DEDUCTIVE AND INDUCTIVE STRUCTURE IN (AND OUTSIDE) THE ESL WRITING CLASS

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Citation: MATHEWS, C. Deductive and Inductive Structure in (and outside) the ESL Writing Class JAS4QoL 2016, 2(4) 4:1-5.
Online: http://as4qol.org/?p=1710#art4

Received Date: 2016/12/16 Accepted Date: 2016/12/25 Published: 2016/12/31

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Abstract

Deductive writing is favored in most ESL writing classrooms, while Japanese-language writing tends towards inductive modes such as ki-shou-ten-ketsu. Japanese students writing inductively in English has been explained as the result of such Japanese prose styles being carried over into English. This article argues that it is naive inductive writing, not the inductive mode per se, that is a problem in writing classes. Japanese prose forms actually share significant features with certain forms of English writing, and the student writer should be taught how to recognize and, when appropriate, use such sophisticated inductive techniques.

Keywords: deductive, inductive, ki-shou-ten-ketsu, academic writing, ESL, Annie Dillard

1. Introduction

In construction, it would be a bad idea to raise the peak of a house before the supporting foundations had been laid. In English-language technical and academic writing, however, such a top-down process—in which the main point is stated at the outset and its supporting arguments come later—is a highly effective way of conveying information and ideas. This form of writing is known as deductive. It is the form that academic and technical writing is supposed to take, and it is a form with which many students of English writing struggle. In this essay, I am going to examine the differences between deductive and inductive writing, including forms of the inductive mode that seem unique to the Japanese-language writing tradition. Inductive writing, I will argue, is not the problem it is often regarded as being; it is, rather, a form used to great effect by some of the most skilled English-language writers. The role of the writing teacher then should be not to eliminate one mode, but rather to ensure that students have an understanding of, and a competency in, both forms of writing.

2. Deductive and Inductive Writing

In deductive texts, the writer begins by stating their main point. In an essay, this is the thesis statement; in a paragraph, it is the topic sentence.
The remainder of the paragraph consists of supporting material: examples, evidence, and discussion connected to the topic. The inductive mode flips deduction on its head. In an inductive text the writer starts with observations, suggestions, and unanswered questions, building up information and ideas layer by layer. The main point is stated at the end of the paragraph or essay, in the form of a conclusion. Inductive writing is closer to the way people actually think (moving from a position of uncertainty to a conclusion) than the more clinical deductive mode, yet the deductive mode is the one most commonly taught in the writing classroom.

There are two main reasons for this. A deductive text, by stating its main points up front, is easier to understand than an inductive text. A well-written deductive text even lends itself to speed reading; its overall meaning should be parsable just by reading the first or second sentences of each paragraph. This makes it an especially valuable structure for texts in which the straightforward communication of facts and ideas is paramount. For the writing teacher, however, there is an additional motivation to push deductive writing. The top-down nature of the form forces the writer to form their ideas in a focused way. By having to come to their conclusions before they begin to actually write, the student writer has no space in which to hide ignorance or indecision.

How, then, do Japanese-language prose styles compare to English deductive and inductive modes? One of the most common modes of writing in Japanese is *ki-shou-ten-ketsu*. This mode is common not only in academic prose, but also in narrative texts such as manga and film/television scripts. *Ki-shou-ten-ketsu* is an inductive mode of writing, yet it appears to differ significantly from the English inductive mode. *Ki* is the introduction; as in English language inductive writing, it gives the broad context of the topic (issues, questions, intuitions, preliminary ideas) without a clear thesis statement or topic sentence. *Shou* develops the themes set up in *ki*: more details are given, the initial context is expanded, examined, and explained. Then comes *ten*, the moment where Japanese writing seems to radically break with English forms.

*Ten* translates literally as “roll” or “turn”: *tenku* means “rolling clause.” In the *tenku* the writer makes a radical shift in topic, either introducing new information that does not seem to fit the established topic, or examining the topic from an unexpected and surprising direction. It is followed by *ketsu*, the conclusion. As in an English language inductive text, this is where the writer makes their main point. A frequently cited example of *ki-shou-ten-ketsu* is early 19th century Japanese poet Sanyo Rei. I have paraphrased Maynard’s translation:

The daughters of Itoya in Osaka
The eldest daughter is 16 and the youngest is 14
Historically, warriors kill their enemies with bows and arrows
The daughters of Itoya kill with their eyes

The *tenku* in the third line is initially jarring. The writer seems to jump, without warning, away from the topic of the daughters to the apparently unrelated subject of historical warfare. Then, in the next line, these two topics are synthesized into a unified confusion. The synthesis is so elegant that, after an initial reading, the third line no longer seems even slightly incongruous. The skill with which the *tenku* and the *ketsu* have been sequenced creates a text that may be puzzling at first, but which on a second reading forms a perfect logical package.

### 3. Deductive and Inductive modes in the writing class

In a recent introductory level academic writing class, a Japanese student of mine handed in a short paragraph. I had instructed the class to write about a lesson they had learnt at some point in their lives, and my expectation was that they would write in the deductive mode (to which I had already introduced them). What the student gave to me, however, was a beautiful example of *ki-shou-ten-ketsu* (edited for grammar):

From a young age, I studied the piano. I found it very difficult, but by the age of six I was able to perform in school concerts. There are many languages in the world, some with very different vocabularies and grammars. By studying hard, I was able to learn the language of music.

In theory, I should have marked the student down for using such an inductive structure. Yet the para-
graph was, like Sanyo Rei’s poem, so elegant that I could not bring myself to do so. The student certainly had not used the deductive mode, but their inductive writing worked so well that it seemed absurd to count it a failure. Can *ki-shou-ten-ketsu*, then, work in an English-language context? According to many educators, the answer to that question is “no.”

The English-language scholar to have written the most about *ki-shou-ten-ketsu* is the linguist John Hinds. Hinds claims, not unreasonably, that the form does not cross over well into English-language writing. Not only does it go against the deductive ideal of English academic writing, but the initial incongruity of the *tenku* seems to render prose (at best) obscure or (at worst) illogical. The English-language tradition of deductive writing, then, seems to offer a corrective to this problematic Japanese structure.

Yet Hinds’s analysis is itself problematic for several reasons. Ryuko Kubota, a professor of language and literacy education, has claimed that Hinds tends to overgeneralize Japanese writing styles. Japanese-language writers, she points out, do not in fact slavishly adhere to *ki-shou-ten-ketsu*. Instead, they vary their structure dependent on the genre of text they are writing, short newspaper reports, longer articles, and technical reports all having their own variations of form. Furthermore, Kubota goes on to claim, Hinds’s binary distinction between English-language writing and Japanese-language writing feeds into old stereotypes about Western and Eastern culture, with the West seen as the realm of logic and the East as the realm of obscurity and obliqueness. These are valid points, and highlight how easy it is to slip into generalized thinking about subjects that are, in reality, highly nuanced. Yet while Kubota’s argument focuses for the most part on Japanese-language texts, there is also an important point to be made on the other side of the equation. In characterizing *ki-shou-ten-ketsu* as oblique, Hinds implicitly contrasts it against the supposedly logical ideal of English writing. This characterization of English writing, however, is itself an oversimplification. Irrespective of how inherently inductive much Japanese writing may be, the fact is that English-language writing is by no means the bastion of deductive structure that Hinds implies it to be. Any teacher of introductory academic writing with native English speakers for students will confirm that those students tend to naturally write in the inductive mode. And it is this “natural” or naive inductive writing, not inductive writing itself, that is the real problem in the writing classroom.

Students new to English write inductively not because of their cultural backgrounds, but because the structure of inductive writing mirrors the way most people tend to think. For the most part, people do not know what they are trying to say—that is, what they are trying to write—until they have worked through a mental process of inductive reasoning. The problem with the naive induction of the untrained student is that this process plays out, not in the mind or on the notepad, but on the page. The student begins in a position of uncertainty and indecision and moves, often clumsily, towards the formation of an opinion, a perspective, a thesis. Along the way their thinking branches out into paths that may lead nowhere or may circle back, after long diversion, to the starting point. Irrelevant details rise to the surface and float there, never to merge back into the main flow.

This is a natural way to work through a problem, and when it is a primarily mental process it results (if followed through to the end) in a clear conclusion. The problem when this is a written process, however, is that the extraneous matter—the dead ends, the diversions, the irrelevancies—are left to clutter up the page. Naive inductive writing is messy writing, unpleasant to read and difficult to understand. To make matters worse, the naive student may, due to time constraints or a lack of motivation, abandon the process before any true conclusion has been reached. The text is thus left in suspended disarray, pointless and unfocused.

One of the features that most overtly signals such naive inductivism in student writing is the misuse of rhetorical questions. Rhetorical questions are popular with both native English-language and ESL writers. Their attraction is clear: the writer is, as they begin to write, still struggling to form their own opinion on the topic, so it seems natural to articulate that uncertainty in the form of a question. The problem for the inexperienced writer is that their thinking on the topic may be so undeveloped that those initial questions are extremely banal. An essay on rail transportation in Tokyo may, for example, begin with the question “Have you ever ridden a train?” Such a question does signal the basic subject of the essay, but it does little else to show the significance of that subject, and it does nothing to engage the interest of the reader.
Yet rhetorical questions can, if formulated in a more thoughtful way, be a useful and effective way of drawing in the reader. The key here is sophistication. A more skilled writer, when formulating a rhetorical question, does not simply write down the first question that springs to mind. Instead, they think through the issues involved first, then work backwards to formulate a question that engages with those issues in a meaningful way.

4. English Inductive Writing Outside Academia

Here, then, is a significant disjunction between English writing as it is taught in the classroom and as it appears in actual (non-academic) essay, articles, and books. Outside the English writing class, sophisticated inductive writing is widespread, common in all manner of nonfiction writing, including magazine articles, literary essays, and personal essays. Of course, the reasons writers of sophisticated English use such questions are very different from the reasons why the inexperienced student writes this way. Whereas the student simply writes the same way they think, the more skilled writer deliberates recreates the process of thought in their writing. Through a careful process of restructuring and refinement, they create a text that subtly guides the reader in the direction of the writer’s own reasoning.

The structure of such sophisticated inductive English writing is frequently closer to ki-shou-ten-ketsu than it is to the deductive mode. The primary commonality between Japanese writing and sophisticated English-language prose can be found in something called volta. Volta is a writing technique, originating in 14th century Italian poetry, which entered English literature with the adoption of the Italian sonnet form. In the sonnet as written by English poets such as Edmund Spenser, Sir Thomas Wyatt and, most famously, William Shakespeare, the text is split into two sections. First there is an extended section in which an idea, or chain of ideas, is developed (in the Shakespearean sonnet, this is the first 12 lines of the poem). Then comes the volta: a moment of radical shift that casts a new interpretation on the preceding lines, sometimes even to the point of actively contradicting them. In Shakespeare’s Sonnet 130, then, we first have lines like these:

My mistress’ eyes are nothing like the sun;
Coral is far more red than her lips’ red;
If snow be white, why then her breasts are dun;
If hairs be wires, black wires grow on her head.  

Then, at the very end of the poem, such negativity evaporates to be replaced by the poet’s true estimation of his loved one: “And yet, by heaven, I think my love as rare / As any she belied with false compare.” The entire meaning of the poem suddenly turns on itself: the poet, we realize, was not in fact denigrating his beloved, but rather presenting an honest portrait of her so that his final declaration of loved is unsullied by cliché or exaggeration.

Sonnets are a relatively rare form in contemporary poetry, yet volta continue to be a vital component in both poetry and prose. The volta can take a variety of forms. Turnabouts in argument, like those in Shakespeare’s sonnets, are still common. There can also be unexpected shifts in narrative, changes in perspective, and even shifts in genre—for example, a text morphing from realism to fantasy. Even more significantly, as Wilson has demonstrated, English-language writers frequently use such volta to inject dynamic energies into their texts, “bringing order to apparent literary chaos and allowing lyric essayists the freedom to push and prod poetic prose until an emotional message pops from the page.”

One example of such a prose volta can be found in Annie Dillard’s short meditative essay “This is the Life.” Dillard’s writing often engages with big themes: mortality, the brevity of human life, the immensities of time and space in which human beings find themselves. In keeping with such ambitious subjects, her essays are often characterized by an open-ended questioning tone. “This is the Life” is a short but especially profound essay on one facet of the human condition: specifically how each of our lives seem so important, so vital, and so universal (in that the things important to us seem somehow essentially, universally worthy), and yet how our individual subjective experiences—our finite lifespans—seem so irrelevant in the larger space of history.

Dillard begins by listing, in the second person, some of the different values by which people can live, or have lived:
You wear the best shoes you can afford, you seek to know Rome’s best restaurants . . . drive the best car, and vacation in Tenerife . . . or you take the next tribe’s pigs in thrilling raids; you grill yams; you trade for televisions and hunt white-plumed birds. Everyone you know agrees: this is the life . . . Yours is the human struggle . . . to achieve [whatever] your own culture tells you: to publish the paper that proves the point; to progress in the firm and gain high title and salary, stock, options, benefits . . . to feed your children or educate them to a feather’s edge; to count coup or perfect your calligraphy.

After this extensive list of declarative statements comes the volta, the tenku of the essay. We expect Dillard to conclude with words of wisdom about the relative smallness of each human life, perhaps to preach the importance of understanding the relativity of our cultural and personal values. Yet Dillard’s inductive chain of reasoning suddenly pivots away from declarative statements and proceeds, instead, to ask a barrage of rhetorical questions. What do you do when you understand your own finite nature? How can such immense knowledge change your everyday behaviour and attitudes? Each questions leads to yet another question, making it seem that the essay is no longer heading for a conclusion but is instead spiraling out into uncertainty. “What,” she goes on, “seeing this spread [of time and space] multiply infinitely in all directions, would you do differently? No one could love your children more; would you change your project? To what?”

The essay ends with two paired sentences, the penultimate long and declarative, the final a stark two-word question: “You have seen an ordinary bit of what is real, the infinite fabric of time that eternity shoots through, and time’s soft-skinned people working and dying under slowly shifting stars. Then what?” That two-word question is, in one sense, a synthesis of the entire essay. Synthesis is this sense means literally to bring together, to combine the threads of a text into a unified conclusion. Yet ironically, this is a synthesis that scatters those threads outwards. This is a mirror of the existential crisis in which Dillard finds herself: there is no answer, no final truth upon which the writer can rest. For such a topic, there is no better conclusion than an anti-conclusion.

5. Conclusion

Granted, the extreme open-endedness of Dillard’s essay may not be an appropriate model for a student’s academic writing assignment. Yet the existence of such texts demonstrates how the deductive mode is itself not appropriate for all purposes. The lesson here for the English writing teacher is that, rather than simply suppressing the student’s impulse to write inductively, they should teach the differing strengths (and weaknesses) of both the inductive and the deductive modes. The deductive mode is an ideal mode for technical writing, instruction manuals, reports, and articles the primary purpose of which is to convey information. The sophisticated inductive mode, on the other, is a valuable tool for dealing with more nuanced topics. By mimicking the writer’s thought processes it can carry the reader along with that process and guide them to the writer’s own conclusion. The “surprise” factor of the tenku/volta can then be used to engage the attention of the reader while simultaneously acknowledging ambiguity and open-endedness. Whereas deductive writing makes things simple and clear-cut, sophisticated induction is able to show the messiness of subjects where solutions are not so straightforward.

Ultimately, no mode of writing (deductive, inductive, ki-shou-ten-ketsu, or otherwise) is a guarantee of clarity and logic. The writer must always do the work to create a text suitable for their purposes. If that writer knows the techniques of both inductive and deductive writing they will be well equipped to construct a text that, whether they work from the foundations upward or downward from the peak, communicates their message powerfully and effectively.

6. References


8 Ibid.

9 Ibid.