Coming to Conclusions Based from Evidence: The Double-Movement of Reflective (Critical) Thinking

Our discussions about Dewey's reflective thinking, inference, and metaphor all revolve around a similar mental movement that Dewey calls the "double-movement" of reflection. This movement really is about how we reach a conclusion or meaning based from the available evidence.

Dewey's "double-movement" of reflection
"There is thus a double movement in all reflection: a movement from the given partial and confused data to a suggested comprehension (or inclusive) entire situation; and back from this suggested whole-- which as suggested is a meaning, and idea--to the particular facts, so as to connect these with one another and with additional facts to which the suggestion has directed attention" (Dewey 79).

See how this double-movement of thinking is really about the mental moves we make to come to a conclusion based from evidence:
"we consider *the possibility and nature of the connection between the object seen and the object suggested*. The seen thing is regarded as in some way *the ground or basis of belief* in the suggested thing; it possesses the quality of *evidence*.
This function by which one thing signifies or indicates another, and thereby leads us to consider how far one may be regarded as a warrant for belief in the other, is, then, the central factor in all reflective or distinctly intellectual thinking"(7-8).
… "Thinking… is defined accordingly as *that operation in which present facts suggest other facts (or truths) in such a way as to induce belief in the latter upon the ground or warrant of the former*" (9).

Inference and Metaphor both operate in the same ways.

Inference:
An inference is a belief (or statement) about something unknown, made on the basis of something known. All inferences have two parts: a **basis** (the known factors; specific and indisputable) and the **conclusion** (the educated guess: a generalization based on evidence, but nonetheless uncertain).
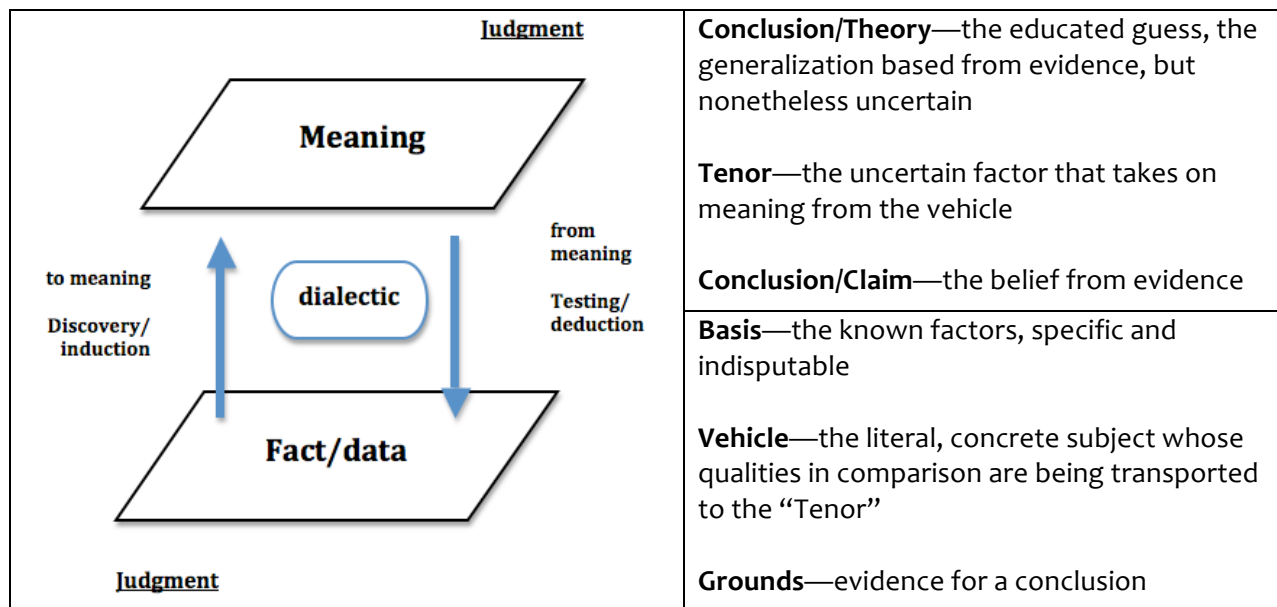
Like in our classroom example in the handout on inferences, we see the wetness, but we infer the rain. We see the person driving a nice car, and we infer they are wealthy.

Metaphor:
A metaphor is a direct comparison in which one thing is described as if it were the other. A metaphor expresses the unfamiliar or unknown (the [tenor](#)) in terms of the familiar or known (the [vehicle](#)). When Neil Young sings, "Love is a rose," "rose" is the vehicle for "love," the tenor.

Putting it in terms of "inference," the **vehicle** is the concrete, specific "thing" or fact, and the **tenor** is the inferred meaning or belief about something unknown. The concept, idea or emotion (tenor) is given meaning through the characteristics of the specific thing or image (vehicle). Our meaning or understanding of love as sometimes painful is communicated by the characteristic of roses having thorns.

Diagram of Double-Movement of Thinking:

Judgment **Meaning** *to meaning* **Discovery/ induction** dialectic *from meaning* **Testing/ deduction** **Fact/data** **Judgment**	**Conclusion/Theory**—the educated guess, the generalization based from evidence, but nonetheless uncertain **Tenor**—the uncertain factor that takes on meaning from the vehicle **Conclusion/Claim**—the belief from evidence --- **Basis**—the known factors, specific and indisputable **Vehicle**—the literal, concrete subject whose qualities in comparison are being transported to the "Tenor" **Grounds**—evidence for a conclusion

What Dewey illustrates here is that <u>this movement is not one way</u>—one fact does not immediately lead to belief. The movement between meaning and facts is like a conversation that goes back and forth. Facts lead us to some suggestion or theory of what they mean—a comprehension of the whole. But then we return with our theory to examine the facts for further clues or basis for the belief. This re-examination may reveal other facts that modify our theory or suggestion. And thus through this back and forth process our thinking evolves.

An Illustration of this double-movement using Frost's "Acquainted with the Night"
We will examine one stanza from this poem trying to come to some conclusion about the metaphoric meaning of night in the poem:

> I have looked down the saddest city lane.
> I have passed by the watchman on his beat
> And dropped my eyes, unwilling to explain.

What does the watchman mean? And what will the speaker not explain.

Literal level analysis (vehicle)	Metaphoric conclusions about night (tenor)
Who might watch at night on a "beat?" --likely to be a policeman or a security guard. This person protects property or looks out for something that might be harmful or dangerous. What does it mean that the speaker drops his eyes and won't explain? Explain what? --the watchman likely checks the passerby to see if they are dangerous, is curious about why they are out at night. Why they wander in the night?	The speaker is "acquainted" with night which implies a passing, not a close, knowledge of night. If this night represents depression, the speaker is acquainted with depression. The watchman, then, could be some protection from depression, either internally like one's conscience or thoughts of God or the watchman keeps them out from the true depths of depression. The speaker avoids contact with this guardian who watches all the time over depression and he won't tell him why he is there, why he is perhaps somewhat depressed himself or exploring what this darkness in himself is about.

Night could metaphorically mean insanity, death, evil, sin, or violence (or many other things).