Appendix C: The Expert Data

This appendix explicates the details regarding the data contributed by the experts for the religion comparison experiments in chapters 4 and 5. The first part contains a copy of the instructions that were provided to the experts. The second part includes the classes themselves.

C.1 Instructions for Participants

We run a research on fully automated detection of similar features within distinct but related domains. With your kind help, we would have the opportunity to validate our computational information-retrieval methods through a comparative investigation of religions.

Please follow the instructions below. Thank you very much for your contribution!

Zvika Marx, student in neural computation Ph.D. program

For the following five religions – Buddhism, Christianity, Hinduism, Islam, Judaism – you are requested to provide a simplified framework for comparing each two of them (Buddhism-Christianity, Buddhism-Hinduism, etc.) with one another.

For each one of the possible 10 pairwise comparisons, please write down in English:

- (I) A list of titles for the main features and aspects that are similar (or resembling, or parallel, or equivalent, or analogous) in the two religions under examination.
- (II) For each such a feature, for each one of the two religions under comparison, write down a list of key-terms that are associated with this feature.

Notes:

(1) Additional Guidelines:

- (a) Please, try to address features that are commonly discussed in the literature and to use key-terms that are relatively wide spread. Please avoid the use of very rare terms as much as possible (even if they are much more to the point).
- (b) Feature titles and key-terms may repeat (over different religion comparisons, repetition of the same key-term for both religions in the same feature etc.). However, keep in mind that we have an interest in exploring unique properties of each comparison.
- (c) It would be much helpful if you could specify in brackets alternative spelling and strictly interchangeable terms to your key-terms, whenever such exist.
- (d) The key-terms may definitely be names of people, places etc., but please try thinking also of key-terms that are not names, whenever such exist.
- (2) Expected numbers of features and key-terms (rough, non-definite guidelines):
 - * Features minimum: about 5; maximum: about 15 (for each pair)
 - * Key-terms minimum: 2-3; maximum: about 10 (for each religion in each pair)
- (3) This task is not meant to be laborious and the output is not expected to become an ultimate reference for comparative religion studies. It is more of getting a view on what you might have in mind now. Please do not consult the literature too extensively (unless you do it for your own reasons). Do concentrate on currently available knowledge. Whenever pointing out additional features and key-terms is not fluent, tend to the minimum values specified in (2) above.

- (4) We would like very much to get your contribution also with respect to religions about which you feel less confidence, even if in such cases you are significantly less accurate and detailed. You are requested to fill in a self-estimated indication to your level of expertise for each comparison, so we could potentially monitor consequential effects if any.
- (5) Although the list of all 10 pairwise religion comparisons is what we are after, partial contribution (resulting from lack of time, lack of knowledge, or any other reason) is still very much welcomed.
- (6) Your name will not be associated with your specific contribution. Please let us know if you prefer not to be acknowledged at all.
- (7) We might come back to you with a request to feedback in a later stage in our research. However, by participation in this stage you do not make any commitment to take part in the later stages.
- (8) We would like very much to get comments and suggestions regarding your impressions of taking part in this procedure. We would be happy to explain and discuss further any aspect of our research.

The instructions above were followed by 10 pages, each containing a table such as the following, where the words **Religion1** and **Religion2** are respectively replaced by the following religion pairs:

(1) **Buddhism** and **Christianity**,

(2) Buddhism and Hinduism,

(3) Buddhism and Islam,

(4) Buddhism and Jusaism,

(5) Christianity and Hinduism,

(6) Christianity and Islam,

(7) Christianity and Jusaism,

(8) Hinduism and Islam,

(9) Hinduism and Jusaism

and (10) Islam and Jusaism,

1	Religion1	Religion2	
Features of Similarity	Key-terms Lists		

o 5	a number between 1 to 5	please indicate a	Level of confidence –
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^{1 –} indicates minimal confidence (features and key-terms are based on very partial knowledge or even on mere intuition, I am not sure if many relevant aspects are covered, etc.)

^{5 –} indicates maximal confidence (features and key-terms are based upon comprehensive knowledge, they seem to me as representing well the whole range of potential correspondences, etc.)

C.2 Religion-Related Term Classes Contributed by Experts

C.2.1 The Data Contributed by Expert I

Table C.1: We present the data contributed by this expert, as a cross-comparison involving all five religions. The expert provided the titles for the aspects of similarity, i.e. classes, and the list of religion pairs to which each similarity aspect is relevant. This data was conveyed to us in printed form, so we show the final version, after filtering out about 30% of the terms and further editorial changes, such as spelling modifications (the data from the other 2 experts, presented in the following sections, allows more detailed trace of filtered terms and changes that have been made).

Buddhism	Christianity	Н	induism		Islam	Juda	aism
Scriptures. (relevant for	Scriptures. (relevant for all religion pairwise comparisons)						
pali~canon	new~testament	git	a	hadith mohamad		halachah m	ishnah
koan mandala	old~testament	mah	abharata	shariah sunnah		siddur tal:	mud tanakh
mantra sutra	apostle bible	upa	nishad	1		torah	
	john luke matthew	ved	las				
	paul revelation						
Beliefs and Ideas (rela	evant for all religion pairwise cor	npariso	ns)				
buddha~nature	jesus~christ	holy	~people	pillar	rs~of~	judgment	
noble~truths	love~of~god	trim	urti	faith		divine~cre	ation
dharma dukkha	devil god cross	moks	ha atman	muhamr	mad~the~pr-	mount~sina	i
emptiness	fish heaven	brah	man	ophe	et~of~allah	no~other~g	od
nirvana	hell	re-		tawhio	d allah	principles	~of~faith
reincarnation	resurrection	inc	arnation	heaver	n hell	temple~mou	nt temple
suffer tantra	trinity					hell yarmu	lke exodus
	_					heaven men	orah talit
						tefilin te	shuvah
Ritual, Prayer and Ho	ly Days (relevant for all religion	pairwis	se comparisons, 1	ess Christ	ianity-Hinduism)		
Gift	eucharist baptism	kumb	hamela	id~al~	~fitr	atonement	read~torah
meditation	christmas confess	fest	ival	charit	ty fast	circumcisi	on
sacrifice	sunday	medi	tation	friday	y haj	passover p	rayer
stupa		puja		kaabal	n mecah	synagogue	tefilin
		sacr	ifice	prayer	r ramadan		
Society and Politics (r	elevant for the following compar	isons: B	uddJudd., Chri	isHind.,	ChrisIslam., Hind.	-Islam, Islam-Jud	d.)
Dalai~lama	catholic church	bra	hmin	calif ali imam		hasid sain	t
bodhisattva	minister monk	cas	te sadhu	shariah sheikh		ashkenazim	community
lama monk	priestly			shia	h sufi	david prop	het rabbi
	protestant rome			sunn	ah	sephardim	Solomon
	vatican					synagogue	
Establishments (releva	ant for the following comparison	only: C	hristianity–Hindı	uism)			
monastery	bishop cardinal	cas	te gift	imam mosque		high~pries	t temple
school	church pope	pri	est			priest lev	i mikveh
temple	priestly	tem	ple			rabbi syna	gogue
						yeshivah	
	or all religion pairwise compariso						
meditation	eucharist	01.01	ram	sufi		zohar ezek	_
nirvana	crucifixion love		kra			ari daniel	
	miracle saint	dar	shan guru	ru		malchut me	
tantra	suffer	yog		Ī		sefirot sh	
	s Education (relevant for the fo			_			
meditation	divinity moral	ash	ram guru	sheikh		gemara par	sha talmud
monastery	theology					yeshivah	
monk sutra	university			1			
Names and Places (relevant for the following religion comparisons: BuddHind., ChrisIslam., ChrisJudd., Islam-Judd.)							
	esus~christ		varanasi	jerusalem		isaac jo	-
-	ohn~the~baptist		arjuna br			_	oraham
	ordan~river bethlehe	∋m	durga gan			adam	
_	erusalem jesus john		kali Kris		madinah	jerusale	em moses
	uke luther mary mat	chew	rama shak	_	mecah		
р	aul rome thomas	shiva vish			mohamad		

C.2.2 The Data Contributed by Expert II

The second expert has provided the data presented in Tables C.2–C.5.

Table C.2: Buddhism–Christianity expert classes.

	Buddhism	Christianity	
Life after death	Reincarnation,	Resurrection	
	nirvana (nibbana)	heaven	
	karma	hell	
	samsara	the day of judgement	
Creatures that	Buddha	God	
have special	Bodhisattva	Jesus	
forces or	Deva	Devil	
abilities		Angel	
Cause and	The law of karma	Sin - punishment	
effect	the cycle of reincarnation	good act - reward	
	samsara		
Sacred places	Temple	Jerusalem	
	monastery	Betlehem	
	the places related to the life of	church	
	the Buddha	cathedral	
		graveyard	
Recommended	Dharma (dhamma)	Praying	
acts	meditation	reading Bible	
	ascetism	good works	
	bhavana	converting	
	the way (faith, strength,	believing	
	mindfulness, concentration,		
	wisdom)		
	merit making		
	pilgrimage		
Sacred times	Full-moon day	Christmas	
	the day of the birth and	Easter	
	enlightenment of the Buddha	Pentacostal day	
		Sunday	
Special places	Sangha	Monastery	
for religious	monastery	convent	
experts		monk	
		nun	
Sacred texts	Tripitaka	The Bible	
	Kanjur	New Testament	
	Tanjur	Old Testament	

Table C.3: Christianity–Hinduism expert classes.

	Christianity	Hinduism
Trimurti	Father	Brahma
	Son and the Holy Ghost	Vishnu
		Shiva
sacred texts	The Bible	Vedas
	Old Testament	Upanishads
	New Testament	Mahabharata
		Brahmasutra

 $\textbf{Table C.4:} \ \, \textbf{Buddhism-Hinduism expert classes}.$

	Buddhism	Hinduism
reincarnation	nirvana (nibbana)	Moksha
	karma	samsara
	samsara	karma
Meditation	Dharma (dhamma)	Dharma
		atman
		Brahman
		yoga
Ascetism	Sangha	Pilgrimage
	monastery	meditation
	pilgrimage	yoga
Guru	Buddha	Yogi
	Bodhisattva	ascetics
	Deva	brahminis
		mahatmas
Sacred texts	Tripitaka	Vedas
	Kanjur	Upanishads
	Tanjur	Mahabharata
		Brahmasutra
<i>Syncretism</i>	Folk religion	Indus
		Veda
		Aryan
		folk religion

 $\textbf{Table C.5:} \ Christianity-Islam \ expert \ classes.$

	Christianity	Islam
Transcendent	God, Jesus,	Allah, Muhammed, angels
creatures	angel, devil	devil, profets
Life after death	Resurrection	Predestination
Life after acam	heaven	paradise
	hell	hell
	the day of the judgement	the day of the judgement
Holy scriptures	Bible	Qur'an
		hadith
Sacred palces	Jerusalem, Betlehem	Mecca, Medina
sucrea parces	church, graveyard	mosque, Ka'ba
	. 5	* '
Sacred times	Cristmas, Easter	Ramadan
	Sunday, the Pentacostal Day	Friday
Recommended	Praying	Praying, pilgrimage (haji)
acts	reading Bible	alms-giving, reading Qur'an
		visiting mosque
		fasting durin Ramadan
Acts that are	Sin, adultery	Drinking alcohol
not	violence	eating pig
recommended	working on Sunday	relationships between opposited
	obeying parents	<pre>sexes (if not relative = adultery)</pre>
	not admiring something that	
	belongs to someone else	
	obeying God and not mentioning his	
	name without a reason	

C.2.3 The Data Contributed by Expert III

Table C.6: Here the data is presented as cross-comparison involving three religions. The terms that are in fact valid for the triple comparison are in bold face. For the other terms, a single letter in square brackets marks the religion to the comparison with which they are relevant, whenever confusion might arise. Terms, term parts and similarity aspects that were not used in the evaluation process are marked by strikethrough line.

	Christianity	Islam	Judaism
Monotheism	Gođ	Allah,	God, Yahweh
	You shall have no	La ilaha illa Allah	Elohim
	other gods before Me	(No god but God)	You shall have no other
	Idolatry	Shirk (=idolatry)	gods before Me
	•	, , , , , , , , , , , , , , , , , , , ,	Idolatry
Scripture	Bible, New Testament	Qur'an, Revelation	Torah, Tanakh
Sc. ip iii. c	Gospels, Revelation	(wahy, tanzil)	Bible, Revelation
Holy	Church	Ummah	Holy people (Am Qadosh)
community			Israel (Yisrael)
·			
Prophets/	Prophets	Prophet (nabi)	Prophets
prophecy	Moses (Moshe) [j]	Messenger (rasul)	Elijah [c], Isaiah [c]
	Elijah [j], Isaiah [j]	Muhammad	Jeremiah [c]
	Jeremiah [j]		Moses (Moshe) [i]
	"The Twelve" [j]		
Sacred Land	Jerusalem, Rome	Mecca, Medina,	Israel
		Jerusalem	Jerusalem
Prayer and	Prayer, mass [i]	Prayer, Salat (namaz)	Prayer,
ritual	eucharist [i]	du'a, Hijrah [c]	daven
	pilgrimage [i]	Ziyarah [c]	
	rosary [j]	Pilgrimage [c]	
Holy days,	Christmas	Ramadan	Sabbath (Shabbat)
times	Epiphany	'Id	Yom Kippur
	Good Friday	'Id al-Fitr	Rosh ha-Shanah
	Easter	'Id al-Adha (Qurban	
	Pentecost	Bairam, etc.)	
Denominat-	Roman Catholic	Sunni	Rabbanite, Karaite
ional, sectarian	Eastern Orthodox	Shi'i (Shi'ite)	Hasidic, Mitnagid
divisions	Protestant	Twelver Shi'I	Reform (Progress,
	Arian	Isma'ili (Sevener	Liberal), Orthodox,
	Monophysite	Shi'i)	Conservative
	Nestorian	Khariji (Kharijite)	Reconstructionist
Mediator(s), viz	Jesus Christ	Muhammad	
between God	incarnation	Wali (pl. Awliya' =	
and humans	atonement	"saints)	
	saints	Ali, Husayn	
	intercession	Imams, intercession	
Atonement	Jesus Christ, Lamb of		Temple
	God, Substitutionary		sin offering
	atonement, repentance		prayer
	confession		repentence
	absolution(sacrament)		Day of Atonement
Emphasis on		Shari'ah, fiqh	Torah, halakah
law			
Circumcision		Circumcision	Circumcision
			Bris (Brit)