

The Transcendental Revolution

Giorgio Buccellati

Kant's critical concern was aimed at separating clearly the categorial dimension of human reason from the perceptual dimension. A basic assumption that underlies his entire philosophical system (and, for that matter, all of philosophy) is that perception and pure reason coexist in human beings, and have to be clearly separated in order to give pure reason its due. In this perspective, the beginning of pure reason coincides with the beginning of humankind, and a critical approach lays bare what has always been there: a transcendental dimension whereby the apriori operates, as it were, on perception.

But what if there was a time when cognition rested only on perception, with no logical overlay at all? It is precisely in this light that we may look at the immensely long pre-linguistic stage of the genus *homo*. Against this background, the emergence of language and categorial thought, after some two million years of purely perceptual cognition, can indeed be considered a full scale revolution. It is the moment when, with categories that are at the same time conceptual and linguistic, cognition transcends pure perception without, however, obliterating it.

The argument I can develop here must necessarily be brief, and on account of its brevity it will appear all the more daring.¹ But I have shared with Antonio many a moment of personal and institutional daring, enough so as to let me believe that this itinerary beyond our confines of Egypt and Mesopotamia might pleasantly intrigue him. It will, in any case, show him how I wish to share with him, in friendship, one more intellectual exploration.

1 The pre-logical stage

What was the hominins' claim to reason? I share the view that articulate and syntactic language began at a relatively late single point in time, and I assume this to be the beginning of conceptuality, i.e., the transcendental revolution to which we will presently return. The question as to what the hominins' claim to reason was must then be viewed in the light of the

1 One will find a fuller exposition in two forthcoming books: *The Four Republics* (Eerdmans) and *A Critique of Archaeological Reason* (Cambridge). I presented an earlier version of this in 2013 *Alle Origini*, chapter 1. In this paper I will restrict references to a bare minimum. I am very grateful to David C. Schindler for his comments on an earlier version of this paper.

presupposition that, for a span of some two and a half million years, these individuals were not endowed with logical thought and the language needed to express it.

The beginning of an answer lies in the concept of spatial competence as evidenced by some of the earliest known stone tools. Thomas Wynn's extremely careful and insightful topological and metrical analysis² has shown quite convincingly that tool production was carried out according to complex, if intuitive, geometric principles. This indicates that there was an explicit sense of structure that governed the toolmaker's operation. Looking at a raw stone, there was a perception of what possible shape it would take as a result of a given knapping sequence. It is both the complexity of this sequence, as it can be reconstructed through the stratigraphic history of the traces on the objects, and the existence of inventories with large numbers of repetitive examples from the same "model," that supports the conclusion that these products were intentional and that there was a craft tradition. In other words, the sense of structure was shared among individuals and on that basis the specific "templates" could be communicated.

Expanding on this, two concepts may be introduced that will help us assess the scope and limits of a pre-conceptual and pre-linguistic "reason."

The first takes as its starting point what I just said about a perception of the potential structure of an artifact before it was actually produced. The term "perception" is in fact improper in that context. The sense of structure is not derived from a sensory response, since there is no physically visible representation of the structure embodied in the raw material. It is, we might say, an anticipatory perception: what has been seen already (the model) and what one wants to produce (the target) are projected as single and distinct wholes. To describe this phenomenon I use the term "para-perception." It is parallel to, and distinct from, perception, yet it is based on it.

The constitutive mechanism that makes para-perception possible may be described as "bracing." This term refers to the ability to link together, or brace, elements that are not contiguous in nature. Thus the seed and the plant that derives from it are never seen physically together: they are not contiguous, either in space or in time, they are only made contiguous in the mind of the observer. In the same manner, the finished product of tool-making and the raw stone from which it is derived are not perceived, physically, together. They are "braced" in the toolmaker's mind.

It was bracing that gave hominins a first measure of control over nature. Making contiguous what is not so given, breaks down a most significant barrier, namely the objective distance, in space and time, among elements. Subjectively, these elements are brought together and acted upon in ways that open completely new horizons. Herein lies the hominins' claim to reason. It was, in Kantian terms, a *perfectly impure reason*, i. e., one without a categorial overlay. Alternatively, we may call it a *pure para-perceptual reason*, in contrast with *pure theoretical and practical reason*, the purity of which depends on the ability to detach the overlay from its perceptual infrastructure.

2 Wynn 1989: viii–108; his earliest material dates from Olduvai, 1,800,000 years ago.

2 The revolution

We can set a beginning for such pure theoretical and practical reason.³ It coincided with the beginning of articulate and syntactic language, to be placed chronologically around 60,000 years ago. It was the moment when logic⁴ began, in the sense of a sequential ordering of elements on the basis of universal principles. Obviously not in the sense that there should have been a theoretical statement in just these terms, but in the sense that linguistic definition, both of the elements and of their syntactic relationship, gave a completely new handle for controlling non-contiguity as given in nature.

Against the background of the long pre-logical stage, we may say that the core of the innovation lay in the reification of perception. As we have seen, para-perception had made it feasible to brace non-contiguity, as a result of which it had also become possible to develop a para-perceptual *culture*, i. e., one whereby the ability to so operate could be transmitted from one individual to another. But this transmission was based on the sharing of intuitive cognitive modes, not on any ability to define the given elements as abstract entities. The spatial competence required in knapping a stone core and to extract from it a tool of a given type did not depend on a definition of either the type or of the operational steps to be followed. This was precisely the great novelty that was ushered in by the transcendental revolution.

The notion of “transcending” has, for Kant, a rather modest resonance: it means only to transcend the limits of perception (or even para-perception, in my understanding). The modesty of the terminological claim may be expressed with the term “reification.”⁵ The physicality of perception is transcended when perception is made into a thing that has a wholly new valence, i. e., a thing that has a conceptual dimension and, immediately correlative with it, a linguistic dimension. A “logical” thing. A whole new referential system opened up, that made it possible to extend the limits of control beyond imagination. A toolmaker could now “refer” (1) to a raw stone of a given rock formation along with the tool that was to come of it, and (2) to the process involved in making it happen. The concepts and words underlying the whole sequence were new “things” – new *abstract* “things,” which could now be manipulated at will on their own and in wholly new ways.

We do not have a record of such reification for tool-making – no lexicon or operative manual. But there is another type of evidence that speaks to the same issue. Dating back to

3 It has been argued forcefully by Chomsky, see for example Chomsky 2005: 12: “the Great Leap was effectively instantaneous, in a single individual, who was instantly endowed with intellectual capacities far superior to those of others, transmitted to offspring and coming to predominate.” The topic has been developed in great detail, from a physiological as well as from a linguistic point of view, by Andrea Moro (Moro 2008).

4 I will use henceforth the term “logic” to subsume both conceptual/categorical thinking and articulate/syntactic language.

5 We could also speak of a “logical” revolution, in the sense that includes conceptualization and verbalization; or of a “referential” revolution, considering the referent as the combination of concept and word that is introduced at this point. It coincides with the “tectonic” age described by Colin Renfrew (Renfrew 2007). – The term “transcendental” differs both from the pre-Kantian one and from the one used in contemporary New Age transcendentalism.

almost the time when we can place the beginning of language, there are incisions on stones and bones that have been interpreted as calendrical notations.⁶ They have been interpreted as representing a record of nightly observations of the phases of the moon, done with a different tool at different times. The sequence is one that does not exist in nature, because one never sees twenty-nine moons in the sky; it exists only as a “thing” of the mind. It is inevitable to presuppose that there was by then a word for the moon, and possibly for its phases, and a linguistically defined syntactic nexus for the sequence itself.

The transcendental revolution consisted then of the reification of elements in nature, and even more importantly in the reification of the mental processes that connect them. In this respect, we may say that language has from the beginning a vocation towards writing, since writing is in effect a reification of the spoken word. The prehistoric calendrical notations are therefore the most telling antecedents of writing, in a conceptual sense if not in a genetic sense (cuneiform does not derive from these notations). This is not to belittle the introduction of writing in Mesopotamia and Egypt, but only to place it in a different perspective, one that enlightens us on the proper function and uniqueness of that new technology. Writing provided an extra-somatic extension (Buccellati 1981) for the linguistic reification that was otherwise restricted to the interface between speaker and auditor. As such, writing extended even further the capability of control over discontinuity in nature: the reified elements were now endowed with a new physicality, the written sign, impressed on clay or drawn on papyrus. Conceptual and linguistic reification had already produced a “thing” that was, yes, independent of its own referent, but still dependent on human living interaction. Now, writing made this same “thing” independent not only of its referent, but also of any living interaction between the writer and the reader. The reification process had taken one extremely significant step further.

3 Fragmentation and sequentiality

There was a deeper epistemological dimension to the transcendental revolution, because it affected the very nature of the human rapport with reality. Conceptual reification, or transcendentality, was a new *logos* that provided a representation wholly *sui generis* of what had, until then, remained pure perceptions, embedded in the mind of the perceiver. It was a representation detached from the things perceived. This offered a degree of control that was absent from the para-perceptual dimension: the manipulation of concepts and corresponding words gave an immensely wider latitude to the opportunities of interaction of humans among each other and with their environment. It all depended on two major factors.

The first was fragmentation. Concepts and words were the referents of individual aspects of the whole with which logic was now confronted. The moon was different from the stars, a full moon different from a quarter moon, and so on. The consequent atomization made it possible to deal more effectively with each fragment, which could be moved at will within the new logical universe, and reassembled as it suited the nature of alternative new wholes. The

6 First discussed by Marshack 1972. For a recent assessment of Marshack’s research see Bahn 2009. For a critical assessment see D’Errico 1989.

great Sumerian lexical lists (and Antonio will forgive me if I privilege Mesopotamia here...) are at the cusp of a trend to fragment and reassemble: professions, objects, natural phenomena, and so on, are defined individually and then regrouped under the category to which they (conceptually) “belong.” The large administrative cuneiform ledgers of the third millennium represent a similar conceptual encroachment on the world, with complex series of totals and subtotals nested within each other, reaching, for example, dimensions in the tens of thousands of animals for herds, which cannot possibly be seen physically assembled. This “encroachment” had very practical consequences, of which agriculture and the domestication of animals in the Neolithic is the most telling example.

The second epistemological aspect of the transcendental revolution was a new understanding of sequentiality. In the long para-perceptual stage, there was an implicit grasp of a *chaîne opératoire* that made it possible to produce the intended artifacts. It was implicit in the specific sense that it could not be seen or “discussed” as a sequence, i. e., as something conceptualized and verbalized in and of itself. All of this changes dramatically with conceptualization and language. Logic is, in fact, not just the *logos* that defines the attributes of the single fragments seen as the constitutive components of reality; it is the discourse that binds them together in a controlled sequential order. An argument has a syntax all its own, which of course matches closely the syntactic arrangement of linguistic expression. Thus the sequence of the phases of the moon as represented by incisions on bones is intrinsically a sequence: the fragments (in this case, the individual signs of the observed moon appearance) make sense only because they are sequentially ordered. They are not a random aggregate, but a step-like progression where each element receives meaning from its juxtaposition to the other elements. It is on this ability to express sequentiality that the notion of causality began to be clearly perceived and expressed.

4 Rejoining fuzziness

The para-perceptual dimension never left us. Kant’s critical approach was aimed at defining the range of perception and its relationship to categorial reason: for such reason to function properly, it had to be “pure” of any commixture with the non-categorial (i. e., para-perceptual) dimension. But there can be no pretense to ignore it, nor any assumption that it was somehow replaced. The great interest in perception that followed in the wake of Kant (one may think of Husserl, Merleau-Ponty and Piaget) underscores the importance of this dimension. The suggestion advanced here is that there was a specific point in the development of the genus *homo* when perception came to be “transcended” through the introduction of logic (concepts and language) – and that, therefore, a reflection on the pre-logical, or para-perceptual, stage can be of immense help in assessing the nature and role of perception.

I will refer to three aspects that are relevant for the central theme of this volume: (1) the notion of fuzziness and its impact on an understanding of (2) the humanities and of (3) the digital dimension, including artificial intelligence.

(1) Without logical thinking, there were, in the para-perceptual stage, no metric standards.⁷ That is, there were no standards based on criteria extrinsic to the object being observed. We may say that in this stage there was only an -emic dimension, not an (e)-tic one.⁸ It is in this connection that we may apply the notion of fuzzy sets to para-perception. In his seminal paper, Zadeh (1965: 338) writes:

Clearly, the “class of all real numbers which are much greater than 1,” or “the class of beautiful women,” or “the class of tall men,” do not constitute classes or sets in the usual mathematical sense of these terms. Yet, the fact remains that such imprecisely defined “classes” play an important role in human thinking, particularly in the domains of pattern recognition, communication of information, and abstraction.

This would apply to the artefactual inventory of even the earliest toolmaker: through para-perception, a tool was perceived as belonging to a class because it could be matched against its structural template that had shaped the making of the tool in the first place. There were no articulate inferences, much less measured standards. But the richness, distinctiveness and repetitiveness of the inventories supports the notion of a taxonomic organization.

We may plausibly attribute this to two characteristics of para-perception: simultaneity and a sense of the whole. Unlike logic, para-perception is not exclusively sequential. Different sensations are simultaneous, and are blended into single perceptions (and consequent para-perceptions). From this derives a strong sense of the whole, which comes to the fore most explicitly with the sense of structure inherent to para-perception. Simultaneity and sense of structure regulate the approach to fuzziness. The continuums that are detected are split without being properly split: there are sub-continuums, as it were, that are identified within the fluid or liquid state of the larger continuum.

(2) We may say that, -emically, there is precision in imprecision; that Zadeh’s “imprecisely defined classes” are in fact precise, according not to the logic of sequential fragmentation, but rather to the awareness of simultaneous wholeness.⁹ It is a dimension to which the humanities are intrinsically sensitive. Without the quantitative thrust of fuzzy logic, the humanities have been dealing all along with the imprecision of classes: the -emic dimension of linguistic analysis (then broadly borrowed within the social sciences) is a relatively recent example of it. In this respect, we may say that the humanities are the firm heirs of hominin para-perception. Only apparently are we rejoining fuzziness. Qua humanists, we have always been firmly rooted in a tradition that could perceive wholeness on the one hand and, on the other, fluid boundaries within it – and act accordingly.

Fuzzy logic aims to constrain the data within an extra-cultural type of precision, i. e., a system that defines an entity from outside its own cultural identity. Such precision derives

7 In his masterly work, Thomas Wynn develops the notion of “interval” as an intermediate type of standard of measurement, see Wynn 1989: 39–44.

8 On this notion, and the notation I use, see Buccellati 2006: 12–13.

9 For a very insightful discussion of the role of wholeness in Plato, and hence in western philosophy, see Schindler 2008.

from the quantitative urge to place extrinsic standards of measurement as a means to impose control on the data. It is of course effective and useful, but it does not exhaust the ways to assess the true and proper identity of the item being considered. There is value to a fuzziness that remains uncharted metrically, but can nevertheless be internalized through a para-perceptual system that can assess its structural wholeness.

(3) We can read here a call for the humanities to remain sensitive to this dimension, especially when they are called upon to become digital. Written at times with an underscore sign, and understood in any case as a collective, “digital_humanities”¹⁰ labors, in my view, under too easy a surrender to the technical dimension. There is no question but that this dimension is indispensable. However, it must remain the special role of humanistic sensitivity to give proper emphasis to what I have called “digital thought.”¹¹ Beyond technique, this lies at the core of the hermeneutic task, which aims at appropriating experience through the most thorough possible (hence, the most digitally effective) system of distributional analysis.¹²

In particular, the humanistic summons is to point to the centrality of a para-perceptual intelligence that, being irreducible to segmentation and sequentiality, i. e., to logical thinking, cannot be captured by the current standards of artificial intelligence. Seeking the roots of continuity much further back in time than is normally the case, into the earliest paleolithic period, emerges thus not as a marginal curiosity, but as a springboard for a better understanding of our own and present human make-up.

Bibliography

Bahn 2009

P.G. Bahn, *An Inquiring Mind. Studies in Honor of Alexander Marshack*, American School of Pre-historic Research Monograph Series, Oxford.

Buccellati 1981

G. Buccellati, *The Origin of Writing and the Beginning of History*, in G. Buccellati/C. Speroni (eds), *The Shape of the Past: Studies F.D. Murphy*, Los Angeles, 3–13 (online at <www.giorgiobuccellati.net>, accessed 9 June 2015).

Buccellati 1996

G. Buccellati, *A Structural Grammar of Babylonian*, Wiesbaden.

10 See recently Burdick/Drucker/Lunenfeld/Presner/Schnapp 2012; it is an excellent review of the field, oriented in the technical sense more than in the direction of method, in the sense to which I refer in the text. For an insightful approach to the technical dimension in the light of contemporary thought see Frabetti (2011: 1–22; 2014).

11 On this see Buccellati 2010: 46–55. I develop this in detail in a forthcoming book to be published by Cambridge University Press, *A Critique of Archaeological Reason*, chapters 11 and 12.

12 The concept of distributional analysis is central to a formally controlled hermeneutic task, and it can ultimately be applied to a broken tradition (a “dead” civilization) only with a strong digital support. It has been amply developed in linguistics (for my part, I may refer to my book Buccellati 1996, especially chapter 58). I am developing this at length within the framework of a research project devoted to *The Philosophical Basis of a Hermeneutics of Archaeology*, which I am co-directing in the Department of Philosophy of the Catholic University of Milan.

Buccellati 2006

G. Buccellati, On (e)-tic and -emic, in: Backdirt. Newsletter of the Cotsen Institute of Archaeology, 12–13 (online at <www.giorgiobuccellati.net>, accessed 9 June 2015).

Buccellati 2010

G. Buccellati, The Question of Digital Thought, in: T.M. Nikolaeva (ed.), *Studies in Linguistics and Semiotics. A Festschrift for Vyacheslav V. Ivanov*, Moscow, 46–55 (online at <<http://www.giorgiobuccellati.net>>, accessed 9 June 2015).

Burdick/Drucker/Lunenfeld/Presner/Schnapp 2012

A. Burdick/J. Drucker/P. Lunenfeld/T. Presner/J. Schnapp, *Digital_Humanities*, Cambridge/Mass.

Chomsky 2005

N. Chomsky, Three Factors in Language Design, in: *Linguistic Inquiry* 36, 1–22.

D'Errico 1989

F. D'Errico, Paleolithic Lunar Calendar: A Case of Wishful Thinking?, in: *Current Anthropology* 30, 117–118.

Frabetti 2011

F. Frabetti, Rethinking the Digital Humanities in the Context of Originary Technicity, in: *Culture Machine* 12, 1–22 (online at <<http://culturemachine.net/index.php/cm/issue/view/23>>, accessed 9 June 2015).

Frabetti 2014

F. Frabetti, *Software Theory. A Cultural and Philosophical Study*, London.

Marshack 1972

A. Marshack, *The Roots of Civilization. The Cognitive Beginnings of Man's First Art, Symbol and Notation*, New York.

Moro 2008

A. Moro, *The Boundaries of Babel. The Brain and the Enigma of Impossible Languages*, Cambridge/Mass.

Renfrew 2007

C. Renfrew, *Prehistory: The Making of the Human Mind*, London.

Schindler 2008

D.C. Schindler, *Plato's Critique of Impure Reason: On Goodness and Truth in the Republic*, Washington.

Wynn 1989

T.G. Wynn, The evolution of spatial competence, *Illinois Studies in Anthropology* No. 17, Urbana/Chicago.

Zadeh 1965

L.A. Zadeh, Fuzzy Sets, in: *Information and Control* 8, 338–353 (online at <<http://www.sciencedirect.com/science/article/pii/S00199586590241X>>, accessed 9 June 2015).

Fuzzy Boundaries
Festschrift für Antonio Loprieno



Fuzzy Boundaries

Festschrift für Antonio Loprieno

I

H. Amstutz, A. Dorn, M. Müller,
M. Ronsdorf, S. Uljas (Hg.)

Widmaier Verlag · Hamburg
2015

Gedruckt mit grosszügiger Unterstützung
der Freiwilligen Akademischen Gesellschaft Basel,
der Gertrud Mayer Stiftung Basel,
der Max Geldner-Stiftung Basel
und der Sallfort Privatbank AG Basel.

Bibliografische Information der Deutschen Nationalbibliothek
Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie;
detaillierte bibliografische Daten sind im Internet über <http://dnb.dnb.de> abrufbar.

Bibliographic information published by the Deutsche Nationalbibliothek
The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie;
detailed bibliographic data are available on the Internet at <http://dnb.dnb.de>.

© Widmaier Verlag, Kai Widmaier, Hamburg 2015
Das Werk, einschließlich aller seiner Teile, ist urheberrechtlich geschützt.
Jede Verwertung außerhalb der engen Grenzen des Urheberrechtsgesetzes ist ohne Zustimmung
des Verlages unzulässig und strafbar. Das gilt insbesondere für Vervielfältigungen, Übersetzungen,
Mikroverfilmungen und die Einspeicherung und Verarbeitung in elektronischen Systemen.
Gedruckt auf säurefreiem, archivierfähigem Papier.
Druck und Verarbeitung: Hubert & Co., Göttingen
Printed in Germany

ISBN 978-3-943955-60-6

www.widmaier-verlag.de

Inhaltsverzeichnis

Band I

Vorwort.....	xi–xiii
Angaben zu den Autorinnen und Autoren.....	1–17

Prolog

1	Emil Angehrn Vom Zwiespalt der Grenze. Über die Notwendigkeit, Grenzen zu setzen und Grenzen zu überschreiten.....	21–36
---	--	-------

Sprache und Schrift

2	James P. Allen Fuzzy Negations.....	39–45
3	Giorgio Buccellati The Transcendental Revolution.....	47–54
4	Eva-Maria Engel Schrift oder Marke? Ein neuer Ansatz zur Lesung der Ritzmarken der Frühzeit.....	55–70
5	Silvia Luraghi From Non-Canonical to Canonical Agreement.....	71–88
6	Matthias Müller Empirie vs. Kategorienbildung. <i>Fuzzy boundaries</i> and <i>fuzzy categories</i> in der ägyptisch-koptischen Syntax.....	89–118

vi	Inhaltsverzeichnis	
7	Fabrizio Angelo Pennacchietti The Fuzzy Boundary between Verb and Preposition. The Case of Serial Instrumental Verbs in Chinese.....	119–129
8	Carsten Peust Egyptologese. A Linguistic Introduction.....	131–148
9	Stéphane Polis/Serge Rosmorduc The Hieroglyphic Sign Functions. Suggestions for a Revised Taxonomy	149–174
10	Chris H. Reintges The Early Egyptian <i>šdm(.w)≠f</i> Passive Revisited. Morphosyntax – Typology – Diachronic Connections.....	175–226
11	Tonio Sebastian Richter On the Fringes of Egyptian Language and Linguistics. Verb Borrowing from Arabic into Coptic	227–242
12	Helmut Satzinger These Strange, Exotic Egyptian Verbal Formations	243–255
13	Andréas Stauder La transitivité sémantique en égyptien. Le cas du pseudoparticipe et de la prédication de qualité	257–276
14	Sami Uljas The Results are Unclear. A Note on Clauses of Result in Earlier Egyptian.....	277–287
15	Pascal Vernus Le sémantisme fondamental de la négation <i>n-<i>js</i></i>	289–300
16	Ghislaine Widmer « Ostracasseries » égyptiennes. L'utilisation des os comme support d'écriture	301–309
17	Jean Winand Fuzzy Boundaries, Funny Syntax. Quelques réflexions sur le progressif et d'autres constructions en néo-égyptien	311–331

Literatur und Bild

18	Marcelo Campagno Egyptian Boundaries in the Tale of Sinuhe	335–346
19	Michael Cooperson Al-Ḥimyarī’s Account of Medieval Malta. A Reconsideration	347–351
20	Alexander Honold Der Fluß und sein Lauf	353–363
21	Hanna Jenni Benoziglios <i>La pyramide ronde</i> (2001). Eine vergnügliche Lektüre	365–378
22	Efrain Kristal Max Beerbohm and the Other Borges	379–388
23	Ludwig D. Morenz Zur Poetik des <i>Schiffbrüchigen</i> . Versuch einer Annäherung	389–405
24	Herbert Morris The Absent and Present Serpent in Nicolas Poussin’s Spring	407–417
25	Miriam V. Ronsdorf Ancient Aliens Again. Remediation in Enki Bilals IMMORTEL (F/I/UK 2004)	419–430
26	Thomas Schneider Fuzzy (Hi)stories. On Cat Killing in France and Egypt, the Mystery of a Priest and Thirteen Assyrians, and the Boundaries of the Past in Demotic Literature	431–446
27	Rolf A. Stucky <i>Cestius exul</i>	447–459
	Tafeln I–IV	

Band II

Geschichte(n)

28	Daniel Arpagaus <i>Fuzzy Boundaries</i> in Nubien? Eine merkwürdige Art zur Angabe von Ackerflächen im Grab des Penniut von Aniba.....	463–493
29	Jan Assmann Rituelle und narrative Logik. Der Osirismythos in den „nächtlichen Riten“ der Pyramidentexte	495–517
30	John Baines On the Old Kingdom Inscriptions of Hezy. Purity of Person and Mind; Court Hierarchy	519–536
31	Susanne Bickel Religion and Economy. <i>Fuzzy Boundaries</i> around Karnak.....	537–545
32	Alfred Bodenheimer Der physische und der symbolische Feind. Wandlungen des Konzepts von Amalek in der jüdischen Tradition.....	547–557
33	Martin Bommas Fuzzification. On the Understanding of Social Motivation in Ancient Egypt	559–571
34	Mark Collier Evidence of Day Duty in O. DeM 10127	573–587
35	Andreas Dorn Scratched Traces. Biographische Annäherung an den Schreiber Amunnacht, Sohn Ipuis.....	589–600
36	Madeleine Herren <i>European Global Studies</i> . Grenzüberschreitungen auf 90 Grad Nord.....	601–618
37	Victoria Loprieno „Der Mensch ist ein Rätsel“. Grenzerfahrungen in den Tiefen Berlins	619–640

38	Maria Michela Luiselli Tracing the Religion of the Voiceless. On Children's Religion in Pharaonic Egypt.....	641–654
39	Ueli Mäder Von der Einsamkeit des Schiedsrichters.....	655–666
40	Ronald Mellor Augustus as Pharaoh.....	667–692
41	Gerald Moers 'Egyptian identity'? Unlikely, and never national.....	693–704
42	David N. Myers Peter Beer in Prague. Probing the Boundaries of Modern Jewish Historiography.....	705–714
43	Rainer Nutz Bevölkerungsrückgang während der Ersten Zwischenzeit?.....	715–726
44	Claudia Rapp Late Antique Metaphors for the Shaping of Christian Identity. Coins, Seals and Contracts.....	727–744
45	Maurus Reinkowski New Uncertainties, Old Certainties. On Shifting Boundaries in the Middle East.....	745–757
46	William M. Schniedewind The Legacy of the New Kingdom in Early Israel.....	759–765
47	Stuart Tyson Smith Hekanefer and the Lower Nubian Princes. Entanglement, Double Identity or Topos and Mimesis?.....	767–779
48	Anthony Spalinger Temple Salary Distributions. Fuzzy Boundaries.....	781–799
49	Deborah Sweeney Monkey Business at Deir el-Medīna.....	801–813

x	Inhaltsverzeichnis	
50	Noémi Villars Un rite pas très net. L'offrande de l'œil- <i>oudjat</i>	815–827
51	Martin Wallraff Spitzenforschung. Der Obelisk vor der Bischofskirche des Papstes in Rom....	829–843

Akademische Kultur

52	Hans Amstutz 20 Jahre Universitätsreform an der Universität Basel im Spiegel der Rektorsreden am Dies academicus.....	847–855
53	Dominique Arlettaz La science de la culture au service de l'art de convaincre	857–861
54	Crispino Bergamaschi <i>Fuzzy boundaries</i> im Rahmen des dritten Zyklus.....	863–866
55	Mauro Dell'Ambrogio I labili confini del diritto praticato.....	867–878
56	Ulrich Druwe Meditationen über den ersten Diener der Universität	879–888
57	Alex N. Eberle The Fuzziness of <i>Reproducibility</i> across Disciplines.....	889–903
58	Ernst Mohr Das wissenschaftliche stilistische System.....	905–923
59	Georg Pfeleiderer Theologie als Universitätswissenschaft. Eine Besinnung in theoretischer und praktischer Absicht	925–940
60	Ursula Renold Welche Akademikerquote brauchen wir? Über den Umgang mit Fuzzy Boundaries in internationalen Bildungssystemvergleichen.....	941–963
60+1	Ralf Simon Der unbedingte Parasit. Zur paradoxen Logik der Grenzziehungen in der verwalteten Universität...	965–979

Tafeln V–VIII