



2009 LINGUISTIC INSTITUTE

LINGUISTIC STRUCTURE AND LANGUAGE ECOLOGIES

LSA 119

Mental spaces and conceptual blending

Gilles Fauconnier & Mark Turner

155 Donner Lab

MW 10:30-12:15

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Compressions

Constitutive Principles

Matching and counterpart connections.

Generic space.

Blending.

Selective projection.

Emergent meaning.

Composition.

Completion.

Elaboration.

VITAL RELATIONS: INNER-SPACE AND OUTER-SPACE

Change

Identity

Time

Space

Cause-effect

Part-whole

Representation

Role

Analogy

Disanalogy

Property

Similarity

Category

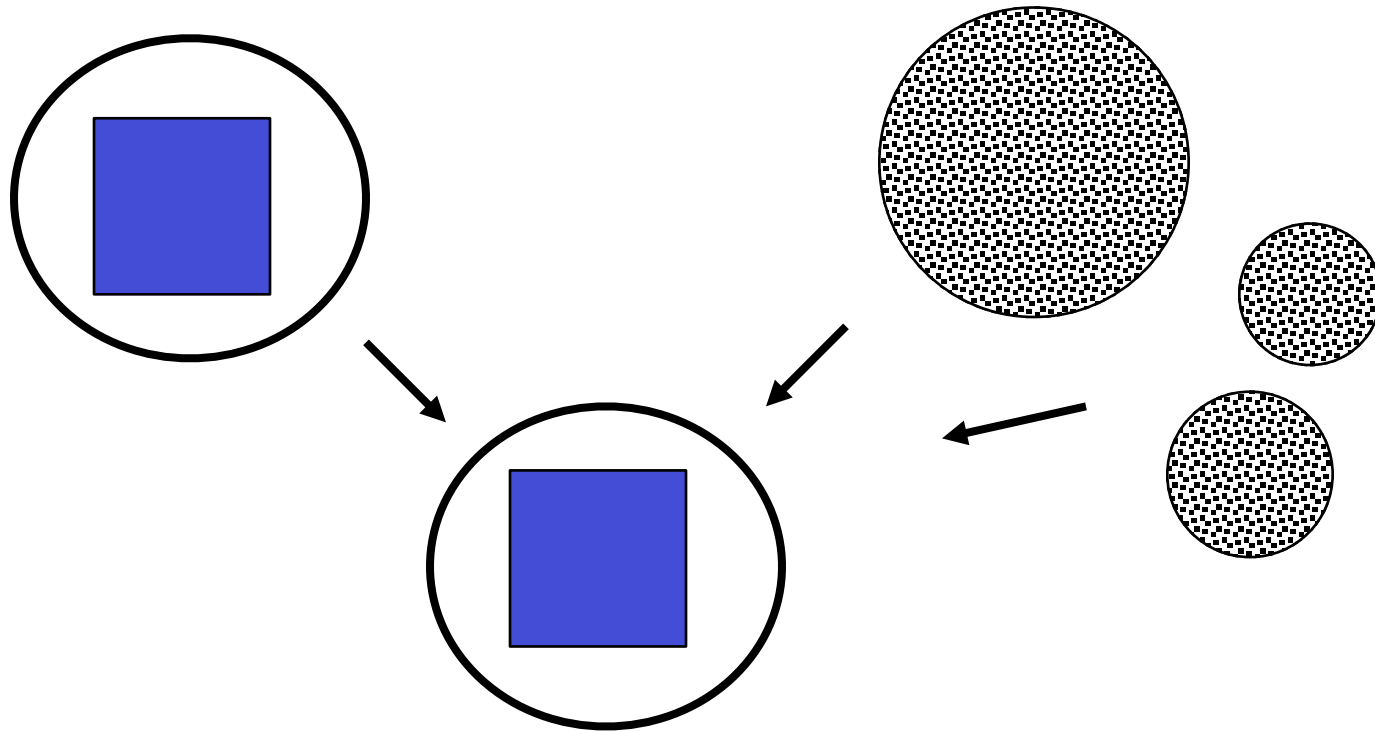
Intentionality

Uniqueness

GOVERNING PRINCIPLES FOR COMPRESSION, 1

Borrowing for Compression When one input has an existing tight integration but the other one does not, the tight integration can be projected to the blend with the effect that the other input is compressed as it is projected to the blend.

Borrowing a Compression By Blending



Borrowing a Compression Borrows Constructions

“You are digging your own grave.”

**“If Clinton were the Titanic, the iceberg
would sink.”**

**This happens routinely: basic metaphors,
force-dynamics, mind is a body moving in
space, fictive motion, image-schemas,
images, . . .**

“You are digging your own financial grave.”

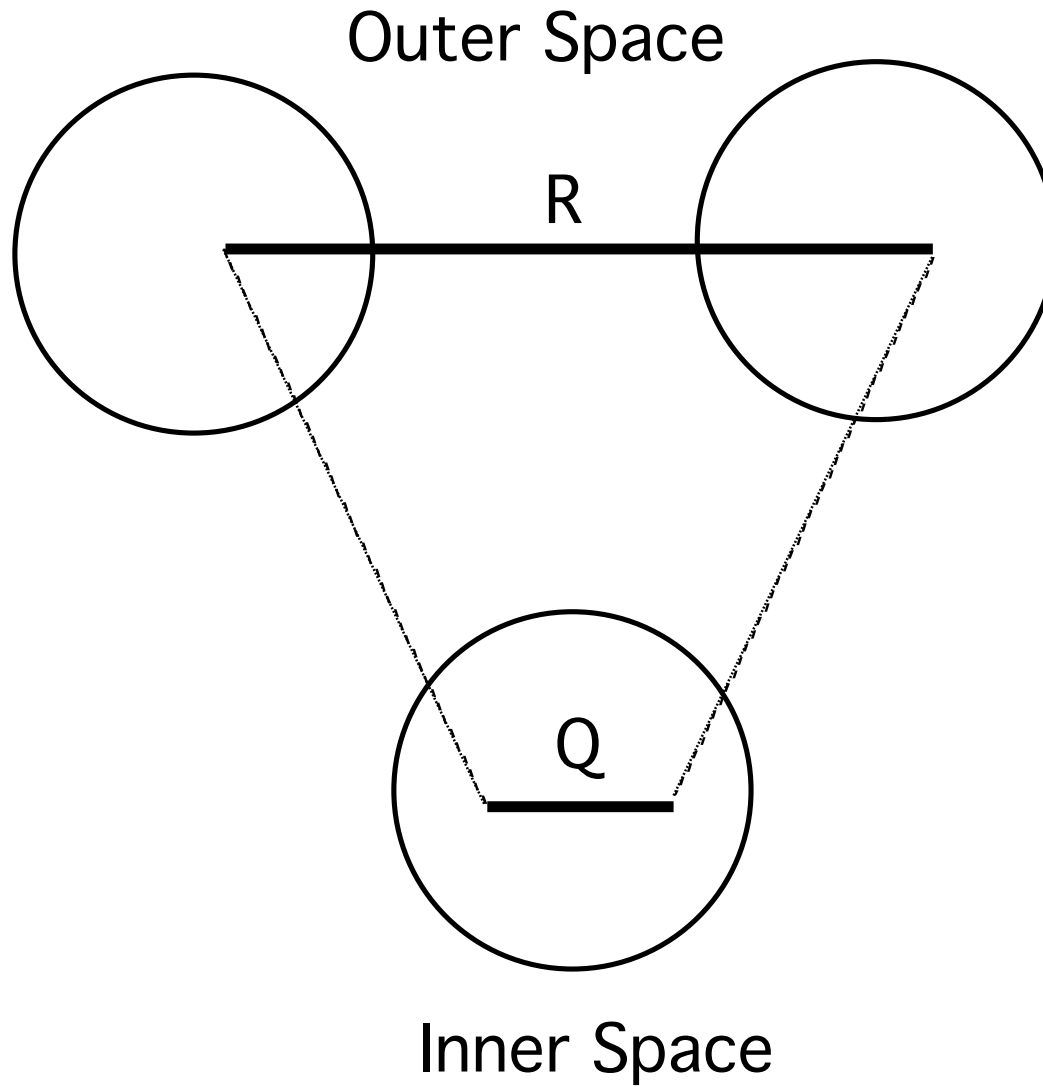
GOVERNING PRINCIPLES FOR COMPRESSION, 2

Scaling compression Inner-space or outer-space vital relations can be scaled to more compressed versions of those vital relations in the blend.

Outer-space → Inner-space

Blending compresses "outer-space" mappings into inner-space human-scale elements that can then be expressed through existing basic human-scale grammatical constructions.

Compressing
outer-space vital relations
into
inner-space structure
in the blend

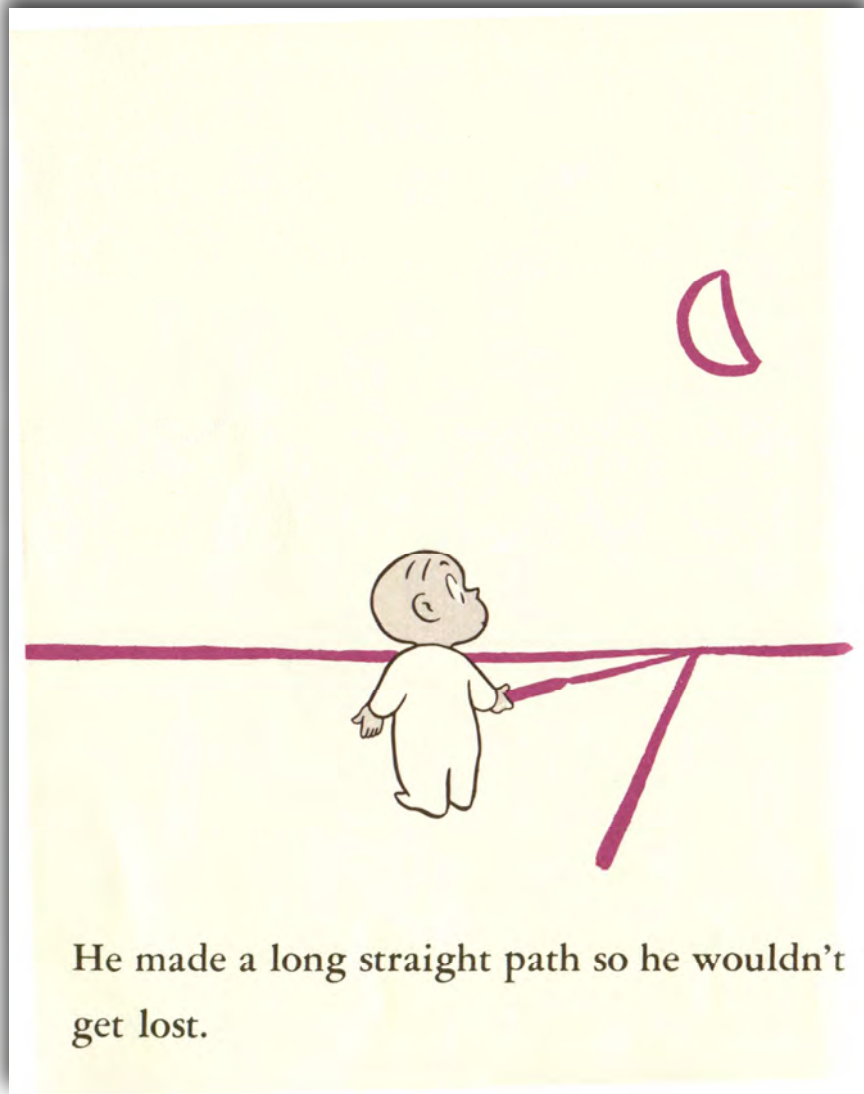


Compression of **Representation** Relations

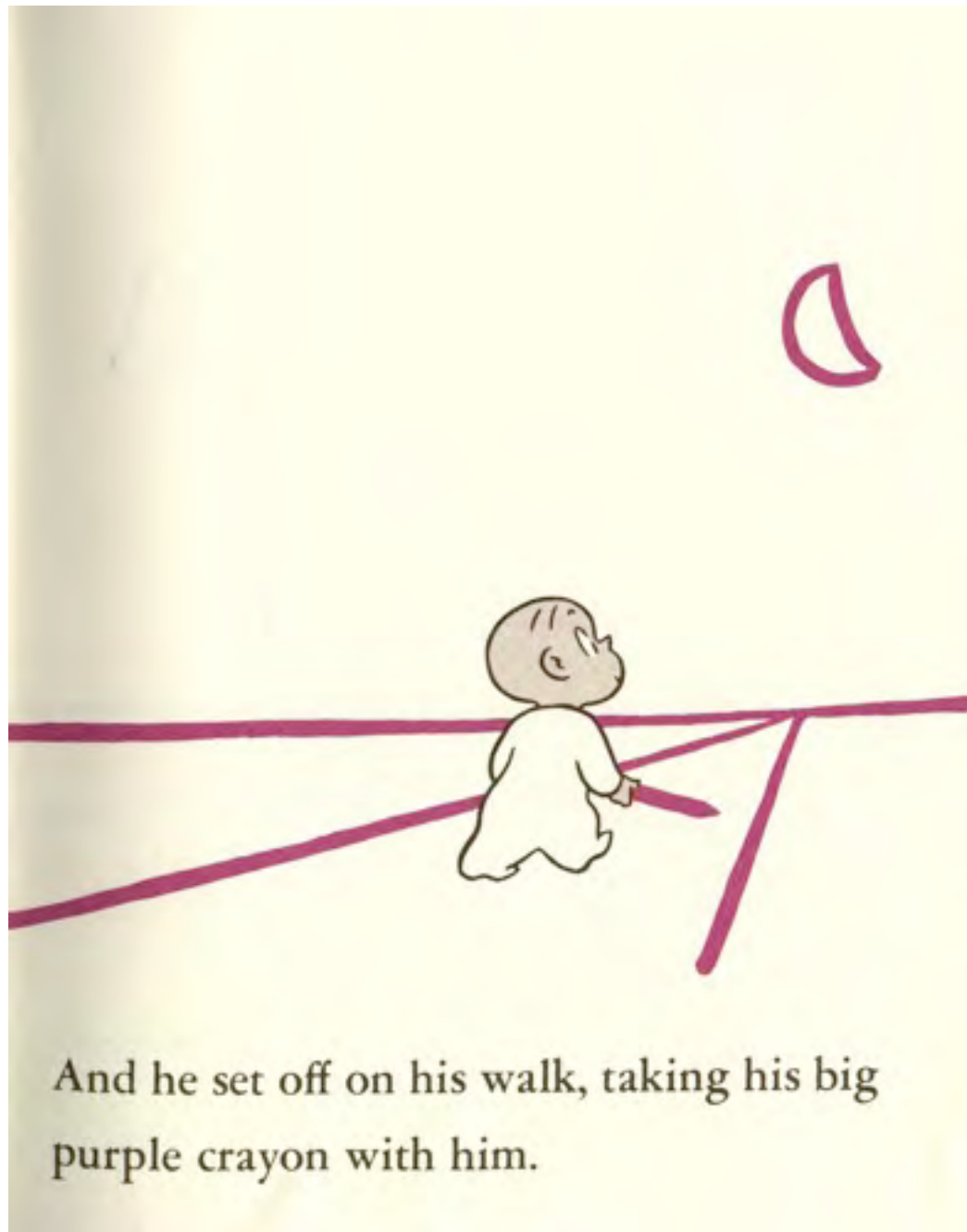
- Turner, Mark. 2004. "The Origin of Selkies." *Journal of Consciousness Studies*, volume 11, numbers 5-6: pages 90-115.
- Turner, Mark. 2006. "Compression and Representation." 2006. *Language and Literature*. 15:1, 17-27.

DOUBLE SCOPE NETWORKS

A double scope network has inputs with **different (and often clashing) organizing frames** and an organizing frame for the blend that includes parts of each of those organizing frames and has emergent structure of its own. In such networks, **both organizing frames make central contributions to the blend**, and their sharp differences offer the possibility of rich clashes. **Far from blocking the construction of the network, such clashes offer challenges to the imagination and the resulting blends can turn out to be highly creative.**

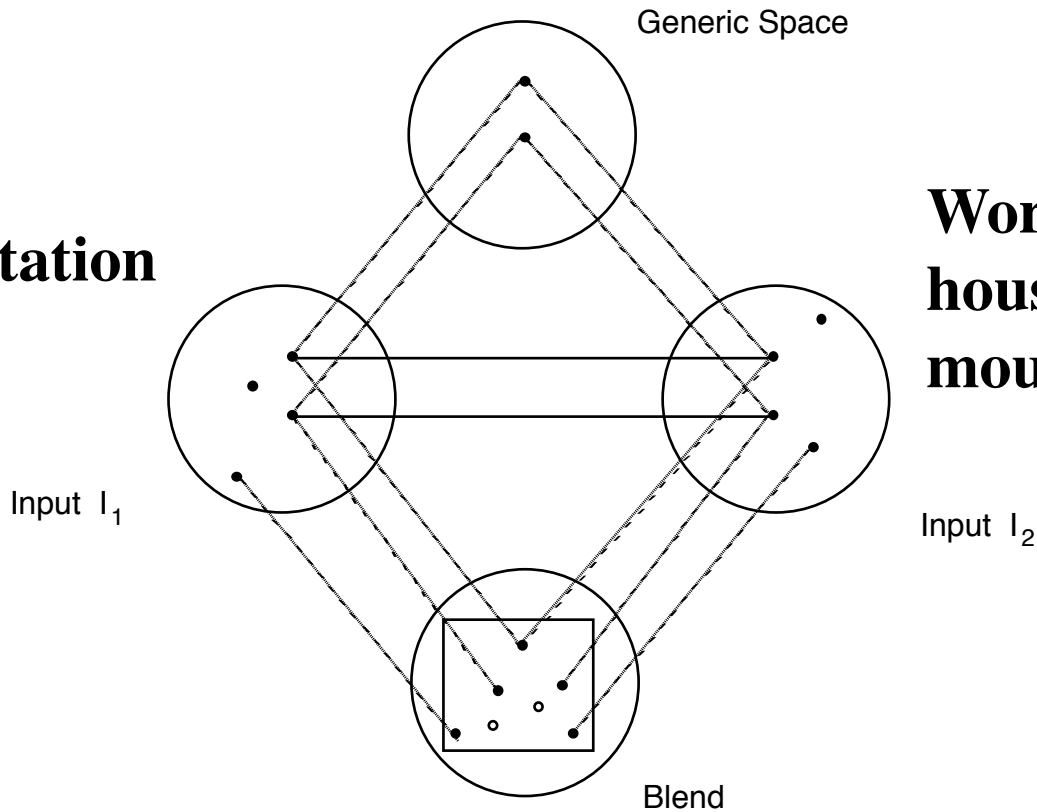


He made a long straight path so he wouldn't get lost.



And he set off on his walk, taking his big purple crayon with him.

Representation



**World (moon,
house, bedroom,
mountain, etc.)**

**Harold's World
(move by drawing, etc.)**



Tentative de l'impossible. (1928) René Magritte.

Bang Shot: Child's Description of a New Constellation

“It's a man. He was a soldier in the Revolutionary War. All of the members of his troop were killed, and the British were starting to come in his direction. So he hid inside the barrel of a cannon. But then reinforcements arrived, and fired off the cannons. Now, this cannon was not lowered, so it fired him into the sky, and there he is. But he doesn't know he's dead, so he keeps running across the sky, trying to find a way back into the Revolutionary War.”

GOVERNING PRINCIPLES FOR COMPRESSION, 3

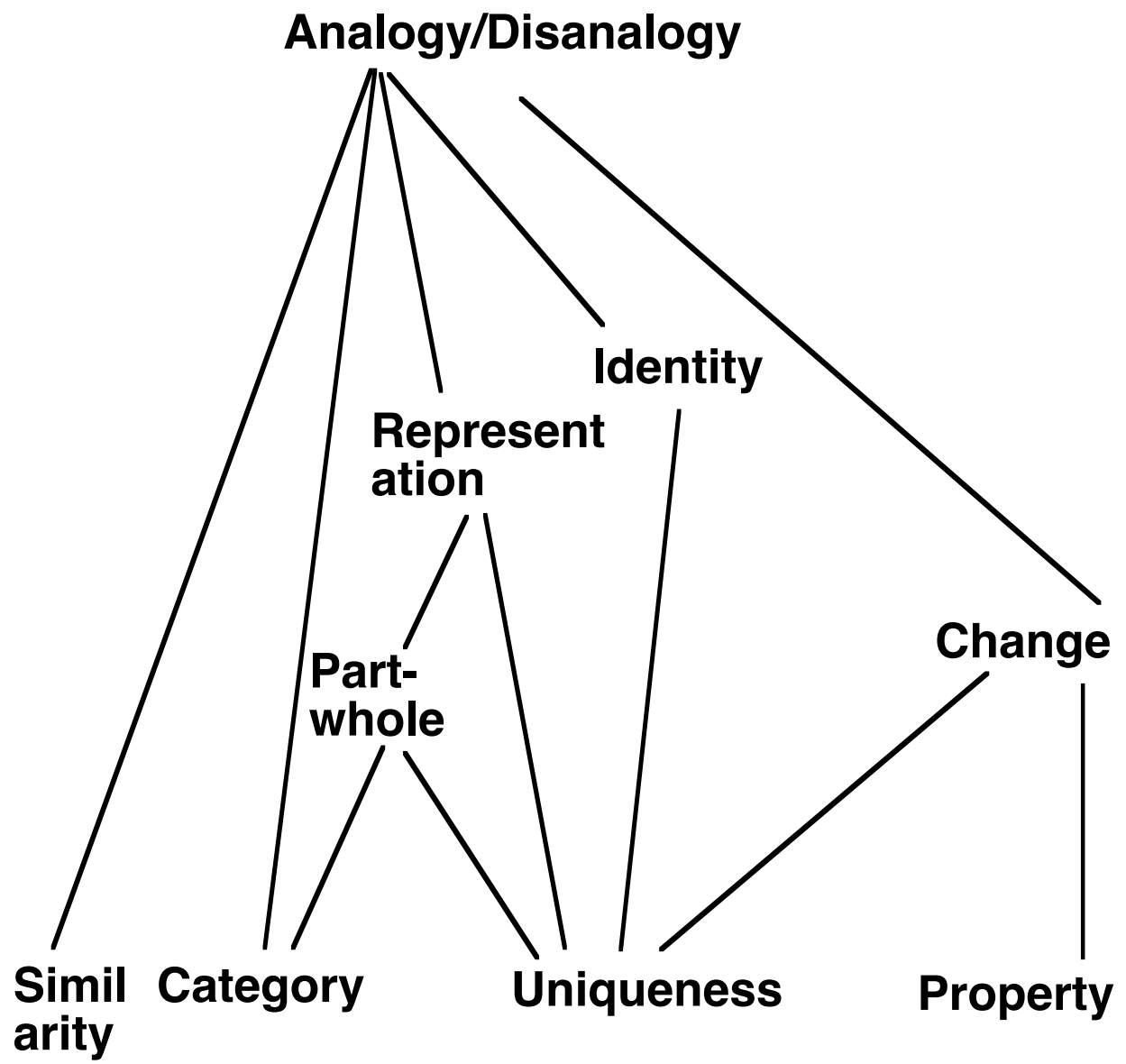
Syncopating compression Diffuse structure in an input can be compressed as it is projected to the blend by dropping out all but a few key elements.

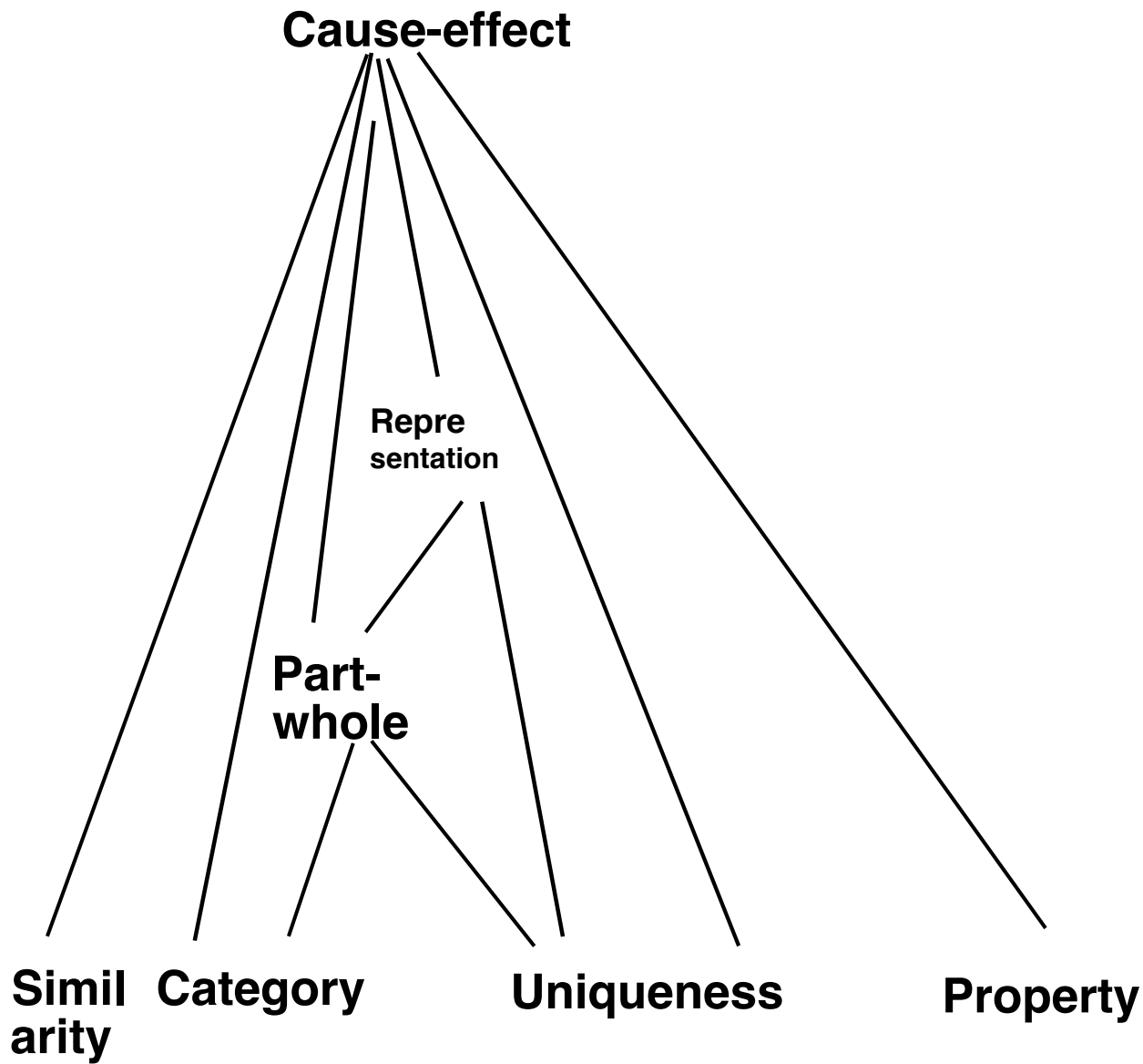
GOVERNING PRINCIPLES FOR COMPRESSION, 4

Same-type compression. Hierarchies of vital relations—like analogy, change, identity, or representation and identity—allow compression of a relation higher on a hierarchy into a relation of the same type lower on the hierarchy.

GOVERNING PRINCIPLES FOR COMPRESSION, 5

Different-type compression





GOVERNING PRINCIPLES FOR COMPRESSION, 6

Creation Blends can sometimes be given a tighter integration by creating there a new vital relation, such as intentionality.

GOVERNING PRINCIPLES FOR COMPRESSION, 7

Highlights compression Distributed elements in an overarching Story can be compressed into a simultaneous arrangement in the blend by such instruments as compression to category and compression to property.

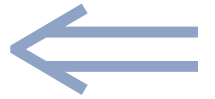
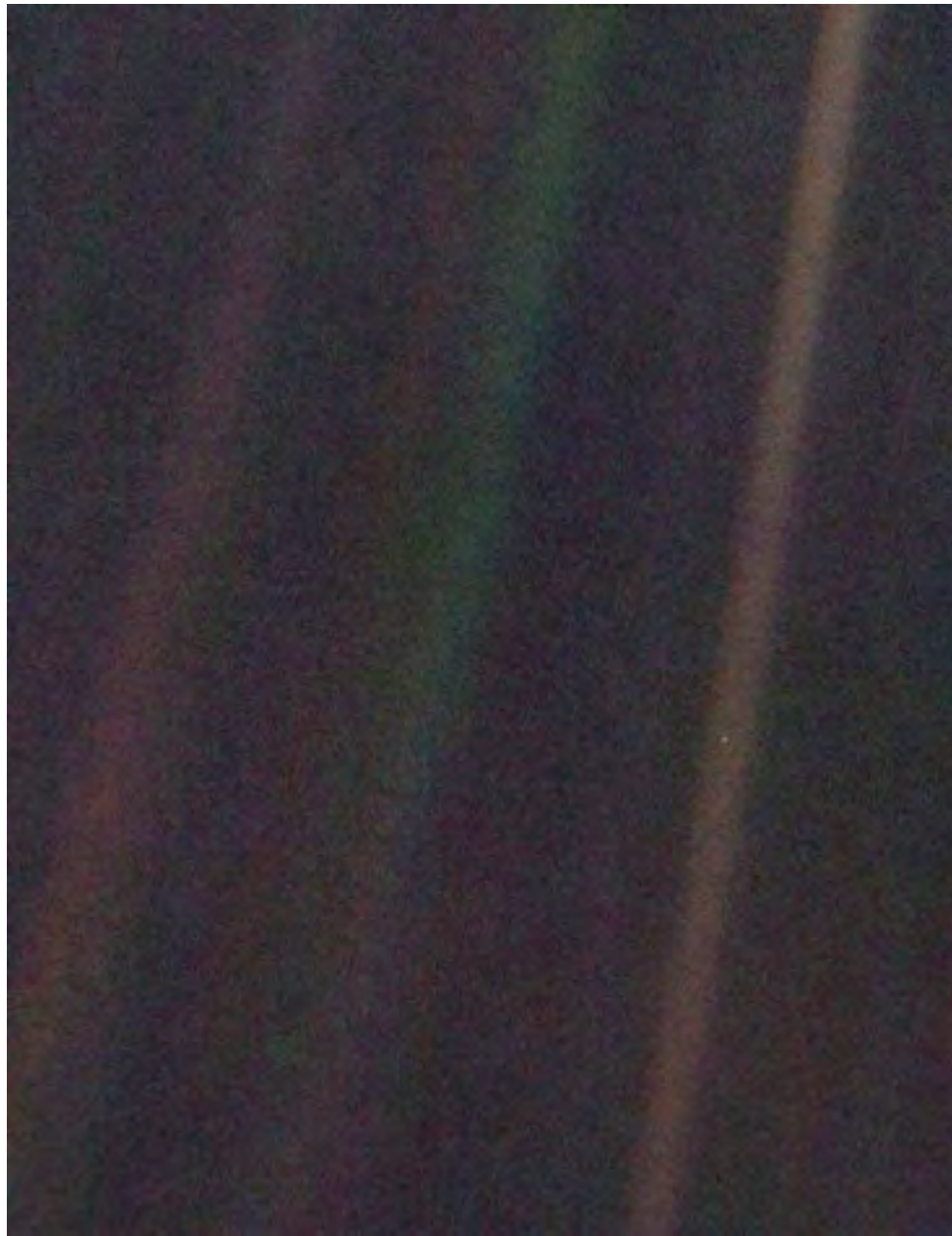
We have seen compressions of
Time and Space

An Inconvenient Truth

“An Inconvenient Truth” is the film version of Al Gore’s slide-show presentation on global warming. Close to the end, Gore shows a picture of the Earth as a what he calls a “pale blue dot.” The Earth is a single pixel on a huge cosmological screen, difficult even to pick out when he points at it. The picture was taken from a distance in space of 4 billion miles. Gore says, “Everything that has ever happened in all of human history has happened on that dot. All the triumphs and tragedies, all the wars and all the famines, all the major advances. That is what is at stake—our ability to live on planet Earth, to have a future as a civilization.”

And then he concludes the film with this blend: “Future generations may well have occasion to ask themselves, 'What were our parents thinking? Why didn't they wake up when they had the chance?' **We have to hear that question from them now.**”

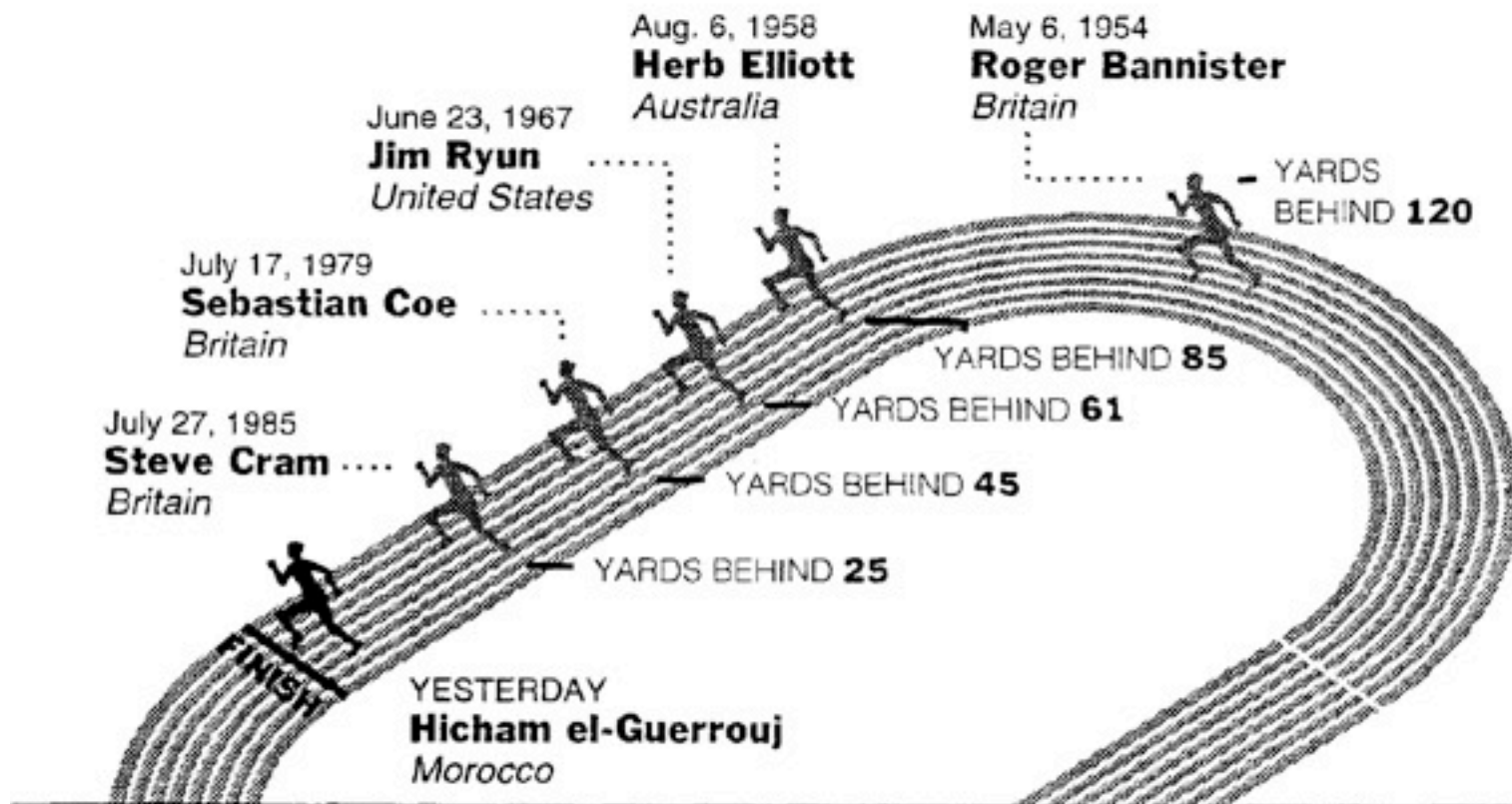
Pale Blue Dot





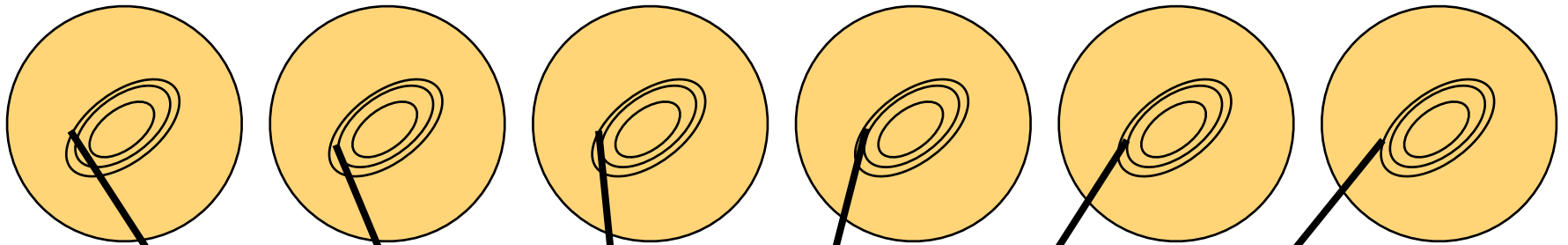
The Time Blend
at the end of
“An Inconvenient Truth”

And then he concludes the film with this blend: “Future generations may well have occasion to ask themselves, 'What were our parents thinking? Why didn't they wake up when they had the chance?' **We have to hear that question from them now.**”



The New York Times

World Record in the Mile



1999

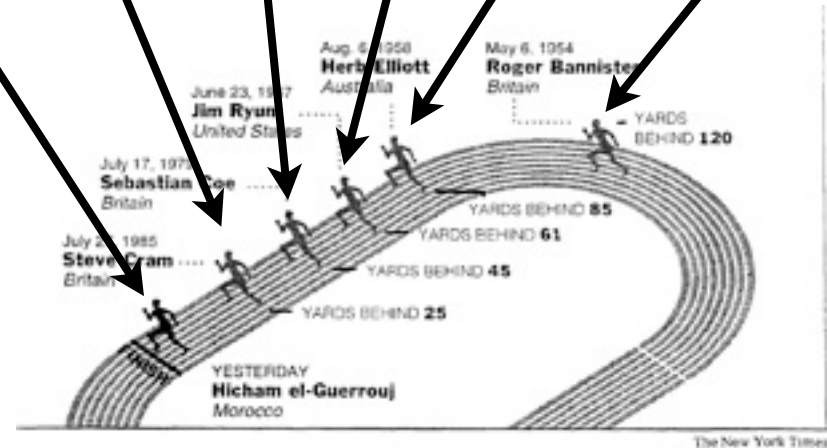
1985

1979

1967

1958

1954

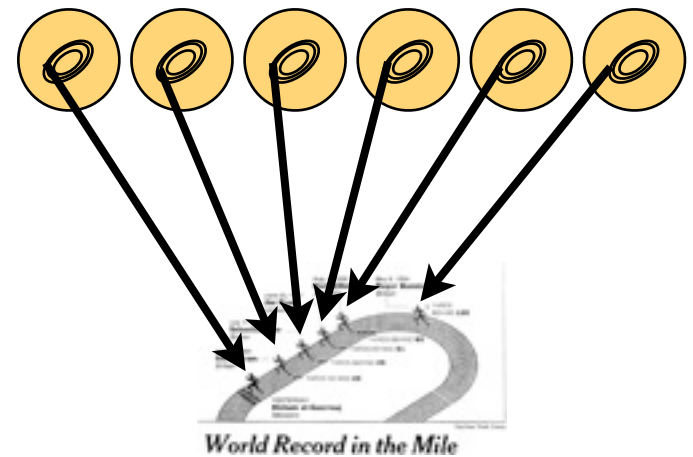


World Record in the Mile

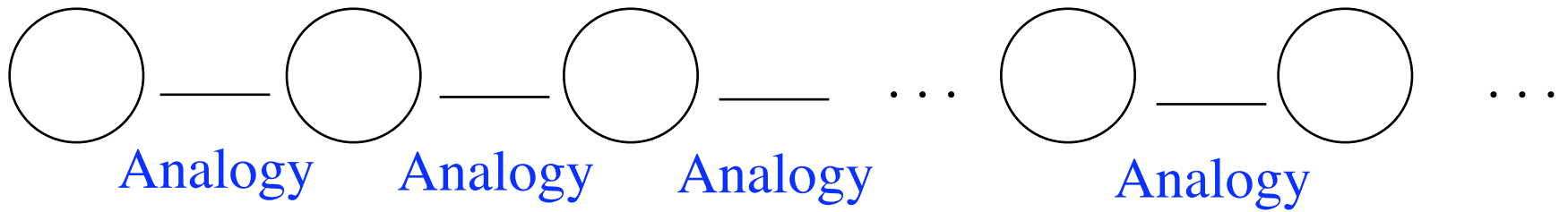
Linguistic constructions are made available by network projections

“Hicham el-Gerrouj beat Roger Bannister.”

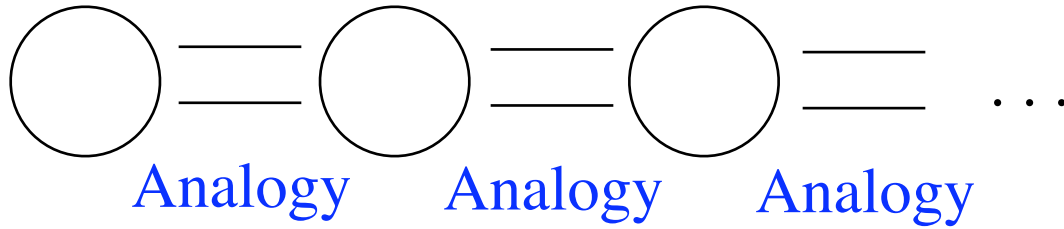
“Hicham el-Gerrouj defeated Roger Bannister by 120 yards”



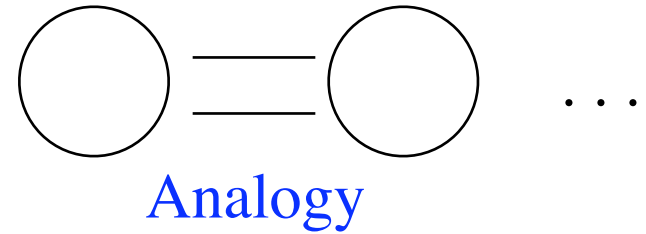
Compressions of analogy and disanalogy



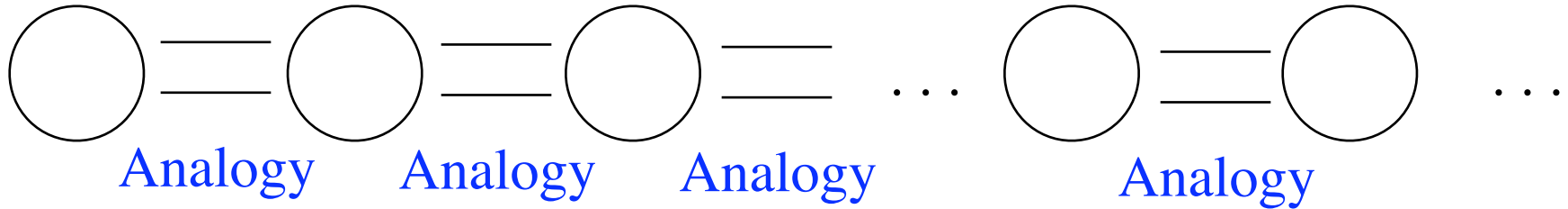
Disanalogy Disanalogy Disanalogy



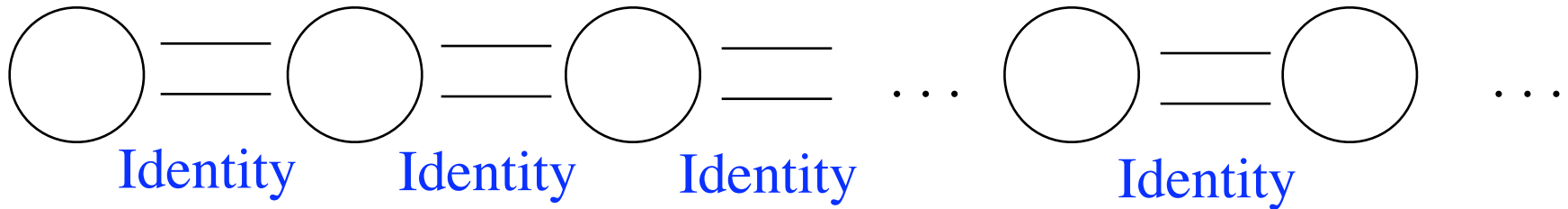
Disanalogy



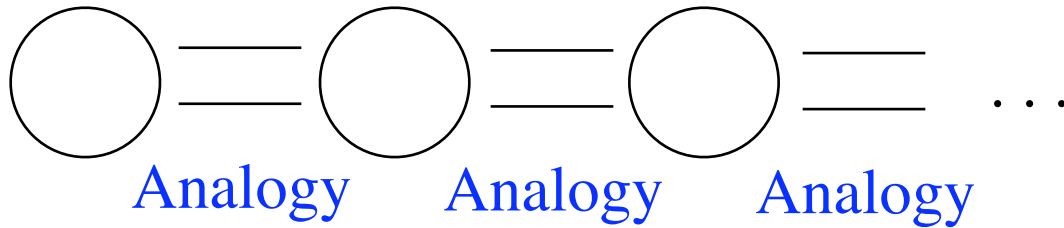
Disanalogy Disanalogy Disanalogy



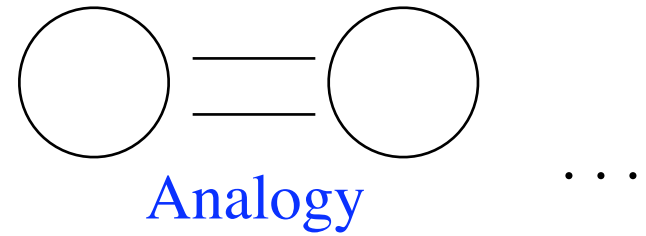
Change Change Change



Disanalogy Disanalogy Disanalogy



Disanalogy

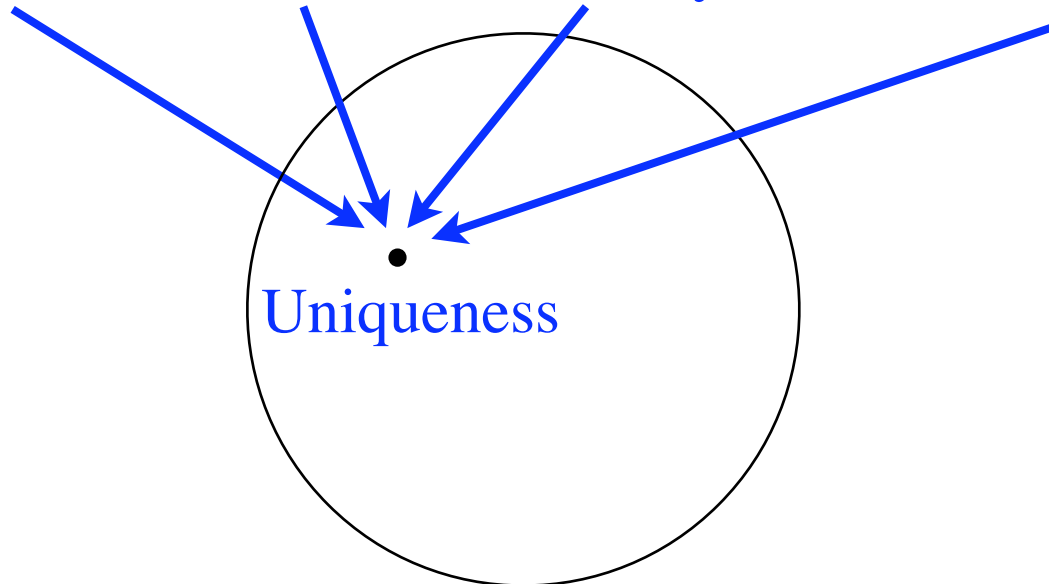
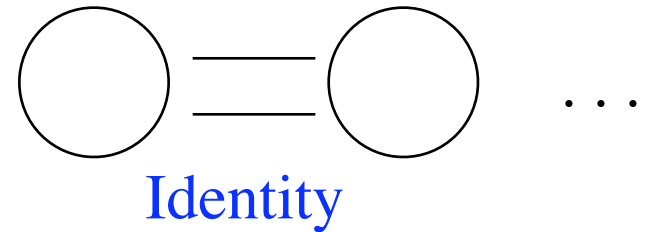
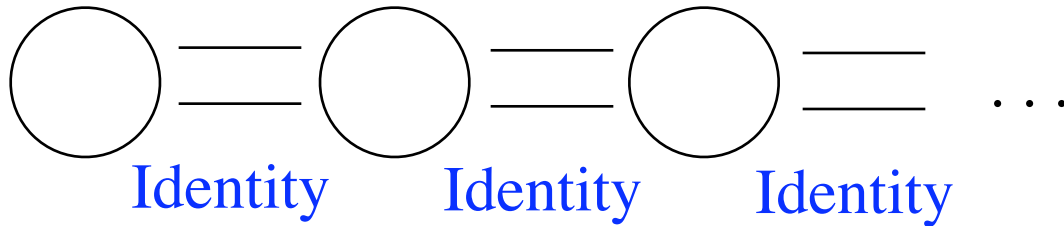


Change

Change

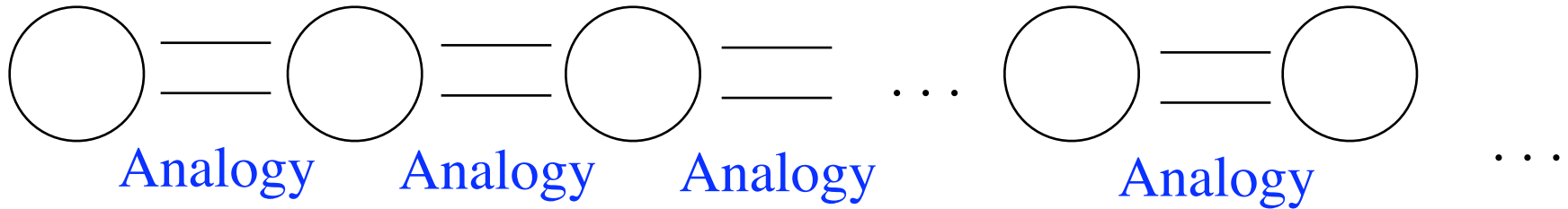
Change

Change



Disanalogy Disanalogy Disanalogy

Disanalogy

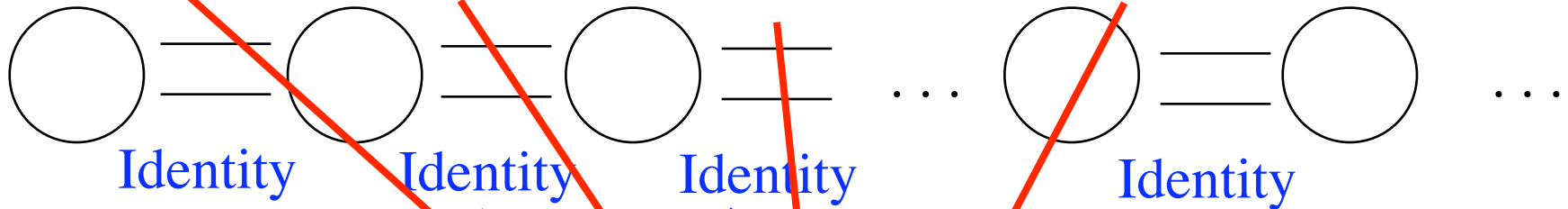


Change

Change

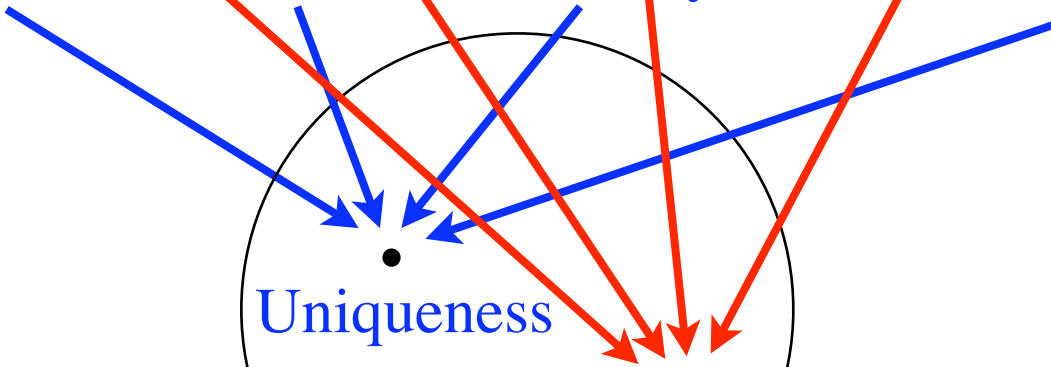
Change

Change



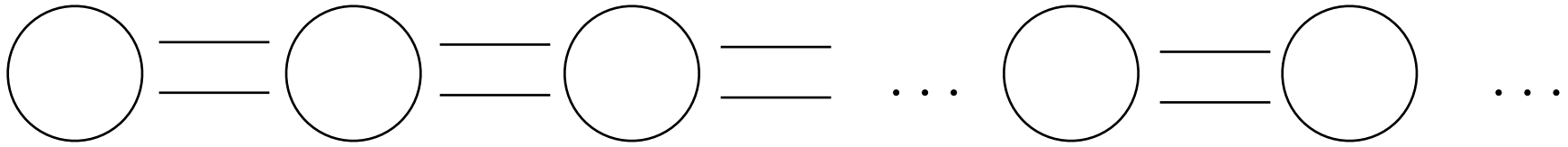
Uniqueness

Change



Disanalogy Disanalogy Disanalogy

Disanalogy

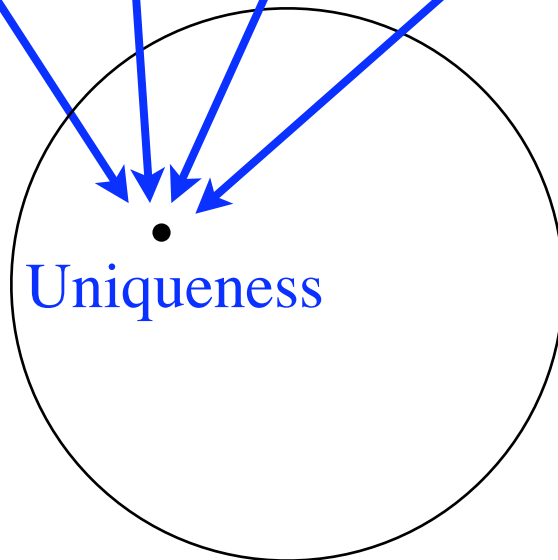


Analogy

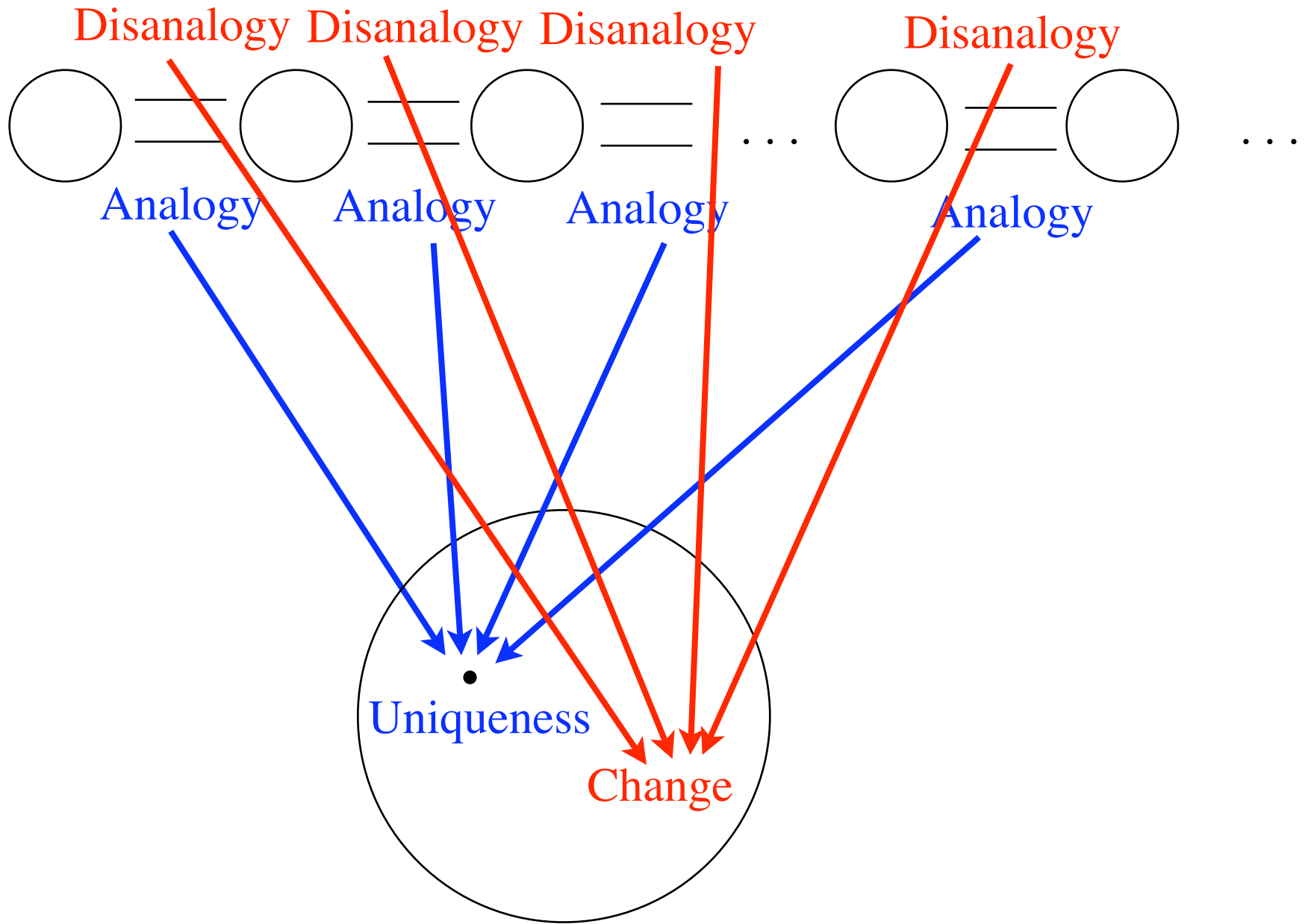
Analogy

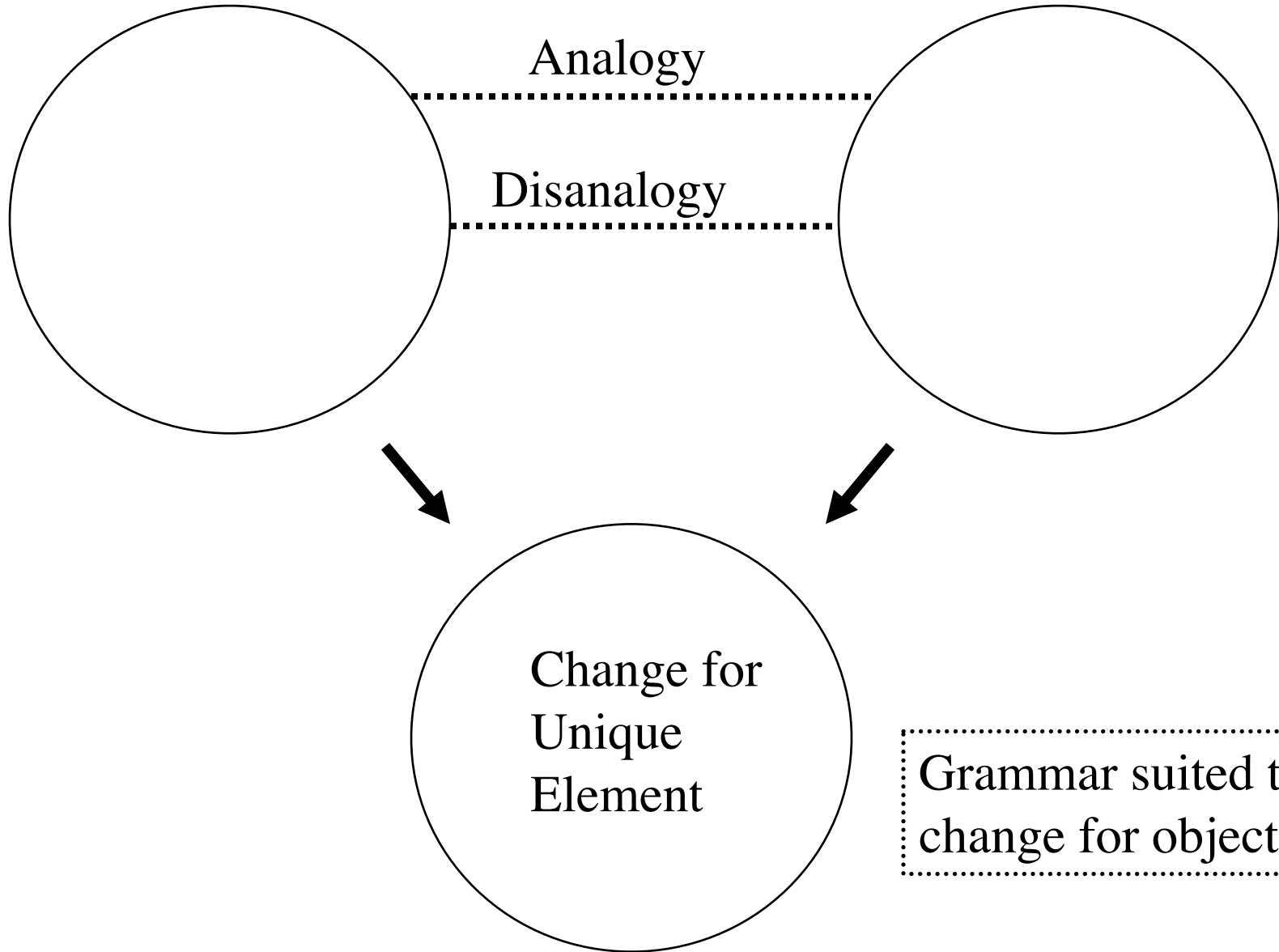
Analogy

Analogy



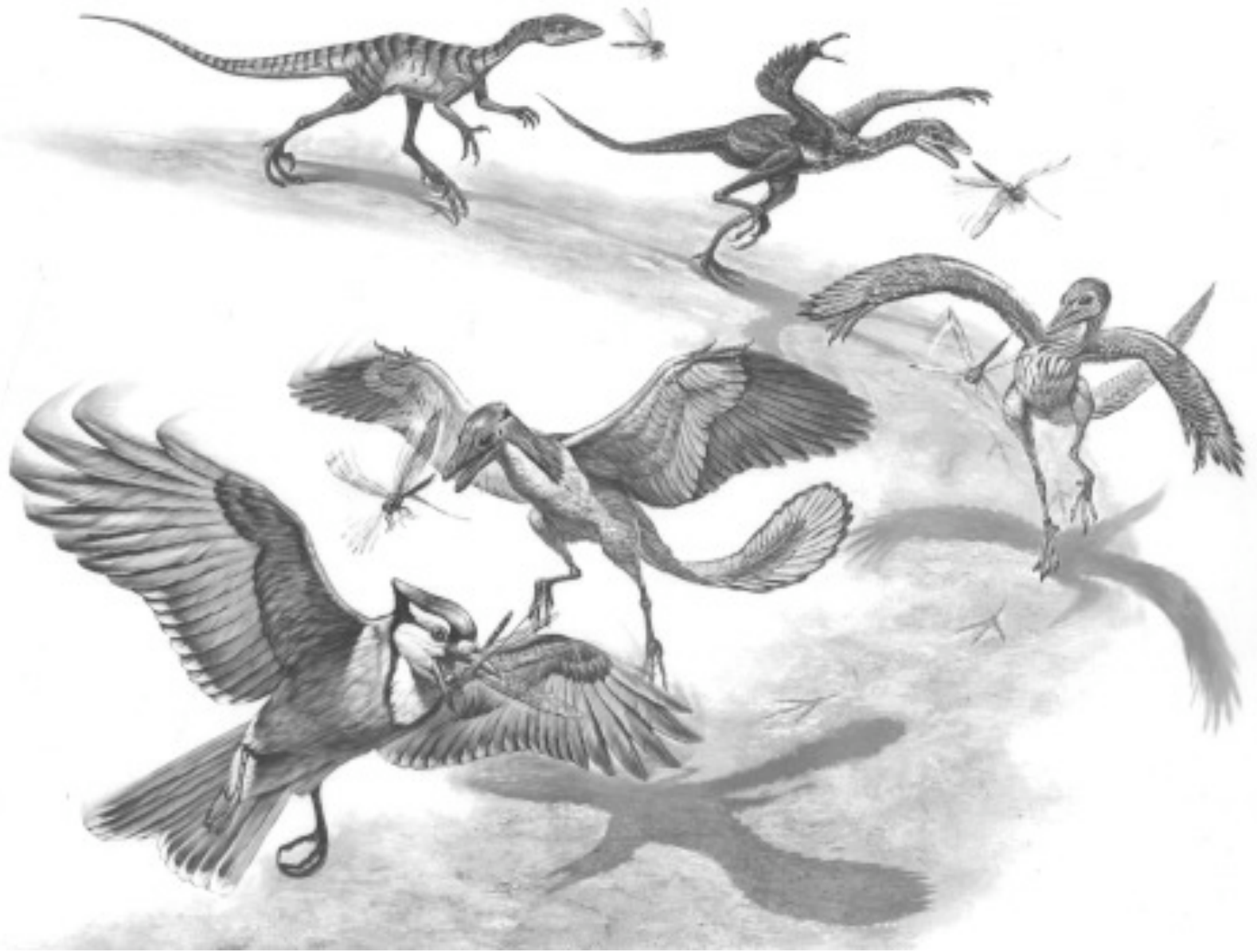
Uniqueness





Identity & Change from Analogy & Disanalogy

- Dinosaurs evolved into birds
- Dinosaurs turned into birds
- Dinosaurs became birds





DA
A

DA
A

DA
A

DA
A



DA

DA

DA

DA

A

A

A

A



**CHANGE
IDENTITY**

**CHANGE
IDENTITY**

**CHANGE
IDENTITY**

**CHANGE
IDENTITY**

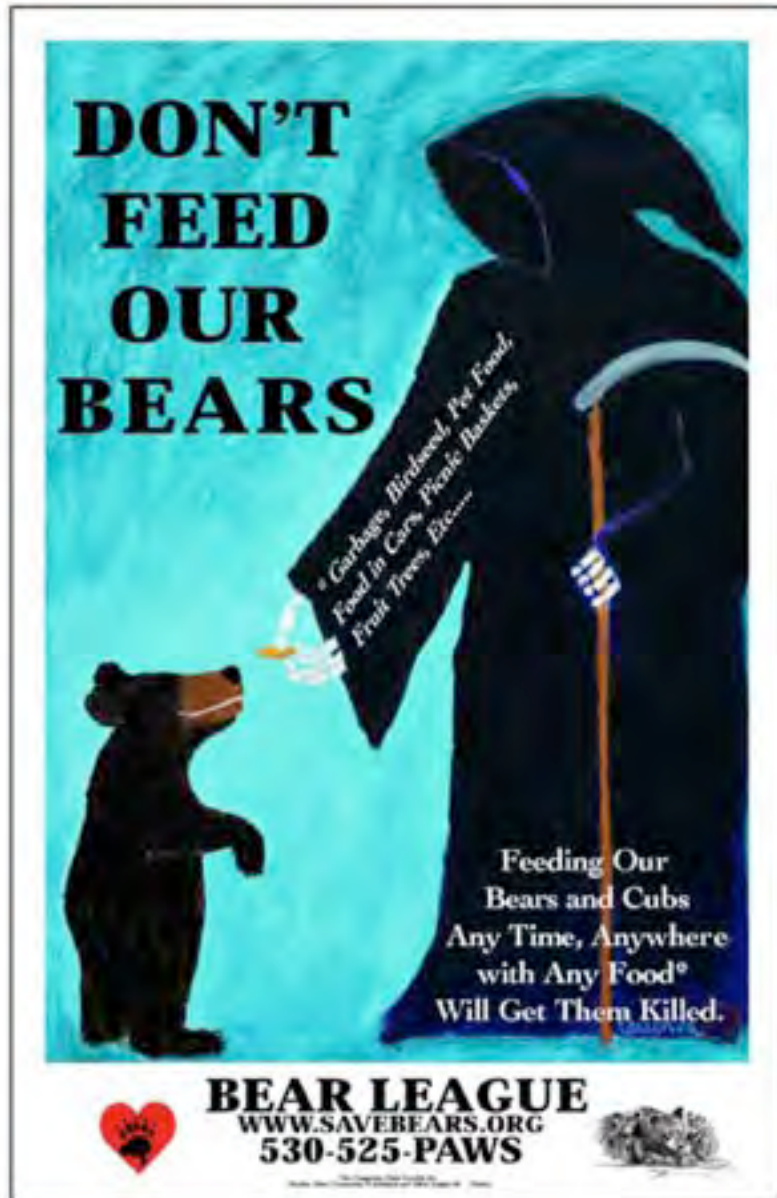


CHANGE IDENTITY **CHANGE IDENTITY** **CHANGE IDENTITY** **CHANGE IDENTITY**



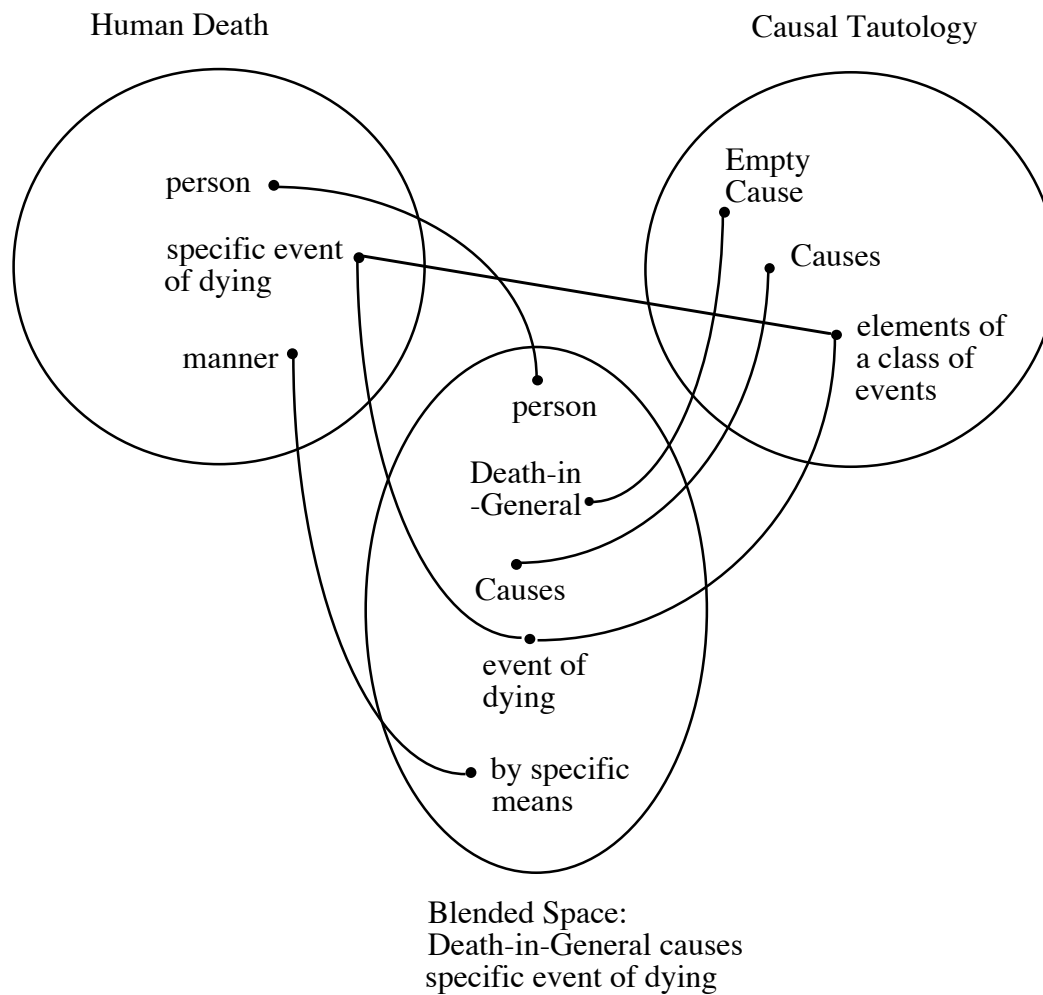
CHANGE, UNIQUENESS, INTENTIONALITY

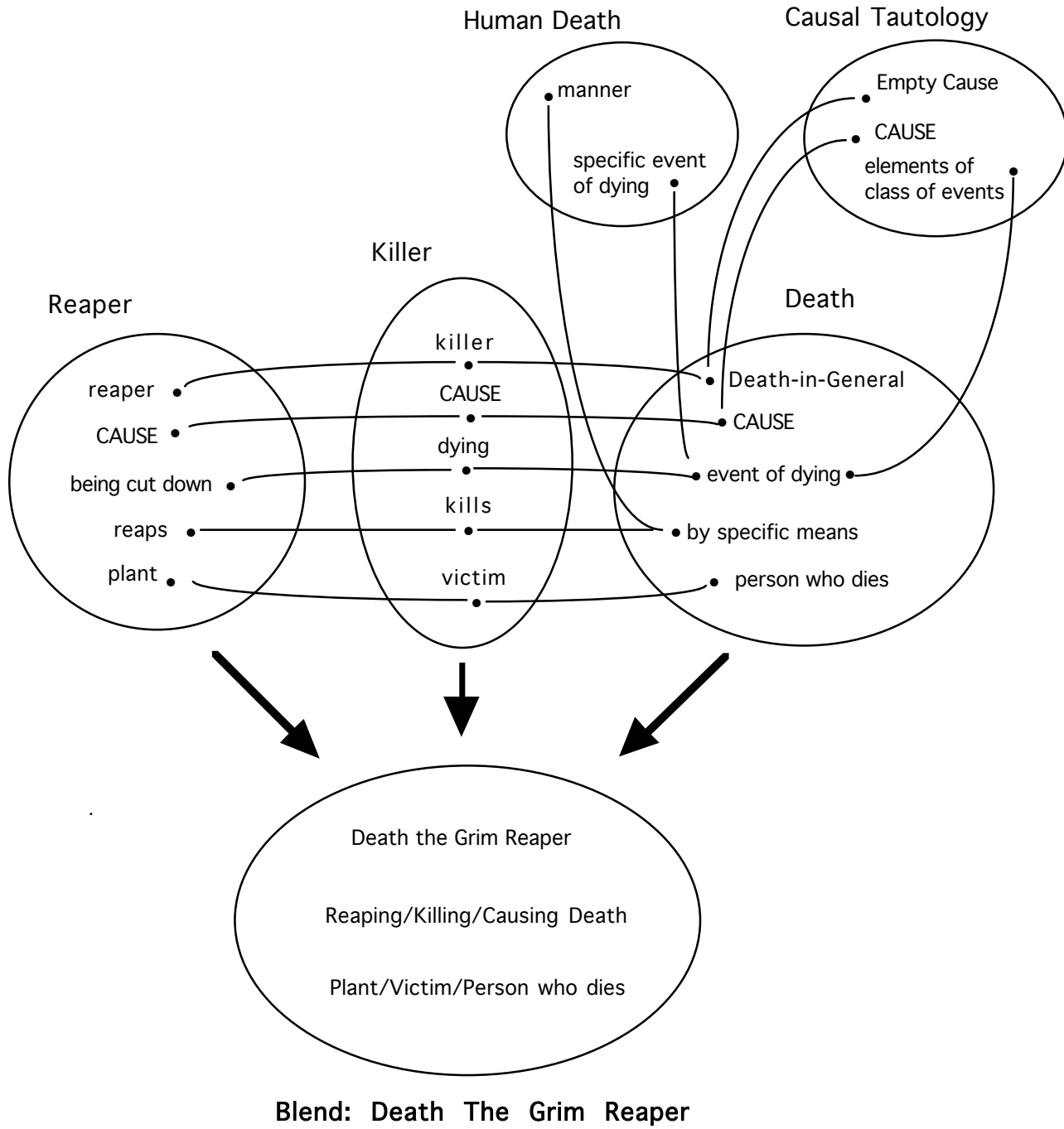
**“A fed bear is
a dead bear”**

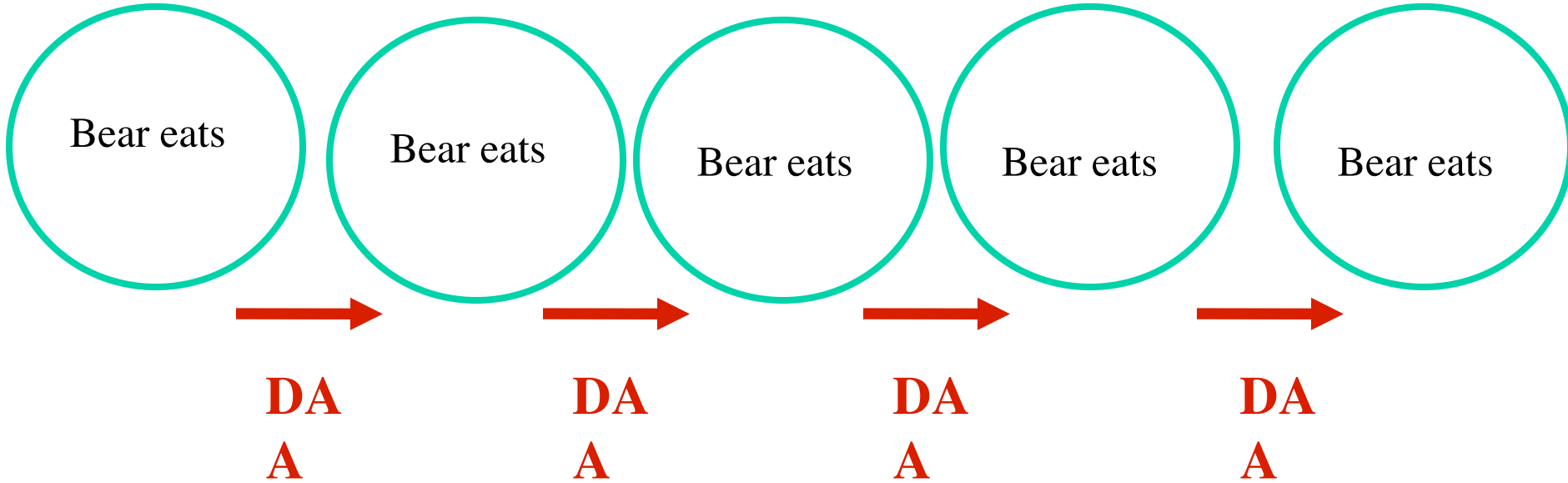


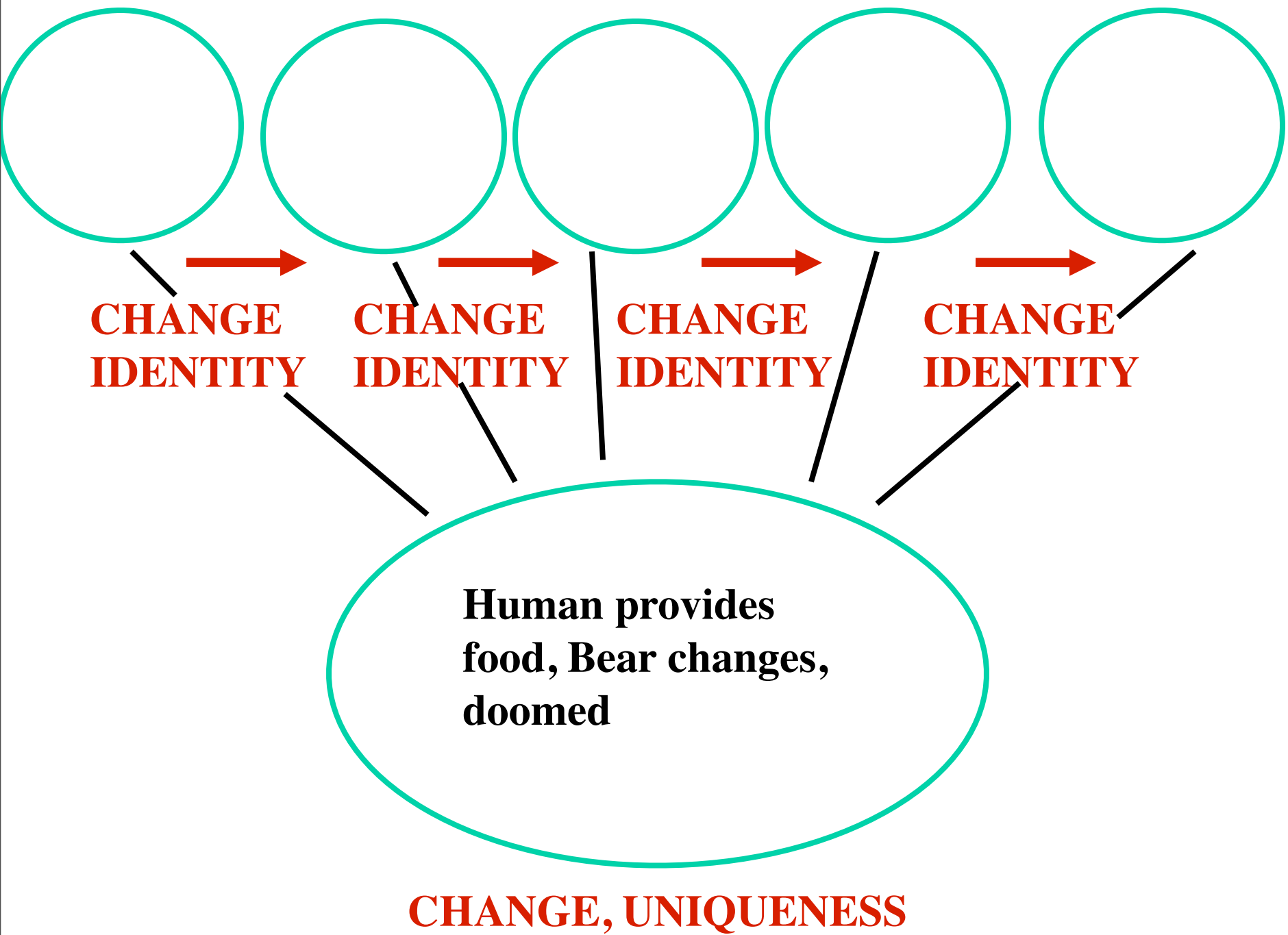
**Garbage, Birdseed, Pet Food,
Food in Cars, Picnic Baskets,
Fruit Trees, Etc . . .**

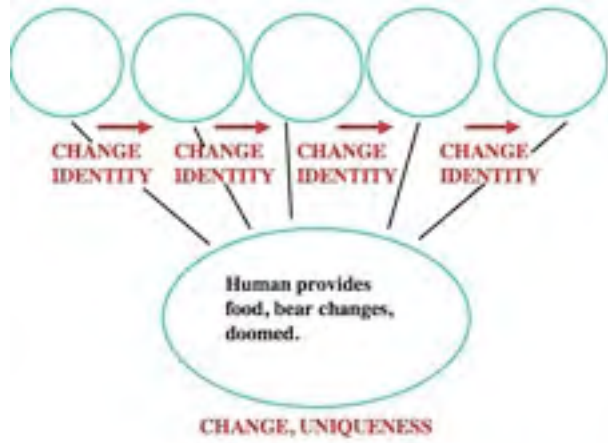
**Feeding Our Bears and Cubs Any
Time, Anywhere, with Any Food
Will Get Them Killed.**







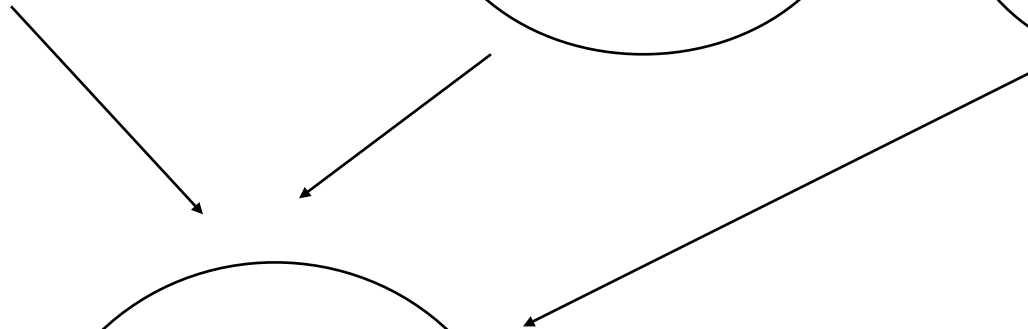




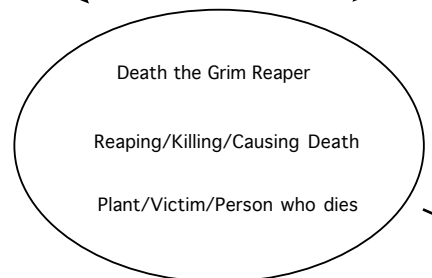
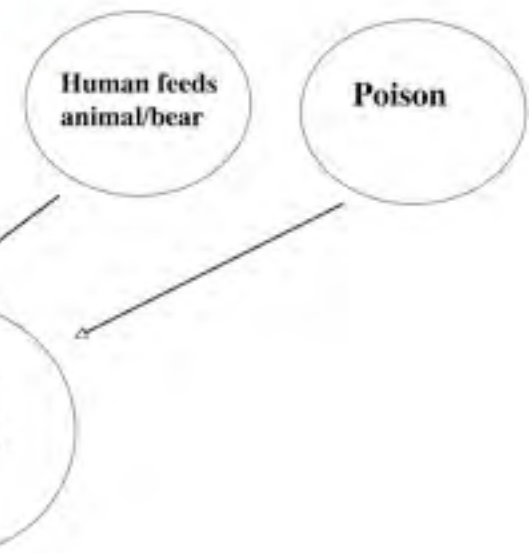
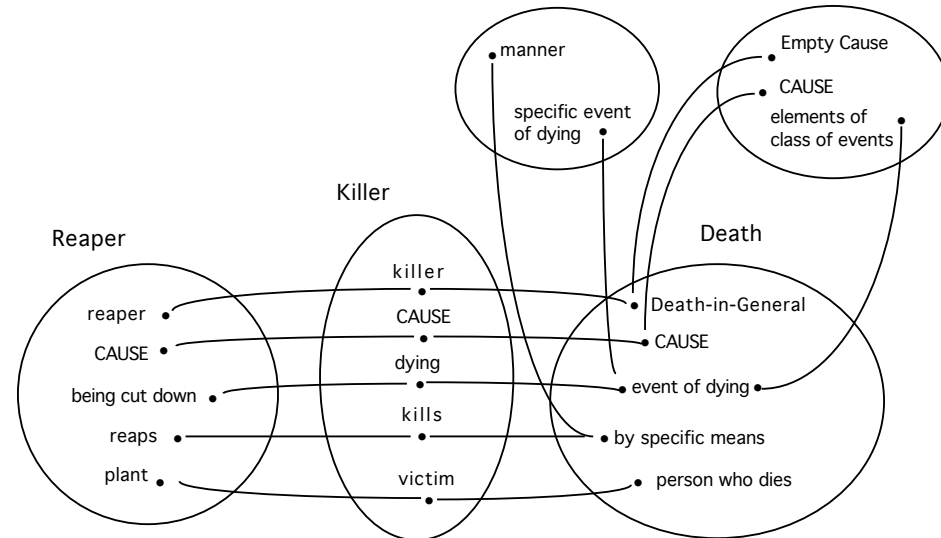
Human feeds animal/bear

Poison

Person/We Feeds/Kills Bear/Bears

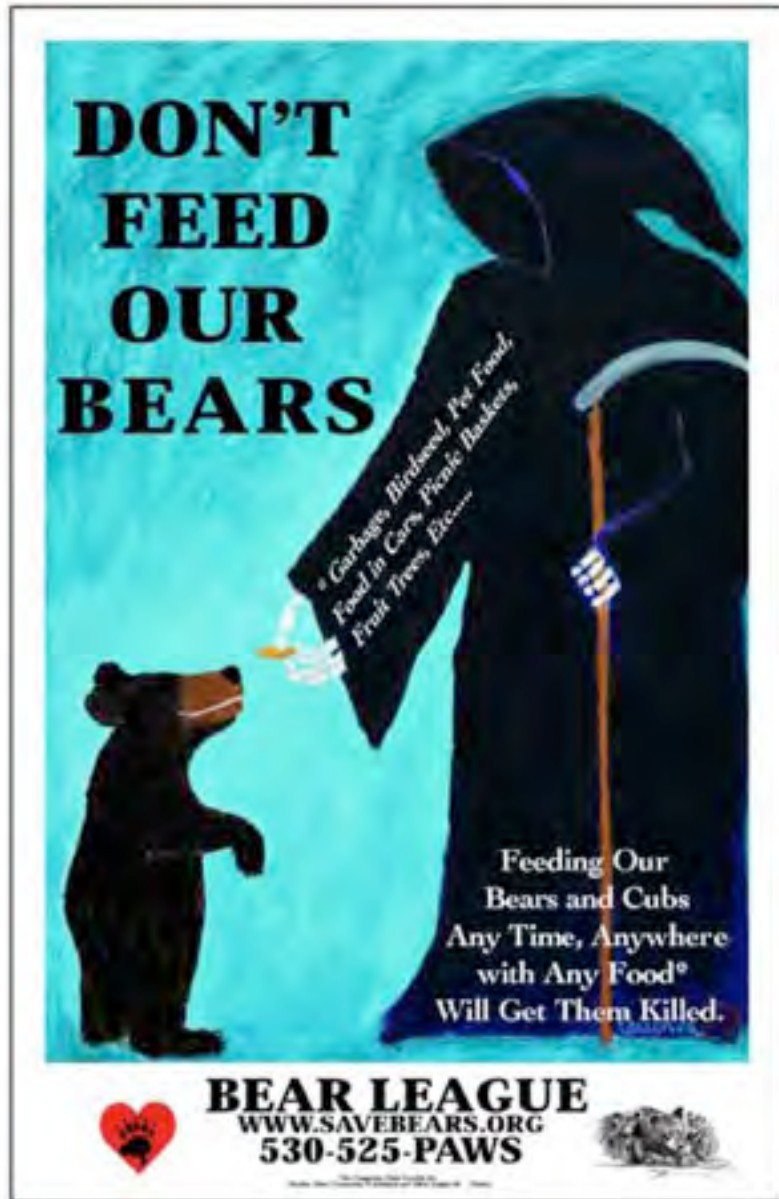


Human Death Causal Tautology



Blend: Death The Grim Reaper





“A fed bear is a dead bear”

**Garbage, Birdseed, Pet Food,
Food in Cars, Picnic Baskets,
Fruit Trees, Etc . . .**

**Feeding Our Bears and Cubs Any
Time, Anywhere, with Any Food
Will Get Them Killed.**

"At what altitude do the deer turn into elk?"

"The new theory is that dinosaurs turned into birds."

"My tax bill gets bigger every year." (Fauconnier)

"The President changes every four years" (Fauconnier 1994 [1985])

Objects

Poem & Revisions

Vera Tobin observes that it is common to refer to a literary work as a unique identity that undergoes change. She cites Hugh Kenner's comment on the five-stanza version of Marianne Moore's poem "Poetry" as "the one scarred by all those revisions" (Tobin 2008, 171; Kenner 1967, 1432).

In this conceptualization, the many variations published under the title "Poetry" are compressed (Fauconnier and Turner 2002) into a single, concrete entity that the poet has altered many times. This entity is also metaphorically characterized as a living body, and the alterations that remove material from that body as violent mutilations. In this way, even a new, intact printing of an earlier version can be "scarred" by the publication of shorter variations. (Tobin 2008, 171-172)

Identity & Change from Analogy & Disanalogy

“In a leap year, we add a day to February.”

“*Kick the habit*”

“*Your agent* is waiting for you.”

“The customer is always right.”

“His girlfriend gets younger every year.”

“Make this problem go away.”

“Get your tennis serve back.”

“Your French has disappeared.”

“The cars get three feet bigger when you enter Pacific Heights,” (Sweetser 1997)

“The fences get taller as you move westward across the United States,” (Sweetser 1997)

“The paint gets darker as you move down the wall.” (Sweetser 1997)

Identity & Change from Analogy & Disanalogy

“Make this envelope disappear”

Section on Causal Compressions



Joey, Katie and Todd will be performing your bypass.

Before you know it, these kids will be doctors, nurses and medical technicians, possibly yours.

They'll need an excellent grasp of laser technology, advanced computing and molecular genetics. Unfortunately, very few American children are being prepared to master such sophisticated subjects.

If we want children who can handle

tomorrow's good jobs, more kids need to take more challenging academic courses.

To find out how you can help the effort to raise standards in America's schools, please call 1-800-95-PROMISE.

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“**Before you know it**, these kids will be doctors, nurses and medical technicians, possibly yours. They'll need an excellent grasp of laser technology, advanced computing and molecular genetics. Unfortunately, very few American children are being prepared to master such sophisticated subjects. If we want children who can handle **tomorrow's good jobs**, more kids need to take more challenging academic courses. To find out how you can help the effort to raise standards in America's schools, please call 1-800-96-PROMISE. If we make changes now, we can prevent a lot of pain later on.”