



ELTE  
EÖTVÖS LORÁND  
UNIVERSITY

*Rituals Between Mind and Society 2021*  
4-5 November 2021



*Jewish Theological Seminary*  
*University of Jewish Studies*

# Circumcision, immersion and dietary restrictions as rituals

*Jewish rituals extending the Lawson – McCauley model*

---

Tamás Biró

tamas.biro@btk.elte.hu, <http://birot.web.elte.hu/>

*ELTE Eötvös Loránd University*

birot@or-zse.hu, <http://www.or-zse.hu/>

*Jewish Theological Seminary – U. of Jewish Studies*



ELTE  
EÖTVÖS LORÁND  
UNIVERSITY

# Overview



*Jewish Theological Seminary  
University of Jewish Studies*

1. What is meant by '*cognitive*' in the cognitive science of religion?
2. A CSR approach to rituals: Lawson and McCauley (1990) model  
– a linguistic fresh view
3. Jewish rituals and a revision of the Lawson – McCauley model



ELTE  
EÖTVÖS LORÁND  
UNIVERSITY

# Overview



*Jewish Theological Seminary  
University of Jewish Studies*

- 1. What is meant by ‘cognitive’ in the cognitive science of religion?**
2. A CSR approach to rituals: Lawson and McCauley (1990) model  
– a linguistic fresh view
3. Jewish rituals and a revision of the Lawson – McCauley model

# What is CSR today?



*Jewish Theological Seminary  
University of Jewish Studies*

- Cognitive science of religion:  
a biological approach to religion,
- as opposed to (or: in addition to)  
theological, historical, social, psychological, semiotic etc. approaches.

# What is CSR today?



*Jewish Theological Seminary  
University of Jewish Studies*

- Cognitive science of religion:  
a biological approach to religion,
- as opposed to (or: in addition to)  
theological, historical, social, psychological, semiotic etc. approaches.
- Hence:  
psychological, neurological, physiological, evolutionary etc.  
research questions & methodologies.

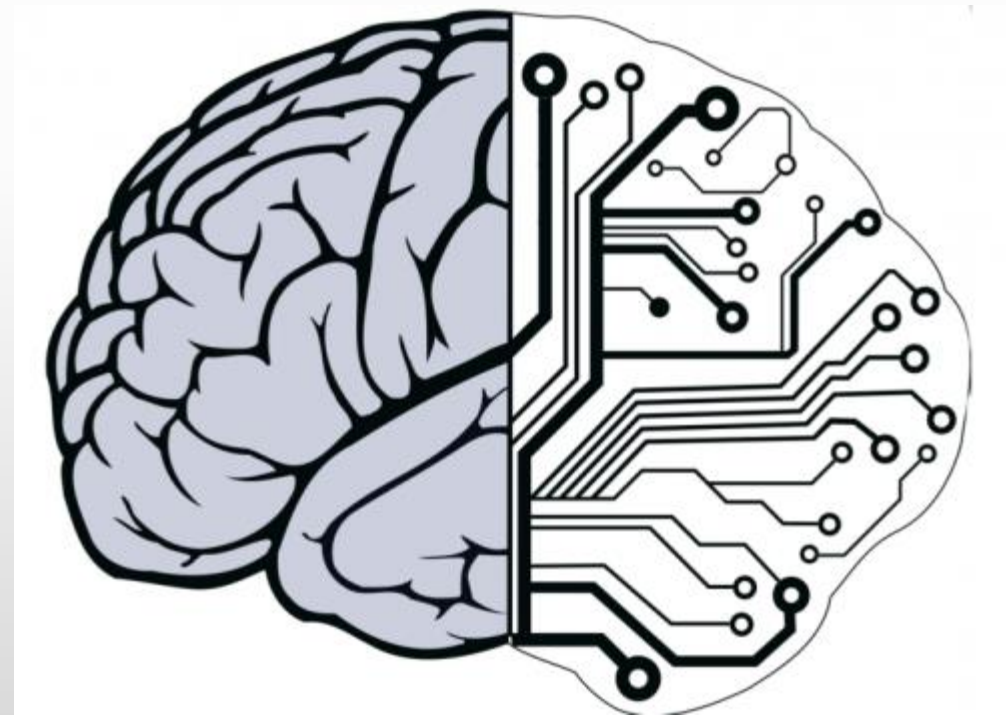
Put it differently: **religion** viewed as a biological phenomenon, in addition to as a historical, social, psychological etc. phenomenon.

# What was CSR originally, in 1990? *(at least, so I believe)*



*Jewish Theological Seminary  
University of Jewish Studies*

- Cognitive turn in the 1950s, 1960s:  
the “mind is a computer” metaphor
- Focus on mind, not brain.
- Phenomena as information processing:  
data structures, algorithms, etc.
- Parallel distributed processing,  
embodied and embedded cognition etc.

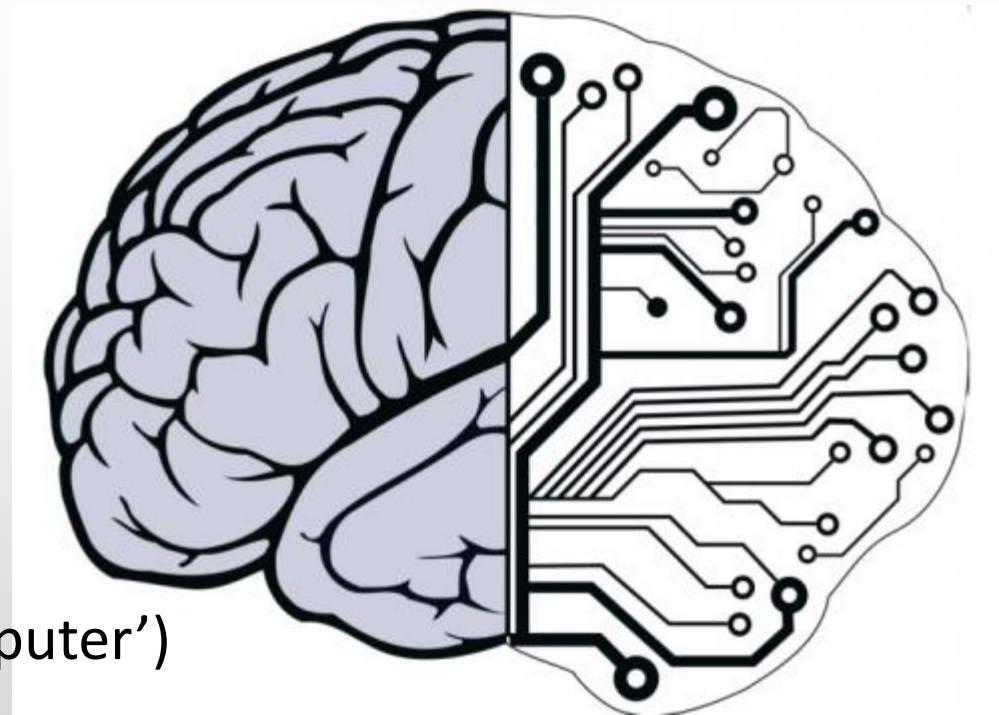


# What was CSR originally, in 1990? (*at least, so I believe*)



*Jewish Theological Seminary  
University of Jewish Studies*

- Cognitive science of religion:  
the “mind is a computer” metaphor
- Religious concepts, beliefs, narratives,  
objects, specialists, rituals...  
as mental “representations”
- ... at least in a computational model:  
(‘computational’ from ‘computing’, not from ‘computer’)
- data structures and algorithms processing them



# The example of linguistics



*Jewish Theological Seminary  
University of Jewish Studies*

- Why couldn't CSR follow the path of linguistics, the first humanities field / the first field studying higher cognition that underwent the cognitive turn?
  1. Using the knowledge accumulated in the past centuries, structural analysis of the phenomena.
  2. Turning those structural analyses into formal models.
  3. Analysis of further phenomena lead to rejection / corroboration / refinement of the existing models.





# The example of linguistics



*Jewish Theological Seminary  
University of Jewish Studies*

1. Using the knowledge accumulated in the past centuries, structural analysis of the phenomena.
2. Turning those structural analyses into formal models.
3. Analysis of further phenomena lead to rejection / corroboration / refinement of the existing models.

*Much later, asking further questions:*

4. How can these models be implemented in the wetware of the brain?
5. Connection to other cognitive functions/phenomena?
6. How can these models be learnt by a learner (ontogeny)?
7. How could those models evolve (phylogeny)?



# The example of linguistics



1. Using the knowledge accumulated in the past centuries, structural analysis of the phenomena.
2. Turning those structural analyses into formal models.
3. Analysis of further phenomena lead to rejection / corroboration / refinement of the existing models.

*Much later, asking further questions:*

4. How can these models be implemented in the wetware of the brain?
5. Connection to other cognitive functions/phenomena?
6. How can these models be learnt by a learner (ontogeny)?
7. How could those models evolve (phylogeny)?

# The example of linguistics



*Jewish Theological Seminary  
University of Jewish Studies*

- Why couldn't CSR follow the path of linguistics, the first humanities field / the first field studying higher cognition that underwent the cognitive turn?
  1. Using the knowledge accumulated in the past centuries, structural analysis of the phenomena.
  2. Turning those structural analyses into formal models.
  3. Analysis of further phenomena lead to rejection / corroboration / **refinement** of the existing models.

**An example  
from the study  
of Judaism**



ELTE  
EÖTVÖS LORÁND  
UNIVERSITY

# Overview



*Jewish Theological Seminary  
University of Jewish Studies*

1. What is meant by ‘cognitive’ in the cognitive science of religion?
- 2. A CSR approach to rituals: Lawson and McCauley (1990) model  
– a linguistic fresh view**
3. Jewish rituals and a revision of the Lawson – McCauley model

# Lawson and McCauley 1990 (revised): *a model of religious rituals*



*Jewish Theological Seminary  
University of Jewish Studies*

- Cognitive science of religion:

approaches *religious* phenomena as *biological* phenomena,  
*viz.* products of the human mind

*Instead of historical phenomena, social phenomena, etc.*

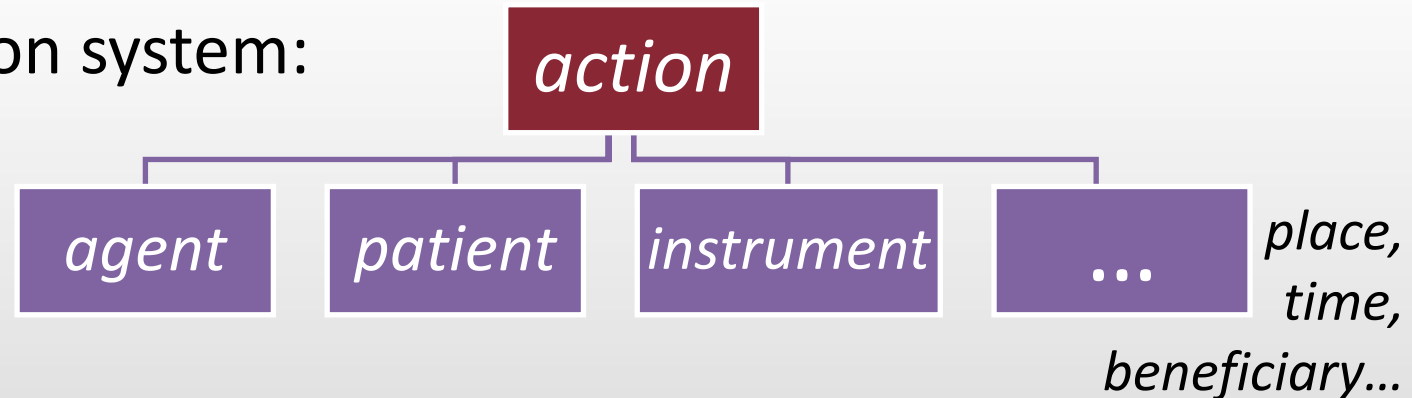
- Religious phenomena = everyday phenomena *with a twist.*
- Rituals = actions *with a twist.*
- Twist here: some culturally postulated superhuman agent is present.

# Lawson and McCauley 1990 (revised): *a model of religious rituals*



*Jewish Theological Seminary  
University of Jewish Studies*

- Cognitive science of religion:
- Rituals = actions *with a twist*.
- Action representation system:



- Twist here: some culturally postulated superhuman agent is present.

# Lawson and McCauley 1990 (revised): *a model of religious rituals*

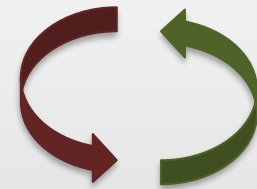


*Jewish Theological Seminary  
University of Jewish Studies*

- Cognitive science of religion – motivation:

- (1) *John broke the window with the hammer.*
- (2) *John broke the window.*
- (3) *The hammer broke the window.*
- (4) *The window was broken.*
- (5) *The window was broken by John.*
- (6) *The window was broken by the hammer.*
- (7) *The window was broken with the hammer.*
- (8) \* *The window was broken with John.*

**Syntactic positions:  
subject, object, etc.**



**Semantic / thematic roles:  
agent, patient, etc.**



ELTE  
EÖTVÖS LORÁND  
UNIVERSITY

# Lawson and McCauley 1990 (revised): *a model of religious rituals*



*Jewish Theological Seminary  
University of Jewish Studies*

- Cognitive science of religion – motivation:
- Action representation system universally mirrored by human language:
  - Subject  $\approx$  agent: wilful initiator of the action.

— **PSA: *principle of superhuman agency*** —

- Object  $\approx$  patient: passive undergoer of action.
- Instrument: contributing to the result of the action without will.
- Etc.

*But in fact, more complex than that...*

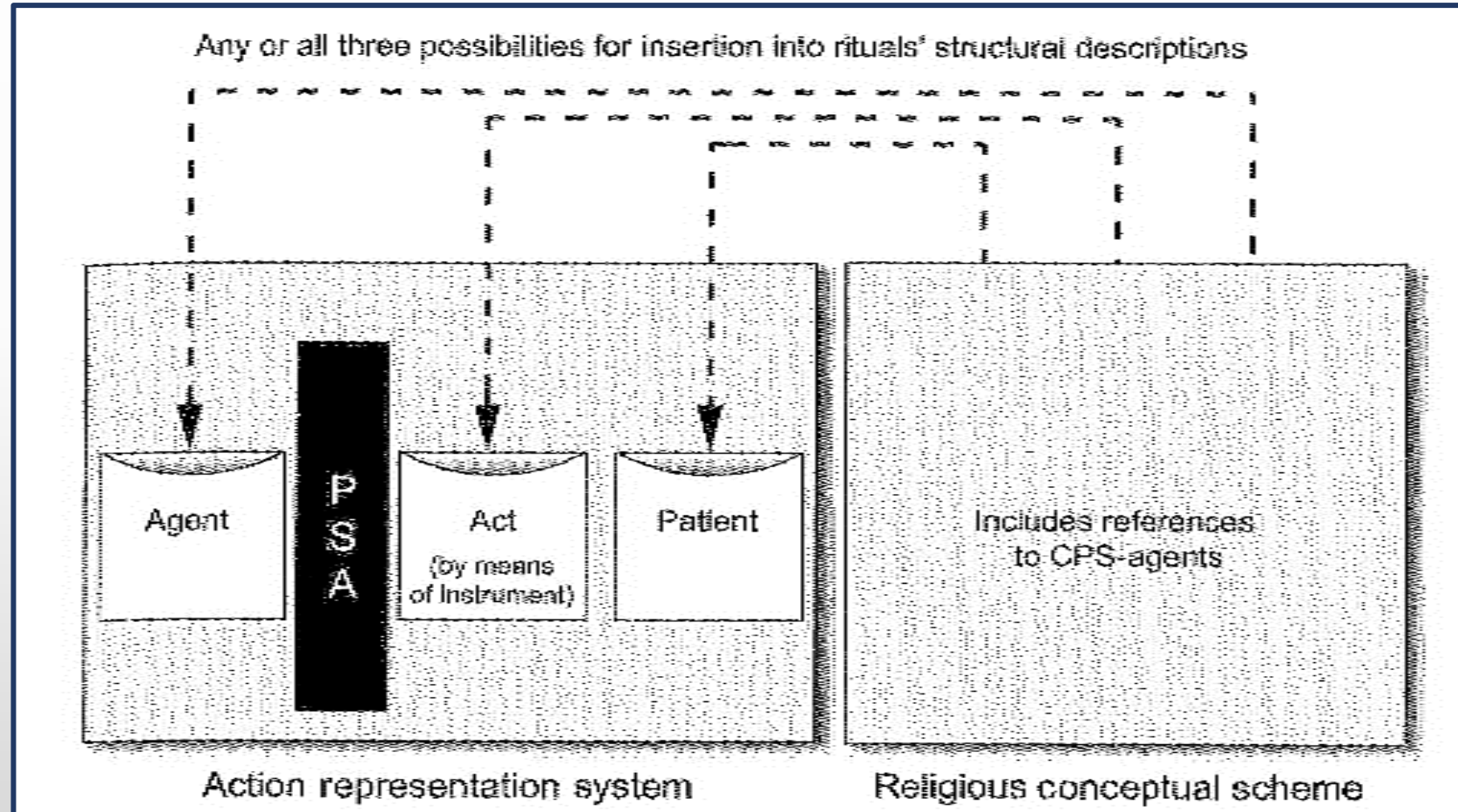




# Lawson and McCauley 1990 (revised): *a model of religious rituals*



*Jewish Theological Seminary  
University of Jewish Studies*



*(McCauley and Lawson 2002, p. 27.)*

# Lawson and McCauley 1990 (revised): *a model of religious rituals*



*Jewish Theological Seminary  
University of Jewish Studies*

- Proposed data structure: attribute-value matrices (AVMs)
- Examples:

*John broke the window with the hammer.*

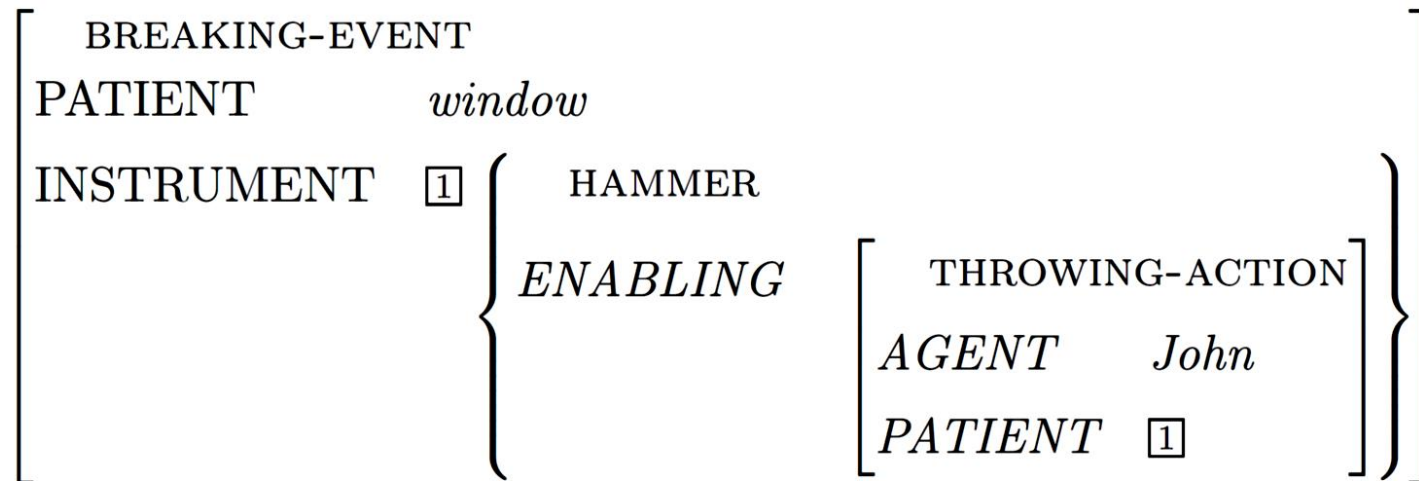
BREAKING EVENT	
AGENT	<i>John</i>
PATIENT	<i>window</i>
INSTRUMENT	<i>hammer</i>

# Lawson and McCauley 1990 (revised): *a model of religious rituals*



*Jewish Theological Seminary  
University of Jewish Studies*

- Examples: a prior, enabling action → agent represented by a proxy  
*A hammer, thrown by John, breaks the window.*



# Lawson and McCauley 1990 (revised): *a model of religious rituals*



*Jewish Theological Seminary  
University of Jewish Studies*

- Examples:            ritual = action with a twist

*John feeds the child.*

GIVING-ACTION	
AGENT	<i>John</i>
RECIPIENT	<i>child</i>
PATIENT	<i>food</i>

*John offers food sacrifice  
to the local deity.*

GIVING-ACTION	
AGENT	<i>John</i>
RECIPIENT	<i>local deity</i>
PATIENT	<i>food</i>



ELTE  
EÖTVÖS LORÁND  
UNIVERSITY

# Overview



*Jewish Theological Seminary  
University of Jewish Studies*

1. What is meant by ‘cognitive’ in the cognitive science of religion?
2. A CSR approach to rituals: Lawson and McCauley (1990) model  
– a linguistic fresh view
3. **Jewish rituals and a revision of the Lawson – McCauley model**

# Lawson and McCauley 1990 (revised): *a model of religious rituals*

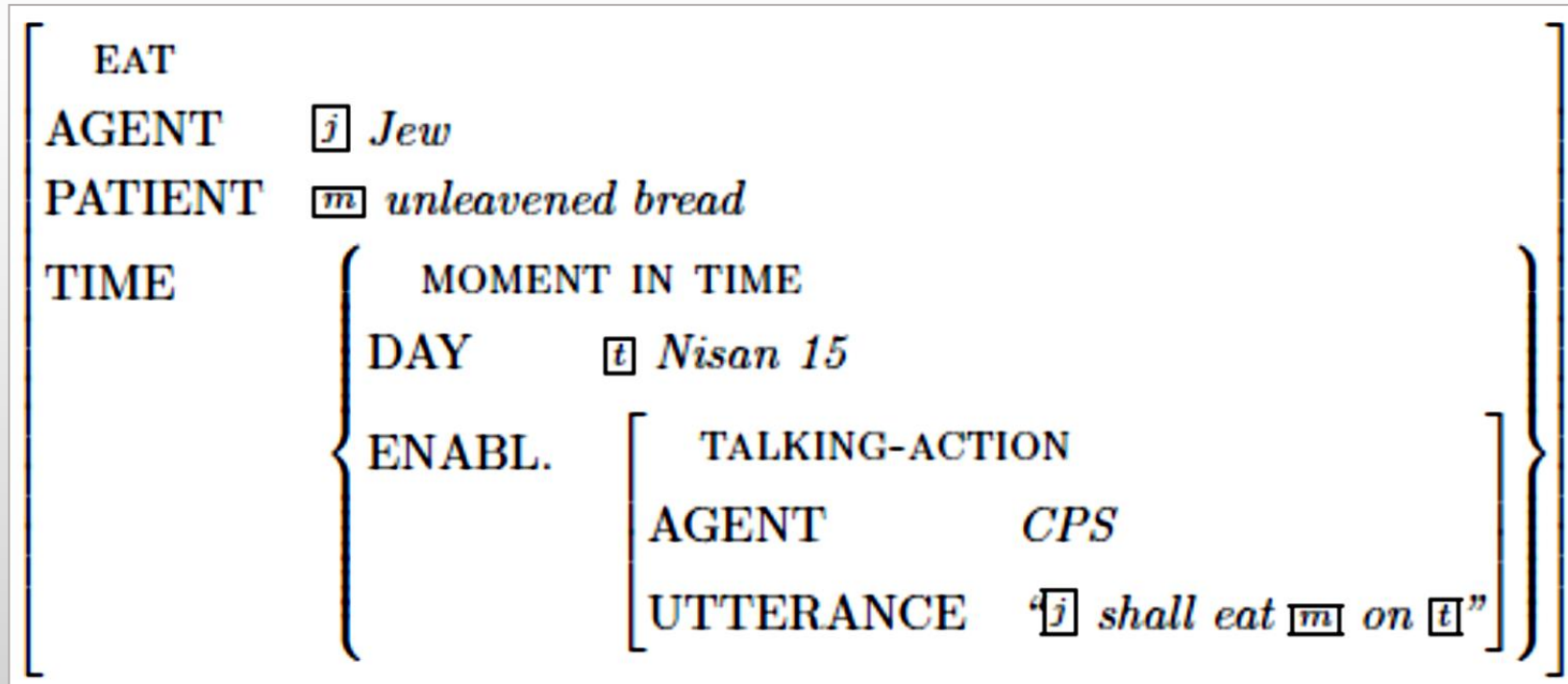


*Jewish Theological Seminary  
University of Jewish Studies*

Biró (2013). 'Is Judaism boring?'

- Examples from Judaism:

*Eating matzah on the 15<sup>th</sup> of Nisan*



**Novelties** with respect to the  
Lawson – McCauley model:

1. Slot for TIME.
2. Prior enabling narratives.
3. Modalities:  
obligation, prohibition.



# Lawson and McCauley 1990 (revised): *a model of religious rituals*



*Jewish Theological Seminary  
University of Jewish Studies*

- Examples from Judaism:

Biró (2013). 'Is Judaism boring?'

## *Immersion in the mikveh*

IMMERSION							
AGENT	<i>woman or convert</i>						
INSTRUMENT	<table border="0"> <tr> <td>WATER</td> <td></td> </tr> <tr> <td>QUANTITY</td> <td><i>40 seah</i></td> </tr> <tr> <td>SOURCE</td> <td><i>natural</i></td> </tr> </table>	WATER		QUANTITY	<i>40 seah</i>	SOURCE	<i>natural</i>
WATER							
QUANTITY	<i>40 seah</i>						
SOURCE	<i>natural</i>						

**Where is the  
superhuman agent?**

# Lawson and McCauley 1990 (revised): *a model of religious rituals*

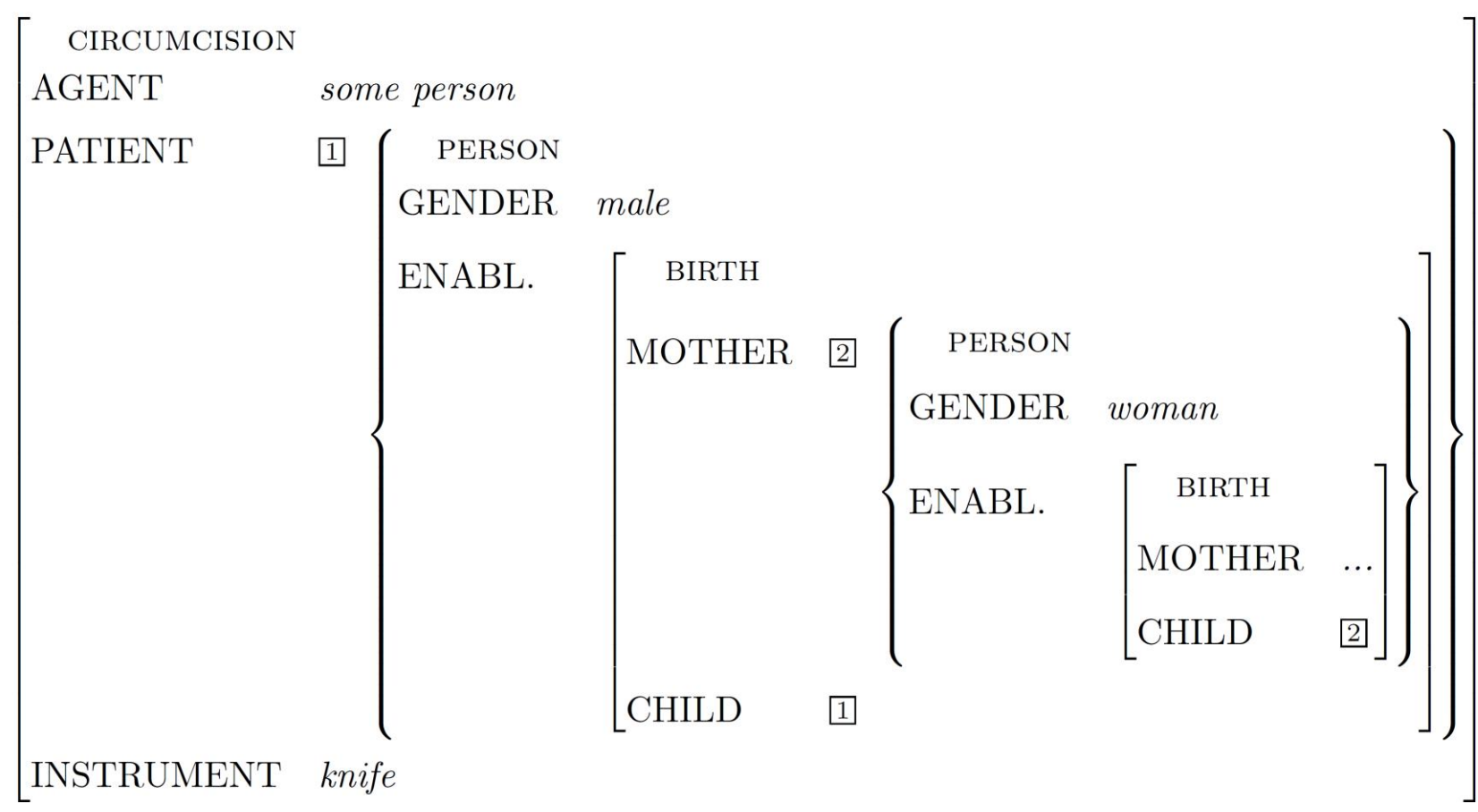


*Jewish Theological Seminary  
University of Jewish Studies*

• Examples from Judaism:

*circumcision*

Biró (2013). 'Is Judaism boring?'



**Halakhically correct  
representation**

**Where is the  
superhuman agent?**





ELTE  
EÖTVÖS LORÁND  
UNIVERSITY

# Lawson and McCauley 1990 (revised): *a model of religious rituals*



*Jewish Theological Seminary  
University of Jewish Studies*

(Biró 2013, 'Is Judaism boring?' ; *and elsewhere*)

## Lawson & McCauley 1990 applied to Judaism:

- requires references to time and place,
- requires negations for prohibitions
- requires *enabling states of affairs*  
(instead of / beside *enabling rituals*)
- + prior narratives  
(enabling non-ritualistic past actions)
- ...

Many actions considered as Jewish rituals  
lack a superhuman agent in their structure!

# Overview



*Jewish Theological Seminary  
University of Jewish Studies*

If time permits:

**Ritual dynamics according to McCauley and Lawson (2002):  
rabbis and rebbes.**

# Harvey Whitehouse



*Jewish Theological Seminary  
University of Jewish Studies*

## Modes of religiosity:

- Fieldwork on Pomio Kivung in Dadul village  
(a cargo cult in Papua New Guinea)
- Observes a “splinter group outburst”  
with new high-arousal rituals.
- *Doctrinal modes* vs. *imagistic mode.*
- “The Pomio Kivung ritual system is unusual in that it includes *no* special agent rituals.” (McCauley and Lawson 2002: 180)

# McCauley and Lawson 2002



*Jewish Theological Seminary  
University of Jewish Studies*

## Types of rituals:

- Form:

*special agent*



*special patient  
special instrument*

- Sensual pageantry:

*high*



*low*

- Frequency:

*low*



*high*

# McCauley and Lawson 2002



*Jewish Theological Seminary  
University of Jewish Studies*

## Types of rituals:

- Form:

*special agent*



*special patient  
special instrument*

- Sensual pageantry:

*high*



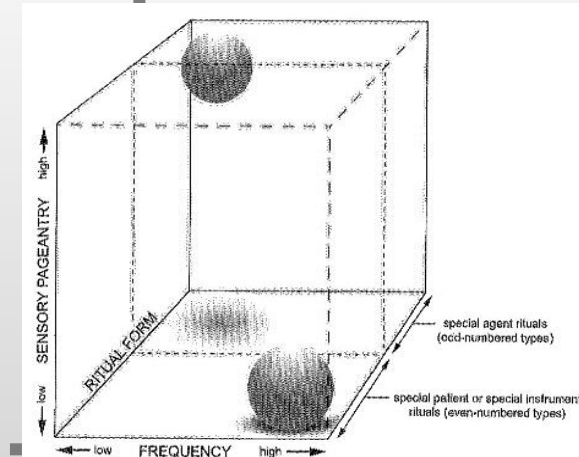
*low*

- Frequency:

*low*



*high*



# McCauley and Lawson 2002



Jewish Theological Seminary  
Jewish Studies

• Comparable amount of both types of rituals: *balanced ritual system*.  
 • Too frequent high pageantry special agent system: sensual overload.  
 • Too few sp. agent rituals → „tedium effect” → „splinter group outbursts.”

## Types of ritu

• Form:

*special agent*



*special patient*  
*special instrument*

• Sensual pageantry:

*high*



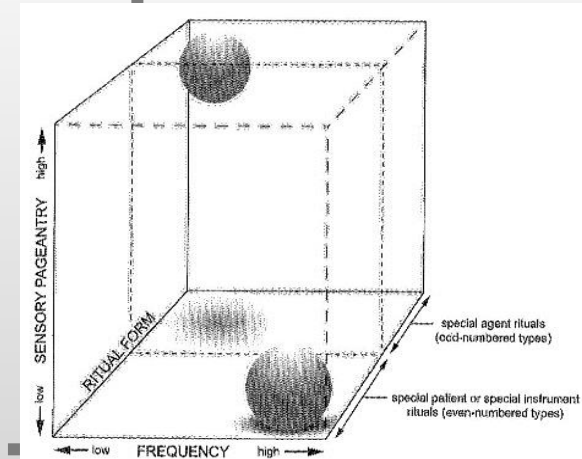
*low*

• Frequency:

*low*



*high*



# Hypothesis



*Jewish Theological Seminary  
University of Jewish Studies*

Judaism lacks a balanced ritual system,

therefore:

- *tedium effects?*
- *splinter groups?*

*Well, yes and no.*

*It is more complicated than that.*

**CRISIS?**

CRISIS?

# “Modes of Judaism”



*Jewish Theological Seminary  
University of Jewish Studies*

- „Theologically (halakhically) correct” Judaism  
*might encode an unbalanced ritual system. Yet,*
- Folk religion  
*compensating for that with other rituals and beliefs.*
- Folk interpretations of Judaism
- “Splinter groups” with charismatic leaders as a “proxy” for the divine  
*introducing new rituals and interpretations.*
- Revising the McCauley – Lawson theory is also an option.



# The hasidic tish:



*Jewish Theological Seminary  
University of Jewish Studies*

- A *high-arousal* and *special-agent* GIVING-EVENT.



GIVING EVENT

AGENT  
RECIPIENT  
PATIENT

*rebbe  
hasid  
food*



Source: [https://commons.wikimedia.org/wiki/File:Boyan\\_tish,\\_Sukkot\\_2009.jpg](https://commons.wikimedia.org/wiki/File:Boyan_tish,_Sukkot_2009.jpg)

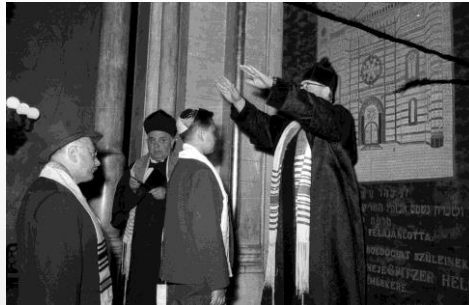
[https://commons.wikimedia.org/wiki/File:%D7%94%D7%A8%D7%91%D7%99\\_%D7%9E%D7%91%D7%95%D7%98%D7%95%D7%A9%D7%90%D7%9F\\_%D7%91%D7%A2%D7%A8%D7%99%D7%9B%D7%AA\\_%D7%94%D7%A9%D7%95%D7%9C%D7%97%D7%9F\\_%D7%94%D7%98%D7%94%D7%95%D7%A8.jpg](https://commons.wikimedia.org/wiki/File:%D7%94%D7%A8%D7%91%D7%99_%D7%9E%D7%91%D7%95%D7%98%D7%95%D7%A9%D7%90%D7%9F_%D7%91%D7%A2%D7%A8%D7%99%D7%9B%D7%AA_%D7%94%D7%A9%D7%95%D7%9C%D7%97%D7%9F_%D7%94%D7%98%D7%94%D7%95%D7%A8.jpg)

# The changing / re-interpreted role of the contemporary rabbi



*Jewish Theological Seminary  
University of Jewish Studies*

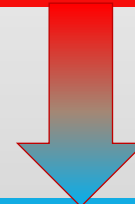
- Is the rabbi a “Jewish priest”?
- Is the rabbi a “Jewish phd”?



- Priestly blessing pronounced by post-war non-orthodox Hungarian rabbis:

- József Schweitzer (1922-2015)
- Alfréd Schöner (1948-)
- István Darvas (1974-)

*special instrument*



*special agent*





ELTE  
EÖTVÖS LORÁND  
UNIVERSITY

# Overview



*Jewish Theological Seminary  
University of Jewish Studies*

1. What is meant by '*cognitive*' in the cognitive science of religion?
2. A CSR approach to rituals: Lawson and McCauley (1990) model  
– a linguistic fresh view
3. Jewish rituals and a revision of the Lawson – McCauley model

**Summary**



ELTE  
EÖTVÖS LORÁND  
UNIVERSITY

# Summary



*Jewish Theological Seminary  
University of Jewish Studies*

1. A revision of the Lawson and McCauley model, with AVMs proposed as the data structures to encode rituals (and much more)
2. Novel approaches to the interpretation of Judaism and its history.
3. Future work for CSR:  
model applied to / tested on / refined on more religions +  
+ algorithms for manipulating these data structures + connection  
to other higher and lower cognitive functions + implementations +  
+ learnability (ontogeny) + evolution 1 (history) + evolution 2 (phylogeny).



**ELTE**  
EÖTVÖS LORÁND  
UNIVERSITY

*Rituals Between Mind and Society 2021*  
*4-5 November 2021*



*Jewish Theological Seminary*  
*University of Jewish Studies*

*Thank you for your attention!*

Tamás Biró

tamas.biro@btk.elte.hu, <http://birot.web.elte.hu/>

*ELTE Eötvös Loránd University*

birot@or-zse.hu, <http://www.or-zse.hu/>

*Jewish Theological Seminary – U. of Jewish Studies*