

# MEDIEN KOMPARA TISTIK

Beiträge zur  
Vergleichenden Medienwissenschaft

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AISTHESIS VERLAG

*Wissenschaftlicher Beirat:*

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Das Periodical *Medienkomparatistik* eröffnet ein neues Forum für vergleichende Medienwissenschaft. Das Zusammenwirken unterschiedlicher Medien und verschiedener medialer Praktiken spielt nicht nur in der gegenwärtigen Alltagswelt eine zunehmend bedeutende Rolle. Vielmehr hat sich in den letzten Jahren, ausgehend von den literatur-, kunst-, und medienwissenschaftlichen Einzeldisziplinen ein fächerübergreifendes Diskussionsfeld herausgebildet, das sich gezielt Fragen des Medienvergleichs und der Interferenz von Medien widmet. Dieser interdisziplinäre Forschungsbereich erlebt derzeit in den Kulturwissenschaften eine erstaunliche Konjunktur. Neben der vergleichenden Methodologie als wichtige heuristische Grundlage besteht eine weitere Zielsetzung der Medienkomparatistik darin, allgemeine Kriterien zur systematischen Erfassung der einzelnen Medien zu entwickeln und ihre jeweiligen Operationsleistungen in sich wandelnden kulturellen Kontexten zu erkunden. Dabei soll ein weites Spektrum medialer Formen und Verfahren einbezogen werden, das von analogen und digitalen Bild- und Schriftmedien über dispositive Anordnungen bis hin zu diskursiven Wissensformationen reicht.

Welche spezifischen Eigenschaften zeichnen einzelne Medien aus, was trennt und was verbindet sie? Welche produktiven Austauschbeziehungen ergeben sich aus medialen Konkurrenzen und Konvergenzen? Wie lassen sich historische Transformationen medialer Praktiken und Ästhetiken erfassen? Wie können mediale Verhältnisbestimmungen medientheoretisch neu konturiert werden?

Das Periodical erscheint zunächst jährlich in einem Band von ca. 200 Seiten. Da es in einem interdisziplinären Forschungsbereich angesiedelt ist, richtet es sich an verschiedene kulturwissenschaftliche Fachgruppen, wie zum Beispiel Komparatistik, Medienwissenschaft, Kunstgeschichte sowie einzelne Philologien wie Anglistik, Germanistik, Romanistik etc.

# Medienkomparatistik

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## Media and Abstraction

‘Concrete’ and ‘abstract’ do not designate a specific type of character.

Bruno Latour

### 1) Introduction

The question to be discussed in this essay concerns the relation between different media and the distinction between concrete and abstract entities or objects.<sup>1</sup> What is the difference between concrete and abstract entities? The *Stanford Encyclopedia of Philosophy* illustrates the difference in the following way:

Some clear cases of abstracta are classes, propositions, concepts, the letter ‘A’, and Dante’s *Inferno*. Some clear cases of concreta are stars, protons, electromagnetic fields, the chalk tokens of the letter ‘A’ written on a certain blackboard, and James Joyce’s copy of Dante’s *Inferno*.<sup>2</sup>

Although the difference seems intuitively clear, it has stirred up a lot of complicated philosophical discussions, especially in the twentieth century, on the existence and ontology of abstract entities.<sup>3</sup> One immediately notes that the examples from the *Stanford Encyclopedia* include for abstracta “the letter ‘A’, and Dante’s *Inferno*” and for concreta “chalk tokens of the letter ‘A’ written on a certain blackboard, and James Joyce’s copy of Dante’s *Inferno*” – entities that at least could be included in a discussion on media theory.

But what is the motivation for this paper? To put it bluntly – there seems to be a certain tendency in recent media studies to reject abstract entities and objects. And this comes as no surprise, given the insistence on materiality in media studies (but is materiality really identical to concreteness?). To cite a prominent example: In his *Passage des Digitalen*, right in the foreword, Bernhard Siegert distances his project to describe the sign-practices of mathematics from the Platonism and intuitionism that is widely common in mathematics and implies that mathematical objects somehow exist as such, perhaps similar to the ‘third world’ of objective knowledge in the sense of Popper. Siegert argues that the “(ideal or empirical) objects of science” should be understood as “the result of practices with signs”.<sup>4</sup> Important and correct in my mind is the point, that the existence of

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1 This paper is *not* about the relation of media to abstract representations – an often discussed case is the role photography played in the emergence of abstract painting.

2 Stanford Encyclopedia of Philosophy. “Abstract Objects”. <https://plato.stanford.edu/entries/abstract-objects/>, 30.01.18.

3 See: Kit Fine. *The Limits of Abstraction*. Oxford: Oxford University Press, 2002.

4 Bernhard Siegert. *Passage des Digitalen. Zeichenpraktiken der neuzeitlichen Wissenschaften 1500-1900*. Berlin: Brinkmann & Bose, 2003. P. 13. On Platonism in

‘ideal objects’ (that might be understood as abstract objects) is not *denied*, it is described as a *result* of material practices. I will come back to that.

The complete *rejection* of ideal or abstract entities is, it seems to me, especially typical for the reception of Actor-Network-Theory (= ANT) and some strands of Science and Technology Studies (= STS) in recent media studies. Just some examples: In a recent paper on the notion of *dispositif* Markus Stauff sums up certain recent tendencies (but here it is not about mathematical entities but about ‘abstractions’ like society):

Instead of taking for granted the existence (and clear identity) of entities like society (or related concepts like the state, the global, capitalism, and organization), [...] Assemblage theory “seeks to replace such abstractions with concrete histories of the processes by which entities are formed and made to endure” (Acuto and Curtis, 2014, p. 7).<sup>5</sup>

Obviously abstractions or abstract entities should be ‘replaced’ by somehow interconnected and assembled concrete entities.

Here the notion of ‘flat ontology’, developed as far as I can see by Bruno Latour (very explicitly in *Reassembling the Social*), comes into play.<sup>6</sup> Since in this model every entity has to be on the same plane – the plane of immanence, as perhaps Deleuze would have said – there can be no abstract entities like ‘society’. Another example: Tobias Röhl wrote recently, albeit with an important hint to avoid a metaphysics of the concrete: “How can we remain ‘ontologically flat’ [...] when talking about [...] macro phenomena without resorting to a metaphysical realm of a societal supra-structure?”<sup>7</sup>

There seems to be a difference to the position of Siegert: In ANT (and also some branches of ethnomethodology, as it seems) abstract entities are *rejected or replaced*, while Siegert at least in the quoted statement, describes material and

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mathematics see: Mark Balaguer. *Platonism and Anti-Platonism in Mathematics*. Oxford: Oxford University Press, 2001.

5 Markus Stauff. “Materiality, Practices, Problematizations. What Kind of *dispositif* are Media?”. [https://www.academia.edu/34244735/Materiality\\_Practices\\_Problematizations\\_What\\_kind\\_of\\_dispositif\\_are\\_media\\_Extended\\_preprint\\_version](https://www.academia.edu/34244735/Materiality_Practices_Problematizations_What_kind_of_dispositif_are_media_Extended_preprint_version), 30.01.18. P. 4.

6 See: Bruno Latour. *Reassembling the Social. An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press, 2005. P. 16 and pp.165-172.

7 Tobias Röhl. “From Supra-structure to Infra-structuring: Practice Theory and Trans-situative Order”. <https://practicetheorymethodologies.wordpress.com/2016/12/16/tobias-rohl-from-supra-structure-to-infra-structuring-practice-theory-and-trans-situative-order/>, 30.01.18. Röhl quotes Schatzki. It is not possible here to analyze the highly problematic character of the concretist metaphysics proposed by Röhl, in some branches of ethnomethodology and in some readings of ANT. It suffices to say that there is a problematic similarity to methodological individualism that underpins neo-classical economic theory and therefore neoliberal ideology, see Geoffrey M. Hodgson. “Can Economics Start from the Individual Alone?”. *A Guide to What’s Wrong with Economics*. Ed. Edward Fulbrook. London: Anthem Press, 2004. Pp. 57-67 and on a more fundamental level see Brian Epstein. “Ontological Individualism Reconsidered”. *Synthese* 166.1 (2009): pp. 187-213.

medial *conditions of their possibility*. And that seems to be a far better solution, because ANT seems to run into a self-contradiction: Take the case of Bruno Latour: At first this trend to prefer the concrete seems to be central to his influential *Reassembling the Social* (and other works), in which he repeatedly insists that the abstract notion ‘society’ should be replaced by the description of concrete networks of human and non-human agents.<sup>8</sup> But: Latour’s central imperative is on ‘following the actors’ and accepting the actor’s own metalanguage (as he puts it) as valid. He remarks: “Its main tenet is that actors themselves make everything, including their own frames, their own theories, their own contexts, their own metaphysics, even their own ontologies.”<sup>9</sup> This leads him to follow actors even when they posit ‘fictional entities’ like “spirits, divinities, voices, ghosts, and so on” as real in the sense that they make actors act.

Is it not obvious that it makes no empirical sense to refuse to meet the agencies that make people do things? Why not take seriously what members are obstinately saying? Why not follow the direction indicated by their finger when they designate what ‘makes them act’? [...] Why not say that in religion what counts are the beings that make people act, just as every believer has always insisted?<sup>10</sup>

Interestingly enough, the *Stanford Encyclopaedia of Philosophy* discusses in the lemma on ‘abstract objects’ explicitly entities conventionally (whatever that means) understood as ‘fictional’. If such (presumably abstract) entities like ‘divinities’ should be accepted, why not ‘society’ or ‘capitalism’ (by the way: Capitalism was already explicitly compared to religion by Marx and by Benjamin<sup>11</sup>)? Think of the fact, as Giddens has underlined, that actors actually *do* describe what makes them act in terms like ‘society’ or ‘capitalism’, these entities *are* part of everyday lingo.<sup>12</sup> And perhaps it is no coincidence that in recent STS, ‘imaginaries’ are objects worth of study.<sup>13</sup> The self-contradiction in Latour is: If you argue that we should follow the actors and their own metalanguages – how then to exclude a certain class of abstract entities (‘society’, ‘capitalism’) postulated by the actors?<sup>14</sup> What about actors that do not want to accept flat ontology and

8 Latour. *Reassembling* (see note 6), p. 5: “Even though most social scientists would prefer to call ‘social’ a homogeneous thing, it’s perfectly acceptable to designate by the same word a trail of *associations* between heterogeneous elements.”

9 Latour. *Reassembling* (see note 6), p. 147. See also p. 30.

10 Latour. *Reassembling* (see note 6), p. 234 and 235.

11 See: Walter Benjamin. “Capitalism as Religion [Fragment 74]”. *The Frankfurt School on Religion. The Key Writings by the Major Thinkers*. Ed. Eduardo Mendieta. New York and London: Routledge, 2005. Pp. 259-262.

12 See: Anthony Giddens. *The Consequences of Modernity*. London: Polity Press, 2009. P. 43.

13 See: Sheila Jasanoff/Sang-Hyun Kim (eds.). *Dreamscapes of Modernity. Sociotechnical Imaginaries and The Fabrication of Power*. Chicago, London: The University of Chicago Press, 2015.

14 See: Bruno Latour. *An Inquiry into Modes of Existence. An Anthropology of the Moderns*. Cambridge/MA and London: Harvard University Press 2013. P. 37. He describes a fictitious anthropologist that is stunned by the fact that her ‘informants’

prefer to have a non-flat ontology? You simply cannot postulate a ‘flat ontology’ in advance *and* ‘follow the actors’ at the same time.

Of course one has to be careful to differentiate – and this is a central point that needs a far more detailed analysis – different forms of what ‘abstract’ means: Is the abstractness of ‘society’ (to take Latours example) really the same as the ‘circle-as-such’ (see below)? Presumably not.

There is an alternative way to proceed: We could ask: What functions does the talk of ‘abstract objects’ have in which contexts? Even: What politics are connected to that? Even if we ontologically reject the existence of abstract entities – be it on the grounds of the unavoidable materiality of writing, be it on the grounds of a ‘flat ontology’ – we might concede that in some operations abstract entities might fulfil a certain or even necessary function (and in others not). Is not the invocation of abstract entities (at least sometimes) a logical necessity? E.g. if we want to observe not ‘photography’ as such and argue there is no such thing but only concrete ‘photographic practices’: Does that not already presuppose the notion of photography, or in Husserlian terms, the ‘*eidōs*’ of photography, understood as a set of irreducible properties that make up photography<sup>15</sup>, simply to have criteria to choose *these* specific practices (and not others) as examples, instantiations, of ‘photography’? Seen in this way, the most concrete point of view already presupposes abstraction.<sup>16</sup> And the next question of course would be: How are different abstract entities actualized in different media? How are concrete and abstract related to each other in different medial configurations? Of course this is a very wide field, so it can only be discussed very selectively.

In the following these questions are discussed along a trajectory of three topics. In 2) the relations between media and the instantiation of the abstract is discussed. How are abstract objects constructed by medial operations? In 3) the point of view is reversed. The question is: How are concrete objects constructed by medial operations? In 4) another discussion is touched upon, namely how the relation between the abstract and the concrete is an eminently political question.

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(meaning the actors to be followed) “fall back on incoherent statements that they try to justify by inventing ideal institutions, so many castles in the air.” If the ANT-ethnographer has to follow the ontologies of the actors, why are then their invented ‘ideal institutions’ only ‘castles in the air’, should they not be taken seriously?

- 15 See: Edmund Husserl. *Erfahrung und Urteil. Untersuchungen zur Genealogie der Logik*. Hamburg: Meiner, 1976. Pp. 409-426. Husserl’s ‘*eidōs*’ as the result of the procedure of eidetic variation is an ideal object and in that sense abstract – but it is absolutely necessary for the scientific structure of transcendental phenomenology, otherwise no structure of consciousness could be described, it would decay into a contingent chaos of phenomena. In that sense abstract objects could be seen as conditions of consciousness as such. See also: Richard Tieszen. “Consciousness of Abstract Objects”. *Phenomenology and the Philosophy of Mind*. Eds. David Woodruff Smith/Amie L. Thomasson. Oxford: Clarendon, 2005. Pp. 183-200.
- 16 That is the central idea of the famous first chapter of Georg-Wilhelm Friedrich Hegel. *The Phenomenology of Spirit*. Oxford: Oxford University Press, 1977. Pp. 58-66.



## 2) Media and the Operability of the Abstract



Fig. 1 A 'concrete' circle.

<http://www.jefm.net/images/stories/blog/photo1.jpg>, 08/02/2018.

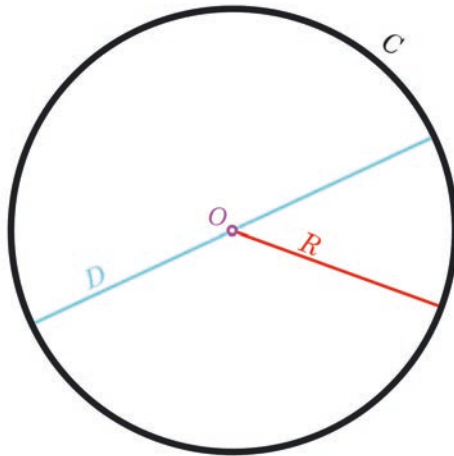


Fig. 2 The circle-as-such, an 'abstract' circle.

<https://en.wikipedia.org/wiki/Circle#/media/File:Circle-withsegments.svg>, 08/02/2018.  
(A circle (black) which is measured by its circumference (C), diameter (D) in cyan, and radius (R) in red; its centre (O) is in magenta).

Even if one insists – and that seems to be something you can hardly doubt – that every abstract entity has to be written down or in a way represented locally, the status of a given entity does not seem to change at least with some changes in the materiality of notation: A circle in chalk on a blackboard is of course far from an ideal circle defined as the set of all points in a plane that are at a given distance from a given point, the centre – but it does not become more or less of a circle when you change the colour of the chalk or write it on wood, etc.<sup>17</sup> Two different medial instantiations of a circle are closer to each other than to the ideally defined circle – what might be construed as an argument for a somewhat independent role of the abstract object. But we could also say: There is no need to postulate an abstract object, these are just two ways to *instantiate*<sup>18</sup> a circle, one as the set of different drawings of circles, one as the mathematical description of an ideal circle: There are two different ways to describe a circle, which are irreducible to one another and the first way is more concrete than the last way.

Interestingly enough, Nelson Goodman argued against the idea that images unavoidably are ‘specific’. “A picture accompanying a definition in a dictionary is often such a representation, not denoting uniquely some one eagle, say, or collectively the class of eagles, but distributively eagles in general.”<sup>19</sup> This is a complicated sentence: Especially the difference between a ‘collective representation, representing a class of objects’ and a ‘distributive representation representing objects-in-general’ is hard to understand. It is also not clear if the denoted ‘general eagle’ is an abstract object or not. Let us suppose it is, insofar a ‘general eagle’ is abstracted from all specific traits of concrete eagles: We could draw the conclusion that a certain arrangement of medial instantiations ‘produces’ a general image that might be understood as the representation or better: presentation of an abstract object (or a ‘more’ abstract object).

Wikipedia-entries e.g. obviously produce abstract objects as one of their functions – in fact that seems to be one task of dictionaries. Consider for example the case of horses. Imagine a dictionary that would contain only concrete cases. Every horse on the earth would have to be registered – at least ideally. Such a Borgesian project would be clearly undesirable. A dictionary may contain articles about concrete entities (e.g. ‘this horse that has won Ascot in 1986’), but also on general and/or abstract entities: ‘The horse-in-general’. Of course one could try to solve this in a nominalist way: ‘Horse-in-general’ is just a label given to a class of phenomena subsumed under that level. But then again: How to decide which phenomena to subsume? Does not that presuppose the general category which should be produced by the subsumption in the first place? Abstract entities seem to be of use in other situations: Consider the following case:

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17 Mathematical Objects like a circle are obviously allographic in Goodmans sense, see: Nelson Goodman. *Languages of Art. An Approach to a Theory of Symbols*. Indianapolis et al.: Bobbs-Merril, 1968. P. 113.

18 Although the notion of instantiation seems already to presuppose the ideal concept of the circle.

19 Goodman. *Languages* (see note 17), p. 21. See also: Neil McDonnell. “Are Pictures Unavoidably Specific?”. *Synthese* 57.1 (1983): pp. 45-102.



### Hygrophorus atramentosus (Secr.) Haas et Haller

Synonym: *Hygrophorus caprinus* ss. Bres.

Hut: 4–8 cm, kugelig bis glockig bis mehr ausgebreitet, manchmal auch niedergedrückt, Rand lange eingerollt, dann flach, dünn, grau, grau-schwarz oder grau mit bläulichem Beiton, Oberfläche schwärzlich faserig.

Lamellen: Weiß, dann grau mit bläulichem Schein, entfernt, dick, ziemlich breit, am Grunde adrig verbunden, am Stiel angewachsen bis herablaufend.

Stiel: Gleichdick, von oben nach unten leicht verdickt, faserig, grau.

Fleisch: Weiß, ohne besonderen Geruch und Geschmack.

Sporen: Länglich elliptisch, glatt, 8–9×4–5 µm. Sporenpulver weiß.

Vorkommen: In Fichtenwäldern auf Kalkboden. Eher selten. Sommer–Herbst.

Wert: Guter Speisepilz.

Name: Von *atramentum* (lat.) = Tinte. Wegen der dunklen Farbe.

Bemerkungen: Der Pilz ist erst vor kurzer Zeit als eigene Art von *Hygrophorus canaryphyllus* abgetrennt worden wegen der mehr ins Grau als ins Braun gehenden Farbe. Er kann mit *Hygrophorus caprinus* ss. Bres. gleichgestellt werden. Die Abbildung trägt wegen technischer Mängel nicht den richtigen Grauton und erinnert an den auf der vorhergehenden Seite beschriebenen Pilz. Die Oberfläche des Hutes ist erkennbar weniger faserig und glänzend.

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Fig. 3 *Hygrophorus atramentosus*, from: Bruno Cetto. *Enzyklopädie der Pilze*. Vol. 2. München: BLV, 1987. P. 73.<sup>20</sup>



### Tricholoma sulphurescens Bres.

Hut: 4–8 cm, fleischig, gewölbt bis ausgebreitet; weiß bis ledergelb, ocker angehaucht.

Lamellen: Dick, sehr gedrängt, mit Zwischenslamellen, am Stiel abgerundet, am Stiel eine deutliche Rinne bildend. Die Lamellenschneide ist leicht unregelmäßig gesägt.

Stiel: 6–9×1–1,5 cm, gleichdick, Basis leicht verdickt, unregelmäßig, weiß, Spitze fast glatt, abwärts fuchsig-punktiert-schuppig.

Fleisch: Weiß, bei Berührung und im Alter schwefelgelblich werdend. Geruch unangenehm, ähnlich dem des Lästigen Ritterlings (*T. inamoenum*) und des Strohhässchen Ritterlings (*T. album*); Geschmack etwas scharf.

Sporen: Hyalin, fast kugelig, 4–6×4–5 µm.

Vorkommen: In Laubwäldern, besonders unter Eichen. Herbst.

Wert: Verdächtig.

Name: Von *sulphurescens* (lat.) = schwefelgelb werdend. Wegen der Farbe.

Bemerkungen: Die abgebildeten Exemplare zeigen nicht die punktierte Ornamentierung am Stiel. Mit Geruch des frisch gepflückten Pilzes, die charakteristischen Lamellen und das glibende Fleisch sind Kriterien die Zweifel bei der Bestimmung. Die erste Bestimmung wurde durch wiederholtes Aufsuchen des Pilzes an derselben Stelle mit deutlichen Merkmalen bestätigt. Der Umgekehrte Ritterling (*T. lascivum* (Fr.) Gill.) und der Strohhässchen Ritterling (*T. album*), ebenfalls weißer Pilz mit unangenehmem Geruch, haben einen glatten Stiel und das Fleisch verfärbt sich nicht gelb.

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Fig. 4 *Tricholoma sulphurescens*, from: Bruno Cetto. *Enzyklopädie der Pilze*. Vol. 2. München: BLV, 1987. P. 265.

<sup>20</sup> In this, as in all following cases, the nomenclature may no longer be valid, but that does not affect the argument presented here.

These are images from a mushroom dictionary, the famous *Cetto*, which is a little out-dated now, but still one of the most comprehensive encyclopaedias for European mushrooms. The book shows, as photographs, on the one hand *these* concrete specimens of mushrooms and, together with the dictionary-context, on the other hand ‘types-of-mushrooms-in-general’: In fact, that is its function. Why should we be interested in *these* concrete mushrooms, which existed years ago and have since rotted away and disappeared? We are interested in the information the image, and the image in combination with the text, gives us about these ‘types-of-mushrooms-in-general’, so that we can learn to identify these particular mushrooms when we find them in the future. The images as general images exemplify<sup>21</sup> the future. But interestingly enough, often the photographs of concrete specimens are not ‘typical’ enough. The photo in Fig. 3 is commented: “The image shows, due to technical shortcomings, not the right shade of grey and so looks like the species shown on the page before”. Photography has technical limitations and shortcomings that distort the appearance of the ‘type’ in the dictionary – in a way, that undermines its difference from another species, which is of course the worst case scenario for the construction of types in a dictionary. The photo in Fig. 4 has a different comment: “The shown specimen doesn’t show the punctuation and ornamentation on their stems. The smell of the freshly gathered mushroom, the characteristic gills and the yellowing flesh dispelled the doubts while classification”. Here the situation is somewhat different: A normally ‘typical’ trait of the species (a certain ornamentation on the stem) is missing, nevertheless the found specimens are classified as *Tricholoma sulphurescens*. In some cases such missing traits lead to the discussion if a completely new species is found or perhaps a variation of a known species – but not in this case. Specimens in nature may exhibit contingent differences from established categories, so that a discussion starts how to classify the found species. This discussion can be found in the *Cetto* in different ways in different cases. These are not isolated occurrences in the *Cetto* (and in other dictionaries using photography). The problem may be that the photo was taken under unfortunate circumstances (because the indexicality of the photograph of course not only connects the concrete object with the image, but also the photographer with the situation in which the image was taken). Or it might be that photography due to its indexical character shows unexpected contingencies of real specimens. Both cases have to be corrected by commentary – that shows why general entities in dictionaries are at least partially abstract, the representations have literally to abstract from contingent, atypical cases.

Therefore one often finds mushroom dictionaries, in which the specimens are *drawn* (see Fig. 5). You can represent them in a ‘typical’ way, one could say ironically, as an image of the Platonic idea of the given species, as the – as it is called in mycology itself – ‘type’.

At this point defenders of media specificity could try to argue that here a fundamental difference between drawing and/or painting and photography

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21 See: Goodman. *Languages* (see note 17), p. 52-57.



Fig. 5 *Hygrophorus hypothejus* and *Hygrophorus lucorum*, from M. Svrček/B. Vančura. *Pilze bestimmen und sammeln*. München: Mosaik 1976, p. 148.

and other indexical media<sup>22</sup> in the strict sense becomes visible: While photography remains tied at least *also* to the concrete *this*; painting is general. But is that not wrong, because there can be paintings of highly specific subjects, e. g. in portraiture?<sup>23</sup> Paintings can never testify for the existence of the depicted, as can photography (at least under controlled conditions)<sup>24</sup>, but it surely can depict concreta: To show concreteness seems to be not the same as to show existence.

22 This differentiation has to be handled with care: Photography has an indexical relationship to the depicted object that painting has not – but in painting you have another indexical level, namely the traces the painter's brush left on the surface. So there are no pure 'indexical' or 'iconical' media but most often complex constellations of different semiotic modes.

23 On the one hand, we could object that even a portrait of a concrete person, like g. Goethe, does not depict Goethe concretely (this Goethe on that specific day) but more often an idealized Goethe, his 'Goethicity'. On the other hand, it might in principle be possible to paint something very concrete – imagine the case when someone takes a photo of a concrete object and then transfers that image painstakingly with oil to a canvas, would we not have to say that the painting shows a concrete object? Thanks to Bernhard Siegert for interesting discussions on that topic.

24 Although there is the interesting case of courtroom drawings – they testify for the existence of persons in the courtroom and therefore functionally substitute

With the notion of the ‘type’ we enter the field of a distinction, namely that between a ‘type’ and its ‘tokens’ made by Charles Sanders Peirce, which bears some relevance here. To put it simply: Every written instance of, as an example, a ‘4’ is a token of the quasi-Platonic type ‘four’ – and we can identify the token ‘4’ by understanding it in a kind of comparison to the type. Nelson Goodman argues:

I prefer [...] to dismiss the type altogether and treat the so-called tokens of a type as replicas of one another. An inscription need not be an exact duplicate of another to be a replica, or true copy, of it; indeed, there is in general no degree of similarity that is necessary or sufficient for replicahood.<sup>25</sup>

Goodman as self-declared nominalist<sup>26</sup> does not like the (at least latent) universal-realist type/token-distinction. He prefers – another new notion in the already messy debate – ‘replication’ as a solution to the problem. (By the way: This shows that the above mentioned question, whether for Goodman ‘distributively general pictures’ are pictures representing abstract objects, at least if these are understood in a Platonist way, would have to be answered with a clear ‘no.’) But what is the replica-relation that binds different instantiations of a character together, if not constituted by a relation to a type? Obviously for Goodman it is not a relation of form or similarity<sup>27</sup>, but purely contextual knowledge and convention – and in this sense no type is needed. The different images of mushrooms are not to be seen as tokens instantiating a type but as replicas of each other, conventionally linked.

But this still does not quite explain the function such images can have for concrete operations of collecting mushrooms. It would be confusing to describe the real specimens in the forest as replicas of the drawing of the mushroom in a mushroom dictionary. Would it not be helpful to say, that in this operational sequence a ‘type’ is created, the ‘ideal mushroom’, which we use for our collecting practices? The situation becomes even more complex when considering fictional entities, but I cannot delve deeper into the discussion of fictional entities here.<sup>28</sup>

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photography. See for example Charlotte Barlow. “Sketching Women in Court: The Visual Construction of Co-accused Women in Court Drawings”. *Feminist Legal Studies* 24 (2016): pp. 169-192.

25 Goodman. *Languages* (see note 17), p. 131.

26 See: Goodman. *Languages* (see note 17), p. xiii.

27 See: Goodman. *Languages* (see note 17), p. 138.

28 For an overview relating to questions of media theory, see: Jens Schröter. “Überlegungen zu Medientheorie und Fiktionalität”. *Fiktion im Vergleich der Künste und Medien*. Hg. Anne Enderwitz/Irina O. Rajewsky. Berlin u. a.: De Gruyter, 2016. Pp. 97-124.

### 3) Media and the Production of the Concrete

Until now the question was, whether it really makes sense to discard the talk of ‘abstract entities’ as completely use- and senseless or whether there may be cases in which they get construed for a specific function at a certain time. Now, one could reverse the question and ask: Are we really better off when focusing only on the ‘concrete’ – whatever exactly that might be. Latour’s position is more complex than that. He does not privilege the concrete in a simple way:

[T]he enquirer will be tempted to privilege some figurations as being ‘more concrete’ and others as ‘more abstract’, thus falling back into the legislative and policing role of the sociologists of the social and abandoning the firm ground of relativism.<sup>29</sup>

This quote and many more firstly shows that the question of concrete vs. abstract plays a central role in ANT<sup>30</sup>; and secondly that we would misunderstand ANT, if we were to argue that it simply prefers concrete to abstract.<sup>31</sup> Thirdly, as I argued above, due to its principle of following the actors, it cannot exclude abstract entities from its ‘flat ontology’, at least if some actors think that abstract entities exist or act (perhaps when collecting mushrooms) as if abstract entities existed.

The so called ‘concrete’ seems not be so fundamental after all, at least for Latour, and of course there is a long tradition of the critique of privileging the concrete *this*, the seemingly *given* in positivist approaches. Latour, by the way, declares himself to be a positivist.<sup>32</sup> The whole idea of a complete and neutral description so present in ANT<sup>33</sup> is non-sensical: A ‘pure description’ without any premises is impossible<sup>34</sup>; even if it were impossible, it is never completed, because networks are infinite; and even if it were possible and it could be completed in a

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29 Latour. *Reassembling* (see note 6), p. 58.

30 This text is a first step towards a media-archaeology of concrete and abstract entities.

31 A colleague of mine once remarked that in ANT (and perhaps STS) the central argument is about privileging the concrete (over the abstract) – at least that does not seem to be the opinion of Latour. See also: Latour. *Reassembling* (see note 6), p. 54: “As far as the question of figuration is concerned, there is no reason to say that the first is a ‘statistical abstraction’ while the other would be a ‘concrete actor’. Individual agencies, too, need abstract figurations. When people complain about ‘hypostasizing’ society, they should not forget that my mother-in-law is also a hypostasis—and so are of course individuals and calculative agents as much as the infamous Invisible Hand.”

32 See: Latour. *Reassembling* (see note 6), p. 156. Hegel’s critique of the *this* was already mentioned above.

33 See: Latour. *Reassembling* (see note 6), p. 137.

34 D. Wade Hands. *Reflection without Rules. Economic Methodology and Contemporary Science Theory*. Cambridge: Cambridge University Press, 2001. Pp. 208-210: underlines the role of economic metaphors in ANT, meaning that there is always already a specific framework in place.

meaningful way, the question still remains what exactly the use is in simply doubling and mirroring an existing practice. Purely doubling the practices of actors makes social science superfluous – Callon, by the way, admits that: After having written ‘that social scientists do not have special access to a truth that would be inaccessible to actors themselves’ some lines later he states:

The role of the anthropology of (the) econom(y)ics is, I believe, to make these anthropological struggles explainable in their theoretical and practical dimensions, by *identifying and revealing the forces* that, in a more or less articulated way, challenge the dominant models and their grip on real markets.<sup>35</sup>

Here, the social scientist or anthropologist ‘reveals’ (and ‘identifies’) something, meaning that it obviously has been hidden and misunderstood before, hidden to the actors involved and misunderstood by them. Obviously, scientists like Callon need access ‘to a truth that would be inaccessible to actors themselves’ – otherwise they simply would be no scientists and could not ‘explain’ anything, a notion Callon uses in the quote. This critique shows that a pure description of the given *this* is simply impossible.

The least we can say is: To argue that the abstract can be ‘replaced’ by the concrete presupposes that the concrete is given as *purely concrete*, that there is nothing abstract in it or nothing abstract necessary to identify it (which reminds us of the mushroom example – perhaps we need at least some abstracted notion or pattern to identify something as a concrete occurrence of this type of entity). Perhaps the concrete, individual element is not the primarily given but always already contaminated by the abstract and we need operations that – so to say – show it, point to it, cut it out from a background, frame and isolate it to produce it *as a* concrete given. This is very sketchy but at least it points to the possibility that there might be not only a construction of the abstract but also of the concrete. The concrete is not given but appears, perhaps temporarily, as result of some operations. Coming back to collecting mushrooms: Imagine I find some mushrooms in the woods. I compare them with the ‘type’ in the book. By this operation I construct the drawing as the type (insofar I accept it as such) – and in parallel, I produce the mushrooms before me as concrete specimens – which might in some details differ from my type. Their ontology as abstract and concrete is produced in that operation. And of course it could be otherwise in other operations. We could point to the image in the dictionary and show it as a concrete example of general-or-abstract-type-images-of-mushrooms-in-mushroom-dictionaries. And we could point to the mushrooms in the woods and show them as mushrooms-in-general.

Perhaps we have to lead us to accept that there are always changing configurations of abstract/concrete and never ever concrete or abstract entities given as such.

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35 Michel Callon. “Why Virtualism Paves the Way to Political Impotence. Callon Replies to Miller”. *Economic Sociology. European Electronic Newsletter* 6.2 (2005): Pp. 3-20, here p. 12, emphasis added. <http://econsoc.mpifg.de/archive/esfeb05.pdf>, 30.01.18.



#### 4) Media and the power of the concrete/abstract-dichotomy

There is an interesting passage in the first edition of *Capital* by Marx:

Es ist als ob neben und außer Löwen, Tigern, Hasen und allen andern wirklichen Thieren, die gruppirt die verschiedenen Geschlechter, Arten, Unterarten, Familien u. s. w. des Thierreichs bilden auch noch *das Thier* existirte, die individuelle Incarnation des ganzen Thierreichs. Ein solches Einzelne, das in sich selbst alle wirklich vorhandenen Arten derselben Sache einbegreift, ist ein *Allgemeines*, wie *Thier, Gott* u. s. w.<sup>36</sup>

In this quote Marx speaks about money. Money as the general commodity, the purely abstract instantiation of value as such is for Marx – at least in this quote – as crazy as if besides all concrete animals the abstract ‘animal-as-such’ would exist in reality. Sohn-Rethel invented the notion of ‘Realabstraktion’ for such phenomena.<sup>37</sup> Money is a real existing abstract object. At least for some strands of marxian critique of political economy the dichotomy of concrete and abstract is absolutely central for the description of capitalism: Marx speaks of abstract labour as opposed to concrete labour; abstract wealth as opposed to concrete wealth – and Moishe Postone added the regime of abstract time reigning over us, as everyone of us knows when the alarm clock rings in the morning. Not surprisingly, Alain Badiou tried to connect this role of abstract wealth in the Marxian traditions with the question for the ontology of mathematical objects, especially numbers, in his study *Number and Numbers*.<sup>38</sup> But be that as it may: It is very interesting that Marx at several points in his work describes the production of the abstract as a quite performative process:

Every moment, in calculating, accounting etc. [...] we transform commodities into value symbols, we fix them as mere exchange values, makings abstraction from the matter they are composed of and all natural qualities. On paper, in the head, this metamorphosis proceeds by means of mere abstraction; but in the real exchange process a real *mediation* is required, a means to accomplish this abstraction.<sup>39</sup>

And this *means*, this *mediation*, this *medium* is money. It is a medium of abstraction that in practices of calculating and accounting produces abstract value.

36 Karl Marx. *Das Kapital. Kritik der Politischen Ökonomie. Erster Band. (MEGA II.5)*. Berlin: Dietz, 1983 [1867, first edition]. P. 37, italics by Marx. Translation into English by J. S: “It is as if besides und beyond Lions, Tigers, Hares and all other real animals, which, grouped into different sexes, species, subspecies, families, ect., are the kingdom of the animals, additionally *the animal as such* existed, the individual incarnation of the whole animal kingdom. Such a single entity that encompasses in itself all really existing specimens of the same thing, is a general entity, like animal, god, etc.”

37 See: Alfred Sohn-Rethel. *Intellectual and Manual Labor. A Critique of Epistemology*. Atlantic Highlands/NJ: Humanities Press, 1978.

38 See: Alain Badiou. *Number and Numbers*. Cambridge: Polity Press, 2008.

39 Karl Marx. *Grundrisse*. London: Penguin Press, 1993. P. 142, italics by Marx.

The abstract is not to be explained away or replaced: Its ongoing production, its coming in and flipping out of existence, its procedural ontology has to be described. And as the example of Marx shows: This question is highly political. The ontology of concrete and abstract is central for power and crisis in capitalism. Especially given the fact – but that is another topic I cannot go into here – that contemporary capitalism is based on digital infrastructures. How far digital technologies as symbol manipulating technologies, mathematical technologies are not at least in part *abstract technologies* remains to be discussed.<sup>40</sup> At least it seems that there is *something abstract* in digital capitalism.

Finally, there is a case in which the medial operability of the abstract, discussed in 2) and the question of the power of the concrete/abstract dichotomy meet. This case is by no means something exotic and special: *Advertising*. Advertising as “capitalist realism”<sup>41</sup> has on the one hand a clear function in the ongoing transformation of the concrete use-value into abstract exchange-value and back. On the other hand its representations often work with general and/or abstract imagery – an advertisement showing a blonde woman drinking euphorically a fruit juice doesn’t say that only blond women should drink this juice. The blonde woman is an image of the ‘happy-consumer-as-such’, a general image (this situation gets complicated if famous film stars act in advertising: they on the one hand represent the ‘happy-consumer-as-such’, but also themselves as desirable individuals). Advertising is the very daily place where general/abstract images operate in the powerful concrete/abstract-regime of capitalism.

## Conclusion

Abstract entities seem to be a pressing problem in the ‘flat ontology’ of ANT. My conclusion is that it might be better not to discard and replace abstract entities by concrete entities, but instead look at the medial operations in which abstract entities get temporarily constructed for different functions. In the same movement also concrete entities are produced, both can easily change their places.

My argument was quite sketchy and preliminary, only a hint for research to come and several problems appeared:

1. What exactly do we mean when speaking about abstract entities? How to differentiate concrete/abstract from singular/general or particular/universal? This has to be clarified in more detail. Is it really the same kind of abstraction when speaking about ‘society’, ‘the type of *Hygrophorus atramentosus*’, ‘money in exchange’ or ‘the circle as such’? Is concrete/abstract really a dichotomy or more a graded continuum?

2. Historical perspectives could be helpful: Is there a history of abstract entities? Obviously at other times other conceptions prevailed – so there might be a

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40 See: Eric Roberts. *Programming Abstractions in C. A Second Course in Computer Science*. Reading/MA et al.: Addison-Wesley, 1997.

41 Michael Schudson. *Advertising, The Uneasy Persuasion: It’s Dubious Impact on American Society*. New York: Basic Books, 1984. Pp. 209-233.

media-archaeology of the abstract. Or is there a media-archaeology of concrete/abstract-constellations?

3. Empirical studies in the sense of ethnography may focus on the question how abstract (or general etc.) entities are produced and used with different media in given situations – that could be called, with a notion I borrow from my PhD-Student Julian Rohrhuber, ‘abstract situations’. Abstract entities could be seen as non-human actors instead of banning them – inconsistently – from ‘flat ontology’.

4. Last but not least: Following Marx and Badiou a political theory of concrete vs. abstract could be formulated, that analyses the on-going production of the difference concrete vs. abstract as a highly political process, mostly mediated by money.