
Editorial

THIS ISSUE, following an international conference held at the IKKM in September 2017, is devoted to what may very well be the broadest media-related topic possible, even if it is accessible only through exemplary and experimental approaches: Under the title of the »Mediocene«, it presents contributions which discuss the operations and functions that intertwine media and Planet Earth. The specific relation of media and Planet Earth likely found its most striking and iconic formula in the images of the earth from outer space in 1968/69, showing the earth—according to contemporaneous descriptions—in its brilliance and splendor as the »Blue Marble«, but also in its fragility and desperate loneliness against the black backdrop of the cosmic void. Not only the creation but also the incredible distribution of this image across the globe was already at the time clearly recognized as a media effect. In light of space flight and television technology, which had expanded the reach of observation, communication, and measurement beyond both the surface of the Earth and its atmosphere, it also became clearly evident that the Planet had been a product of the early telescope by the use of which Galileo found the visual proof for the Copernican world model. Nevertheless, the »Blue Marble« image of the planet conceives of Earth not only as a celestial body, but also as a global, ecological, and economic system. Satellite and spacecraft technology and imaging continue to move beyond Earth's orbit even as they enable precise, small-scale procedures of navigation and observation on the surface of the planet itself. These instruments of satellite navigation affect practices like agriculture, urban planning, and political decision-making. Most recently, three-dimensional images featuring the planet's surface (generated from space by Synthetic Aperture Radar) or pictures from space probes have been circulating on the Web, altering politico-geographical practices and popular and scientific knowledge of the cosmos. Today, media not only participate in the shaping of the planet, but also take place on a planetary scale. Communication systems have been installed that operate all over the globe.

Like the somewhat complementary idea of singularity, the designation of Earth as a celestial body seems to have been transferred to life on the planet's surface, mainly to describe biological and cultural diversity, thus replacing former ideas of universality. At the same time, however, the »Blue Marble« has given way to the »Red Marble«, the no less iconic computer-generated image of the overheated planet as subject to massive climate change, due not only to global carbon dioxide

emissions from power plants and devices such as cars, but also to energy-intensive practices like cloud-computing. Without technological interventions into the planet as an ecosphere, and without the operation of media, there simply would be no climate change, and there would be no Planet Earth. The enmeshment of media and the Planet includes technical media of the modern sphere such as the telegraph, television and the internet, as well as magical media which embody visions and conceptions of world and worldmaking, extending also to media that function in nature itself, such as physical media or DNA.

In a certain respect, this issue thus continues the debates on »Media of Nature« taken up in *Zeitschrift für Medien- und Kulturforschung* 7/2 (2016). It highlights the relationship between media and the shaping and modeling of Planet Earth as well as the diverse ways of living on Earth as an all-encompassing habitat. Moreover, as the Galileo example already indicates, according to the leading hypothesis, the interrelation of media and the Planet is by no means restricted to what we now call the Global age: Planet Earth has always-already been mediatised, even if this has perhaps only recently become observable, due to media conditions such as space flight or to more current media developments, mainly marked by the pervasiveness, omnipresence, and ubiquity of media on a worldwide scale. It is media that from the beginning made Planet Earth imaginable, perceptible, measurable, calculable, visible, navigable, conceivable, and (at least seemingly) manageable. And media continue to do so, from the sundial to the telescope, from cartography to the telegraph and satellite communication. Whether in the geosciences, popular culture, or artistic imagination, the knowledge and perception of the planet is and has always been processed by media. This is by no means restricted to highly engineered Western societies based on Western media technology but, in a comparative perspective, it is as true and as relevant for diverse and local forms of knowledge based on mythic, fetishist and ritualistic practices.

Historically, this process may have begun with the introduction of road systems, transoceanic seafaring and global mail communication; continued with the discovery and technological exploitation of electromagnetism and the attendant possibility of instant communication, which culminated in the construction of worldwide cable networks serving telegraphy, telephony, broadcast, and computer communication; and led to the present-day proliferation of satellites that populate Planet Earth's atmosphere. These developments were (and are) based on the widespread consumption of resources, workforce, capital, and on the production of waste that attends the creation and maintenance of these vast infrastructures. It is not only today that global communication networks of the most different kinds exert influence on the relations among various cultures and collectives on the planet, and have massive effects on global and regional economies. Equally important, in the realm of politics, are political processes of negotiating and establish-

ing global communication standards. Last but not least, the link between globally operating media and the conception and perception of the globe itself is apparent in the network of media needed for weather forecasts and climate models, which leaves its imprints on the very procedures and models it creates.

At the same time, it is media which enable the articulation and enmeshment of regional and particular practices and habits and thus transform the planet from a unified (stellar or geographic) object into a horizon of particularities and singularities. Media are thus deeply implicated in the conception and working of Planet Earth as a diversified unity or as a single complex system, like e.g. the »Earth System« hypothesis suggests. Similarly, practices relating to worldwide communication and a global economy, climate research, cross-cultural exchange, ecology, and science fiction rest upon the idea of a unitary planet—which, in turn, is a media product. Media inscribe themselves into global change, and, conversely, global change subjects media to its conditions. Yet media do more than simply pervade our perception, communication, and attempted control of the planetary. Depending on the region, they may also materially contribute to habitat modification, whether through energy consumption, the creation of a need for rare earth minerals and other raw materials, or the production of waste.

Media should not, however, be mistaken for planetary super-subjects or docile instruments fully controllable by human actors. As agencies they forge relations between entanglement and dissociation, media intertwine the technological with the symbolic, mediating between nature and culture, between the individual and society, on a global scale. In doing so, media have become constitutive of the coordination of distributed agencies, which have an impact on each other, on their respective environments, and above all on the planet itself, only through their cooperation and interaction. It is through these functionalities of binding and coupling (and dissolving) that media impose and imprint their conditions on the world in an abiding way.

The idea of the »Mediocene« advocated in the contributions of this ZMK issue serves as a complement and a corrective to the model of the »Anthropocene« that has been so remarkably developed and successful in recent years. The idea of the »Anthropocene« starts from geological stratigraphy and taxonomy and assumes that the impact of specifically human interventions in the global habitat has grown in scale. This then leads to a permanent alteration of the global habitat and, decisively, to a transformation of the geological shape of the planet to such a degree that it serves as justification for proclaiming a new geological epoch (succeeding the »Holocene«). Man-made phenomena like CO₂ emissions (and attendant climate change), accumulating sedimentation, and the rapid extinction or large-scale migration of species, for example, have begun to leave permanent, geologically detectable traces and effects on the planet. As a complement and a corrective to

these otherwise convincing observations and statements, the basic underlying assumption of the »Mediocene« concept is that these undeniable phenomena and, on a truly planetary scale, existential problems cannot be satisfyingly conceived of as long as they are ascribed—either exclusively or directly—to human agency, or to some other superactor like fossil fuels (»Oleocene«), plantational economies (»Plantatiocene«) or global capital (»Capitalocene«). The prevalent exclusive accounting of human agency (or any other equivalent potential super-agency, be it oil, money or the agrobusiness) has already been disputed in the debate about the Anthropocene. This one-sided viewpoint unwillingly continues and reinforces—willingly or not—the notion of human (or other) mastery, domination, and Western hegemony. It still seems to adhere to the idea of the need and the (more or less human) ability to control planetary processes, from nature to history, society, culture, and technology. Yet it is precisely the practices and politics of (mostly Western) human rule over all other forms of life that have produced the aforementioned problematic changes. These changes in themselves at the same time challenge the assumption of a primacy that is exclusively human.

Of course, as this comparison to the »Anthropocene« shows, the concept of the »Mediocene« has far-reaching implications which transcend the limitations of a single journal issue and thus cannot be sufficiently explored here. Nonetheless, these implications can be exposed: For instance, it is clear, among other demands, that the critical transition from the assumption of the »Anthropocene« to that of the »Mediocene« requires the development of a specific media anthropology. It invites a de-centered or symmetrical anthropological approach that will investigate the underlying mediations among the human, the technological, and the natural, in which agency is rooted. Such an anthropology will assume that the relation between media and humans is always-already given and precedes any of the operative separations between them.

In addition, and in a complementary way, the hypothesis of the »Mediocene« also calls for an appropriate understanding of media. Media can be identified as the blind spot in discussions of the »Anthropocene« where they figure at best as the compliant tools and subservient instruments of the supposed control and causation in human hands, extending the human contribution to planetary change. As we know, however, media can be understood precisely *not* as obedient tools controlled by human subjects or collectives. Rather, media have to be cast as sets of connecting elements that organize operative and cooperative practices, networking and co-evolution among a variety of agents, both human and non-human, including artifacts as well as natural objects and processes (if indeed this distinction remains at all possible). It is only through their mutual involvement in what we call media that these agents acquire some distributed agency, they even come into being only through their relationships of correlation and interconnec-

tion. Specifically, the mediality of the »Mediocene« forms the conceptual link between nature and culture, allowing for the investigation of phenomena like the relation of various forms of human existence to the functions of media processes, the anthropological intertwining of the human and the non-human, and the ontology of material media operating within physical and biological systems. This applies on a scale from the Planet as a whole (as a conceivable and perceptible object no less than as a horizon of different perspectives, as in perspectivism) to the most local and particular spheres. The concept of the »Mediocene« thus also enables an analysis of diverging media cultures in which different forms of existence may relate to nature, to human practices of different kinds and cultures, and to the most diverse artifacts in a multitude of ways.

Other consequences also have to be taken into consideration: As a historical and epistemic model, the »Mediocene« has two components. On the one hand, it marks out a precise era in historical time: The age of media in the sense of an irreversible, rapidly developing, and epoch-making spread of media across the planet, with implications even on the scale of deep time. As we have seen above, the »Mediocene«, like the »Anthropocene«, can be historically dated; either to the early nineteenth century with the rapid growth of new media technologies and practices in the industrialized world, from the steam press to photography to telegraphy, and others; or to the heroic era of space flight or to some other period. These apparatuses, which enabled or enforced instant distribution and automatic reproduction of information, facilitated and accelerated worldwide communication. As these media facilities spread across the globe, they also set the scene for local and regional forms of appropriation and idiosyncratic media practices. For instance, in the twentieth century, cinema and electronic mass media propelled the mediatization of the planet as well as the emergence and articulation of national and cultural specificity. Later, the expansion of computer technologies contributed to the (limited) calculability of the planet, turning it into the »earth system«. In this context, it is especially relevant to consider the ongoing process of digitization as a historical rupture in the evolution of the »Mediocene« itself.

On the other hand, however, it is impossible to conceive of history or evolution as frames in which the »Mediocene« can be located—or dated, since it is a framing of time—without media. All history and all evolution is constructed by media, since the past has to be mediated in order to be taken notice of and articulated, through myths, legends, and tales, through popular culture and vernacular knowledge, or through scholarly research that investigates historical documents, monuments, traces, and testimonies. In this sense, not only does the »Mediocene« inhabit (deep) time, but the inverse is also true: historical and deep times are themselves products of media operations and hence it is they that inhabit the »Mediocene«.

This leads to a further problem linked to time in the »Mediocene«: As mentioned previously, it turns out that, although the »Mediocene« is a precise and dateable period in history and in deep time, the planet has nevertheless been intertwined with media and mediatic operations from its very beginnings, long before the emergence of an »Age of Media« in the modernist sense. This seeming contradiction can be resolved nonetheless: For us (mostly westernized human researchers), the mediatic nature of the Planet has only been possible to grasp from a certain point in time which we now qualify as the beginning of the »Mediocene«; but once taken into consideration, the »Mediocene« must have necessarily also been there from the outset. Taken as an epistemic concept, the »Mediocene« is also a heuristic model applicable to situations beyond its particular historical frame—such as, for instance, prehistory or deep time. In very much the same way, it is equally true to say that the planet has been understood as a planet only since the Copernican Revolution, and that, nevertheless, it has always also been a planet since the time of its inception. In addition—to return once more to a truly planetary, comparative scale again—we must insist that non-western conceptions of the world and of the planet may have developed their own (implicit) practices and notions of the mediatic which have possibly always been linked to their understanding of the Planet and from which we could learn more about the »Mediocene«. Thorough study of non-Western and non-hegemonic epistemologies and ontologies, which independently conceive of this link between nature and culture, are hence especially helpful in the attempt to access the »Mediocene«.

Last but not least, the proposed concept of the »Mediocene« brings certain challenging aspects of political ecology to the fore. In this field, the shift towards a focus on media and the integration of concepts of the mediatic help clarify the complex interactions among natural, political, technological, and cultural forces, a nexus exemplified in events like Hurricane Katrina in 2005. In that setting, the mutual entanglement of various kinds of media, from racially conditioned architecture and transport systems to weather forecasts, produced a disaster that overwhelmed humanitarian and climatic registers. Born of the transatlantic slave trade, the seaport of New Orleans had modified the Mississippi River in a way that became a facilitating, if not causal, factor in the devastating flood. Furthermore, New Orleans is the locus of a hybrid post-slavery society, a pre-condition for the degree of damage and loss of life the city then suffered. Another example comes from the practice of deep sea mining and seabed mining. This cases makes it abundantly clear how geopolitics depend on media, a relationship which expresses itself in areas like cartography and the media of global law (like the International Seabed Authority or ISA). The exploration phase of seabed mining projects are heavily media based, involving operations like locating, sea-bottom scanning, and sampling, using technologies such as echo-sounders, side scan sonars, deep-

towed photography, remotely operated vehicles, data collection, etc. This deep involvement with media technology has a strong geopolitical impact as nations attempt to extend the parts of the seabed over which a maritime state exercises the sovereign right to explore and exploit natural resources.

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The Editors