FIVE POSSIBLE MACHINES OF TRUTH AND KNOWLEDGE

on Digital Concept and Cultural Production in the 21st Century - based on early experiences from the Humboldt Forum

ABSTRACT

In this talk I would like to address some possible roles digital concept design, as a new, emerging professionalization at the intersection of scholarly humanities and media-technical specializations, can or should play in projects of cultural production in the digital age.

The digitization, digitalization and online presentation of the ethnographic and world art collections of the Staatliche Museen zu Berlin in the Humboldt Forum, complemented by the collections of the Humboldt-Universität zu Berlin, the Stadtmuseum Berlin and the new historical exhibitions of the museum, Geschichte des Ortes, represents a significant moment in the history of cultural enterprises in Europe. Typical of the cultural digitalization moment in general, but exceptional in its scale and scope, the Humboldt Forum project provides an important case study for how digital means can be and are being applied to projects of cultural heritage mediation, knowledge-production and truth-making today.

Drawing on 5 years experience behind the development of digital content strategy, infrastructure and media offering for the Humboldt Forum, I will focus in on 5 possible formulations of the task this cultural project has posed and is posing to the new art/science/business and politics of digitalization. 5 possible machines of ethnographic truth and knowledge which digitalization could/should build, capable of mediating this material and immaterial cultural heritage in new ways to new local and worldwide publics. 5 new chances/risks of fulfilling (digitally) unrealized knowledge-producing and truth-making projects of the (analog) past.

The projects described and imagined involve creating the infrastructures, algorithms and affordances for taking on some of the „hard challenges“ of the Humboldt Forum - including the mediation of vast, complex, contested and elusive immaterial cultural heritage in ways „true“ to the principles and precedents of this multi-polar and unprecedented project.

GREETING

Thank you.

Hello, it's great to be part of the conversation. I was very happy to be invited. I want to say, too, I appreciate all the work that's gone into setting up the conference, in particular the very
competent infrastructure - both personal and technological - we can use to overcome this terrible distance, that since last March has gotten in everybody's way. I look forward to seeing where my talk may interactivate with the other talks in this session, and I hope it leads to some good discussions when we have the chance to meet in more real time.

1. INTRO

The title of my talk is "5 Possible Machines of Truth of Knowledge".

The title I proposed was "On Some Possible Machines of Truth and Knowledge". Now that the conference is here, I can be more specific, and commit to five. I call them possible machines, but as I hope to make clear, they are also necessary and mandatory machines.

In general, the points I want to make are about digital concept design and its possible/optimal/perhaps necessary role in cultural production today, where it is emerging as an increasingly important cultural technology (Kulturtechnik) and as an increasingly prominent profession in projects and initiatives of the culture industry, broadly defined; I will be taking the Humboldt Forum as my main point of departure and reference.

To make a sub-title out of all of that, I could also call my talk: "On Digital Concept and Cultural Production in the 21th Century".

The immediate background to the talk are the last 5 years, which I have spent developing and implementing digital concept design and content strategy for the Humboldt Forum project, together with a great team of colleagues growing from 1 to 20+ as the project has progressed and the concept has gone to implementation. In this role I produced concept, advised on strategic media use, directed projects and delivered products serving the digital mediation of the Humboldt Forum’s contents and messaging. Concretely, this comes down to about 10 digital products in which I played a substantial role, a number of which are now in various stages of production and roll-out for the Humboldt Forum as it sets to open, in phases, starting this December 16th.

I hope you will all come.

Soon you will be able to see this digital offering concretely for yourselves - those of you who are in Berlin and, increasingly as things come online, also any of you who are not. For that reason, and because I am not here to speak for the Humboldt Forum, but rather independently or separately, as a practitioner of media and as a scholar of media, language, and visual/digital culture, I won’t be going into detail on these concrete projects today, 10 concrete machines, as it were, for the digital mediation of cultural heritage. Rather, I hope to use this talk to bring our discussion reflecting on this work to a broader, abstracter level of the machinic in the production of culture (and so necessarily of truth) today. I would like to enable a reflection and a discussion on the role of digital concept design and development in projects of cultural production, and in particular with reference to five abstract machines, possible machines of truth and knowledge because we can and do use them to create reality, generate knowledge and make truth, but also, as I will argue, mandatory machines, because ineluctable, machines
which we are always inevitably also running, when we build or run concrete machines of digital mediation, which have become a standard part of museum or more-than-museum practice in the 21st Century.

These machines, for reasons that will be clearer as I go on, I will call:

- **Object-ing**
- **Informat-ing**
- **Identity-ing**
- **Relation-ing**
- and
- **Worldview-ing**

In German, this might be something like:

- **Objekt-izieren**
- **Informat-ieren**
- **Ident-izieren**
- **Beziehen**
- **Weltansichten**

### 1. OBJECT-ING

The object is the first focus of cultural studies, at the core of each branch of the museum's traditional mandate, in collecting, research, education and conservation. As such, the object is often also, concretely, the first problem posed to digital mediators of cultural heritage, a first task or challenge they may encounter as practitioners of their trade, art, or science, however you define it. Digital mediation in the museums profession today certainly begins where analog object- and information-management and -display practices leave off, with their storage shelving, card catalogues and thematic vitrines. Yet, through all the evolution since, towards the "digital museum", re-mediation of the object, a furthering of the original collection and display functions of museums, remains a first task for digitalization. Indeed, the task awaiting myself and my first colleague in the project, (Nathalie Keurmeur, now heading up the content division of the Digital Department), in April 2015 when we started\(^1\) as part of a new

\(^1\)…and that now faces Viola Rosenau and her team in the project of digitalizing the collections now newly gathered in the Humboldt Forum and displaying these in an online gallery, due to unfold into 2022.
Staff Unit of the Stiftung Preußischer Kulturbesitz, centered to a large extent around the mass of objects that make up these institutions’ standing among traditional museums, in this case, principally, the collections of the Ethnologisches Museum and the Museum für asiatische Kunst, but also collections from the HU and to a lesser extent Land Berlin in the Berlin Exhibition, various lenders and, with smaller initial holdings, the Stiftung Humboldt Forum itself, in particular with objects connected to the history of the site.

This brings me to the problem with objects.

**The problem with objects**

For any project of knowledge aimed at truth there really is a problem with objects.

What’s the problem?

The whole tangle of moral, political, legal and economic trouble constituting the debate around provenance and restitution are a “problem with objects”.

The evils of chauvinism, sexism, racism, colonialism and exploitative capitalism can all be put down to acts of objectification and reification in the mindsets and worldviews of individuals and groups.

The problem with objects, however, goes even deeper. Already the object as a form of thought is problematic.

What we do with the object-machine, object-ing, seems like a natural habit of mind, but it is culturally and personally learned.

Truth when we look at it philosophically is already a product (victim) of the object machine before we can even ask the question of the truth of objects.

But if we are building machines, it is to get beyond an impasse like this.

We can take a cue here from David Bohm, an important late 20th Century theoretical physicist active in the integration of relativity theory and quantum mechanics. He thought we were long overdue for an update in our worldview based on these revolutionary insights, over a century old by now.

He saw the core problem with our worldview in a perennial habit of mind to think of Truth as an object - a truth, the Truth, objective.

He said instead we have to:

> give up altogether the notion that the world is constituted of basic objects or “building blocks”. Rather, one has to view the world in terms of universal flux of events and processes. p.9 Wholeness and the Implicate Order(1980)
This might seem like an abstruse, philosophical point, but it is anchored for Bohm in a vivid awareness of historical horrors, which he ascribes to the pernicious effects of the object machine (still my wording) ... this problematic mode of thought maintained in forms of language, with a powerful impact on thinking.

More concretely, this comes down to the substantive in Western grammar and in Western mindsets:

> It is clear...that the ordinary mode of language is very unsuitable for discussing questions of truth and falsity, because it tends to treat each truth as a separate fragment that is essentially fixed and static in nature. p.41

So, if this is the problem with objects - What's the solution?

Again here, we can take a cue from Bohm, in looking to new modes of language (media) as possible drivers of new modes of thought, capable of evolving new habits of mind. – Digital concept can play a particular role here - (new media are new modes of thought) - so it is worth following Bohm’s logic about this problem of worldviews and how to change them.

What Bohm calls for is a reform of language (we can extend this to media) - which he called the Rheomode, Rheo coming from the Greek, for movement.

Using this mode in the construction of sentences, or in the formulation of coherent thoughts, requires avoiding noun-based constructions - This mode of language use disallows objecting in discourse, and by this measure expects to arrive at a different result of discourse.

> The rheomode does not allow us to discuss the observed fact in terms of separately existing things of an essentially static nature...
> The world view implied in the rheomode is ... expressed by saying that all is an unbroken and undivided whole movement, and that each ‘thing’ is abstracted only as a relatively invariant side or aspect of this movement. p.46-7

Hence, the first abstract machine at work behind concrete projects of digital mediation, the object or object-ing machine, is associated with a primal problem confronting any project of truth. The truth of objects can be approached only via a rejection of the notion that truth is an object. In concrete projects of digital (re-)mediation, there is particular potential for developing these new modes of language (new media are new modes of language) capable of encouraging/enabling new modes or habits of thought, with the potential to effect epochal change in the dynamics of human truth-making, by breaking the grip of the object machine where it is at work in projects of knowledge, truth-making and cultural production.

2. INFORMAT-ING

To counteract, or at least avoid reinforcing, the abstract object-ing machine in the concrete mediation of objects, we rely on another machine: a machine for producing and presenting
information about objects, for securing and highlighting their details, for associating them with facts and ideas, of making them mean.

The information (or in “rheomode”, informat-ing) machine is essential in the production of truth around objects, yet equally effective, for all its immateriality, at blocking out, covering up or altering the truth of objects it informs.

The information machine has the virtue of making visible the invisible, immaterial truth of objects. It is capable of vast and vastly flexible materialisations of the immaterial dimensions of material culture.

To give you a sense of how effective (wirksam) it can claim to be, we can look at the examples from the core messaging and content strategy of the SMB museums, in a set of principles that has been very influential also on other portions of the project: the three guiding ideas, we called them MPG – Multiperspektivität, Partizipation und Gegenwart.

M. - We can have easy multiplication of the productivity of the information machine on objects, because we have easy multiplication of the information sets on each given object. If an object has one text, it can have three texts in the same space, and therewith three perspectives.

P. - If I can also open the authorship of this information to different sources, meaning different communities and positions, the digital information machine can (and should) also make a major contribution towards participation.

G. - If I can place current information and contemporary perspectives, and keep these updated, then I can also ensure the third principle is fulfilled, Gegenwartsbezug.

Yet, if the information machine is interesting, it is for more than just multiplying the information around objects or accelerating its refresh rate. Can it counteract, contravene, resist or overcome the object-ing machine, understood as an inherently falsifying habit of mind? Or can it in some way help restore the object, if not concretely back to the world it was separated from (although that is also a function digital concept can and will play in the cases where this happens), then at least back into the frame of a certain set of facts, information or ideas?

Restoring lost legacies, the immaterial that has gone missing in the preserved material heritage, making ideas and ways of thinking emerge through the mediation of objects, was at the core of the vision (concept) behind the Berlin museums. The purpose of the collecting and storing, study and preservation of these objects was not the objects themselves, we are told, but the ideas, Ideals that could be made visible, restored to perceptibility, perhaps even to agency.

Wilhelm von Humboldt formulated it this way, in his short early sketch of a possible “comparative anthropology”:

Das Bestreben der vergleichenden Anthropologie geht dahin, die mögliche Verschiedenheit der menschlichen Natur in ihrer Idealität auszumessen ...
Was sie sucht, ist also kein Gegenstand der Natur, sondern etwas Unbedingtes, - Ideale, die aber auf Individuen, auf empirische Objecte ... bezogen waren ... Gesammelte Schriften Vol. 1 S. 163.

Similarly, inspired by Alexander von Humboldt, and in much greater elaboration over the course of his productive and influential lifetime, Adolf Bastian set and carried out, in his vast information machine, this same priority. This is as Glenn Penny tells it in his In Humboldts Schatten, published last year:

Für Bastian waren die Objekte, die Menschen herstellten und gebrauchten also zuallererst "Abdrücke ihres Volkgeistes"...darum dreht sich ein Großteil seiner Veröffentlichungen - weniger um die Gegenstände, ...als darum, was sie über Sitten, Moral, Praktiken und religiöse Ideen eines Volks aussagten. Kurz gesagt, er benutzte die Objekte, um die Ausformung der dahinter stehenden Ideen zu erkennen. p. 17 In Humboldts Schatten 2019

We will come back to Bastian. Because, for all the power of information to counter the object-ing machine, in revealing or activating ideas, there is also a problem with informat-ing.

3. IDENTITY-ING

Of all the ideas objects can reveal, there is one that is of particular interest in this tradition, and particularly problematic.

WvH puts “Charakter” at the focus of what a comparative anthropology is looking for, in its pursuit to understand Humanity, the Human, humans, individual humans, but even more, kinds of humans.

The free development of this idea into a thing, Character or Personality, was at the core of his theory of education, just as its support and defence was at the center of his political theory, in his writing on the limits of state action.

When he writes his famous sentence, defining the purpose of humans:

"Der wahre Zweck des Menschen ... ist die höchste und proportionierlichste Bildung seiner Kräfte zu einem Ganzen",

this is the whole (the Ganze) he is talking about, discernable/readable/codifiable? as charakter, manifesting an essential and inviolate identity.

Ethnographic study à la Wilhelm von Humboldt may transcend objectivist/reductionist modes of thought with the “concept” it proposes for the field, comparative anthropology, but nevertheless seems dedicated to firmly establishing another abstract, immaterial, type of thing, the character, personality or identity of any possible human encountered.
The words Charakter, Natur, Art, Gattung, Volksgeist, Volk, Rasse, and Nation appear in this discourse in an attempt to pin down (object) this elusive thing, and it is precisely in this pinning down that we come to the problem with informat-ing, where it comes to the production of an idea like identity, given as true.

Wie man in der vergleichenden Anatomie die Beschaffenheit des menschlichen Körpers durch die Untersuchung des thierischen erläutert; ebenso kann man in einer vergleichenden Anthropologie die Eigenthühmlichkeiten des moralischen Charakters der verschiedenen Menschengattungen neben einander aufstellen und vergleichend beurtheilen. p. 337 in VA vol. 1 (Zollner, p.98)

**The problem with identity**

At first thought, the Identity-ing maching seems like a helpful machine. For excluded groups it generates inclusion. Representation, as the machine is also known, has been the locus of a lot of well-intentioned investment among anthropologists and ethnologists. For the simple reason that in the hegemonic conditions of the information machine, it seemed to give native and excluded communities a chance. But it is also Identity or Identity-ing that produces the violence of their exclusion.

Here we can turn to Amartya Sen, an important development economist, noble prize winner and student of the factors behind societal collapse and mass genocides. Like Bohm with regards to the machine I call Object-ing, Sen attributes a whole sequence of horrors to campaigns of what I would call Identity-ing.

He sees the core of the problem in the rigidification of identities and in the violent imposition of identities on others. He comments, in his *Identity and Violence: on the Illusion of Destiny*, that the subjugating force of an imposed identity is based, not so much on the degrading description, as on the illusion that the identity is exclusive, natural, inescapable - i.e. true.

According to Sen, the problem of identity can be counteracted in a couple of ways:

On the one hand by broading the radii of identification we use in defining ourselves and others, and on the other by acknowledging the rightful role of reason and free choice in shaping and deciding identities.

These are antidotes Sen describes to “a cultural politics that likes dividing the world’s inhabitants up into different cultures”, and to campaigns of identity-ing capable of mobilising populations to terrorise freshly labelled victims. As such, they are necessary input into the construction of any information machine as it begins to generate firm objects out of an idea like the identity of anyone or any group.

**4. RELATION-ING**

We cannot counteract the object-machine, we cannot prevent it from ruining the work, for example, of the information machine, designed to complete it and keep it at bay, by adding more information. For this, we need a new machine - call it a machine of relations. Turning
back to Penny, we see this was also the main goal of the information- and idea-machine Bastian wanted to build for Berlin and the world.

Das zentrale Ziel beim Sammeln dieser Hundertausende von Gegenständen lag darin, sie durch dynamische, aktive und erhellende Gegenüberstellungen zusammenwirken zu lassen. p. 19 In Humboldts Schatten 2019

A machine of relation in this sense does not just add more information to objects, it registers, preserves and manifests relations, not as single information points, but rather "alive", response as active and interactive vectors of inquiry.

Durch Alexander von Humboldt [war Bastian] überzeugt, dass die Naturwissenschaften einen Weg zum Verständnis der kosmischen Harmonie der Welt boten.... Er war überzeugt, die Weltanschauungen jeder Kultur drücke die Gemeinsamkeiten und Unterschiede aus, die man zwischen den Kulturen finde. Sein erstes Ziel war es somit, diese Gemeinsamkeiten in all ihren räumlichen und zeitlichen Variationen zu verstehen, und sein Endziel, mithilfe dieser Informationen zu einer Gesamtgeschichte der Menschheit zu gelangen.

The phrase, “Gesamtgeschichte der Menschheit“ is one way Bastian had of formulating this notion of a global schematizing of the information around objects. The trope of knowledge when accumulated amounting to a history is an artefact of the 18th and 19th Century, particularly decisive for in the display practice and content strategy of the British Museum, for example. The Berlin tradition participated in this historicizing habit of mind and science, but it also distinguished itself from this and established itself on the basis of other metaphors. Bastian's idea of a Gedankenstatistik, or his “Archiv of Elementargedanken” go further, in conceiving, exploring and building on a non-linear schematization of objects and facts in their relationality. As such it is faithful, more faithful (truer) to the scientific ethos of Alexander von Humboldt, perhaps best exemplified in his vast ambitions for cartography, as a machine of relations adequate to a total physical (and with the right techniques and data sets also cultural) description of the world. Here, according to Ottmar Ette in his Alexander von Humboldt und die Globalisierung:

Denn Alexander von Humboldts Wissenschaft läßt sich ganz im Sinne vom griechisch bios als eine vollgültige, nicht auf die semantischen Reduktionen eines biowissenschaftlich-medizinischen Lebensbegriffs eingeengte Lebenswissenschaft verstehen.“ p.226 Ette

In Bastian, as in Alexander von Humboldt and Wilhelm, we have promising material for a machine of relation-ing in the sense I want to give the term. Overall, there is promising material (meaning both promising ideas and promising data) for reinvesting the intellectual legacy of this more-than-museum project in projects of truth like Bohm's “rheomode", developing new modes of language to possibly (urgently, necessarily) arrive at new modes of thinking. This according to Ottmar Ette, who, in his Alexander von Humboldt und die Globalisierung, emphasizes:
wie sehr [Humboldts] Untersuchung der (alt)amerikanischen Kulturen eingebettet ist in ein transareales, verschiedene kulturelle Areas querendes Studium der Weltkulturen, das sich immer wieder einer keineswegs als linear gedachten Geschichte der Menschheit versichert.... Alexander von Humboldts neue Ordnung des Diskurses beruht auf der Bewegung, (rheo) auf einer sich zwischen unterschiedlichsten Phänomenen einstellenden Mobilität, die zwingend auch sein Lesepublikum erfaßte. ...

224-5 Ette

The relation-ing machine can overcome object-ing, as well as the object-ing at work at the level of information and ideas. In so doing, it secures the initial dream of the information machine. It binds the information to the object and information to information, and in so doing is able to reveal and activate the ideas, whether latent or emergent in them.

5. WORLDVIEW-ING

One final machine to conclude.

It all comes together in a worldview - or worldviewing machine.

A word like worldview may have a bad reputation in critical discourse, today, for its close association with grand narratives and master narratives of the past. Yet, this too we need to get over. Because whatever else exists, worldviews exist, and we’ve got to be able to talk about them.

As we saw, Bastian used objects to reveal ideas and the ideas he was really interested in, more than identities, were worldviews.

Again, from Penny:

Die Ideen hinter den Objekten benutzte [Bastian] wiederum dazu, die Entstehung des Weltbilds dieser Menschen zu verstehen .... Also trug er Zehntausende und schließlich Hunderttausende solcher Objekte in seinem Museum zusammen, um eine gewaltige vergleichende Analyse dieser Weltbilder vornehmen zu können. ...

In Humboldts Schatten 2019

Similarly, Wilhelm von Humboldt preserved languages, or through his research analysis preserved our access to languages, not for the words and grammars, “totes Gerippe” in his words, but for the worldviews, for the possibility of viewing and living in the world in different ways.

The first truth of worldviews, therefore, is that there are worldviews. The second is that they are everywhere. The worldview-ing machine is the biggest machine, and the most inescapable, because whatever else we are doing in cultural practice, we are always also building the world, worldview by worldview.

The best account, the most Humboldtian account of the Humboldtian notion of “Worldview” I know of is from Karl Jaspers in his Psychologie der Weltanschauungen from 1919.
“Was ist Weltanschauung? …nicht einzelnes Fachwissen, sondern das Wissen als eine Ganzheit, als Kosmos. Aber Weltanschauung ist nicht bloß ein Wissen, sondern sie offenbart sich in Wertungen, Lebensgestaltungen, Schicksal, in der erlebten Rangordnung der Werte.” S. 1

This is the greatest and most ineluctable role digital concept can play in projects of cultural production in the 21st Century.

How can worldviews be made visible? How can lost worldviews be reactivated? How can others' worldviews become ours? These are questions for a worldview-machine, a worldview-viewer or worldview-viewer. And Karl Jaspers gives us good hints.

CONCLUSION

The machine we have been building in building the Humboldt Forum, both physically and digitally, is ultimately and inevitably a worldview-viewer, a machine for making world-viewable. If we have done it right, if it is completed and put to good use, it will also be a worldview-viewer, putting our limited pictures and perspectives on the world mutually on view and up for discussion. This is a special and the most ambitious role digital concept and development can play in cultural projects. It is a possible machine, because it is possible to evolve to new worldviews through the mediation of new modes of language and media (new worldviews are possible!); it is a necessary machine, because inevitably with projects of cultural mediation we are building a world. With a project like the Humboldt Forum, taken in the ideal and idealistic form we deserve to take it in, the original falsification of the world resulting from object-ing can be counteracted through modes of presentation and engagement that reembed the object in its background mesh of relations (its world) and that restore to it its lost power to project a worldview, as a living and liveable whole of relations.

These are 5 abstract machines I see at work behind the work of creating concrete machines for the digital mediation of cultural heritage. Many of you may also perceive these machines at work in your work, and have reflected on your position with regard to them and what they produce. Most importantly, as with any machine, since every machine makes reality and can be used to shape truth, we must judge it by its products. What knowledge or truth (whether of objects, information, identity, relations or worldviews) can or does the machine produce? What projects of knowledge-production or truth-making can or does it advance?

FIN