Yaqob's Ladder and the Logic of Magic, Metaphor and Metaphysics Narratives of the Unconscious, the Self, and the Assembly

Julio Michael Stern

IME-USP - University of São Paulo







1st World Cong. on Logic & Religion, April 1-5, 2015, João Pessoa

http://www.ime.usp.br/~jstern/miscellanea/jmsslide/LR15A30.pdf

Versions: 02/15/2015, 04/03/2015; Audio: 30 min.

Julio Michael Stern

Audio – LRI01

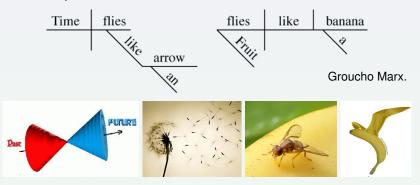
Logic of Magic, Metaphor & Metaphysics...

This Presentation

- I This Presentation
- II Magical Thought: Biblical Paronomasia, Polysemy and Syllepsis
- III Yaqob's Ladder: Human Ontogeny as Thought, Language and Inference
- IV Permanence of Archaic Forms of Association
- V References / Works of Art
- VI Frequently Asked Questions

Polysemy, Paronomasia and Syllepsis

Polysemy: Capacity of a sign to bear multiple meanings.
Syllepsis: Understanding of the same word(s) in two different ways at once*. Same (or similar) expressions simultaneously refer to a proximal/immediate & to a remote/alternative context.



• Paronomasia (similar sounding words) is a mechanism that can be used to induce sylleptic effects.

* Riffaterre (1980, p.625-626, p.637-638).

Julio Michael Stern

Audio – LRI03

Logic of Magic, Metaphor & Metaphysics...

II.1 3/24

Some Remarks on Overinterpretation

If we fail to perceive the subtle indicators of individuation and the exquisite twists and turns of character development that often lie 'hidden in plain sight', we do not simply fail to add a speculative layer of overinterpretation to the history, or prophetic message, or plot. We risk ignoring the center stage and focus of this subtle work of divine anthropology.

Ultimately, whether the claim of implicit subtext to any given verse will be judged as a literary reading, as creative midrash or... as overinterpretation, will depend on the resonance of the subtext with the literary whole and upon the further contextual indications of the subtext.

A Word about Close Reading, Overinterpretation and Bean Counting: One persons's close reading is another's overinterpretation... Klitsner (2006, p.16, 20, 26).

• A sacred text *speaks* to its reader according to his/her virtues and vices, wishes and needs.

Biblical use of Paronomasia and Syllepsis

Semitic languages' triliteral root system plus inflection by vocalization stimulates using effects based on Paronomasia.
Pervasive use in classical literature, Noegel (2013, p.24,178).

Emphatic or poetic function: Genesis 1:1 & Ecclesiastes 7:1
 At the beginning created God...

Better a good name than good perfume.

• Name captures essence of an entity (etymologically or not).

• Name exegesis function: Genesis 25:26

[he] hold the heel of (esau and was called by the name Yaqob. - (eqeb = Heel, step, footsteps, trail; to track; following, due-to, because-of, in-consequence-of \rightarrow Yaqob.

- $(oseh = to do, to make <math>\rightarrow (esau)$.

Klein (1987, p.481, 488), Casanowicz (1879).

Julio Michael Stern

Audio – LRI05

Logic of Magic, Metaphor & Metaphysics...

II.3 5/24

אטָזָת ב<u>ְּעַק</u>ָב עֵשָּׁו וַיִּקְרָא שְׁמָו <u>וִעֲק</u>ָב



Syllepsis for Mantic Prophecy and Magic Sympathy

Mantic or Prophetic function: Amos 8:1,2 & Amos 7:5,7
 כָּה הַרָאַנִי אֲדֹנֵי יְהוֶה וְהוֶה כְּלוֹב קֵיזֹ

I see: A basket of summer (fruit) = The end of my people.

קאָקָ: qeṣ. = summer; ruin, end (of life-cycle). Schorch (2000, 215) וָאָמֶׁר אֲדֹנֶי יְהוּה חֲדַל־נָּׁא מֶי יָקוּם יַעֲקֶׁב כָּי קָטָן הָוּא: כָּה הָרָאַנִי וְהַגֵּה אֵדֹנֵי נָאֶב עַל־חומֵת אֲגֵרָ וּבְיָזָו אֲגָרָ:

By whom shall Yaqob arise? for he is so small. Thus God showed me a vertical wall; In His hand, a plumb-line. anak(y) = Lead, plumb line; Ego (pronoun), Self-Identity token. Klein (1987, p.40, 577, 588), Jaynes (2000, p.295-6, 372).

• Sympathetic magic / semiotic function: Numbers 21:8,9 Copper snake/magic (*neḥaš*): As/on a miracle/pole ~ sign (*nes*) *neḥaš neḥošet vayśimehw (al hanes* נְתָשׁ בְּהָשֶׁת וַיְשׁׁמָהוּ עֵּל־הָנָס Klein (1987, p.412, 418), Hurowitz (2004).

Magical & Ungrammatical Transformations & Rituals

- Naming gives (or captures) the identity (essence) of an entity.
- Renaming implies a change of identity!^(a,b)
 ex: Genesis 32:28,29,32

שׁמְדְּ כֵּי אִם יִשְׂרָאֵל כִּי שָׂגִיתָ עִם אֱלֹהֶים וְעָם־אָנָשִׁים וַתּוּכֵל: נִיִּשְׁאַל יַעֲלֶב [יִשְׂרָאֵל] ניּאמֶר הַגִּידָה־נָא שְׁמֶּד ניּאמֶר לֵכָּה זָה תִּשְׁאַל לְשְׁמֵי וּיְבֶרֶד אֹתו שָׁם: עַל־כָּן לָא־יאָכָלוּ בְנֵי־יִשְׂרָאֵל אֵת־גֵּיד הַנֵּשָׁה

...and your [Yaqob] new name shall be Yśra'el, for you have struggled with 'elohim & with men and prevailed.^(c) And Yaqob [Yśra'el] asked him: Tell^(d) me thy^(e) name! and he^(e) said: • Standard: For what reason do you ask my name? • Syllepsis: "Why-is-it-like-this?" – this is what my name asks! And there he^(e) [Lama-ze] blessed him [with his new name -Yśra'el]. Hence, Yśra'el-ites don't eat the sciatic^(g) sinew.^(f)

Yaqob to Yśra'el Transformation (notes)

(a) Hebrew *Dabar* means Word & Thing ($\& \Rightarrow$ *magical thought*) Buber (1927), Rabinowitz (1993), Shands (1968), Stern (2007).

(b) No entity without identity!

(Pun intended, see W. van O. Quine's celebrated aphorism)

(c) The identity of an entity is forged:

- by the words used in its / his / her attributed name;
- by the narrative explaining the naming process;
- by renaming, hence changing the name(ed) (of the) entity.
- "I" am my name condensating the tales told* about me!

(d) *Yaqob* 'becomes' *Yśra'el* by asking (actively inquiring or demanding) an understanding about the world, by searching for causal relations explaining the way it is and how it works.

(e) He^(e) must be the angel of Metaphysics, concerned with – why things are the way they do (Aristotle's causal explanations)

 * mostly by myself; Jaynes (2000), Bruner (2002). $\scriptstyle{\scriptstyle{-}}$

Julio Michael Stern

Yaqob to Yśra'el Transformation (notes)

(d,f,g) *Hag(y,a)dah* = tell, story; *gyd* = sinew, vein, penis; *našeh* = to forget; sciatic (hapax legomenon).*

• Standard reading: Ritualized eating taboo.

• Murky sexual innuendo induces strong sub-text polarization, marking the possibility of syllepses and alternative readings.

• Alternative reading: Avoid the "tale of oblivion" ! Do not forget (the tale told)! Remember (the lesson learned)!

• At many temporal scales (daily vigil / sleep cycle, individual birth / death, raise / fall of civilizations) we are always learning/ forgetting, finding/ loosing/ (re)creating knowledge & wisdom.+

* See Klein (1987, p.91, 97, 136, 138, 428, 634, 681).

⁺ Riffaterre (1980, p.637), paraphrases Hegel's Phenomenology of Spirit: Natural consciousness, too, is always learning from experience what is true in it [and then] it is always forgetting it and starting the movement all over again.

Human Ontogeny: Thought, Language and Inference

Revisit Amos 8, Gen 25, Amos 7, Gen 32, Eccl 7; Gen 28:12.

• For me, these examples suggest parallel evolutionary ladders for acquisition of linguistic skills and rational/intellectual abilities, for individual human ontogeny and/or species phylogeny:

(7?) Formal relations as mathematical demonstration / proof.

(6) Hermeneutics, formal relations \Rightarrow Legal system; (tools for) communal agreement, but also stereotypification, melancholy;

(5) Do not forget, remember! (?) \Rightarrow Oral to written tradition;

(4) Causal relations \Rightarrow Why - explanat., insight, responsibility;

(3) Recursive relations; Self-reference \Rightarrow Complex metaphors and narrative structures; Ego, conscious teleological planning;

(2) Consequence relations \Rightarrow Simplest narrative structures;

(1) Magical relations \Rightarrow Mantic visual/aural pattern resonances;

Human Ontogeny: Thought, Language and Inference

• From relatively free, uncontrolled or ungrammatical associations based on visual/aural form/pattern matching; to progressively more controlled, grammatical and complex chains of relations; to long, formal and rigorous argumentation.

• This seems to be our road of development: Yaqob's Ladder.

- This path seems to (unavoidably) take us closer to God...*
- Talmudic logic includes deductive, inductive, probabilistic, recursive, circular (hypersets), etc. rules for argumentation; Ex: *Yšma'el ben Eliša* 13 *mydot* (hermeneutic inference rules);
- Dorsal spine of mainstream (rabinic) Judaism after II CE;
- Modern mathematical models for such forms of inference.⁺
- Ich fürchte, wir werden Gott nicht los,* weil wir noch an die Grammatik glauben. F. Nietzsche, Götzen-Dämmerung (1889).

• Yaqob's ladder's bottom/archaic steps' permanent importance: Any? No? Rationalistic trap? Shallow/ unfulfilling form of life?

+ Hidary (2012), Klein (2013), Abraham et al., etc.

Human Ontogeny: Thought, Language and Inference

• For ideas and approaches related to the previously suggested development path for thought and language, see:

- Ontogeny: Lev Simkhovich Vygodskii, Jean Piaget, etc.
- Phylogeny: Julian Jaynes (Kielmeyer's recapitulation law);

• At the *top* of the evolutionary ladder we find inference chains with logical rules represented by powerful algebraic properties (associativity, commutativity, transitivity, fixed-points, etc.), refs.

• I am more interested in the *bottom* of this evolutionary ladder, with relatively free / ungrammatical association mechanisms!

- Weak(er) properties, ex. *limited range* inference rules.
- Scarce work at this extreme of the scale, see Franks (2012).

• Could such models benefit from Statistical Analysis tools for probabilistic association & pattern-matching mechanisms? (where longer, size *s*, chains have probability $e^{-\alpha s}$)

Permanence of Archaic Forms of Association

King *hizeqiya*, the iconoclast (2 Kings 18:4, 700 BC), destroyed the *Nehuštan*, the copper snake of Num 21:9 (1400 BC).
Contemporary monotheistic religions have banned any form of manipulative magic, M.Weber (1919), G.Bateson (1987).

• It is a *Roš Hašanah* (new year's) costume to invent, prepare, "say" and eat new culinary pun-dishes, like: *To a Peas*-ful year! *Raisin* salaries! *Lettuce* go, *Thyme* to *Beet* our obstacles! etc.

- Contemporary psychotherapy recognizes the importance of using ontogenically archaic forms of association and thought.
- Demarcation criteria for acceptable use of magical thought?
- Can the use of such archaic inference chains be modeled?

• Are the Freudian cathexis (Besetzung) mechanisms of displacement (Verschiebung) and condensation (Verdichtung), or the Lacanian poetic functions of Metaphor (drawing a structural similarity) and Metonymy (drawing a contiguity) examples of good or valid logical operators?

(p.6): *yśimehw* = to place; *yśmehw* = be happy.

Julio Michael Stern

Audio – LRI13

Logic of Magic, Metaphor & Metaphysics...

IV.1 13/24

Causal Explanations and Logical Positivism

- Auguste Comte (1798–857), Wiener Kreis (Schlick 1922–36):
- Science = Observational sentences + Logical structure.*
- Ontology & metaphysics have the status of mere auxiliaries.*
- The notion of cause itself has no firm place in science.
- Mark of progress: Disappearance of causal terminology.

• Max Planck (1950): Positivism lacks the driving force to be a leader on this road... Progress, advancement, requires new associations of ideas and new queries... toward such things the fundamental attitude of Positivism is one of aloofness.

Metaphysics concerns causal explanations telling why things are the way they do. These are the narratives and metaphors, often intertwined with abstracts symbolic statements, we use to build our understanding, to gain insight or intuition about objects in our world and the way they work, see Stern (2011).*
Hence, ontology and metaphysics must have their place at the center stage of scientific drama, see Stern (2014, 2015).*

(*Role of parameters in physics & statistics)

Yaqob's Ladder: New & (very) Old Pavements

- Gen 28:10-19 Symbol of human development & evolution.
- Time honored idiom: Do not throw away the ladder after having climbed up on it!
- Positivist hubris impairs intuition, creativity & evolution.
- Yaqob's ladder is not a one way lift, we must climb it up and down, all the time, and all the way!
- Life requires conscious rigor, but also dreaming, new insights and creative associations; visiting new and (very) old pavements.
- Is this one of the roles of religion? and art? and some other old ways almost forgotten in modern society?





Bibliography and Works of Art

- M. Abraham, D.M. Gabbay and U. Schild (2009, 2012, 2013).
- Analysis of the Talmudic Argumentum a Fortiori Inference Rúle (Kal Vachomer) using Matrix Abduction. *Studia Logica*, 92, 3, 281-364.
- Contrary to Time Conditionals in Talmudic Logic. Artificial Intell. & Law, 20, 145-179.
- Future Determination of Entities in Talmudic Public Announcement Logic. *Journal of Applied Logic*, 11, 1, 63-90.
- G. Bateson, M.C. Baterson (1987). *Angels Fear: Towards an Epistemology of the Sacred*. NY: Macmillan.
- D.I. Brewer (1992). Jewish Exegesis before 70 CE. Tübingen: J.C.B.Mohr.
- J. Bruner (2002). Making Stories: Law, Literature, Life. Harvard Univ. Press.
- M. Buber (1927). Leitwortstil in der Erzählung des Pentateuchs. Transl. p.114-128 in M. Buber, F. Rosenzweig (1994). *Scripture & Translation*. Indiana Univ. Press.
- I.M. Casanowicz (1894). Paronomasia in the Old Testament. Boston, MA: Norwood.
- J. Derrida. (1972). La Dissémination. Paris: Editions du Seuil.
- C. Franks (2012). The Realm of the Sacred, wherein We may not Draw an Inference from Something which Itself has been Inferred: A reading of Talmud Bavli Zevachim folio 50. *History and Philosophy of Logic*, 33, 1, 69-86.
- R. Hidary (2012). Talmudic Topoi: The Hermeneutical Methods of Midrash and Greco-Roman Rhetoric. 17th Int.Conf.of The Jewish Law Association, Yale University.
- V.A. Hurowitz (2004). Healing and Hissing Snakes. Scriptura, 87, 278-287.
- J. Jaynes (2000). *The Origin of Consciousness in the Breakdown of the Bicameral Mind.* 2nd ed. Mariner Press. (1st ed. 1976)
- D.A. Klein (2013). Rabbi Ishmael, Meet Jaimini: The Thirteen Middot of Interpretation in Light of Comparative Law. *Hakirah*, 16, 91-112.
- S. Klitsner (2006). Wrestling Jacob: Desception, Identity & Freudian Slips in Genesis. Jerusalem: Urim.

Bibliography and Works of Art

• S.B. Noegel (2013, 2014).

- Entries: *Paronomasia* and *Polysemy*. p.24-29 and p.178-186, v.3; in G. Khan, ed. *Encyclopedia of Hebrew Language and Linguistics*. Leiden: Brill.

- Literary Craft and Performative Power in the Ancient Near East. p.19-38 in K.Smelik, K.Vermeulen, eds. *Literary Readings of Ancient Jewish Texts*. Leiden: Brill.

• N.L. Rabinovitch (1973). Probability and Statistical Inference in Ancient and Medieval Jewish Literature. Univ. Toronto Press.

• I. Rabinowitz (1993). A Witness Forever: Ancient Israel's perception of Literature and the Resultant Hebrew Bible. Bethseda, MD: CDI. (ch.1)

• M. Riffaterre (1980). Syllepsis. Critical Inquiry, 6, 4, 625-638.

• S. Schorch (2000). Between Science and Magic: The Function and Roots of Paronomasia in the Prophetic Books of the Hebrew Bible. p.205-222 in Noegel (2000).

• H.C. Shands (1968). Psychoanalysis and the Twentieth-Century: Revolution in Communication. Ch.4 in J. Marmor. *Modern Psychoanalysis*. Transaction Publish. (p.106-7)

• J.M. Stern (2007, 2011a,b, 2014, 2015).

- Language & Self-Reference Paradox. Cybernetics & Human Knowing, 14, 4, 71-92.
- Constructive Verification, Empirical Inductn, Falibilist Deductn. Information, 2, 635-50.
- Symmetry, Invariance & Ontology in Physics & Statistics. *Symmetry*, 3, 3, 611-635.
- Jacob's Ladder and Scientific Ontologies. Cybernetics & Human Knowing, 21,3, 9-43.

- Cognitive-Constructivism, Quine, Dogmas of Empiricism, and Münchhausen's Trilemma. Ch.5, p.55-68, V.118, *Springer Proceedings in Mathematics & Statistics*.

- M. Weber (1919). *Wissenschaft als Beruf Die Entzauberung der Welt*. München: Duncker & Humblodt. (Transl: Science as Vocation Disenchantment of the World)
- Works of art: Ze'ev Raban's graphical illustrations; St Peter's Church, St Charles,
- MO, USA; Jacob's Ladder by Willam Blake; Spiral staircase photo by Nils Eisfeld.

• E. Klein (1987). A Comprehensive Etymological Dictionary of the Hebrew Language. Jerusalem: CARTA.

FAQ1: Ariadne's Clues in Linguistic Clews



Weak links between words $(\mu \upsilon \theta \sigma \varsigma)$ derived from etymology, pseudo-etymology, paronomasia, contextual syllepsis, etc. can be used to build (spin) threads $(\mu \iota \tau \sigma \varsigma)$ of meaning.

- The intrepid explorer can then try to use such threads as Ariadne's clews (or clues) in the labyrinths of implicit meaning, in hope of not loosing himself in his way to (and from) paradise.

• Can we expect etymological and pseudo-etymological links of a natural language to encode (real, reliable, etc.) knowledge?

• Can we expect *sacred / revealed* texts to encode multiple narrative structures making use of such association chains?

• Can such messages, lying hidden in plain sight, (re)present objective / inter-subjective archetypes?

FAQ2: Promethean fire: Tool for freedom, not for free



- Brothers Yaqob & $(e \dot{s} a u \text{ parallel } \pi \rho o \mu \eta \theta \epsilon v \varsigma \& \epsilon \pi \iota \mu \eta \theta \epsilon v \varsigma.^*$ • Genuine science is an active intellectual enterprise (\neq passive learning) and promotes dynamic worlds (\neq static status quo).
- Mankind has(d) ambivalent feelings for its benevolent Titan.
- Unavoidable consequence: Strong reactionary currents.

Technology (in our times, software) is a productivity amplifier.
Good: Promotes interdisciplinary research, allows processing big data, accelerates scientific discovery, frees creativity in art...

• Bad: Can bypass intellectual skills, may avoid acknowledg. of context/ boundary conditions, narcotic automation effects, etc.

* $\mu\alpha\theta\epsilon\iota\nu$ - think; *pra-mantha - shake/ take by force.

Julio Michael Stern

FAQ3: Integrative Individuation vs Narcissistic Hubris



- Western culture (Wissenschaft) progressively, but unevenly, intertwined and integrated art, science and philosophy.*,+
- Integration of mythological and religious archetypes is very important, but requires soft, non-doctrinaire approaches.
- Dangers of integration breakdown are underestimated.#
- Ontogeny: Mythological themes: Echo & Narcissus, ...
- Reaction / collateral damage: It is all around us...

* C.P. Snow (1959). *Two Cultures*. ⁺ J.M. Stern (2014). *Cognitive-Constructivism, Art & Ontology: Living Forms of the Active Logos*. MuBE, São Paulo.

Failed program of the Enlightenment (Siècle des Lumières, Aufklärung); Jean-François Lyotard's Postmodern condition.

FAQ4: Cultural / Linguistic Turning Points

• Figs. at p.1 & 20 make reference to historical personalities emblematic of (emphasis) transitions on relational couplings: magical ⇒ metaphoric/ allegorical ⇒ causal/ formal* -relations

• Rav Yehošu⁽a ben Yoseph, Galilee, 0 – 33 CE.

Known as the master of *hagada* (tale, narrative, allegory) & nicknamed *hagadya* (the lamb, good heart). Spoken language: Classical Hebrew had been replaced by Aramaic (Greek, Latin).

- Allegorical teaching: Was widely accessible & translatable.
- Talmudic halaka (walk, way): Hermeneutical mydot^{*+} II-V CE
- Sir Francis Bacon, England, 1561 1626.

One of earliest empiricists, he promoted: *Inductive method*^{*+}; Scientific inquiry; The Royal Society (natural knowledge) 1660.

• After the development of quantitative methods & technology over three millennia, scientific models and language become the dominant system in human knowledge.

+At that time, non-mathematical, but well regimented inference rules; *Current research for best axiomaic systems.

FAQ5: 1st World Cong. Logic & Religion - Importance

(At CNPg) Logic is a sub-area of Philosophy. Hence, it is at the see-shore, where the waters of Philosophy meet the dry land of Mathematics – and the see-shore is a turbulent environment. Moreover, many aquatic creatures see it as part of terra firma, a world alien to them, while many of those that proudly stand on dry land see it as a semi-submerged world better to be avoided. Nevertheless, the see-shore is also a very rich and diverse environment, full of life, supporting life forms that can be found nowhere else. The see-shore is a very narrow - almost onedimensional - band that, nevertheless, is responsible for linking two great realms. Without this connection, these two realms would remain isolated, at least from a biological perspective. Interdisciplinary is the blessing* (and the curse) of Logic! It characterizes the field as a cross-roads between the Exact Sciences and the Humanities (but also makes it a frequent victim of the "not-out-of-my-budget" syndrome).

* Mar briga com pedra: Vive (sofre) o marisco! < -> < -> < -> < -> <

FAQ6: Metaphysics and the Letter Lamed

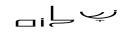
• Name: from verb *lomed* = I learn. Value: 30.

• Grammatical functions as a prefix: Infinitive verbal form. Ex: *Dabar* = word; *ledaber* = to speak. Preposition: to, for. Ex: *lama* = why, *l-ma*, for-what (por-que).

• The angel *lama-ze* is subordinated to the letter *lamed*, either grammatically or conceptually, for a why-question can only be answered if the following conditions for learning are satisfied:

(1) In the pertinent universe or relevant domain of the question there is some kind of order (to be learned), not only chaos.

(2) It is possib. to establish (partial) correspondences between the internal organization of the individual (organism, system) asking the question and the external order of the universe, based on potentially available structural similarities.



• The *lamed* makes this link! Peace, goodbye, farewell...

・ 同 ト ・ ヨ ト ・ ヨ ト

- Muito Grato - Thank You - Todah Rabah -

Caetano Veloso (1984), Lingua :

Se você tem uma ideia incrível, É melhor fazer uma canção; Está provado que só é possível, Filosofar em alemão.

Tom Jobim e Vinicius de Moraes (1958):

Velho caminho por onde passou, Carro de boi, boiadeiro gritando ô ô; Velho caminho por onde passou, O meu carinho chamando por mim ô ô.

Caminho perdido na serra, Caminho d pedra onde não vai ninguém; Só sei que hoje tenho em mim, Um caminho de pedra no peito também.

Hoje sozinho não sei pra onde vou, É o caminho que vai me levando ô ô...



Jacob's Ladder, A.Houthuesen