Cognitive Science in the Study of Early Christianity : Why It Is þÿ H e l p f u l a n d H o w ?

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COGNITIVE SCIENCE IN THE STUDY OF EARLY CHRISTIANITY: WHY IT IS HELPFUL – AND HOW?

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Abstract

In recent years, a number of New Testament and early Christian scholars have begun to use cognitive science approaches in their work. In this paper, I situate those efforts within the larger framework of the changing humanities, and the increased interest among humanistic scholars and social scientists in drawing on the growing body of knowledge on the cognitive and evolutionary roots of human thinking and behaviour. I also suggest how cognitive historiography can be helpful in shedding new light on issues discussed by New Testament scholars, by elaborating a test case: an analysis of the rite introduced by John the Baptist.

Keywords: New Testament Studies; Cognitive Science of Religion; Religious Studies; Ritual Studies; Social-Scientific Criticism; John the Baptist

1. Introduction

Heikki Räisänen (1941–2015), the renowned Finnish New Testament scholar, came to fame, among other things, for his vigorous defence of a 'religious studies alternative to New Testament theology'.[1] In a book first published in 1990, he outlined a programme for an overall account of the thought-world of the New Testament that would be compatible with a strictly

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[1] Quoting the title of the very last paper that he wrote before his death ('Religious Studies Alternative to New Testament Theology: Reflections on a Controversial Enterprise'), prepared for the conference held in Leipzig, 28–30 September, 2015. Heikki was no longer able to attend the meeting, but the paper was read out for the participants. The paper is being published posthumously in H. Räisänen, *The Bible among Scriptures and Other Essays* (Tübingen: Mohr Siebeck, in press).

religionswissenschafltich approach.[2] The final outcome of the project appeared twenty years later.[3]
While my concern here is not with crafting a synthesis of the religious thought-world of the first
Christians – a task way beyond my capacity – the approach promoted in this paper reflects some of
the major concerns of Räisänen's work: his striving for fair comparison and his 'etic' approach (vs.
a Christian-theological or 'emic' perspective), as well as his conviction that New Testament
exegesis should – or at least can fruitfully – be practiced in dialogue with Religious Studies.

Religious Studies (the Study of Religion, Comparative Religion, Science of Religion,
whatever name one prefers) is a multifaceted field, characterized by a whole range of theoretical
conflicts and divisions. In his overview, Gregory Alles refers to two tensions that have
characterized the field. One is the 'tension between those who favour critical cultural studies and
those who favour natural science'. The other has to do with what he calls the 'apparently
unavoidable division between theology and religious studies'.[4] Räisänen's championing of a non-
confessional and history-of-religion approach to the thought-world of the early Christians reflects
the latter of these two tensions, and many of his main emphases (such as the inclusion of extra-
canonical texts, the recognition of diversity, and an aversion toward reconstructing theological
systems) find their natural setting in the debate between theology and Religious Studies. While I
fully subscribe to these emphases, my own interest is rather in the first form of tension referred to
by Alles: the more recent divide between 'culturalists' and those religion scholars who have started
to make use in their work of findings from the natural sciences. The most prominent movement in
Religious Studies showing leanings toward the natural sciences is the field dubbed the 'Cognitive

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[2] H. Räisänen, *Beyond New Testament Theology: A Story and a Programme* (London: SCM, 2nd ed. 2000).

[3] H. Räisänen, *The Rise of Christian Beliefs: The Thought World of Early Christians* (Minneapolis, MN: Fortress, 2010).

[4] G. Alles, 'The Study of Religion: The Last Fifty Years', *The Routledge Companion to the Study of Religion* (ed. J.R. Hinnels; London: Routledge, 2010) 31–55, at 52.

Science of Religion' (CSR). Cognitive scholars of religion are interested in the cognitive and evolutionary roots of human religiosity; their purpose is to develop testable and clearly formulated theories probing the cognitive underpinnings of religious thinking and behaviour – practices that give an unmistakably scientific flavour to the cognitive programme.[5]

To put it briefly: my argument in this paper is that cognitive science, more accurately the Cognitive Science of Religion, can be brought into fruitful interaction with New Testament Studies, and with Early Christian Studies more generally. This claim does not come out of the blue; over the last ten years or so, a number of biblical scholars have begun to draw on cognitive approaches in interpreting texts and analysing the religious world of early Christianity.[6]

2. Cognitive study of religion and the changing humanities

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[5] J.L. Barrett, 'Cognitive Science of Religion', *Religion Compass* 1 (2007) 1–19, J.L. Barrett, 'Cognitive Science of Religion: Looking Back, Looking Forward', *Journal for the Scientific Study of Religion* 50 (2011) 229–39; I. Pyysiäinen, 'Cognitive Science of Religion: State-of-the-Art', *Journal for the Cognitive Science of Religion* 1 (2012) 5–28.

[6] For book-length expositions, see P. Luomanen, I. Pyysiäinen and R. Uro, eds, *Explaining Christian Origins and Early Judaism: Contributions from Cognitive and Social Science* (Leiden: Brill, 2007); C. Shantz, *Paul in Ecstasy: The Neurobiology of the Apostle's Life and Thought* (Cambridge: Cambridge University Press, 2009); T. Kazen, *Emotions in Biblical Law: A Cognitive Science Approach* (Sheffield: Sheffield Phoenix Press, 2011); R. Roitto, *Behaving as a Christ-Believer: A Cognitive Perspective on Identity and Behavior Norms in Ephesians* (Winona Lake, IN: Eisenbrauns, 2011); I. Czachesz and R. Uro, eds, *Mind, Morality, and Magic: Cognitive Science Approaches in Biblical Studies* (Durham: Acumen, 2013); R. Uro, *Ritual and Christian Beginnings: A Socio-Cognitive Analysis* (Oxford: Oxford University Press, 2016); F. Tappenden, *Resurrection in Paul: Cognition, Metaphor, and Transformation* (Atlanta, GA: SBL Press, 2016); I. Czachesz, *Cognitive Science and the New Testament: A New Approach* (Oxford: Oxford University Press, 2017).

From its very outset a pluralistic and highly interdisciplinary movement, the Cognitive Science of Religion has evolved during its quarter-century history into a complex network of approaches and schools which are not easily summarized.[7] One important trend has been the integration of various evolutionary and biological approaches with what has sometimes been called the 'standard' cognitive science of religion: in other words, an approach that seeks to explain religious thinking and behaviour in terms of the general mental architecture (consisting of mental modules) which channels the spread of religious traditions.[8] With the integration of evolutionary approaches into the cognitive programme, new research questions have emerged: How does genetic and cultural co-evolution contribute to the transmission of religious concepts and behaviours? Moreover, if evolved behavioural patterns can be connected to 'religion', how are they adaptive under various

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[7] For schools and currents in CSR, see Uro, *Ritual and Christian Beginnings*, 46–64.

[8] Pyysiäinen, 'Cognitive Science of Religion', 6. For the characterization 'standard' CSR, see P. Boyer, 'A Reductionist Model of Distinct Modes of Religious Transmission', *Mind and Religion: Psychological Foundations of Religiosity* (ed. H. Whitehouse and R.N. McCauley; Walnut Creek, CA: AltaMira, 2005) 3–29; I. Pyysiäinen, 'Religion: From Mind to Society and Back', *Grounding Social Sciences in Cognitive Sciences* (ed. R. Sun; Cambridge, MA: The MIT Press, 2012) 239–64, at 242–6; L. Turner, 'Pluralism and Complexity in the Evolutionary Cognitive Science of Religion', *Evolution, Religion and Cognitive Science: Critical and Constructive Essays* (ed. F. Watts and L. Turner; Oxford: Oxford University Press, 2014) 1–20, at 3–4.

environmental conditions?[9] An example of the latter is Signalling Theory, in which costly religious

behaviour is explained as an adaptive trait, fostering group cohesion and suppressing free-riders.[10]

The story of the cognitive movement in Religious Studies is a complex one, and obviously

cannot be unfolded here in detail. Instead, I offer three general considerations which contextualize

the growing interest in cognitive approaches in Religious Studies, and – I hope – will encourage

biblical scholars to take a closer look at cognitive approaches: First, there has been a gradual

lessening of the great divide between the humanities and the natural sciences; second, we should no

longer consider the social/cultural level of explanation to be the only legitimate one; and third,

cognitive approaches offer a responsible method for drawing comparisons.

1.1 The great divide between the humanities and the natural sciences is diminishing

The emergence of cognitive approaches in Religious Studies can be situated in the larger

context of the deep-rooted conflict between the sciences and the humanities, or between 'the two

cultures', to use C.P. Snow's well-known formulation of the issue.[11] This great divide has been

described in terms of such dichotomies as explanation/interpretation, biology/culture,

nature/nurture, determination/freedom, and so on. One description which is often repeated is that

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[9] For evolutionary approaches in the cognitive study of religion, see F. Watts and L. Turner, eds, *Evolution, Religion and Cognitive Science: Critical and Constructive Essays* (Oxford: Oxford University Press, 2014). Note that evolutionary approaches to religion come in many forms; one such form, evolutionary psychology, has been prominent in the work of those who can be seen as representing the 'standard' model (e.g. P. Boyer, *Religion Explained: The Evolutionary Origins of Religious Thought* (New York: Basic Books, 2001); S. Atran, *In Gods We Trust: The Evolutionary Landscape of Religion* (Oxford: Oxford University Press, 2002).

[10] J. Bulbulia and R. Sosis, 'Signalling Theory and the Evolution of Religious Cooperation', *Religion* 41 (2011) 363–88. See also Uro, *Ritual and Christian Beginnings*, 133–53.

[11] C.P. Snow, *The Two Cultures* (Cambridge: Cambridge University Press, 1993), based on his talk delivered in 1959 at the University of Cambridge.

humanists study 'texts' (in the broad sense that this term is often understood today), which are best approached from the interpretative perspective, whereas scientists study 'things', governed by deterministic laws.[12] Since biblical scholars have always been intrinsically in the business of interpreting texts, it is understandable they have aligned themselves firmly with the humanities camp, without paying much attention to various attempts at 'vertical integration'[13] or 'consilience', a term that has come to be associated with the unity of human knowledge at least since Edward O. Wilson's famous work, *Consilience: The Unity of Knowledge* (1998).[14] More recently, however, new models have been advanced for collaboration between the sciences and the humanities, which could be of more interest to biblical scholars. For example, in their introduction to the excellent collection of essays on the consilience approach,[15] the Canadian scholars Edward Slingerland and Mark Collard are very explicit on the point that the 'second wave consilience' they advocate is different from the earlier model represented by Wilson. According to Slingerland and Collard, 'first wave consilience' aimed at 'bringing the study of humanistic issues into the same framework as the study of non-human species and non-biotic phenomena'. Against such an approach, they argue that

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[12] Cf. E. Slingerland and M. Collard, 'Introduction: Creating a Consilience: Toward a Second Wave', *Creating a Consilience: Integration the Sciences and the Humanities* (ed. E. Slingerland and M. Collard; New York: Oxford University Press, 2012) 3–40, at 3, 10.

[13] 'Vertical integration' is a term is a term used by J. Tooby and L. Cosmides, 'The Psychological Foundations of Culture', *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (ed. J.H. Barkow, L. Cosmides and J. Tooby; Oxford: Oxford University Press, 1992) 19–136.

[14] The word 'consilience' means literally 'a jumping together' (lat. *con* + *salire*, 'to jump, leap'). It was probably first used by William Whewell in his 1840 *The Philosophy of the Inductive Sciences,* in reference to the linking together of knowledge from different academic disciplines; see E.O. Wilson, *Consilience: The Unity of Knowledge* (London: Little, Brown and Company, 1998) 8–9. The word has become widely familiar from Wilson's book.

[15] E. Slingerland and M. Collard, eds, *Creating Consilience: Intergating the Sciences and the Humanities* (New York: Oxford University Press, 2012).

… this way of describing the undertaking is not only unhelpful but also inaccurate. It is unhelpful in that it can give the impression that consilience involves the sciences engulfing the humanities – a prospect that is understandably off-putting for humanists. It is inaccurate because it was clear, before the consilience project was initiated, that significant changes would have to be made to the framework used to study non-human species and non-biotic phenomena in order to deal with a number of humanistic issues. Thus, in our view, it is better to think of consilience as *an attempt to develop a new, shared framework for the sciences and humanities.*[16]

The Cognitive Science of Religion can be seen as operating largely within this new, shared framework. To be sure, the field has rightly been defined as being about 'sciencing up' the academic study of religion.[17] But cognitive scholars of religion do not usually aim at a simplistic reduction of cultural and religious matters to domains of natural sciences (such as biology or neuroscience). Rather, they have developed a number of ideas and models that give priority to an interactionist approach over the 'science-engulfing-the-humanities' approach criticized by Slingerland and Collard. These include Lawson and McCauley's emphasis that explanation and interpretation are mutually complementary[18], and the notion of 'explanatory pluralism', advocated for example by McCauley and Pyysiäinen;[19] the latter term refers roughly to non-reductive cross-

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[16] Slingerland and Collard, 'Introduction', 3–4, my italics.

[17] Barrett, 'Cognitive Science of Religion', 230.

[18] E.T. Lawson and R.N. McCauley, *Rethinking Religion: Connecting Cognition and Culture* (Cambridge: Cambridge University Press, 1990).

[19] R.N. McCauley and W. Bechtel, 'Explanatory Pluralism and Heuristic Identity Theory', *Theory & Psychology* 11 (2001) 737–60; I. Pyysiäinen, 'Reduction and Explanatory Pluralism in the Cognitive Science of Religion', *Changing Minds: Religion and Cognition through Ages* (ed. I. Czachesz and T. Bíró; Leuven: Peeters, 2011) 15–29; R.N. McCauley, 'Explanatory Pluralism and the Cognitive Science of Religion: Why Scholars in Religious Studies Should Stop Worrying about Reductionism', *Mental Culture: Classical Social Theory and the Cognitive Science of Religion* (ed. D. Xygalatas and W.W. McCorkle, Jr.; Durham: Acumen, 2013) 11–32.

fertilization between levels of analyses, such as the social and the psychological level. It should also be noted that many cognitive scholars of religion come from different fields of social, historical, and theological studies, bringing with them a range of traditional methods and approaches which they continue to apply along with cognitive approaches.[20] As István Czachesz has pointed out, the cognitive approach to Biblical Studies is not actually a new method at all, but 'the cognitive turn has the potential of shedding new light on many, if not all, traditional questions of the methodology of biblical interpretation'.[21]

1.2 The social/cultural level is no longer seen as the only legitimate level of explanation or interpretation

Popular models for explaining early Christianity, and religious phenomena in general, have long been anchored in social theory and in various culturalist approaches. In the above-mentioned overview, Alles writes about 'an anthropological turn', referring to the impact on the study of religion, beginning in the 1960s, of the work of Claude Lévi-Strauss, Clifford Geertz, Mary Douglas, Victor Turner and others.[22] Something similar happened in New Testament Studies with the emergence of social-science approaches in the 1970s and 1980s.[23] While various post-modern, post-structural, post-colonial, feminist and other post- approaches have made it difficult to describe the history of research with reference to just a few dominant schemes, it can be argued that the foregrounding of socio-cultural factors in the interpretation of New Testament (or cognate) texts has

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[20] Uro, *Ritual and Christian Beginnings*, 57.

[21] Czachesz, *Cognitive Science and the New Testament*,

[22] Alles, 'The Study of Religion', 44–45.

[23] J.H. Elliott, *What Is Social-Scientific Criticism?* (Minneapolis, MN: Fortress, 1993); D.G. Horrell, 'Social Sciences Studying Formative Christian Phenomena: A Creative Movement', *Handbook of Early Christianity: Social Science Approaches* (ed. A.J. Blasi, J. Duhaime and P.-A. Turcotte; Walnut Creek, CA: AltaMira, 2002) 3–28.

been *one* major mode in which the work of our guild has operated during the last decades. Whether this takes the form of the explicit use of social-scientific concepts and models, or more inductively by focusing on the social realia of the New Testament world,[24] the level of the social and cultural – embracing social institutions, economics, social strata, cultural values, rhetoric, etc. – has now been a major interpretative framework in New Testament scholarship for several decades.

Currently, however, this pattern is shifting toward approaches that blur the traditional 'hierarchy' of the sciences. One indication of this shift is that Social-Scientific Criticism, a subfield promoting the explicit use of sociological and anthropological models, has broadened to encompass social-psychological approaches and models, in particular Social Identity Theory.[25] There are obvious cognitive aspects in Social Identity Theory (SIT)[26] which bridge the gap between the social and the cognitive sciences. This new interest in approaches integrating social and cognitive research

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[24] D.B. Martin, 'Social-Scientific Criticism', *To Each Its Own Meaning: An Introduction to Biblical Criticisms and Their Application* (ed. S.L. McKenzie and S.R. Haynes; Louisville, KY: Westminster John Knox, 1999) 125–41.

[25] P.F. Esler, *Conflict and Identity in Romans: The Social Setting of Paul's Letter* (Minneapolis, MN: Fortress, 2003); J.B. Tucker and C.A. Baker, eds, *T & T Clark Handbook to Social Identity in the New Testament* (London: Bloomsbury, 2014).

[26] To give one example: two basic features of SIT, categorization and accentuation, can be investigated in the light of cognitive science; see P. Luomanen, I. Pyysiäinen and R. Uro, 'Introduction: Social and Cognitive Perspectives in the Study of Christian Origins and Early Judaism', *Explaining Early Judaism and Christianity: Contributions from Cognitive and Social Science* (ed. P. Luomanen, I. Pyysiäinen and R. Uro; Leiden: Brill, 2007) 1–33, at 22–25. For a socio-cognitive approach integrating social psychology and cognitive science in the study of Ephesians, see R. Roitto, 'A Socio-Cognitive Perpective on Identity and Behavioral Norms in Ephesians', *Mind, Morality and Magic: Cognitive Science Approaches in Biblical Studies* (ed. I. Czachesz and R. Uro; Durham: Acumen, 2013) 234–50.

is not a separate phenomenon, but can be seen as part of a much larger trend of grounding the social sciences in the cognitive and evolutionary sciences.[27]

The pioneering work in the Cognitive Science of Religion (recall the 'standard' model introduced above), was a strong call to consider the cognitive and psychological foundations of religious cultures, thus providing a necessary corrective to the 'mind-blindness' that has haunted the social sciences.[28] More recently, however, CSR has developed into a pluralistic field, accommodating diverse approaches and often emphasizing 'two-way interaction' between the socio-cultural domain and that of cognition.[29] It is crucial for New Testament scholars to be familiar with these developments in the study of religion, since much of the work in interpreting New Testament texts in their cultural contexts assumes a one-way interaction, prioritizing the influence of society or culture on individual cognition. Careful analysis of these cultural and social contexts is of the utmost importance for interpreting the New Testament, but such analysis should not be based on the assumption that the only causative chain is from the level of the social and cultural to individual cognition, and not vice versa.

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[27] R. Sun, ed., *Grounding Social Sciences in Cognitive Sciences* (Cambridge, MA: MIT Press, 2012); J.H. Turner, R. Machelech and A. Maryansky, eds, *Handbook on Evolution and Society: Toward an Evolutionary Social Science* (Boulder, CO: Paradigm Publishers, 2015).

[28] M.D. McCubbins and M. Turner, 'Going Cognitive: Tools for Rebuilding Cognitive Sciences', *Grounding Social Sciences in Cognitive Sciences* (ed. R. Sun; Cambridge, MA: MIT Press, 2012) 387–414.

[29] R. Sun, 'Prolegomena to Cognitive Social Sciences', *Grounding Social Sciences in Cognitive Sciences* (ed. R. Sun; Cambridge, MA: MIT Press, 2012) 3–32, at 18–23. For various approaches to culture/cognition interaction, see A.W. Geertz, 'Brain, Body, and Culture: A Biocultural Theory of Religion', *Method and Theory in the Study of Religion* 22 (2010) 304–21. W.M. Gervais, A.K. Willard, A. Norenzayan and J. Henrich, 'The Cultural Transmission of Faith: Why Innate Intuitions Are Necessary, But Insufficient, to Explain Religious Belief', *Religion* 41 (2011) 389–410; Pyysiäinen, 'Religion'. For a 'socio-cognitive approach' to early Christian religion, see Uro, *Ritual and Christian Beginnings*.

1.3 Cognitive approaches allow a responsible method for comparison

Cross-cultural comparison has been and is a key issue in the study of religion, and much ink has been spilt over the topic. Among postmodern scholars, comparativism has been treated with a considerable amount of skepticism;[30] but the bottom line, as William Paden puts it, is that 'there *is* no study of religion without cross-cultural categories, analysis, and perspective':

> Knowledge in any field advances by finding connections between the specific and the generic, and one cannot even carry out ethnographic or historical work without utilizing transcontextual concepts. Like it or not, we attend to the world not in terms of objects but in terms of categories. Wherever there is a theory, wherever there is a concept, there is a comparative program.[31]

Hence, comparativism is – or at least should be – a key issue in the study of the New Testament as well, and by extension in the study of early Christianity. Räisänen's vigorous defence of 'fair play' in the study of early Christian religion reflects several aspects of the issue, such as the notoriously negative view of Judaism held by past generations of biblical scholars and the one-sided focus on the canonical texts, overlooking extant non-canonical writings. The notion of fair comparison arose with Räisänen's early work on the Qur'an in the 1970s, and later inspired several research projects on extra-canonical writings and 'heretical' authors.[32]

Comparativism is an unavoidable but thorny path. How does cognitive science help New Testament scholars practice comparison in a responsible way? Among those who have explicitly

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[30] For comparativism and postmodernism, see K.C. Patton and C.B. Ray, eds, *A Magic Still Dwells: Comparative Religion in the Postmodern Age* (Berkeley, CA: University of California Press, 2000).

[31] W.E. Paden, 'New Patterns for Comparative Religion', *A Magic Still Dwells: Comparative Religion in the Postmodern Age* (ed. K.C. Patton and C.B. Ray; Berkeley, CA: University of California Press, 2000) 182–92, at 182.

[32] See, for example, R. Uro, ed., *Thomas at the Crossroads: Essays on the Gospel of Thomas* (Edinburgh: T&T Clark, 1998); A. Marjanen and P. Luomanen, eds, *A Companion to Second-Century Christian "Heretics"* (Leiden: Brill, 2008).

theorized on this issue in our field are those scholars who promote the use of social science models – so let me again take Social Scientific Criticism as an example. These scholars use 'cross-cultural models', such as the 'generic model of honour-shame', as a guide to reading texts in New Testament.[33] The key problem for advocates of social-scientific 'modelling' is the cultural distance between the ancient biblical world and the modern Western interpreter. Using insights and models from cultural anthropology, especially from a subfield called Mediterranean anthropology,[34] is the best way for the interpreter to avoid ethnocentric and anachronistic readings of New Testament texts. In this approach, the comparison is between two broad cultural constructs: on the one side the ancient Mediterranean world, dominated by collectivist and honour-driven values, on the other the modern world of individualism. The emphasis is on differences.

As we know, the model-centred approach has aroused fierce scholarly debate as to the role of models in exploring the social and cultural world of Christianity. Wayne Meeks, for example, in his 2004 presidential paper to the SNTS, referred to this debate in his comment about 'some' who, having faced 'the sheer limits of data in our sources', were tempted to replace 'the inductive testing of hypotheses' with a 'deductive use of sociological or anthropological theory'.[35] This kind of criticism is not as self-evident as it might seem at first sight. For one thing, the inductive–deductive dichotomy is not very illuminating. Scholars can work inductively or deductively, and still achieve

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[33] R.L. Rohrbaugh, 'Introduction', *The Social Sciences and New Testament Interpretation* (ed. R.L. Rohrbaugh; Peobody, MA: Hendrickson, 1996) 1–15.

[34] J.G. Peristiany, ed., *Honour and Shame: The Values of Mediterranean Society* (London: Weidenfeld and Nicolson, 1965); D.G. Gilmore, ed., *Honor and Shame and the Unity of the Mediterranean* (Washington, DC: American Anthropological Association, 1987), D.G. Gilmore, 'Anthropology of the Mediterranean Area', *Annual Review of Anthropology* 11 (1982) 175–205; M. Herzfeld, 'Honour and Shame: Problems in the Comparative Analysis of Moral Systems', *Man* 15 (1980) 339–51; D. Albera, 'Anthropology of the Mediterranean: Between Crisis and Renewal', *History and Anthropology* 17 (2006) 109–33.

[35] W.A. Meeks, 'Why Study the New Testament?', *New Testament Studies* 51 (2005) 155–70, at 161.

relevant knowledge by hypothesis-testing.[36] Moreover, a theory-driven approach does not mean 'filling in the gaps' in our evidence, since models, theories and concepts are tools for selecting, organizing, and categorising data as well as making connections between data – not for creating new data.[37] We cannot help but theorize one way or another.

This does not mean that the approach emphasizing the 'otherness' of the New Testament world should not be supplemented with theories and approaches that are amenable to dealing with the undeniable similarities between us and the people in the New Testament world. The human brain and its basic mental functions have not changed in any significant way over the last two thousand years.[38] There is no *a priori* reason to assume that we will reach the best understanding of the New Testament and its world by focusing merely on the differences between the ancient/Mediterranean world and modern/Western values and behavioural patterns. Cognitive and evolutionary approaches to religion can be helpful in counterbalancing a one-sided emphasis on the 'strangeness' of the world of early Christians by offering tools for analysing early Christian texts, beliefs, rituals etc. as results of *human behaviour.* Zooming out to generic types of human

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[36] R.L. Grimes, *The Craft of Ritual Studies* (Oxford: Oxford University Press, 2014) 169–70.

[37] In fairness, it should be noted that the discussion of the use of models in interpreting New Testament texts has been much more nuanced than the above reference to Meeks' brief comment would suggest. See, for example, S.R. Garrett, 'Sociology (Early Christianity)', *Anchor Bible Dictionary* (ed. D.N. Freedman; New York: Doubleday, 1992) 89–99. P.F. Esler, 'Introduction', *Modelling Early Christianity* (ed. P.F. Esler; London: Routledge, 1995) 1–22, P.F. Esler, 'Models in New Testament Interpretation: A Reply to David Horrell', *Journal for the Study of the New Testament* 78 (2000) 107–13; D.G. Horrell, *The Social Ethos of the Corinthian Correspondence: Interests and Ideology from 1 Corinthians to 1 Clement* (Edinburgh: T&T Clark, 1996) 9–32; D.G. Horrell, 'Models and Methods in Social-Scientific Interpretation: A Response to Philip Esler', *Journal for the Study of the New Testament* 78 (2000) 83–105; Luomanen, Pyysiäinen and Uro, 'Introduction', 18–20.

[38] Cf. L.H. Martin, 'Past Minds: Evolution, Cognition, and Biblical Studies', *Mind, Morality and Magic: Cognitive Science Approaches in Biblical Studies* (ed. I. Czachesz and R. Uro; Durham: Acumen, 2013) 15–23, at 17.

behaviour is useful because it opens the door for cross-cultural comparisons that go beyond

dichotomous (or unduly sharp) contrasts between different cultural 'worlds' – whether inspired by

Social Scientific Criticism or by postmodernism.

It is this cross-cultural perspective offered by cognitive science that opens up new possibilities

for the study of the New Testament, and by extension for the study of early Christianity. These do

not have to lead to our abandoning our task as *historians* of ancient texts and cultures for an

essentially ahistorical approach, one which would give pride of place to generic human

predispositions and ignore cultural variation or historical particulars. Rather, my argument is that

cognitive science can provide us with theories, frameworks and tools that can *contribute* to

historical and cultural analyses.[39] Indeed, an entire new subfield has developed, that of cognitive

historiography, which is gaining currency among archaeologists, classicists, historians of ancient

religions, early Christian scholars, and others.[40]

How might cognitive historiography work in the study of the New Testament? In the second

part of my paper, I attempt to illustrate this by means of a concrete example.

3. A cognitive approach to John the Baptist

As I have indicated, biblical scholars have begun to show an interest in cognitive approaches,

and over the last ten years have already tested the relevance of cognitive methodology against a

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[39] L.H. Martin, 'The Future of the Past: The History of Religions and Cognitive Historiography', *Religio: Revue pro religionistiku* 20 (2012) 155–71.

[40] H. Whitehouse and L.H. Martin, eds, *Theorizing Religions Past: Archeology, History, and Cognition* (Walnut Creek, CA: AltaMira, 2004); L.H. Martin and J. Sørensen, eds, *Past Minds: Studies in Cognitive Historiography* (London: Equinox, 2011). A new journal, *Journal of Cognitive Historiography,* was launched in 2014.

number of themes and areas. These include orality and textuality,[41] memory and transmission,[42] magic,[43] ritual,[44] morality and ethics,[45] religious experience,[46] and the analysis of theological

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[41] I. Czachesz, 'Rewriting and Textual Fluidity in Antiquity: Exploring the Social-cultural and Psychological Context of Earliest Christian Literacy ', *Myths, Martyrs, and Modernity: Studies in the History of Religions in Honour of Jan N. Bremmer* (ed. J.H.F. Dijkstra, J.E.A. Kroesen and Y.B. Kuiper; Leiden: Brill, 2010) 425–41; R. Uro, 'Ritual, Memory and Writing in Early Christianity', *Temenos* 47 (2011) 159–82; G. Levy, *Judaic Technologies of the Word: A Cognitive Analysis of Jewish Cultural Formation* (Sheffield: Equinox, 2012).

[42] P. Luomanen, 'How Religions Remember: Memory Theories in Biblical Studies and in the Cognitive Study of Religion', *Mind, Memory and Magic: Cognitive Science Approaches in Biblical Studies* (ed. I. Czachesz and R. Uro; Durham: Acumen, 2013) 24–42; I. Czachesz, 'Rethinking Biblical Transmission: Insights from the Cognitive Neuroscience of Memory', *Mind, Morality and Magic: Cognitive Science Approaches in Biblical Studies* (ed. I. Czachesz and R. Uro; Durham: Acumen, 2013) 43–61.

[43] I. Czachesz, 'Explaining Magic: Earliest Christianity as a Test Case', *Past Minds: Studies in Cognitive Historiography* (ed. L.H. Martin and J. Sørensen; London: Equinox, 2011) 141–65, I. Czachesz, 'A Cognitive Perspective on Magic in the New Testament', *Mind, Morality and Magic: Cognitive Science Approaches in Biblical Studies* (ed. I. Czachesz and R. Uro; Durham: Acumen, 2013) 164-79.

[44] R. Uro, 'A Cognitive Approach to Gnostic Rituals', *Explaining Christianity Origins and Early Judaism: Contributions from Cognitive and Social Science* (ed. P. Luomanen, I. Pyysiäinen and R. Uro; Leiden: Brill, 2007) 115–37, R. Uro, 'Towards a Cognitive History of Early Christian Rituals', *Changing Minds: Religion and Cognition through the Ages* (ed. I. Czachesz and T. Bíró; Leiden: Peeters, 2011) 103–21, R. Uro, 'Kognitive Ritualtheorien: Neue Modelle für die Analyse urchristiliche Sakramente', *Evangelische Theologie* 71 (2011) 272–88, Uro, *Ritual and Christian Beginnings*; J. Jokiranta, 'Ritual System in the Qumran Movement: Frequency, Boredom and Balance', *Mind, Morality and Magic: Cognitive Science Approaches in Biblical Studies* (ed. I. Czachesz and R. Uro; Durham: Acumen, 2013) 144–63.

[45] Kazen, *Emotions in Biblical Law*, Roitto, *Behaving as a Christ-Believer*,

[46] Shantz, *Paul in Ecstasy*; I. Czachesz, 'Filled with New Wine? Neuroscientific Correlates of Religious Experience in the New Testament', *Experientia, Volume 2* (ed. C. Shantz and R.A. Werline; Atlanta, GA: Society of Biblical Literature, 2012) 71–90, I. Czachesz, 'Jesus' Religious Experience in the Gospels: Toward a Cognitive Neuroscience Approach', *Jesus – Gestalt und Gestaltungen: Rezeption des Galiläers in Wissenshaft, Kirche und Gesellschaft:*

concepts.[47] The concrete example I am looking at here, namely John the Baptist, deals with ritual,

an area that has played a significant role in the cognitive study of religion.

John the Baptist is an interesting case for a ritual analysis of Christian beginnings. Scholars

have widely recognized the important role played by John and his movement in the rise of the Jesus

movement, as reflected in the frequent references to this prophetic figure in the New Testament and

other early Christian writings.[48] A number of analyses have been carried out to shed light on the

meaning and function of John's immersion ritual in the cultural context of first-century Judaism.

Such socio-cultural analyses have yielded valuable information as to how John's immersion can be

understood in the light of the purificatory and penitential practices of his time. For example, it is

generally acknowledged that ritual bathing was widespread in the daily life of Jews in Judea during

the Roman period.[49] In John's cultural setting, purification by immersion was a culturally pervasive

practice, and there is no doubt that John's contemporaries understood his ritual as a version of

purification immersion, irrespective of what specific theological meanings or social functions they

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Festschrift für Gerd Theissen zum 70. Geburtstag (ed. P. von Gemünden, D.G. Horrell and M. Küchler; Göttingen: Vandenhoeck & Ruprecht, 2013) 569–96.

[47] I. Czachesz, 'Early Christian Views on Jesus' Resurrection', *Nederlands Theologisch Tijdscrift* 61 (2007) 47–59; G. Theissen, 'Kontraintuitive Bilder: Eine kognitive Analyse der urchristilichen Christologie', *Evangelische Theologie* 71 (2011) 307–20. Tappenden, *Resurrection in Paul*.

[48] John appears in a total of 53 passages in the Gospels and Acts. In addition, references to John occur in extra-canonical gospels, such as the *Gospel Thomas*, the *Gospel of the Ebionites*, and the *Gospel of the Nazareans*. See R.L. Webb, *John the Baptizer and Prophet. A Socio-Historical Study* (Sheffield: Sheffield Academy Press, 1991) 47–91.

[49] Y. Adler, 'Religion, Judaism: Purity in the Roman Period', *The Oxford Encyclopedia of the Bible and Archaeology* (ed. D. Master; Oxford: Oxford University Press, 2013) 240–49; see also E.M. Meyers, 'Aspects of Everyday Life in Roman Palestine with Special Reference to Private Domiciles and Ritual Baths', *Jews in the Hellenistic and Roman Cities* (ed. J.R. Bartlett; London: Routledge, 2002) 193–220 and S. Freyne, 'Jewish Immersion and Christian Baptism: Continuity on the Margins?', *Ablution, Initiation, and Baptism: Late Antiquity, Early Judaism, and Early Christianity*, Vol 1 (ed. D. Hellholm, T. Vegge, Ø. Norderval and C. Hellholm; Berlin: De Gruyter, 2011) 221–53.

associated with it. As for the latter, scholars have advanced various interpretations of John's immersion: for example, that it functioned as an alternative to temple offerings, as a once-and-for-all initiation into the Baptist movement, as a ritual of moral purification, or as a demonstration that ritual washings were ineffective without true repentance.[50]

How do cognitive approaches contribute to such standard historical and exegetical work? In answer, I offer three considerations as to what cognitive science can 'do' for historical analysis. My points relate 1) to ritual innovations, 2) to the evaluation of historical interpretations, and 3) to the transmission of biblical traditions.

2.1 An analysis of the formal characteristics of John's baptism helps to bring the innovative nature of John's immersion ritual to the fore

Although scholars often recognize the difference between John's rite and other contemporary Jewish water purifications, they seldom emphasise the fact that the immersion practice instigated by John involved both ritual agent and ritual patient.[51] Jewish ritual washing was a self-administered action, and its ritual structure was thus quite different from that of John's immersion. The

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[50] For a discussion of different interpretations of John's rite, see Webb, *John the Baptizer*, 183–216; J.E. Taylor, *The Immerser: John the Baptist within Second Temple Judaism* (Grand Rapids, MI: Eerdmans, 1997) 49–100; J. Klawans, *Impurity and Sin in Ancient Judaism* (Oxford: Oxford University Press, 2000) 138–43; Uro, *Ritual and Christian Beginnings*, 80–98.

[51] For example, Webb notes that the feature that John's baptism is consistently described as being administered by John is 'quite unusual' and may have been John's innovation (Webb, *John the Baptizer*, 180), but he does not draw any further conclusions from it. Freyne, in his otherwise detailed comparison between Jewish ritual washing and early Christian baptism, does not even mention the difference (Freyne, 'Jewish Immersion'). An exception to John's being described as an agent of the baptism is the D reading of Luke 3:7, in which the baptism of the crowds is depicted as taking place before John (ἐνώπιον αὐτοῦ).

innovative nature of John's rite becomes palpable when we apply the cognitive theory of ritual developed by Thomas Lawson and Robert McCauley.[52] This theory, referred to variably as Ritual Form Theory or Ritual Competence Theory, focuses on the formal characteristics of rituals as actions in which ritual agents perform actions upon ritual patients, often by means of instruments. Lawson and McCauley argue that people universally construe rituals as ordinary actions, with the exception that in religious rituals 'culturally postulated superhuman agents' are evoked. The important point for our discussion is that Lawson and McCauley offer a framework for the cross-cultural analysis of ritual actions that goes *beyond* the functions and meanings that rituals serve in particular cultural and institutional settings. Their bold claim is that there are 'ritual intuitions' which, if not universal, are frequent enough to allow relevant inferences from people's behaviour across cultures.

The most interesting of these 'ritual intuitions' suggested by Lawson and McCauley is the hypothesis that people generally regard those rituals in which it is the agent of the ritual that is closely associated with superhuman agents as being more powerful than those in which superhuman agents are associated with the instrument or patient of the ritual. To use Lawson and McCauley's own technical terminology, the hypothesis argues that 'special agent rituals' are more powerful than 'special instrument' or 'special patient rituals'.[53] Think for example of a shamanic healing ritual, as compared to a sacrifice to one's ancestors. In the former it is the agent, the shaman, who offers a connection to the world of superhuman agents, while in the latter it is the patients, i.e. the ancestors,

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[52] Lawson and McCauley, *Rethinking Religion*; R.N. McCauley and E.T. Lawson, *Bringing Ritual to Mind: Psychological Foundations of Cultural Forms* (Cambridge: Cambridge University Press, 2002).

[53] More specifically, they hypothesize that special agent rituals are generally understood as ones that cannot be repeated ('when gods do things, they are done once and for all'), can be reversed (for example by defrocking priests), and involve sensory pageantry. The prediction that special agent rituals are performed only once for a single ritual patient can be challenged, however, by a significant body of contrary evidence (cf. e.g. healing rituals). See the discussion in Uro, *Ritual and Christian Beginnings*, 85–87.

who have the closest relationship with the superhuman world. According to Lawson and McCauley's hypothesis, a shamanic ritual would be generally perceived as more powerful and efficacious than a sacrifice to ancestors – which, I think, would be largely confirmed.

Thus, the cognitive theory of ritual advanced by Lawson and McCauley provides us with analytical concepts with which to tackle the issue of what was new in John's ritual washing. John turned the Jewish self-administered water ritual into a special agent ritual, in which an agent, a god-sent prophet (Luke/Q 7.26) or someone authorized by him (cf. John 4.1–2), immerses a ritual patient (i.e. the baptizand). This innovation had an impact on the religious practices of John's contemporaries that reached beyond his own followers, and his practice was copied by adherents of the Jesus movement as a central entrance rite.

The cognitive approach not only offers analytical concepts to describe John's ritual invention; it also opens up avenues for analysing the role of ritual innovations in the rise of religious movements more generally.[54] The group of adherents attracted by John is an excellent example of a movement in which a ritual creation plays a key role in motivating and mobilizing followers. My favourite point of comparison is Amma or Ammachi ('Mother'), the most renowned female guru in present-day India.[55] Known as a 'hugging saint', she shares a number of features with John the Baptist. The trademark of both religious leaders is the performance of a new ritual. Their ritual innovations are based on the traditional practices of their cultures (Jewish ritual washing, the

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[54] The issue of ritual innovations as catalysts for new movements has been largely neglected in ritual theory. See, however, C. Bell, *Ritual: Perspectives and Dimensions* (Oxford: Oxford University Press, 1997) 223–42.

[55] For Ammachi, originally Mata Amritanandayami (born 1953), see S.J. Raj, 'Passage to America: Ammachi on American Soil', *Gurus in America* (ed. T.A. Forsthoefel and C.A. Humes; Albany, NY: State University of New York Press, 2005); A.J. Lucia, *Reflections of Amma: Devotees in a Global Embrace* (Oakland, CA: University of California Press, 2014). Uro, *Ritual and Christian Beginnings*, 78–80.

traditional Hindu *darshan*),[56] yet they are distinctively new creations. We can also safely argue that the ritual entrepreneurship of both leaders is a crucial factor in the success of their respective movements.

2.2 *Cognitive theory is helpful in evaluating historical interpretations*

Cognitive theory is also useful in evaluating interpretations that historians of early Judaism and early Christianity have proposed as to John's immersion. As I have noted, scholars have not usually paid much attention to the formal differences between Jewish ritual washings and the rite promoted by John. The failure to recognize the most obvious feature of John's practice has entailed readings which overlook the decisive role that John's ritual innovation played in the formation of the movement. For example: Joan Taylor, who has written an extensive and in many respects helpful analysis of John's immersion, misses precisely this point.[57] Taylor rightly points out that John's water ritual must be interpreted in the light of the purification practices of Second Temple Judaism.[58] In her discussion of the issue of what was 'novel and extraordinary' in John's ritual practice, however, Taylor sees this as having to do with the ethical prerequisites that John set for participation. The 'novelty' of John, in other words, lay not so much in his immersion practice as in

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[56] *Darshan* is a central ritual act in Hindu worship, in which a devotee sees and is seen by a god, represented by an idol, renouncer or guru (C. Humphrey and J. Laidlaw, *The Archetypal Actions of Ritual: A Theory of Ritual Illustrated by the Jain Rite of Worship* (Oxford: Clarendon, 1994) 229–30, 270; Raj, 'Passage to America', 137–8). The ritual hug performed by Amma, involving kissing and touching, is a radical new version of the traditional ritual act familiar to every Hindu worshipper.

[57] Taylor, *The Immerser*, 15–100.

[58] Taylor, *The Immerser*, 94.

his teaching: that 'previous immersions and ablutions were ineffective for Jews without the practice of true righteousness'.[59]

Such an interpretation leaves us with some nagging questions. First of all, why did people want to be immersed *by* John or someone authorized by him? Why was ordinary purification in a *miqveh* or a natural water source not enough? It seems obvious that people believed they were receiving *more* by letting John submerge them than by immersing themselves in a pool or river. In terms of the cognitive theory introduced above, John's special agent ritual would have been intuitively felt to be more powerful than a self-administered ritual purification. This is confirmed by the historical record: John's immersion rite achieved unprecedented success among his contemporaries. His practice produced the epithet 'Baptist' or 'Baptiser', and the popular movement around him grew big enough to pose a serious threat to the local ruler, Herod Antipas (Josephus, *Ant.* 18.116–19; Mark 6.14–29).

To take a more general perspective: a cognitive analysis of John the Baptist demonstrates why cultural and historical approaches should be supplemented by a consideration of intuitive psychological constraints. Assessing various culturally plausible interpretations is an indispensable part of our work as exegetes. Such analyses focus on the few extant references and interpretations in our sources (the New Testament and Josephus), as well as on the wider cultural background (such as descriptions of ritual bathing in early Judaism). What should not go unnoticed, however, is that such public narrative manifestations have only limited value in explaining people's actual behaviour. There is more to people's practices and beliefs than the explicit statements they are able to give (which in our materials also often derive from the educated elite and do not necessarily offer the perspective of ordinary people). Imagine an interview with the participants in a ritual practice in some historical context. People may not be willing or able to explain why they are participating in

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[59] Taylor, *The Immerser*, 99–100.

the ritual.[60] Or they may just give ad hoc reasons for their participation. Maurice Bloch has recently made the same point in the context of social/cultural anthropology.[61] arguing that 'an anthropologist has to take into account the fact that all statements about beliefs, understandings. etc., that she may hear from informants have … been totally transformed by a very complex psychological process within the mind of the informants…'.[62] They are always second-order interpretations, only remotely connected to the inner states that have led to the action.

2.3 Cognitive theory can offer tools for analysing the transmission of biblical traditions

As important as the discovery of the 'cognitive basement' is for the cognitive study of religion, the cognitive approach is not only about intuitive psychological constraints. To achieve a more complete picture of the cognitive approach, it should be recognized that a number of cognitive scholars of religion have tackled the issue of how to explain explicit religious knowledge in cognitive terms.

There is a range of different theoretical frameworks within which scholars have dealt with the issue. They have, for example, drawn on memory studies,[63] the duality of mind,[64] embodied

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[60] Humphrey and Laidlaw, *Archetypal Actions*, 100.

[61] M. Bloch, *Anthropology and the Cognitive Challenge* (Cambridge: Cambridge University Press, 2012).

[62] Bloch, *Anthropology and the Cognitive Challenge*, 199.

[63] H. Whitehouse, *Modes of Religiosity: A Cognitive Theory of Religious Transmission* (Walnut Creek, CA: AltaMira, 2004).; I. Czachesz, 'Long-term, Explicit Memory in Rituals', *Journal of Cognition and Culture* 10 (2010) 321–33, Czachesz, 'Rethinking Biblical Transmission'.

[64] I. Pyysiäinen, 'Intuitive and Explicit in Religious Thought', *Journal of Cognition and Culture* 4 (2004) 123–49. T. Tremlin, 'Divergent Religion: A Dual-Process Model of Religious Thought, Behavior, and Morphology', *Mind and Religion: Psychological and Cognitive Foundations of Religiosity* (ed. H. Whitehouse and R.N. McCauley; Walnut Creek, CA: AltaMira, 2005) 69–84.

cognition,[65] and co-evolutionary theories of cultural learning.[66] It would be impossible to describe all these approaches here. Suffice it to take a few examples as to how cognitive and evolutionary theories can shed light on the spread and transmission of the traditions about John the Baptist.

One way to approach to the question is to ask what role was played in the transmission by ritual. The relationship between ritual and religious knowledge has been a traditional issue in the study of religion, and one variation on this question is related to semiotic approaches to ritual.[67] It is indeed highly intuitive to ask what a given ritual 'means' or what kind of sign system it involves. A cognitive approach to ritual transmission, however, shifts the focus from the 'meaning' to different ways in which a ritual *facilitates* the spread and consolidation of religious beliefs. Whatever meanings and interpretations people attach to rituals, religious transmission would hardly be possible *without* rituals of one sort or another.

Harvey Whitehouse, who has pioneered cognitive approaches in social anthropology, offers the simple but important observation that religious traditions cannot emerge without two things taking place: first, people have to be able to remember the beliefs and rituals involved in the tradition, and second, they have to become motivated to pass on those beliefs and rituals.[68] Memory and motivation are thus the crucial constraining factors in the transmission of a tradition.

Why did people remember John's rite, and pass on stories about him to others? To answer that question, we can draw on findings in memory studies.[69] It is, for example, generally

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[65] Geertz, 'Brain, Body, and Culture', Uro, *Ritual and Christian Beginnings*, 154–77.

[66] Gervais, Willard, Norenzayan and Henrich, 'Cultural Transmission of Faith'.

[67] J. Kreinath, 'Semiotics', *Theorizing Rituals: Issues, Topics, Approaches, Concepts* (ed. J. Kreinath, J. Snoek and M. Stausberg; Leiden: Brill, 2008) 429–70.

[68] H. Whitehouse, 'Modes of Religiosity: Towards a Cgnitive Explanation of the Sociopolitical Dynamics of Religion', *Method and Theory in the Study of Religion* 14 (2002) 293–315, at 293.

[69] Biblical scholars have been particularly interested in *social memory* studies, and have drawn on the notion of 'collective memory' (or 'cultural memory') in the wake of the renewed interest in the work of Maurice Halbwachs

recognized that the memorability of an event is enhanced by emotional arousal.[70] We can argue that John's baptism was an emotionally strong ritual: it involved the whole body and centred on the individual ritual patient. An interesting group of studies has demonstrated that one prominent factor that heightens the participant's memory concerning an event in which he or she is involved is *self-relatedness*.[71] It is evident that John's immersion fosters self-relatedness, and hence the memorability of the rite, in several ways. The participants have made a personal decision to undergo John's immersion.[72] The ritual structure (special agent ritual) reinforces the idea that the ritual patient is receiving special attention from a superhuman being. Moreover, the patient is him/herself an agent in the act of confession (Mark 1.5; cf. Matt 3.6), which further makes the experience personal and memorable.

The issue of motivation is also crucial in the analysis of cultural transmission. People who heard stories about John must have been motivated to keep them in mind and pass them on. Theories of cultural learning are helpful in conceptualizing this process. According to one such theory, cultural learning can be modelled as a process constrained by 'transmission biases', such as

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(1877–1945) in social and cultural studies (A. Kirk and T. Thatcher, eds, *Memory, Tradition, and Text: Uses of the Past in Early Christianity* (Atlanta, GA: Society of Biblical Literature, 2005); D.C. Duling, 'Social Memory and Biblical Studies: Theory, Method, and Application', *Biblical Theological Bulletin* 36 (2006) 2-4). Unless anchored in the study of cognitive memory, however, the notion of 'social memory' remains vague. For approaches integrating cultural and cognitive memory, see P. Boyer and J.V. Wertsch, eds, *Memory in Mind and Culture* (Cambridge: Cambridge University Press, 2009).

[70] D.L. Schacter, *The Seven Sins of Memory: How the Mind Forgets and Remembers* (Boston, MA: Houghton Mifflin, 2001) 164–5. See also Czachesz, 'Long-term, Explicit Memory in Rituals'.

[71] C.S. Symons and B.T. Johnson, 'The Self-reference Effect in memory: A Meta-Analysis', *Psychological Bulletin* 121 (1997) 371–94; J. Cloutier and C.N. Macrae, 'The Feeling of Choosing: Self-Involvement and the Cognitive Status of Things Past', *Cosciousness and Cognition* 17 (2008) 125–35.

[72] Czachesz, 'Long-term, Explicit Memory in Rituals' 334.

the strategies that people generally apply in acquiring information from those around them. For example, people usually accommodate the behaviour and knowledge of the majority; they also tend to imitate the successful and try to avoid being deceived.[73] In relation to the last point, Joseph Henrich has advanced an interesting notion of 'credibility-enhancing displays' (CREDs).[74] The core idea is that successful beliefs in cultural transmission are often associated with costly behaviour by those who promote the beliefs. 'Actions speak louder than words'. It seems obvious that John's lifestyle, his special diet and outlook,[75] together with the ultimate price that he paid for his prophetic ministry, functioned as 'credibility-enhancing displays', promoting his status as a prophet and offering a means for others to evaluate the truth value of his message.

It should be emphasized that none of these or other cognitive or cultural evolution theories can replace standard historical and source-critical work. Cognitive theories do not offer a simple 'touchstone', enabling us to decide which traditions are historically reliable or what actually happened at a particular moment of history. What the cognitive approach can do, however, is provide new frameworks for our historical work and help us to integrate New Testament exegesis with recent advances in the study of religion and human behaviour more generally.

3. Conclusion

Biblical Studies has always been a discipline that has been ready to integrate insights from other fields with its core mission, the study of biblical texts and of the cultural world in which those texts have emerged. Without this boundary-crossing spirit, we would not have had the History of

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[73] P.J. Richerson and R. Boyd, *Not by Genes Alone: How Culture Transformed Human Evolution* (Chicago, IL: The University of Chicago Press, 2005). Gervais, Willard, Norenzayan and Henrich, 'Cultural Transmission of Faith'.

[74] J. Henrich, 'The Evolution of Costly Displays, Cooperation and Religion: Credibility Enhancing Displays and Their Implications for Cultural Evolution', *Evolution and Human Behavior* 30 (2009) 244–60.

[75] Mark 1.6; Matt 3.4; Mark 2.18; Matt. 9.14; Luke/Q 7.33–34.

Religion School, form criticism, or any of the more recent approaches that have enriched our field over the last decades. Cognitive science presents a radical challenge: it calls upon us to situate our work within the larger framework of the changing humanities and of interdisciplinary efforts to understand the cognitive and evolutionary roots of human religiosity. This challenge may appear demanding, but it is worth confronting.