Identifying Fallacies of Reference in Argumentation

by Jim Gough

Introduction

The experience of teaching informal logic (sometimes called practical logic) at the introductory level over the last fifteen years has allowed me the opportunity to identify some interesting problems. These problems have been encountered by students attempting to understand some of the ideas presented in the informal logic course and by the instructor trying to insure that the students comprehend these ideas. Of course any significant problem that is encountered by a number of students should provide a reason for the conscientious instructor to investigate ways to solve the problem. At the same time, the option exists to eliminate the problematic content from the course. As I have suggested elsewhere, the elimination of content from any course in the liberal arts should be considered carefully and critically analyzed to determine that it is an acceptable strategy. For example, some ill-considered attempts to revise the liberal arts curriculum have been met by some justified criticism. However, if we have both a conscientious instructor and the notion that the content of the course should remain, then the issue is one of pedagogy. What is the most effective strategy to gain the maximum student comprehension of the problematic course material? Following the suggestions in some of the better informal logic texts, my emphasis in teaching informal logic is first to help students develop the critical skills necessary to identify mistakes in the argumentation of others. As well, it is to help them avoid these same mistakes in the construction of their own arguments. So, all the course material is focussed on developing these two corresponding skills.

In this paper I provide an explanation of the strategy or process I followed in identifying and producing one solution to a problem encountered in teaching students how to identify distorted references in arguments. I include a copy of the document I distribute to students for their use in making sure they have identified distorted references correctly and have the means to defend their claims, along with some exercises which have proved useful in the testing of the ideas developed about distorted references. I remain open and appreciative of any suggestions as to how this classroom material may be improved.

These distorted references are references that in various ways could mislead the reader of an argument to accept an unacceptable reading of a term, concept or idea. In other words, the attempt is to avoid accepting or producing a distorted reference. It is important for the critical reader to identify exactly how the reference is distorted in...
order to be able to understand how they can be misled and how they can avoid making the same mistake themselves. It is also important for the critical reader and arguer to be prepared to provide a rational justification for any mistake they claim has occurred in the argumentation provided by someone else. This is important because sometimes students make the same mistake in reasoning in their own arguments they accuse others of committing. It is necessary to avoid, if at all possible, this clear violation of the Principle of Non-Contradiction. Consistency is not just an option; it is necessary to develop and maintain good argumentation skills. Students and some post-modern relativists often miss this very important point.

The Strategy

The strategy followed in producing the enclosed classroom material (5. Identifying Distortion and Confusion in Linguistic Reference) is relatively simple. First, it is necessary to clearly identify (or discover) the problem, its parameters, source(s) or cause(s). This process may involve several components from various areas, each interacting in different ways to produce the problem. Students were informally polled to determine where they identified the problem with the material in the text on language and argumentation problems. A formal poll was used in the middle of the term in which students were encouraged to write down their concerns with any section of the course and the section on problems with language use surfaced in every term. A colleague asked me to teach this section in his course because he was unsatisfied with his ability to make the distinctions clear to students and students reaction to this section of the course. This provided the basis for a reasonably well-formed description of the problem.

Second, a solution dealing with factors identified in the description of the problem needs to be sought which is satisfactory to both the standards of the instructor (and/or the course itself) and the comprehension needs and abilities of the students. A standard needs to be created which satisfies both these two important conditions. Establishing this balance or trade-off process, forms the basis for what could be characterized as reasonable expectations as a standard for solving this or any similar pedagogical problem. What is it that a student could reasonably be expected to comprehend in an introductory course in informal logic? What standard(s) should apply to establish what is a reasonable explanation of material in the course? These are the kinds of questions that must be answered if one has established the basis for reasonable expectations. Of course, the answers to these questions and the standard of reasonable expectations will vary by course and situation. However, once there is a tentative determination of this standard, it is then possible to decide on the parameters of a solution. What needs to be provided from the perspective of both the student and the instructor. For example, it is not a reasonable expectation that the instructor should provide students with both the questions and all the correct answers to any quiz or test that counts for grades, even though the students might
appreciate such a course. Also, it is not reasonable for any
instructor of an informal logic course to expect students to understand
difficult philosophical issues in order to grasp a particular concept in
language or reference. Reasonable expectations fall somewhere
between these two extremes and always remain open to revision
without prejudice within the range of options available: level of
student comprehension, time available over the duration of the
course. The solution to a pedagogical problem must be constrained,
then, by a standard test established by the use of some reasonable
expectations between the audience (students) and the instructor.

The Problem

In most informal logic texts and also in most informal logic
courses, there is a section that deals with problems involving the
misuse of language. In some textbooks with a fallacy approach or
focus, these problems are explained as fallacies of reference,
ambiguity, vagueness and equivocation. In other textbooks, these
problems may be identified as exaggeration, slanting and selective
use of evidence. Some problems of reference are also included in
discussions of emotionally charged language, questionable
classifications, biased or sexist language, persuasive definitions or the
use of euphemisms. Sometimes the problem is identified as the
psychological effects on an audience, while at other times the problem
may be described as simply a mistaken or sloppy reference. In the
first case the arguer’s intent plays a role while in the second kind of
case it does not. I choose to duck this difference by focussing on the
effect on an audience, looking for a cause but not necessarily a
motive for this negative effect. My fear is that focussing on a motive
could quickly lead to an ad hominem attack unless one is particularly
careful. Often students are quick to demonstrate their new found
fallacy labeling skills producing a problem called fallacy overkill,
when charges of a fallacy are ill-considered and hastily made without
due consideration that the burden of proof falls on the person making
the charge of a fallacy to justify or defend his or her charge.

Within this large range of possibilities, students can tend to be
confused and find it difficult to identify the precise mistake or fault in
reasoning in the defective argument or piece of rhetoric. Without this
precision in identification any attempted justification for the charge of
a mistake often fails. Without a complete understanding of the
identification of the fault and the justification for it, any attempt to use
the analysis of an example containing a fault in language to correct
one’s own reasoning and argumentation is likely to fail. This is often
frustrating for students because they may sense that something is
wrong but remain unable to identify the precise fault within a set of
possibilities. This frustration becomes most apparent when students
are asked to explain how the mistake in language use occurs and how
to correct for it in the argument and how to avoid it in one’s own
argumentation.

Proposed Solution
There are several factors that seem to contribute to this problem. Often students in an informal logic course need to develop careful reading of texts; otherwise *slippery references* pass through their pre-critical comprehension. So, it is useful to give students a pre-test of their reading and comprehension skills in the first week of the course to gauge the amount of work that needs to be done to improve their critical reading skills. This helps the instructor to identify any problems in reading comprehension that could contribute to later problems with identifying distorted references. If we suppose that the reading/comprehension problem is solved, then we can identify still other factors.

The first factor identified is that textbooks rarely, if ever, give extensive examples of precise or good use of language to provide accurate references. Indeed, there may be residual fear of defying the post-modernist, relativist claim that all texts are subjectively relative to the personal references provided by individual readers. For the post-modernist here is no objective or reader invariant text whether the text is taken to be an argument or any other piece of rhetoric. This failure, however, leaves many students somewhat justifiably puzzled by what is supposed to be wrong with the use of language that distorts reference. So, to correct this problem I constructed a table which begins with an ideal situation in which reference is clear and determinate as the basis for a comparison to distorted references, those that fail to satisfy the conditions of the ideal (1A. **Language**). This ideal language contains three components of a relationship, (a) the idea, term, word or concept, which is used to (b) provide a determinate or clear map or reference or identification of (c) a referent as object, event or state of affairs. The middle column (b) changes in the ideal language relationship from what should be the case to what is the case in deviations from the ideal in the languages referred to as 2A, 3A and 4A. This ideal language is used as reference point for fixing on deviations from this norm.

There is no attempt to justify the actual existence of this language or even the possibility that it could ever be realized. It is a heuristic device only. This ideal language relation allows the student to determine what specific differences and conditions occur when this Aristotelian-type mean is not satisfied. Distortions from this ideal map can be determined with some ease and defining conditions identified easily. Defects in this ideal relationship are identified as problems (**Problem 1** | **Problem 3**) which produce the next deviation from the ideal such as relationships 2A.**Language**, 3A.**Language** or 4a.**Language**. Hence, students are better able to identify the particular mistake or fault in language use and reference. This makes them better able to construct a defensible justification for the charge of a particular fallacy of language. Finally, they are often better able to determine how they can avoid making these same mistakes in their own work.

The second significant factor in distorted reference is the use of questionable classifications. Language is a schema of classifications.
Questionable classifications have been used to formulate negatively discriminatory identifications in ways that are illegitimate (without any acceptable justification or argumentation).\textsuperscript{11} Bias and prejudice seems to have a linguistic foothold as early derogatory identifications of women as akin to passive, docile, domestic animals, for example, served as an attempted justification of their discriminatory and biased social status and roles. The same hold true for other negatively discriminated against groups. Many students abhor what they take to be biased and prejudicial language but fail to understand or identify why such references are wrong or mistaken.\textsuperscript{12} If there is a relationship between bias and language uses, one part of it seems to occur as a distortion of reference. So, to identify how this might occur, the Problem 3 is provided to help the student identify what goes wrong in the reference relationship identified as 4A.Language.

The problem for students understanding mistakes in language use is not created so much by what textbooks say about misuses of language in argumentation but what these texts do not say. In my brief survey of some of these texts, there seemed to be an implicit or unelaborated, ideal view of reference, which was assumed in many of these textbook representations of the misuse of language in arguments. Among students of philosophy the various views of reference, correspondence, coherence, pragmatic, semantic, etc., remain contentious and subject to much critical argumentation. So, perhaps this might account for the missing or hidden assumption not being made explicit. As in many arguments, it is important to identify and make these assumptions explicit so those students in an informal logic course can understand deviations from the norm. Many students in informal logic courses have no background in philosophy or issues of reference. Any failure to make the ideal reference situation explicit violates the \textit{reasonable expectations} that students could generate about the course. So, the burden to correct this situation falls on the instructor.

The resolution to this problem, which I have employed for the last three years, has gained mixed results. Some students have been able to make good use of the material to focus their efforts very precisely on the fault committed, eliminating close alternatives in the process. Other students, however, have indicated in both informal and formal feedback that the schema developed was more difficult to understand than the in-class and textbook explanations. So, for these students the material was not only not helpful, it was also somewhat problematic as it seemed to produce more angst than the original problem it was intended to solve (See: Post-Assessment questionnaire at the end of the handout). This suggests that the instructor\textsuperscript{\dagger} s reasonable expectations about this assignment and handout does not yet match some student\textsuperscript{\dagger} s reasonable expectation. The equilibrium point has not been reached and more work and research needs to be done before this material can be deemed fully successful. This should not be cause for great alarm on my part but it does point out the need for continued assessment and revision of
such class assignments and related material.

Identifying Distortion and Confusion in Linguistic Reference

Student Name:_________________Student ID#________________

Instructions: In this exercise, you are requested to imagine that the Ideal Language represented in 1A provides a standard for testing deviations identified in 2A, 3A and 4A. So, begin this project completing the pre-test. Complete the non * sections of exercises 1, 2, 3 and 4, p.108 of the textbook. After you have completed this pre-test, then you should proceed to read through the set of explanations of each of the language relations. Then proceed to the discussion of the problems that can occur as a result of distortions and confusions in reference and meaning. Use these distinctions to add to your understanding of the material in the textbook. This assignment is intended to supplement the textbook explanation and exercises, not replace them. Finally, as a post-test complete the exercises at the end of this handout. After you have re-read the explanations and understand the nature of the deviations in each of the relations 2A, 3A and 4A, then complete exercises the non * exercises 6 (page 109-110) and 1, 2, 8, 9, 10, 11 (pages 121-122). This material will be discussed and various solutions to the enclosed exercises considered in the next class. Finally, at the end of this assignment write a brief critique of it: was it clear, informative and helpful or not? As always fully explain and support your views. Keep this material as part of your course notes.

Ideal Situation: Clear and determinate meaning is a precise fit of A (word, term or designation)--->B(object, state of affairs, situation, concept, idea or abstraction) in a way which is consistent.

In the chart below, 1A.Language represents the ideal situation that should be achieved to establish fixed or clear reference and meaning. It is not what often, or some claim ever happens, but it is a useful norm. In this situation a term, word or phrase should provide determinate, clear and precise meaning to fix reference or identification with an object, idea, concept, situation, state of affairs, or abstraction. Using this ideal model, reference should be fixed in such a way that all viable alternatives are eliminated and there is no distortion or confusion in meaning. This Ideal Situation represents a useful norm because mistakes in language use can be understood as references or attempted references, which violate this norm or standard of reference. However, this Ideal Situation is a contentious model as there are a lot of objections to any claims that reference can be either objectively or absolutely fixed in the way that this model suggests. So, this should warn us against complacently accepting this model. The model remains at the heart of what good reference might
be like. It is like aiming for the centre of the target or the bull’s eye rather than some spot on the periphery. While aiming at the bull’s eye, it is likely that most of us will fix reference somewhere on the periphery. This should not deter us, however, from aiming at the centre of the target.

The first language schema, 1A.Language describes an ideal norm, which is violated in each of the other language schemas, 2A, 3A and 4A. The contrast between 1A and the alternatives is meant to provide you with a means of clearly seeing and understanding the differences between the correct use of language to refer univocally or unequivocally and deviations from this ideal. Through practice and experience we should discover what constitute acceptable deviations from this norm (close to the centre but no bull’s eye) and what examples constitute unacceptable deviations. Throughout it is necessary to emphasize the important role played by context. Some deviations are applauded as interesting and even centrally important literary moves in a piece of text primarily intended to be read as a piece of literature. When the context changes to an argument, however, we make different assumptions about the audience, what they deserve, what they are looking for, and how the text should be constructed to rationally persuade them of something. So, in this latter context, ambiguity, equivocation, exaggeration and some distortions are not usually considered acceptable.

Each of the problems listed, Problem 1-Problem 3, alter the ideal meaning/reference relationship specified in 1A.Language (by producing defective relationships identified in: 2A.Language, 3A.Language, and 4A. Language) in ways that make this defective relationship unacceptable, especially as it occurs in the support provided for a conclusion.

1A.Language-> determinate, clear, precise, 1B: referent-object, [word term neutral map-> people, event(s), concept] to provide reference, situation, state of identification of.. affairs, fact, idea.

When the ideal situation described between 1A-->1B does not occur, then the structure of the meaning relationship changes depending on what problem is created with the distorted language use.

The brief descriptions in the centre columns under 2C-4C identify the possible factors, which could contribute to changes in meaning and significant deviations from the ideal description under 1A. There is no illegitimate attempt to identify an arguer’s intentions or motives since this could be fallacious. Consider the following problem that could occur if the conditions in 1A.Language are not satisfied. If this problem occurs in any of its manifestations, (i) - (iii), then this could lead to the defective language relationship described as 2A.Language.
Problem 1: Distortion of the meaning relationship (1A.Language, above) by the use of: (i) emotionally charged language (positive or negative tone added to the referent), (ii) euphemism(s) (disguising of undesirable features of a term), (iii) persuasive definition (redefining a term to alter belief(s), attitude(s) towards acceptance or rejection of the referent).

2A.Language- 2C: attitude, belief, emotional tone is-->
[word phrase term] visualized towards a particular interpretation (negative or positive) over other possibilities and used in place of argumentation.

2B: When there is more than one possible interpretation of the referent, then meaning is distorted to favour one over the others without good reasons, or any argument provided to persuade.

If there is a deviation from the norm established in 1A.Language, then instead of producing the defective relationship described in 2A.Language, above, there is another possibility that reference and meaning may be confused. This could produce the defective relationship of language/reference/meaning described in characterization 3A. Language. The situation in Problem 2, below, is different from that described in both Problem 1 and relationship 2A.

Problem 2: Confusion of meaning by (a) vagueness (no determinate meaning can be discovered in the background or context of the argument), (b) ambiguity (one or more possible meanings but no one meaning is clear from the context or the background), or (c) equivocation (a central term in the argument is used in two or more senses and “the premises of the argument appear to support the conclusion only because these senses are not distinguished from one another”. 14 Note that this latter condition is extremely important to distinguish the mistake made in (b), ambiguity, from the mistake made in (c) equivocation.

3A. Language- 3C: (a) confusion between Bi/Bii/Biii/etc.-->
[word phrase term] 3B: referent indeterminate, unclear

3C: (b) confusion between Bi and Bii------>
3B: at least two alternatives, neither one of which is clear

3C: (c) deliberate use of confusion from--->
Bi to Bii to support conclusion
3B: deliberate shift in referent from Bi->Bii to support conclusion without acceptable
Problem 3: Bias in meaning can occur when a questionable classification is created using distortions of language or confusion in meaning (primarily vagueness, where there is no determinate meaning and/or any proposed meaning is obscure), and/or faulty assumption(s), the arguer produces a questionable classification to support a conclusion without providing any rational argumentation to support this classification. Bias can create a set of psychological parameters within which evidence is placed or situated, mediated in the interpretation of the evidence are vested interest and bipolar opposites, the “us” versus “them” kind of “black and white” thinking. Those that are not capable of rational support replace actual distinctions that could be supported.

4A. Language- > 4C: selectivity and slanting of evidence by->
[word idea, referent concept] exaggeration, underestimation, omission, overestimation of available evidence
4B: A particular kind of selective observation of available evidence

Understanding what is wrong with an argument is one step in a process that should allow us to produce better arguments ourselves. So, there are ways to avoid the mistakes made above.

To solve or to avoid Problem 1, the language needs to be changed to avoid distortion. For example, in (i) and (ii) substitute neutral language for emotionally charged language and in (iii) substitute a reportive or properly formed stipulative definition for the persuasive definition.

To solve or to avoid Problem 2, the referent needs to be fixed, made determinate, by using reportive or stipulative definitions, precise use of terms or context-based clues to establish one clear meaning: examples or paradigm cases can sometimes help to make the meaning clear.

To solve or to avoid Problem 3, how classifications, definitions, distinctions are used in an argument needs to be critically questioned so that the clearest and least biased attitudes and beliefs are promoted. In this way, the evidence can be considered as fairly, neutrally and objectively as possible within some acceptable limits (eg. no complete impartiality).

Exercises and Examples

Example A: Is this an argument or not? If so, standardize and evaluate.

P1. Jobs are created by people.
P2. There are plenty of jobs available to those who need them.
P3. Finding a job is a job, for those with initiative and ambition.
P4. A person who tries hard enough will eventually succeed at finding a job.
P5. Yet, many jobs remain unfilled.
P6. Our welfare rolls remain filled with the jobless.

C7. So, people who can not find a job simply are not trying.

Example B: Is this an argument? If so, standardize, diagram and evaluate.

P1. Intellectually challenged adults are not mature adults.
P2. The opinions of intellectually challenged adults are ill informed by education and sufficient experience.

C3. Hence, intellectually challenged adults should be seen but not heard.

Example C: Is this an argument? If so, standardize, diagram and evaluate.

P1. Real women are ruled by feelings, moods and attitudes, which are all mixed-up, not by facts, reason, nor logic.
P2. So, to genuinely animate and persuade a woman it is only necessary to create a feeling of praise or blame.
P3. Woman is the perfect auxiliary to man.
P4. Authentic women respect their need for guidance, support and control.

C5. So, those women who assume control of their own lives do so at their own peril.

Example D: Is this an argument? If so, standardize, diagram and evaluate.

P1. Women are passive and men are aggressive by nature.
P2. Caregivers are those who are capable of silently, patiently and obediently satisfying the needs of others.
P3. Treatment specialists are those who are capable of taking command, actively structuring and determining the best treatment outcome for patients with diseases and illnesses.
P4. So, women make better nurses than men.

C5. Therefore, women make better nurses than doctors.
(Note: Although some of these examples may appear offensive to some people, they are, at the same time representations of actual positions developed by people in an attempted defense of these positions.)

**Exercises:** Locate each of the terms or phrases in the left-hand column with the appropriate euphemistic phrase or designation in the right-hand column by writing the letter from the left-hand column in the box in the right-hand column.

| [a] terrorist | [] innovative ship-to-shore cargo transfer |
| [b] budget cuts | [] productivity potential |
| [c] sloth | [] impromptu improvised solo |
| [d] yes-man | [] public information |
| [e] corporate greed | [] spatially fulfilled |
| [f] the patient died | [] affirmative activist |
| [g] funeral director | [] downsizing or rightsizing |
| [h] lies we tell | [] hostage administrator |
| [i] lies they tell | [] unprocessed news |
| [j] rumours | [] propaganda |
| [k] fat | [] multi-axis task resolution and data entry process |
| [l] fat individual | [] shareholder appreciation strategy |
| [m] crossword puzzle | [] a person of circumference |
| [n] oil tanker spill | [] recumbency counselor |
| [o] musician’s mistake | [] person underwent spontaneous vital-state alteration |

**Exercises:** For each of the terms or phrases specified, arrange them in an order in which they progress from the most favourable emotional connotation from the perspective of the intention of the person using the term to give it a positive twist, to most negative emotional connotation.

1. expert, well-informed person, know-it-all, intellectual
2. obscene, sexually explicit, pornographic, realistic
3. male chauvinist, assumes the inequality of the sexes, sexist pig, biased against women
4. upward-adjusting market, inflation, rising prices, skyrocketing prices
5. budget adjustments, right-sizing, down-sizing, firing, layoffs
6. senior citizen, old-codger, old man, geezer
7. sensational, attractive, beautiful, pretty
8. propaganda, distorted information, doublespeak, needed information
9. pervert, dirty old man, sexy senior citizen, active libido
10. intelligent, brainy, head-in-the clouds, geek

Post Assessment of the Assignment

1. The material in this assignment was clear - Yes [ ], No [ ], Somewhat [ ] because:

2. If your response to 1, was “somewhat”, then briefly indicate what areas you suggest were clear and which ones were not clear, because:

3. The material in this assignment was informative – Yes [ ], No [ ], Somewhat [ ] because:

4. If your response to 2, was “somewhat”, then briefly indicate what areas you suggest were informative and which ones were not informative, because:

5. Using your responses to 1-4, determine whether or not the assignment was helpful [ ], not helpful [ ], somewhat helpful [ ] because:

   Note: You may want to use this material as part of your course evaluation.

Endnotes

1 For example, some of these classroom experienced problems precipitated the following articles: “The Use of Irony in Argumentation”, Jim Gough and Christopher Tindale, Philosophy and Rhetoric, vol.20, n.1, 1987, and “Missing and Hidden Premises”, Christopher Tindale and Jim Gough, Journal of Informal Logic, vol II, 2 &3, 1985, as well as some others.

2 A discussion of this problem is contained in “Traditions and the Liberal Arts Community”, Jim Gough, Aitia, vol 21, no 1, 1996.


4 This is not an easy task since it requires the instructor to empathize with the situation of the student and his or her context in approaching the material in any course.

5 This is an allusion to the method of convergence that is developed by Lakoff and Johnson in their book, Philosophy in the Flesh, Basic Books, 1999, especially the discussion in chapter 6, pages 91-93. Using this method “convergent evidence tests inferences that are
different from different subject matters and yet confirm the same theory. What makes converging evidence convincing is that the theory cannot follow from any one set of methodological assumptions. Rather, our confidence in it increases as converging evidence from various methodologies mounts up”. (91-92) I am suggesting that this same methodology can be applied to solving problems of the sort that I discuss.

6 In many sexual harassment policies and some theories in ethics references are made to the reasonable expectations of an impartial observer or the “reasonable person standard”. I use a similar device here, except that the standards may vary by classroom context and situation.

7 The use of the legal phrase “without prejudice” is intended to convey the notion that it is possible for someone to give up a preferred position, take on another one, without any residual resentment or distress. This is another ideal situation since many of us may never be able to actually assume such a situational stance.

8 This problem is discussed in the introduction to A Sourcebook for Critical Thinking, Jim Gough, Waterloo, 1983, p.19-20. Also the Max Shulman novel, The Many Lives of Dobie Gillis, Random House, 1952 contains a character who attempts to mold a future wife by teaching her the rudiments of logic which she promptly and humourously turns on its head against the teacher in an elaborate fallacy overkill.

9 In my experience, this is not just a problem in informal logic courses as students often tend to be less critical readers as they seek information not critically acceptable information in this information age.

10 This is not an instance of the naturalistic fallacy or the “is/ought” problem or “ought/is” problem since the intention is to produce an explanation not argumentation.


12 I once had a student complain about the use of an example, which contained (offensive) gender-biased language in an argument. This produced an interesting discussion about how it would be possible to ever identify such problematic language, recognize what was wrong with it and potentially prevent its occurrence in argumentation if was impossible to employ any examples of such language in class.


14 Govier, 1997, 112

15 Some of these examples come from “Euphemistic Doublespeak:”
Some of the examples in this exercise are adapted from Good Thinking: An Introduction to Logic, Second Edition, Gerald Runkle, Holt, Reinhardt and Winston, 1981, p.21

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