicative limits at logography (one symbol for one term), where a low and slow amount of information gets conveyed by scenic cartouches and cartooning. Scribes then invented combinations of logographic and phonetic meanings, so that some symbols could be characters (or parts of characters) for a discrete spoken sound of language. With the rise of written characters, a specific word or phrase comes to mind by reading an ordered sequence of symbols (which then led to fully alphabetic systems in some civilizations). Writing any words, phrases, and sentences from all of spoken language became possible, permitting literature in its full sense. In addition, depicting relational information with diagrams, charts, and maps could take fuller advantage of 2-D relationships to represent dense amounts of data and information where rows & columns, axes & lines, boundaries & areas (and so on) are labeled with multi-word terms and phrases. The third main beneficiary was music, where organized characters for sounds make musical notation to be “read” as singable or playable notes.

Scribal writing transforms the power of socio-cultural organization:

Social institutions are much affected by the limitations of the oral channel. Religions tend to have a more local focus, to be more clearly intertwined with everyday life. Legal procedures are less governed by general laws, by formal procedures. Precedent will rarely play a distinct part in lawmaking, since recent judgments constitute the practice of the law itself. There are few written formulations that outlive their usefulness and turn into an embarrassing relic for the

judge to modify and the legislature to undo by formal resolution. The homeostatic tendencies of memory usually consign to oblivion what is no longer wanted. Oral communication in the political field obviously restricts the buildup of bureaucratic government. While it does not prevent the rise of states, the relationship between the center and the periphery is likely to remain a weak link in the chain of messages. Both internal communication and central accounting can operate by adding mnemonic devices to oral storage, but the more complex the organization of the state and the economy, the greater the pressure toward the graphic representation of speech. [J. Goody, *The Power of the Written Tradition* (2000), p. 25]

Scribal writing allows social organizations to grow in complexity without much loss of coherence and civil order. Low-complexity small societies, dependent on custom and ritual, cannot grow past their stage of tribalism and chiefdom. Literacy permits *legibility*: being able to read words meant that one could “read” people. Legibility is the precondition for the standardizations of *legislatability*. Designations for classifications assign eligibilities, privileges, and duties under lawful rules, which get inscribed for juridical application. Residents became subjects, subject to the names and categories set by written terms.

What is knowledge? In pre-literate societies, information consists of what the living can remember to say; what goes unsaid in the presence of younger ears just goes out of existence. In literate societies, undying words of stiff pages fill the eyes and crowd the mind, having their say upon what counts as knowledge. Younger eyes must confront a host of better-informed ancestors and reach consensus with them as well as the living. To be a mindful learner is to converse with talkative ghosts and remember well what they say. And to be powerful ruler, one must artfully compromise with a host of skeletal rules, more pitiless than an invading army, holding their death-grip over the land. Only more writing can contend with such insistently immortal dictators.

**5. Writing Forms.** Diverse kinds of writings get developed from language’s modes of poetry and prose, such as narration, report, exposition, biography, factual lore, legend, prophecy, divination, fable, poetry, rhapsody, drama, epic, myth, morality tale, lamentation, admonition, stratagem, anecdote, precept, proverb, allegory, aphorism, humor, farce, satire, epigram, rhetoric, correspondence, declamation, oration, dedication, panegyric, and propaganda. These are hardly exclusive genres – most ancient writings combine or overlap multiple modes. Their common feature is their wide range of meaningful communication. Literary writing – hereafter “literature” in its generic cross-cultural sense rather than a theoretical, modernist, or Western definition – depends upon spoken language in a way that documentation, pictograph/ideogram symbolism (semasiography, not based on words) does not. Literature, like oral speech before it, has the unrivalled ability to convey anything that one thinks about.

More examples of Scribal (pre-scholia) writing with some sort of literary status include lyrics, hymns, poems, odes, aphorisms, riddles, maxims, adages, recipes, directions, craft instructions, journals, memoirs, autobiographies, stories, romances, folklore, oracles, omens, veneration, prayers, epitaphs, rites, incantations, prophecies, hemerologies, horographies, annals, genealogies, biographies, monumental inscriptions, proclamations, commemorations, speeches, decrees, laws, treaties, oaths, contracts, and deeds. Scribing became equated with expertise, because scribes could read and digest everything written.

In the ancient world, skilled scribes could be regarded as great sages, healers, mages, seers, and priests. The *literati* were the *cognoscenti*. The ability to read and write was wisdom itself.

...distinctions between craftsmanship, ritual and magical acts, deep wisdom, and rational science do not apply to ancient wisdom conceptions, which use wisdom terms such as Greek *sophía*,

Hebrew *ḥokmāh*, Akkadian *nēmequ* or Egyptian *rḥ* to denote all of these “sub-systems of wisdom.” In Mesopotamia, the term *ummānu* not only means scholar but also craftsman, and, as well as the *ummānu* “specialists of various types including the *āšipu* (exorcist who recites incantations), *kalû* (lamentation singer), *ṭupšarru* (scribe or astronomer), *bārû* (diviner, *haruspex*), and *asû* (physician)” were also regarded as wise men. [Dietrich, chap 1 in *Teaching Morality*, p. 8.]

Other civilizations recognized a similar status for scribal elites: in Mesopotamia, the Sumerian word *abgal* and the Akkadian *apkallu* (‘the wise’ and ‘sage’); in India, Sanskrit’s *kavi* (‘seer’ and ‘sage’); in China the word *shi* 夫 (‘sage’ scholar).

Where Scholia (below) becomes available, most of these sorts of writings were elevated into higher forms of creative writing and literary prose, fostered in the scribal arts.

“It is important to consider that Pre-Socratic wisdom in all high cultures of the ancient world regarded specialized handicraft as well as ritual proficiency and divinatory skills as wisdom. It was not only judges and kings, scribes and counselors but also astronomers, architects, diviners, healers, and magicians who were regarded as being wise men and wise in their art of craftsmanship. Even Aristotle regarded wisdom as the perfection of skill (*areté téchnēs*).” [Dietrich, J. (2018). “Wisdom in the Cultures of the ancient World: A general introduction and comparison.” In Oshima (ed) *Teaching Morality in Antiquity*, p. 7]

Oral transmission by verbal repetition displays severe practical limitations. Composers of oral performances are often imitated, but never quite duplicated precisely. A singular devotee can personally memorize astounding amounts by ear with diligent practice; what gets transmitted among different people of differing ability is another matter. Even if that imitation sometimes approaches the degree of similarity that can be called “recitation” by rote memory, future reciters insert their own variations, by mistake or intent, to lend each recitation the character of a living performance, of which oral transmission always consists. Oral recitation comes from an alert mind shaping vital ideas for their living audiences. There are only a handful of examples from around the world where long recitations did remain essentially unchanged across centuries before any assistance from writing, made possible only by unbroken lines of families or clans determined to preserve a language in verse or hymn. While accurate, understanding can decay after centuries pass, when one is reciting something barely sounding like words and nothing like what is commonly spoken in one’s current dialect.

Writers of literature easily live on through their unchanging words, as read and understood by the informed minds of their future readers. Thought organized into constant expressions and sentences transcend rigid boundaries of time and space, farther than the way that spoken language transcends limits of bodily contact. Although a text needs recopying for preservation, which can introduce errors, accurate copying is far easier over long periods of time than rote memorization. Writing is a kind of authorial immortality, as this Egyptian papyrus from around 1200 BCE attests:

If you would only accomplish this, becoming expert in writing:  
Those writers of knowledge from the time of events after the gods,  
those who foretold the future,  
their names have become fixed for eternity,  
though they are gone, they have completed their lifespan,  
and all their kin are forgotten.

They did not make for themselves a chapel of copper,

or a stela for it of iron from the sky.  
They did not manage to leave heirs,  
from their children, to pronounce their names,  
but they have achieved heirs out of writings,  
out of the teachings in those.

The doors of their chapels are undone,  
Their ka-priests have gone.  
Their tombstones are smeared with mud,  
their tombs are forgotten,  
but their names are read out on their scrolls,  
written when they were young.  
Being remembered makes them, to the limits of eternity.

A man is dead, his corpse is in the ground:  
when all his family are laid in the earth,  
It is writing that lets him be remembered,  
in the mouth of the reciter of the formula.  
Scrolls are more useful than a built house,  
than chapels on the west,  
they are more perfect than palace towers,  
longer-lasting than a monument in a temple.

Those who knew how to foretell the future,  
What came from their mouths took place,  
and may be found in (their) phrasing.  
They are given the offspring of others  
as heirs as if their (own) children.  
They hid their powers from the whole land,  
to be read in (their) teachings.  
They are gone, their names might be forgotten,  
but writing lets them be remembered.

–Papyrus Chester Beatty 4 (portions) Lichtheim 1976: 176-177.

**6. Scholia.** Where 1-5 (above) are present, plus six more conditions, the Scholar emerges:

(a) Copying. Recording of oral narrative/verse in writing, and careful reproduction of writings. Encourages the spread of audiences, who can either read for themselves, or at least hear renditions given by speakers reading from something written. Copying yielded further benefits, such as the preservation of secular and sacred texts (against invasion/occupation or the disappearance of the original language), and the propagation of a unified religion over broad territories. Rapid copying also lent itself to the development of stylized cursive and calligraphy. Political and priestly elites in many civilizations were either scholars or relied on corps of scholars. As time passes, recopying further leads to collation, redaction, compilation, and further sorts of editing.

(b) Editing. Copying and re-copying opens opportunities for scribes to make mistakes, try to correct observed mistakes, and (in the scribe's opinion) improve the text in the process. From

simple corrections of minor errata in spelling, grammar, or accidental omission, to significant “re-writings” to modify the meaning, such emendations can easily accumulate over decades and centuries. The work of later editors gets multiplied, if they follow the urge to restore a more “original” or “authentic” text version. Just as motivating can be an editorial goal of supplying orthodoxy to a earlier text that needs to conform or confirm later standards.

(c) Commentary. Readers and copiers easily become responders and writers themselves. Commentary in its broadest sense is text that mentions, cites, or refers to other composed writings (in addition to oral sources as well). Types of commentary include citation, allusion to earlier writings, appeal to their authority, quotation, marginalia, exegesis, glosses, correction, criticism, disputation, refutation, and so on.

(d) Literacy. Attainment of great literacy and erudition – a highly skilled scribe has a large vocabulary; ample numeracy; acquaintance with dialects and languages; techniques for deciphering and translating; a taste for finer literary qualities; and facility with a breadth of literary forms. Literacy makes reading an end in itself for personal enrichment as well as a utilitarian tool for technical, political, economic, or religious ends.

(e) Research. Taking opportunities to access and utilize preserved writings to increase literary and lexicographical abilities along with the growth of content knowledge. Scholarly research may result in the composition of specialized texts about writing such as glossaries, grammars, lexicons, dictionaries, thesauruses, composition manuals, and translation guides.

(f) Schooling. Formalized or informal, institutional or private, literary education is conducted between a master and apprenticed students towards scholarly attainment. No “schools” in any organized or recognized manner is necessary, but schooling for the transfer and enhancement of expertise makes scholars rather than amateurs, enthusiasts, or dilettantes. Schooling leads to the production of primers, readers, introductions, lectures, and textbooks.

Scholia never replaced the scribal industriousness of recording and copying. However, the scholar was able to enhance and enlarge textual content, and take full advantage of the space-time dimensions opened by reading.

TABLE: Classifying kinds of texts by readership scope and text durability.

TIME SPACE	For temporary usage and consultation	For longer-term consultation	For longest-term readability
Readable only within a highly restricted place.	Storage records Fiscal records Memoranda Notes	Temple archives Royal archives Court proceedings, deeds Divinations, Omens	Tomb inscriptions Coffin inscriptions Celestial observations Annals, chronicles
Readable by those it is intended for.	Messages Letters Receipts	Political instructions Judicial decisions Military strategies	Scribal templates Sage literature Occult literature

	Reports	Sacred scriptures	Technical literature
Accessible to many in public or in publication.	Posted decrees Public proclamations Public speeches Formal orations	Laws Drama Civic ritual Biography	Monument inscriptions Popular lore, fiction Epic poetry Lyrical poetry

Such a broad array of literary productions, combined with scribal schools and collections, allows the assembly of libraries. The great Assyrian king Ashurbanipal (fl.640 BCE) was most proud of his Library of Ashurbanipal that contained many thousands of tablets. He could think of no higher merit, perhaps above his military stature, than comparing himself with his senior scribal scholars:

Marduk, the sage of the gods, granted me broad understanding and far-reaching wisdom as a gift; Nabû, the scribe of everything, bestowed on me the precepts of his craft as a present; Ninurta and Nergal endowed my body with power, virility, and unparalleled strength. I learnt the craft of the sage Adapa, the secret lore of all of the scribal arts. I am able to recognize celestial and terrestrial omens and can discuss (them) in an assembly of scholars. I am capable of arguing with expert diviners about (the series) “If the liver is a mirror image of the heavens”. I can resolve complex (mathematical) divisions and multiplications that do not have a(n easy) solution. I have read cunningly written text(s) in obscure Sumerian and Akkadian that are difficult to interpret. I have carefully examined inscriptions on stone from before the flood that are sealed, stopped up, and confused. (Asb. L4 i 15–22 – in Novotny 2014, 96)

The Twelve Disciplined Praxes can attain the level of Scholia where techno-socio-cultural conditions may permit. The twelve are: Art critique, Technical arts, Pedagogy, Literary criticism, Religious ecumenics, Ritual propriety, Music criticism, Moral wisdom, Sport training, Market commerce, Political governance, Marital/parental counseling. Masters exemplify their knowledge in the praxes with concrete demonstrations; masters convey practical training with their verbal explanations; and masters may encourage the recording of teachings as written explications. With the rise of scribal scholia, bodies of scholarly writings about masterful practice are assembled for wider review and deeper sophistication.

Anybody who does not earnestly wish that all humanity is well, therefore abuses it. But he is not even a true friend of himself, if he wishes to live as a healthy man among the sick, as a wise man among the dumb, as a good man among the bad, or as a happy man among the miserable. – Johann Amos Comenius, *Pampaedia—Allerziehung*

Early texts that attained literary character, unless it was the result of spontaneous use and immediate inscription, circulated in spoken discourse in its original language for a time before anyone wrote it down. For example, the Hindu Vedas circulated in northern India for many centuries in recitation verse before they were written. The youngest portions of the Vedas, the Upanishads, are the most sophisticated and speculative, but still pre-date their recording in written Sanskrit. The same pattern holds for Homer’s *The Iliad*, an epic transmitted by memorization and recitation long before someone put it into writing. Mesopotamian literature such as *Gilgamesh*, and much of the Old Testament, circulated and congealed as oral narrative before getting put into writing. A piece of literature such as China’s *Dao Te Ching* by Laozi was probably not written by Laozi and its multiple authors drew from oral tradition going back centuries before getting recorded and re-compiled by later editors. As many as

eight stages intervene between our present-day ability to read a text and whoever was first speaking its sayings. Initial stages include the following:

- Creation. The speaker(s) assemble thoughts into a coherent whole for hearer appreciation.
- Recitation. Valuable orations are memorized and recited for application, and also for accuracy.
- Composition. After a period of time, a version of a spoken piece is written down as a memory aid.

The form and format of an oration largely determines how it gets recorded in writing. There are five main sorts of orations that are fairly memorizable and repeatable as needed for many audiences over time. Looking only at the script, its features can reveal the sort of vocal performance behind it.

Verse hymn	Displays meter and rhyming, with simplicity, duplication, and brevity.
Verse poetry	Meter and rhyme assembled in long sections, or even lengthy books.
Discourse recitation	Mnemonic devices, variations with repetition, and sectional patterns.
Prose narration	Cognitive quirks to sustain interest, dramatic effects, thematic tropes.
Prose exposition	Didactic schemas, explanatory clarity, topic and subtopic organization.

If a written text displays a format like recitation (poetic or discursive) then it may be similar to the original reciter's version. A successful orator, and especially one aiding others to replicate an oration too, relies on memorable familiarities embedded in the verse or recitation. A performing orator who gives dozens or hundreds of talks and recitations of the same material over many years (such as a bard, poet, preacher, or teacher) understandably relies on mnemonic and literary devices inside the body of the spoken work to ensure accurate deliveries across many audiences. Stylized, formulaic, and structured texts could easily reflect original oral recitations and transmissions. Repetitions and patterns are in the toolbox of a skilled orator who wants the tale or lesson to be reliably memorable among listeners.

That false dichotomy of either "extemporaneous speech-giving with no patterning" or "lengthy oral transmission with plenty of patterning" should not be imposed on ancient oral cultures. Only in literate societies could authors read from their own compositions (that audiences could read for themselves too), easily delivering complex discourses without repetitions and memory aids embedded within. Pre-literate oral composers relied on memory devices extensively, so verbosity cannot disqualify originality. For example, discerning authentic passages in the Buddhist Canon where sayings and teachings were heard directly from the Gautama Buddha is not an impossible task, unless wrong assumptions about orality and recitation are academically presumed. The same goes for sayings of Jesus in the Gospels, or for statements of Socrates in some of Plato's dialogues. Texts should be read critically, but not hyper-skeptically. Giving all the literary credit to subsequent followers forgets to explain what made all those followers want to follow with fervor. Committees are rarely original or inspirational and never penetrating. Crediting multitudes of disciples with poetic, rhetorical, and discursive genius as well as prodigious memory cannot offer a more likely scenario than a singular profound mind speaking through a shaky medium of transmission.

Furthermore, if multiple written texts recorded for the same oration display some variances, that need not mean that differences were introduced only after the written texts themselves underwent copying and recopying – after all, a good poet or learned teacher typically modifies the content over time. Two variant texts dating from a later period after the orator's death may both be near-verbatim reports of original recitations.

It is true that excessive repetition, constant simile and imagery, syllables and words strung in formations, formulaic patterns, duplicative passages, and organization structures observed in a longer text means that such a text was more likely recorded after there already had been a prolonged

sequence of oral transmissions over decades or centuries before getting recorded into writing. By contrast, a narration or exposition, displaying few or no mnemonic traits but many didactic traits (e.g. long lists, lengthy and complex discourses, wide-ranging and heterogeneous information) was far more likely to have been composed for preservation directly into written text.

Once a text is recorded, more stages await.

- Replication. Multiple versions of the spoken piece get recorded as texts at various times and places.
- Recension. Scribes edit version(s) of a text for spelling, grammar, consistency, and coherence.
- Redaction. Scribes (or scholars) refine a text for comprehension and preservation through copying.
- Translation. Scholars choose a text for translation into a vernacular language or a different language.
- Compilation. Scholars assemble similar-themed texts for publication in a single linearized work.
- Reproduction. Preserving a favored text/compilation by reduplicating it over the passage of centuries.

We must not think of ancient literature as going directly from an author's thoughts to letters on papyrus or parchment. The expertise of the poets, sages, and magicians pre-dates any scribal appearance as literature. The survival of a special text across so many stages does tell us one sure thing: its thoughts are still able to present a lively mind behind the words. The poetry and prose of that oral transmission – "literary before literature" – offers thoughtful *discourse* for study and contemplation. The text "speaks to us" in that unmistakable literary way. After a discourse gets written down, the categories of scholarly literature await (below), such as Sage Literature. Yet the text's literary value surely pre-dates its composition in letters (otherwise, why ensure its written preservation?) so we must also have oral categories such as "Sage Discourse". Sage Discourse is entirely oral, but its discursive content can be as sophisticated and intellectual as anything safely placed into scrolls and books. Examples: discourses found in the Hindu Upanishads and Mahābhārata, the Dao Te Ching, Babylonian Disputation poems, the Old Testament's Ecclesiastes, and Egyptian Didactic Instructions.

Besides the sage discourses that sooner or later reached written form, many ancient societies possessed a rich body of sage discourse, that was either never recorded (perhaps surviving as oral narration to this day) or eventually recorded in modern times. In so far as cultural and intellectual merit is concerned, nothing about literature per se lends automatic superiority. The value of literature instead rests on the accumulation of diverse bodies of texts which then permit the transition from scholarly discourse to the methodical argument of academic disciplines. Where scribal literacy is absent and no scholia are recorded in a written script, the emergence of academia is stunted or absent. Unlike China, where revelatory divination was revealed and recorded in proto-script, the mode of Indian revelation was through the chanted or sung hymn so orality was divine. Although India reached heights of philosophical and theological sage discourse by 400 BCE to 100 BCE, Hindu intellectuals were not recording much historical documentation or composing coherent histories, and its historical sensibility lagged at the older stage of oral lore, legend, and fable for a couple more centuries.

Sage Discourse elevates thought to heights of reflection and reasoning about essential matters of culture, cosmos, and human affairs. Core praxes refined through scholarly care inspire speculations and conclusions having to do with the arts of expression and performance, the worldviews of ritual and myth, the vitality of mind and body, and the welfare of community and polity. Supreme values and human destinies are at stake. Sage discourse, from whatever society it arises, displays philosophical and historical aspects that open intellectual paths toward the first two academic disciplines (see below). The beginnings of philosophy and history pre-date academic literature and institutions, for the reasons that (a) literacy is not required for philosophical and historical thinking, and (b) philosophical and historical thinking are necessary for the development of the academic disciplines.

A handful of examples illustrates the power of Sage Discourse. The Brahmins responsible for the Upanishads during 600-400 BCE were not academics – they were mostly illiterate and proudly so, as preservers of the oral Vedas within clans jealous of their proprietary rituals. However, they were embedded within a literate scholarly elite circa 400-100 BCE, and the Upanishads got recorded as texts in the classical Sanskrit script of that era. That Brahminic scholarship in turn generated the beginnings of academic disciplines in India circa 200 BCE to 200 CE. This sequence was seen in China as well. Illiterate Daoist masters passed down their sage discourses by oral teachings, only later recorded during the 5th-3rd centuries BCE at a time when academic scholars were also recording and reacting to texts of the schools of Confucianism, Mohism, and Legalism. In ancient Greece, the 7th-5th centuries BCE was the time for producing written texts of traditional epics and poems such as Homer’s Iliad and Hesiod’s Works and Days, two texts containing earlier oral verse from 9th-7th centuries BCE that contain passages having philosophical and historicist sensibility. The emergence of a scholarly and academic class in the 6th century BCE then witnessed the start of Greek philosophy, followed promptly by the historiographical and socio-political disciplines. Around the same time period, the priestly scribes of the Israelite kingdoms, who were acquainted with Egyptian and Babylonian sage discourse and wisdom literature, compiled and edited much of the Old Testament during Babylonian exile and the Jerusalem restoration (530s-480s BCE). They combined Yahwist and Elohist oral narratives with Priestly portions to form the Pentateuch; they settled their version of Israel’s past with Deuteronomy to 2 Chronicles; and they finalized Isaiah, Jeremiah, and Ezekiel. Second Temple priestly scholars during the Hellenistic period circa 4th-1st century BCE then recorded as Sage Literature (below) the wisdom of Job, Psalms, Proverbs, Ecclesiastes, and Song of Songs; and constituted the rest of the Old Testament historiography from Ezra-Nehemiah to Malachi. By contrast, the two earliest civilizations replete with Sage Discourse, of Mesopotamia and Egypt, fostered ample scholarly activity but they never developed academic philosophy or history, due more to untimely empire collapses rather than intellectual resources.

A new communication technology such as writing always requires a lag-time of dual-use literary modes. Historians of literature have to ask, “Was that text only recording older pre-literate oral speech, or was it directly composed for its inscribed format?” An illustration: by now, we are familiar with sorts of writing ready-made for Internet access (emailing, texting, blogging, tweeting, etc.) that only tenuously resemble earlier print styles and formats. Even as the world’s print literature is getting scanned/converted for computer coding (html, pdf, and so on), much Internet discourse has already moved on, hardly imitating such things as newspapers, novels, or monographs. In 500 years, scholars will ponder that confusing transition between media: “Was that 21st century website simply registering older pre-Internet print, or hosting fresh content just for the Internet?” Arguments over language, style, and content shall ensue...

## **7. Sage Literature, Occult Literature, Technical Literature**

Lord Huan was reading books at the top of the hall.  
Wheelwright Pian was chipping a wheel at the bottom of the hall. He put aside his mallet and chisel and went up to ask Lord Huan: “I dare to ask, what words is my lord reading?”  
The lord answered: “Words of the sages.”  
[Pian] asked: “Are the sages alive?”  
The lord answered: “They are already dead.”  
“So—” said [Pian]—“what my lord is reading is nothing but the dregs of the souls of the ancients!”

—Zhuangzi (4<sup>th</sup> cent. BCE)

Literature is of, by, and for the literate in general. Scribes just write for themselves, clients, or bosses. At a scholar's direction a scribe will copy down this letter or that incantation for a specific purpose, but the text template is understood among scholars for general consultation. Literature conveys the more complex thoughts, sentences, and verse that spoken poetry and prose can express. Modern definitions of "literature" must not be anachronistically imposed on ancient societies; a helpful conception must be broad but not vacuous. Literature relies on the stage of Scholia, but not an "academic scholar". We are not yet at the stage of Academia. The master of a genre such as epic narrative and poetic lore, a Homer or a Qu Yuan, has already attained an educated and scholarly status in their literary tradition.

Academic disciplines from archaeology and paleography to history and literary theory have quarreled over classifying ancient texts, each preferring criteria developed from their own fields. Writings that are obviously temporary and utilitarian, more about managing information for limited use, are easily separated out as merely scribal. Texts displaying scholarly competence and worth transcend utility in various ways. Readership scope is a poor criterion. Texts may have many readers, or very few. Inscriptions on the inside of tombs and coffins are only for the dead and their gods, but they can display the highest literary qualities of refinement and expression. Monumental inscriptions stand for the ages to multitudes passing by, but terse and simple prose serves that public purpose better. Measuring the writing scale of a text's word count can't identify literature either. Brevity is indeed the soul of wit. Lengthy annals of tedious exposition contain ample information without much literary character; short epigrams and proverbs are able to delight and impress readers across millennia. Only the *content* of literature as it is appreciated by the literate can guide us further.

Here, we are describing literature by and for adults, or at least advanced readers in their teens. The category of children's literature, for fun poetry, fanciful fiction, and entertaining learning, is vast but less scholarly. However, even fable, folklore, and fairy tale can incorporate adult themes. Popular stories, whether for adults or for children, may be classifiable with Sage Literature depending on content.

**"Sage Literature"** is not just an arbitrary catch-all for writings ill-fitting with other categories, nor could it be based on criteria for literary form and structure, and surely it should not comprise a bin based on just one or two cultures. (The notion of "Wisdom literature" proved to poorly define a few Biblical books much less Mesopotamian parallels too.) Sage Literature is universally about the content: sagacious and reliable wisdom about what really matters in life. That wisdom doesn't just arrive from nowhere. A pre-literate society transmits oral sayings, tales, and sagas down the centuries and millennia, with as much reconstruction and recombination as strict repetition. Sage discourse (defined above) is the primary resource, of course. Customary wisdom gains new life after getting incorporated into literature, where new eyes can judge what is worthy from the past for their own times.

Sage Literature is the category for written works, usually factual prose but sometimes fictional or poetic as well, that conveys advice and information about any of the Twelve Disciplined Praxes that attains the Scholia stage but does not reside with Academia (explained below). Authors may happen to be recognized as scribes or scholars, but no matter their background and education, they are creative writers; they may quote from tradition but their compositions offer originality. Sage literature elucidates and expounds upon important purposes, meanings, and values inherent to a disciplined praxis, allowing deeper appreciation by adepts and wider comprehension for society. The content of an item of Sage Literature may concern artistry, teaching, literary criticism, comedy and entertainment, piety and religiosity, ceremony and ritualization, musicality and theatricality, propriety and morality, games and sport competition, property and wealth, ethnicity and culture, statecraft and war, or love and sexuality (along with combinations and overlaps among these general topics), in whatever way each particular

culture regards its own practices and institutions. Any work falling into this category rarely sticks to a single topic; for example, a religious hymn may contain ethical and theodicy ruminations, and a heroic epic could include reflections about economic and political matters. Like its content, the style of wisdom literature can vary widely, taking poetic, epigrammatic, historical, advisory, instructional, didactic, juridic, expository, autobiographical, conversational, disputational (and so on) schemas. Their commonality mainly lies in reflective evaluation: counseling proper attainment, praising exemplary achievement, condemning foolish vice, lamenting social decline, or enlightening human existence.

The emergence of Sage Literature in a civilization exemplifies a nascent historicist consciousness looking back in time and a sense of writing for future posterity, along with a drive to preserve what is finest and best in the face of internal or external challenges. A longing for the traditional and classical, or a resignation to stoical or skeptical stances, might pervade the literary tone. At the least, what is worthy merits conservation and respect. For example, courtly annals of dynasties can often be laudatory and prescriptive as well as descriptive of courtly and military affairs. "Accurate" histories are a literary genre that had to await academic treatment; wisdom literature about the past is pragmatic and precautionary. Sage literature approaching an academic level often took the form of the dialogical (multi-voice) discourse or the monographic (single voice) treatise. Sage literature only grew after academic literature arrived, but it usually incorporates philosophical insights due to the availability of philosophy in most societies. Its genres lend advice about creativity, personal growth, spiritual discovery, self-help, leadership, historical figures, current events, travel destinations, career goals, growing wealth, finding love, lasting relationships, good parenting, and so on.

**"Occult Literature"** is the category for written works that describe and explain the esoteric practices of the "cult" at the heart of any religion. The public face and message of a religion is exoteric, accessible to anyone. Sage literature about a religion's beliefs can give outsiders a glimpse inside, and a religion that develops a theology publishes an official account of dogmas and creeds. From the standpoint of a religion's theology, of course, its own practices are "true religion" and anything else is treacherous heresy, foolish superstition, or evil magic. Theology urges a sharp dichotomy between religion and magic, so "true religion" correctly influences the divine while "magic" incorrectly fails. All the same, any religion is basically cult, from the witch doctor dispelling evil spirits to the priest turning wine into blood. What believers are doing in their own company yields the real benefits of membership: the mystical and magical practices that convert mythic beliefs into beneficial activities. Whatever is by invitation only, with one's initiation first, followed by the initiate's demonstration of devotion next, opens the entryway into the "cult" at the center of any and every religion. Put another way, those who aren't engaged within the cult cannot be authentic members of the religion, no matter how devoutly they mouth aloud the beliefs or commit the scriptures to memory. If the cult was abstracted away from a religion, what is left wouldn't be religion anymore, but just legend, cosmogeny, contemplation, or philosophy. Occult literature eventually escapes from proprietary control to reach eyes of the curious public; its weirdness indicates how the puzzled reader isn't in the cult.

The mysteries are only revealed within the cult. Occult literature guides practitioners and masters towards the genuine revelations, the secret meanings, to the religion's insight and knowledge by explaining the workings of the regimens, rites, rituals, chants, mantras, trancings, prayers, hymns, dirges, devotions, veneration, shrines, sacraments, liturgies, incantations, sacrifices, conjurations, spells, charms, portents, curses, taboos, and whatever else has protective and transformative efficacy. How do any of these activities actually work? Occult literature reveals why they work: the hidden dimensions to human-divine relationships, the mysterious ways of sacred and transcendent powers, the ultimate plan and plot of all creation, the inner nature of the illuminated human being, and the spiritual journey towards sanctification and salvation. Believers might just want a healing spell, or maybe a guarantee of immortality, but the cult contains everything a religion can deliver. Occult literature has

innumerable subtopics and genres which include: astrology, horoscopy, cleromancy, oneiromancy (dream interpretation), hemerology, geomancy, alchemy, magic, amulets and talismans, divination, prophecy, the psychical, the mystical, the paranormal, sorcery, theurgy, and so on. When the thin layer of formal theology is peeled away and people want authentically transformative experiences, religion has always been there all around the world. Nowadays we hear people say “I’m spiritual, but not religious” but that actually means “I’m religious but not theological” – they are recovering how to be personally religious without having to be churchly orthodox.

**“Technical Literature”** is another category for Scholia developed from practical arts and crafts that are pre-scientific while encouraging proto-scientific information. Core examples are writing and script primers, grammars, composition and orthography guides, prosody studies, language usage guides, glossaries, and lexicons. Further examples are guides, surveys, and manuals about health, healing, anatomy, diet, cooking, cuisine, entertainment, music, harmonics, instrumentation, craft, fabrication, construction, architecture, military and martial arts, navigation, travel maps and charts, travelogues, natural wonders, explorations, mining, minerology, metallurgy, agriculture, agrometry, surveying, geometry and calculation, accounting, chronometry, calendars, almanacs, astrometry, and ephemerides. As the academic discipline of Science emerged during the Iron Age, scientific fields such as medicine, geography, physics, astronomy, and chemistry were gradually developed. Technical literature continued to be produced as invention kept pace with science, requiring technology manuals and engineering textbooks. Mathematics is the other academic discipline which developed from technical literature in synch with technological and scientific advances.

An illustration of this accumulation of sage, occult, and technical literature is provided by the corpus of disciplined works used by Brahmins that expand on topics in the sacred Vedas: the Vedāṅga, the Dharmaśāstra, and Arthaśāstras. They typically date from 500 to 100 BCE and later. The Dharmaśāstra are texts expounding the organizational, legal, and ethical structures of society. Arthaśāstras focused on the administrative and political governance of kingdoms. The Vedāṅga are six in number: Śikṣā (phonetics, pronunciation); Chandas (poetic prosody); Vyākaraṇa (grammar and linguistic rules); Nirukta (dictionaries and etymology); Kalpa (ritual explanations); and Jyotiṣa (auspices, horology, astrology).

## **8. Twelve Praxis Disciplines and Eight Academic Disciplines**

Scholarly literature – whether Sage, Occult, or Technical – grounds the twenty scholarly disciplines that provide the foundations of all academic study and advancement. Every “area”, “field”, “discipline”, “inter-discipline”, “cross-discipline”, “transdiscipline” (and so on) relies on sub-areas, versions, or combinations of these twenty scholarly disciplines. If something entirely evades these foundations, it is either unscholarly or undisciplined, no matter how interesting it may be for enthusiasts.

The 20 Scholarly Disciplines = 12 Praxis Disciplines + 8 Academic Disciplines

The Twelve praxis disciplines are:

- Art critique
- Technical arts
- Pedagogy
- Literary criticism
- Religious ecumenics
- Ritual propriety

Music criticism  
Moral wisdom  
Sport training  
Market commerce  
Political governance  
Family counseling

The Eight academic disciplines are:

Philosophy  
History  
Social Theory  
Theology  
Political Theory  
Economics  
Science  
Mathematics

The epistemic grounds for these twenty disciplines are recounted elsewhere. Their origins can be briefly indicated here. Science arose from healing and farming practices and observations of natural history, alongside Mathematics for solving calculations of quantities and predicting celestial and earthly moving bodies. Besides the technical grounds for Science and Mathematics, the other six academic disciplines – Philosophy, History, Social Theory, Theology, Political Theory, and Economics – largely developed from types of scholarly literature about the 12 disciplined praxes. Each of the academic disciplines apply the high levels of literacy and scholarly activity necessary for academic disciplines. Philosophy arose from wisdom tales and mythic narrative; History from annals and epics; Social Theory from considerations about kinship grouping and community; Theology from ecumenical religious comparison; Political Theory from counsels on statecraft and leadership; Economics from adages on property and wealth.

Greece. 4th-1st centuries BCE. The emergence of the Academy, thanks to Plato and Aristotle, where philosophy, history (natural and social), social/political theory, theology, and economics were developed.

Rome: 2nd century BCE to 2nd century AD. The expansion of the Greek model of the Academy and the schools studying the core disciplines. Hellenistic academics and Roman contributions such as Stoicism spread across the Empire and beyond.

India. 2nd century BCE to 1st century AD. The rise of the Śāstra: specialized texts about various praxis disciplines became fully academic, with sustained schools for the core disciplines from philosophy, history, and social theory to political and economic theory.

China: 3rd century BCE to 2nd century AD. The “Hundred Schools” of thought: various movements of thought, many originating and transmitted orally since the 6th century BCE, were organized into texts, digests, canons, and anthologies for further scholarly debate and academic study.

Much literature of a scholarly sort, to fully serve its cultural praxis, need not become “academic” in the full sense of joining Academia (below). Here we are speaking of literature about these praxes, not the establishment of so-called “academies” promoting the praxes themselves. A “music academy” for

example, need not involve anything written down besides musical scores. By contrast, a “pedagogy academy” or a “technical academy” would be literary and scholarly. In Academia, literature has to be read, digested, and discussed, but some Praxes see little direct benefit. For example, art criticism helpful for the practicing artist should be a sort of wisdom literature at most. The more “academic” that art *theory* gets, the less influential upon masters and innovators it usually becomes, including art critique (carried on connoisseurs who aren’t art masters). “Academic art” usually represents a dead-end for the art genre itself, despite its curation by the field of art history. Similarly, “academic music,” “academic poetry,” “academic theater,” and “academic sport” do not offer fruitful opportunities. On the other hand, for different civilizations, academic aesthetics, academic literature, academic ritual, academic policy studies, and academic military studies can make powerful cultural contributions.

**9. Academia.** Scholarly disciplines (some or all of the 20 disciplines are pursued in a civilization), plus techniques and organizations to enhance the scholarly pursuits of disciplines.

- A. Scribal industry (scriptorium). Techniques for efficient scribal recording, copying, and translating.
- B. Archival storage (library). Accessible, not secret government repositories or esoteric temple archives.
- C. Literary pedagogy. Masters formally teaching and testing students in schools, academies, etc.
- D. Scholar courtesies. Mutual recognition of scholar status, reciprocal access to collections and libraries.
- E. Scholarly communities. Methodical research and deliberations, aiming at knowledge expansion.
- F. Employment status (guild). Experts can earn fees or wages for scholarly service and/or teaching.

Academia allows the specialization of the scholar to be a full-time calling and career, with positions, privileges, and responsibilities that may be said to be professional in spirit if not actuality. So long as nothing too strict is implied by “institution”, such as Shils’s sociological depiction below, scholarly institution can be envisioned during the Bronze Age and thereafter.

By institutionalization of an intellectual activity I mean the relatively dense interaction of persons who perform that activity. ... The high degree of institutionalization of an intellectual activity entails its teaching and investigation within a regulated, scheduled, and systematically administered organization. The organization regulates access through ... for example study, teaching, investigation, publication, appointment, and so forth. It also entails the organized support of the activity from outside the particular institution and the reception or use of the results of the activity beyond the boundaries of the institution. (Edward Shils 1970: 763)

“**Reference Literature**” is the fourth category for texts, joining the three scholarly types of literature, for all of the scribal, scholarly, and academic texts concerned with the industry of literature in general. The scribal arts rely on writing and script primers, grammars, composition and orthography guides, language usage guides, glossaries, lexicons, style and format guides, and (in modern times) manuals for printing and typography. The scholarly arts add dictionaries, thesauruses, etymologies, translation guides, guides for collating and editing, readers, introductions, lectures, and textbooks. Academics then produce characteristic sorts of reference works: catalogues, bibliographies, authorship guides, critical editions, critical translations, compendiums, anthologies, doxographies, mythographies, intellectual biographies, historiographies, and encyclopedias.

In the category of historiography, Herodotus and Polybius in the ancient West and *The Book of Documents* (*Shū jīng*) in the ancient East, are early exemplars. Sima Qian in the first century BCE assembled the major work on Chinese history, the *Shiji*. The category of the compendium (with anthology) has an early Chinese example in the *Huainanzi* of Liu An from 139 BCE, and a later exemplar in the *Yiwen Leiju* completed by Ouyang Xun in 624. Among works from ancient Greeks, only Aristotle's several treatises on natural topics go in an encyclopedic direction. Romans went further, with Varro's many compendiums from first century BCE and Pliny the Elder's multi-volume *Natural History*.

In Academic literature, discourse and dialogue becomes more pedagogical, reflexive, discursive, historically-aware, and somewhat philosophical. The accumulation of literary works from the past means that one's new discourse or treatise has to selectively incorporate and address their salient views. Discerning and accounting for divergence or disagreement from one's "sources" is the academic author's responsibility, so a more dialectical and logical mode is required. In Wisdom Literature, dialogue can adopt the forms of paired declamation or partner disputation. For Academia, dialogue develops into "didactics", and then into "dialectics" as a method useful for deliberations, to clarify conceptual distinctions and contrast contradictory theses.

Dialectics next allows the disputation format to proceed on towards formalized debating in public forums or among discoursing scholars engaged in argumentation. A distinction between rhetoric and logic emerges. A parallel development is found in jurisprudence in the format of legal argumentation for hearings and trials and juridical reasoning for rendering decisions. In early civilizations, the Scholar transitioned from a center-focused elite towards an outward-facing profession for the emerging civic sphere of life. Academic-scholars acquired notoriety and prestige for leading schools of theory (about cosmology, human nature, ethics, etc.) or movements of praxis (such as health arts, expressive arts, or religious rites). Courtier-scholars not only advised the monarch, as they composed public addresses for established powers and contrived persuasive legitimations for usurping powers. Bureaucrat-scholars developed into a jurisprudence role responsible for reliably upholding the "laws of the land" more than just relaying the "decree of the king. Philosophical, Praxical, and Political academics dominated the early emergence of academic disciplines, and they each produced bodies of literature that accumulated their deliberations.

Mastery and pedagogy in any area of human achievement, such as the 12 praxes, can attain high intellectual levels without writing or scholia. Innumerable societies, cultures, and nations have demonstrated this in the past, before writing became nearly ubiquitous. To say that academic disciplines do require scholars and literary works is not a claim about intelligence or ranking cultures. It is simply a fact, an operational definition of what academia is and does, in its pursuit of methodically tested and accumulated *knowledge*. Societies that developed academics before or after other societies are hardly better or worse for pursuing their own path-dependent journeys with their capacity for writing. Interestingly, every culture that did develop Academia promptly established the eight academic disciplines, usually in this order: Philosophy, History, Social Theory, Theology, Political Theory, Economics, Science, Mathematics.

Why does Academia require (a) assertions and (b) written assertions and (c) accumulated written assertions? All dialectics involves assertions, whatever else gets uttered too. Academia relies on didactics and dialectics, actual or imaginative, among thinkers who are reading accumulated writings making assertions. Each academic discipline promotes methodical discourse for communal deliberations about credible assertions, which academic communities call "knowledge". The point of Academics is methodical knowledge, which is not possible without scholarly literature. Traditional oral cultures surely possess expert information acquired from a society's millennia-long experience about innumerable

matters. The twelve Disciplined Praxes all pre-date scholia and writing itself, and both Wisdom Literature and Technical Literature offer refined or elaborated discussions about practical expertise and wisdom. However, literature sooner or later made the assembly of Academia irresistible, and every literate and schooled society, unless halted prematurely by invasion or extinction, eventually developed their versions of the Eight Academic Disciplines. Three specific reasons, here provided as A, B, and C, explain what Academia requires from literature.

A. Everything communicated without any writing is either Oral, Pictorial, Mimetic, or Coded. Whether oral (spoken and whistled language), pictorial (such as drawing, mosaic, or painting depiction), mimetic (e.g. gestural sign language), or coded (signaling by glyph, smoke, drumming, etc.), informative communication at most attains the complexity of Recitation. Recitations on desired occasions (regardless of content and context) can display representational features, but they are essentially performances. No two performances, even if they are taken for repetitions of “the same” material, are assertions in and of themselves, for participants or observers. Academic discourse largely consists of assertoric statements. Academia requires assertions for people to ponder, not just performances to appreciate. Performances (such as dramatic or mythic content) can surely inspire ideas and judgments, and those, if recast into grammatical statements, can become assertions. Assertions require contradiction, not just contraposition. “A” and “B” are contradictory where each is an assertoric (not just expressive or suggestive, etc.) statement where only one (at most) can be credibly (rationally) affirmed. Some “C” may reconcile A with B, but reconciliation presupposes their assertoric incompatibility.

B. Performances (including rituals, remembrances, recitations, recopying, reconstructing, and so on) cannot contradict each other. Portions of performances can observably contrast, while *descriptions* of two phases from two performances can be contrary to each other. Observed contrasts and described contraries are not contradictory. If multiple performances inspire a person to think “That is inaccurate” or “That can’t be correct” and so on, then this person could conduct another performance to display what is thought to be right, but yet another performance cannot *contradict* the others. Not even the imitation of this new “correct” performance among other performers, and not even the lasting survival of one’s performance in future repetition longer than any competitor performances, establishes a contradiction. A modernized performance of Shakespeare’s Hamlet can be contrasted with older versions, but it can never be said to contradict the original play script. If someone thinks, “The original Folio is the true Shakespeare play” then let that statement be asserted.

C. So far, activities such as public debates are performances able to meet criterion A by delivering contradictory recitations out loud. However, Academia further requires *written* assertions, that can be collected and accumulated for lasting usage, lasting longer than a generation and even outlasting living memory with little or no inerrancy. Any assertion can be repetitively recited among communicators, but repetitive sets of assertions passed along among multiple individuals over long durations (and especially across lifetimes) gradually revert to performances, without exception. The close study of oral cultures shows that the notion of “reliably perfect transmission” across decades or lifetimes without any written aids around is mostly fictional (a convenient fiction for devout memorizers, but still a fiction). Rare examples of highly accurate transmission of a long narrative make use of communal recitation (for example, Buddhist Pali suttas or Papua New Guinea genealogies), where many memorizers occasionally compare their recitations in full and the majority rules on accuracy. However, these rare cases are exemplary for preserving singularly important narratives, not multiple informational sources about diverse matters. In fact, impressive displays of verse memorization from centuries past are not necessarily matched by comprehension; it may happen that neither reciters nor listeners can understand most of the words anymore. (Medieval and modern travelers to India have noted how Brahmins able to repeat entire Vedas largely lost any comprehension of the rites and hymns, unless they were educated by up-to-date commentaries. Because the Zoroastrian Avesta was only transmitted orally

for many centuries by those unfamiliar with its original ancient language, some of it is now unintelligible to all.) The accumulation of information about many topics, essential to academics, has to rely on written records of informative assertions. Assertions are not the only sort of information, of course, but academics requires assertions to be deliberated and debated for the point of judging (sooner or later) which is more credible, over and above any opinions held by individual debaters. The *credibility* of assertions is, by definition, somewhat independent from any degree of conviction or certainty held by individuals – credibility is by its cognitive nature something more communal than subjective. In other words, consensus is credit: the way that a consensus forms around the credibility of an assertion is an additional rational contribution to its credibility, over and above whatever each person separately happens to think. For communal credibility, rationality is not reducible to just the aggregate of judgments taken one by one.

D. In light of A, B, and C, Academia requires accumulated non-fiction literature available for scholarly study. Academics are scholars who seek and value communal ponderability, debatability, and credibility placed on long-accumulated assertions. Those assertions can then be methodically evaluated through deductive, inductive, and abductive inferences and complex arguments. Such methodologies require the consultation of collected and organized texts. In the short term, for episodic purposes, dialectics and debate does not necessarily require anything written. One can easily imagine a political speech to a receptive public audience, or a legal hearing where only spoken testimony from all parties gets presented. Oral cultures had well-developed political and legalistic discourse for their social practices. That praxis discourse is not yet academic. For Academia, where long-lasting communities of scholars (not just scribes) must access accumulated information, only collections of written literature will serve. Scholars eventually require preserved collections of writings. Scholia without collections or libraries is barely possible, but impractical and inefficient, and usually sporadic. The intellectual heights of Scholia call for the establishment of Academia.