

**বচনের বিরোধিতা Opposition:** Standard-form categorical propositions having the same subject terms and the same predicate terms may (obviously) differ from each other in quality, or in quantity, or in both. Any such kind of differing has been traditionally called **opposition**.

**বিরুদ্ধতা:** Two propositions are **contradictories** if one is the denial or negation of the other—that is, if **they cannot both be true and cannot both be false**. Two standard-form categorical propositions that have the same subject and predicate terms but differ from each other in *both* quantity and quality are contradictories.

A proposition, “All judges are lawyers” বিরুদ্ধতা O proposition, “Some judges are not lawyers,”



E proposition, “No apples are pots” বিরুদ্ধতা I proposition, “Some apples are pots”



In summary: **A** and **O** propositions are contradictories (“All *S* is *P*” is contradicted by “Some *S* is not *P*”). **E** and **I** propositions are also contradictories (“No *S* is *P*” is contradicted by “Some *S* is *P*”).

**বিপরীত বিরোধিতা : CONTRARY** :Two propositions are said to be **contraries** if **they cannot both be true**—that is, if the truth of one entails the falsity of the other—but **both can be false**.

“Rupa was at Goa on 01/01/21 at 1 pm” বিপরীত বিরোধিতা “Rupa was at Agra on 01/01/21 at 1 pm



Universal propositions (**A** and **E**) having the same subject and predicate terms but differing in quality (one affirming, the other denying) are contraries.

A proposition, “All poets are dreamers” বিপরীত বিরোধিতা E proposition, “No poets are dreamers,”



If one of the propositions is necessarily true, then it cannot have a contrary.

But.....neither proposition can be necessarily true (স্বতঃসত্য) . They must be contingent (আপত্তিক).

(necessarily true—logical or mathematical truth, such as “All squares are rectangles,” or “No squares are circles.”)

**অধীন-বিপরিত বিরোধিতা:** Two propositions are said to be **subcontraries** if they cannot both be false, although they may both be true.

Particular propositions (**I** and **O**) having the same subject and predicate terms but differing in quality (one affirming, the other denying) are subcontraries.

**I** proposition, "Some diamonds are precious stones," অধীন-বিপরিত **O** proposition, "Some diamonds are not precious stones,"



If either the **I** or the **O** proposition is necessarily false (for example, "Some squares are circles" or "Some squares are not rectangles"), it cannot have a subcontrary.

**অসম বিরোধিতা: Subalternation:** When two propositions have the same subject and the same predicate terms, and agree in quality (both affirming or both denying) but differ in quantity (one universal, the other particular), they are called *corresponding propositions*. This opposition between a universal proposition and its corresponding particular proposition is known as subalternation. In any such pair of corresponding propositions, the universal proposition is called the *superaltern*, and the particular is called the *subaltern*.

**A**- "All spiders are eight-legged animals" অসম বিরোধিতা **I**- "Some spiders are eight-legged animals."



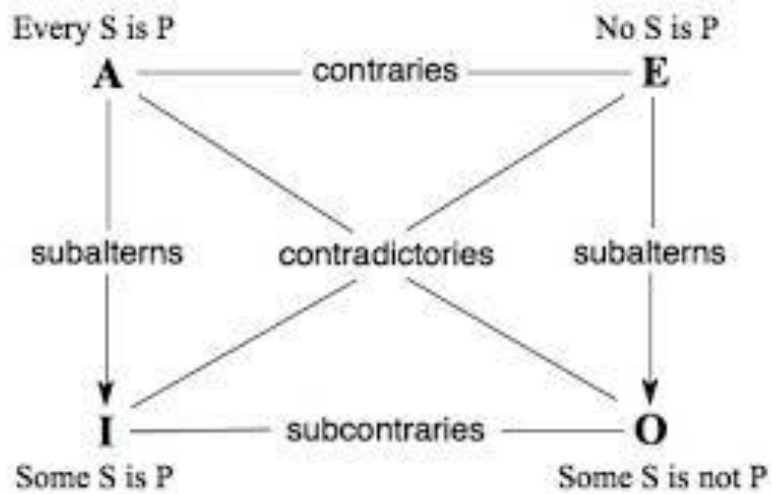
**E** - "No whales are fishes" অসম বিরোধিতা **O** - "Some whales are not fishes."



**If A/E is true, then I/O is true; If A/E is false, then truth value of I/O is undetermined.**

**If I/O is false, then A/E is false; If I/O is true, then truth value of A/E is undetermined.**

## Square of Opposition:



A number of very useful immediate inferences may be readily drawn from the information embedded in the traditional square of opposition. Here are some examples:

- \_ If an A proposition is the premise, then (according to the square of opposition) one can validly infer that the corresponding O proposition (that is, the O proposition with the same subject and predicate terms) is false.
- \_ If an A proposition is the premise, then the corresponding I proposition is true.
- \_ If an I proposition is the premise, its corresponding E proposition, which contradicts it, must be false.

**A** is given as true: **E** is false; **I** is true; **O** is false.

**E** is given as true: **A** is false; **I** is false; **O** is true.

**I** is given as true: **E** is false; **A** and **O** are undetermined.

**O** is given as true: **A** is false; **E** and **I** are undetermined.

**A** is given as false: **O** is true; **E** and **I** are undetermined.

**E** is given as false: **I** is true; **A** and **O** are undetermined.

**I** is given as false: **A** is false; **E** is true; **O** is true.

**O** is given as false: **A** is true; **E** is false; **I** is true.