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Human-Nature Interactions

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Preface

The volume 'Beyond Subsistence – Human-Nature Interactions' is explicitly dedicated to a central element of the theoretical concept of ResourceCultures: the question of cultural evaluations in the context of resource handling. In this case, those resources are of existential significance for the users. In fact, this does not contradict the concept of resources as being culturally constructed, which forms a key element in the theoretical concept of ResourceCultures, as has been repeatedly emphasised in the context of several publications of SFB 1070 (see, e.g. Hardenberg et al. 2017).¹

With the workshop that forms the basis for this volume, the editors have dedicated themselves to exploring the fine line of distinction between subsistence as a livelihood for physical survival on the one hand, and as the basis of a way of life considered adequate on the other. The latter understanding includes elements of a cultural sphere that also contributes to ideal and social well-being, which in turn is considered fundamental to human existence in many societies. In this context, the examples presented in the various contributions highlight the multiple facets of subsistence that have emerged as a result of cultural conditioning, as well as the need to analyse each case in its own natural and socio-cultural context. The considerations made here about things that are considered fundamental for the functioning of societies in different cultural contexts and the handling of them ultimately lead to a reflection

on interactions between humans and nature. This opens up perspectives on the relationship between both, which is different in various cultural contexts from the modern Western world and also conceives nature as an actor in a variety of ways. The elaboration of human subsistence thus often takes on the character of an interaction with nature that goes beyond the mere use of organic substances or exploitation of raw materials. In the different ways of dealing with the things that are conceived as resources for subsistence, the cultural character of resources and their forms of use is revealed particularly clearly.

This volume illustrates very well the applicability of the concept of ResourceCultures. Especially the activities of securing basic human survival, which are primarily categorised in modern Western thinking as purely material-oriented and nature-exploiting, can be identified through the consideration of their respective socio-cultural embedding as much more complex activities, which are subject to strong cultural conditioning. The editors and contributors to this volume are therefore to be greatly thanked for the prudent and careful way in which they ensure this important broadening of our perspective on a fundamental aspect of our human existence.

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¹ Hardenberg et al. 2017: R. Hardenberg/M. Bartelheim/J. Staecker, The 'Resource Turn'. A Sociocultural Perspective on Resources. In: A. K. Scholz/M. Barthelheim/R. Hardenberg/J. Staecker (eds.), ResourceCultures. Sociocultural Dynamics and the Use of Resources – Theories, Methods, Perspectives. RessourcenKulturen 5 (Tübingen 2017) 13–24.

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Beyond Subsistence: Human-Nature Interactions

An Introduction

Keywords: resources, social networks, agency, post-anthropocentrism, human-nature relationship

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Introduction

This volume is the conference proceeding of the international workshop ‘Beyond Subsistence: Human-Nature Interactions’ which took place at the University of Tübingen in October 2019 and was conceived by the Working Group ‘Animals, Plants and Substances’ within the collaborative

research centre SFB 1070 RESOURCECULTURES. The centre has been committed to interdisciplinary research that covers large geographical areas and chronological ranges from the prehistoric Ice Age to the present, combining archaeological and ethnographic perspectives. While the spatial and chronological contexts remain broad and all-encompassing, all projects at SFB 1070 are centred around the topic of resources and the socio-cultural dynamics surrounding their use (Hardenberg et al. 2017; Teuber/Schweizer 2020). These subjects have crucially provided the theoretical basis for the workshop, drawing on some of the pre-existing methodological and conceptual differences to encourage interdisciplinary debates. This introduction will explore some of the theoretical concepts and discuss the objectives and motivations for organising the workshop. The contributions included in this volume reflect the fruitful exchanges that occurred during stimulating and thoughtful discussions.

1 The Theoretical Framework of SFB 1070 RESOURCECULTURES

The aims for bringing the concept ‘Resources’ to the forefront are multi-fold and have been extensively explored in several publications (see contributions in the SFB’s book series ‘Ressourcen-Kulturen’, for a summary see Hardenberg et al. 2017). One main objective of SFB 1070 is to redefine this concept in a way that can be applied to cross-cultural studies at large. Yet, the notion of resources has been largely investigated through

¹ This article is the result of a joint effort, the three authors contributed to all the sections of the text. The question of the theoretical framework of SFB 1070 was mostly addressed by M. Díaz Zorita-Bonilla and K. Kitagawa. The topic ‘Human-Nature Interaction’ and ‘Beyond Subsistence’ was mostly developed by K. Kitagawa and V. Tumolo, while the introduction to the contributions of ‘Beyond Subsistence’ was mostly addressed by V. Tumolo and M. Díaz Zorita-Bonilla.

its economic aspects, and the researchers in this field have a historically significant role in shaping the discourse around such a topic (see Teuber/Schweizer 2020 for review).

Some disciplines face a greater challenge in giving equal weight to economic and social significance of resources, a challenge that is particularly relevant to archaeology (Allentuck 2014). Therefore, reframing the concept of resources beyond the traditional economic perspective is an intellectual endeavour that potentially enables the social sciences to explore the broader social and cultural contexts (see contributions in Scholz et al. 2017; Teuber et al. 2020). Resources are defined as tangible and intangible entities that actors interact with, and that shape social relations, communities and identities. They can contribute to the heuristic models that could be used 'for the reconstruction of socio-cultural dynamics and practices of different cultures in space and time' (Teuber/Schweizer 2020, 11).

With this analytical perspective on resources, both the economic and social values are considered of equal importance for the current discourse, enabling us to explore relationships of resources – including objects, living beings and immaterial entities – from a holistic viewpoint. This view is not uncommon in anthropology, as economic and cultural aspects are interwoven in the realities of the present world. Consequently, the anthropological gaze and theories within and beyond SFB 1070 are employed to complement studies that, at times, treated economic, social and cultural aspects as separate entities or heavily emphasised economic principles to be the determining factor that influences human decisions, actions and behaviour.

Moreover, multiple resources can co-exist and interact with one another but they also need to be maintained (Bird/O'Connell 2006). This interconnectedness of resources or 'interdependencies of resource uses' (Teuber/Schweizer 2020) is considered a ResourceComplex. Summarising Hardenberg et al. (2017), Sieler rightly argues that the analytical perspective considers resources not as 'isolated objects but as always part of larger assemblages which are combinations of things, persons, knowledge and practices' (Sieler, this volume).

2 Human-Nature Interaction and 'Beyond Subsistence'

The workshop focused on human-nature interactions, in the relationships between humans, plants, animals and substances. This theme is relevant for both anthropological and archaeological pursuits and, within the latter, for bioarchaeology – that is the study of human, animal and plant remains from archaeological contexts (e.g. Buikstra/Beck 2006).

The human-nature interaction cannot be simply reduced to the use of natural resources by human actors to support their biological existence, but it is a 'highly condensed social fact' (Appadurai 1981, 494). In line with this, the title of the workshop and this volume has been chosen to revisit the concept of human-nature interaction, moving from the sole purpose of subsistence. As a process in which humans meet their basic needs and the environment provides resources to humans, subsistence connotes a specific kind of relationship between the environment and humans, tied to the notion of 'survival'.

The concept 'subsistence' associated with Polanyi's substantivist approach regards non-capitalistic economic realities as systems rooted in provisioning, reciprocity and redistribution (Polanyi 1944). In this approach, cultural norms and social relations play a crucial role in humans' subsistence practices in addition to purely economic decisions. Furthermore, activities tied to people's way of subsisting are embedded in multiple relational spheres besides economy. Polanyi attributed these lines of thinking to non-Western, pre-capitalistic societies, allowing anthropologists to explore economy in different cultural and societal contexts.

The notion of subsistence economy is also explored in Marxists' works, which discuss the diachronic developments of the capitalist expansion and the predecessors of the Western economic system that came to the forefront through the Enlightenment and the Industrial Evolution. Other works follow the notion of subsistence in different 'spheres of exchanges' such as conversions and conveyance (i.e. Bohannon 1959), interrogating how Western industrial systems influence, alter or merge with local economies. According to these

contributions, the subsistence practices can be interlinked with other economic spheres of exchange such as prestige and, more importantly, they are often juxtaposed against developed Western capitalistic systems, imbuing the term with a specific notion of subsistence or subsistence economy.

In archaeology, subsistence could be understood as a key economic factor (Kelly 1992) associated with human needs (Menger 2007) and influencing diverse aspects of past human lifeways. The term in archaeological literature is at times used synonymously with the notion of survival (Binford 1978) and has been void of any theoretical consideration, in contrast to anthropological work. Furthermore, the concept of subsistence is closely linked to that of resources, which can be considered as ‘natural products, means of production, signs of wealth or forms of subsistence’ (Hardenberg et al. 2017). Lastly, while subsistence is at the core of most societies, in the archaeological discourse it is often not considered as a cultural practice.

Analysed with different theoretical approaches, subsistence as a concept becomes a broader theoretical lens in itself. Following Gibson’s seminal work, the term affordance ‘implies the complementarity of the animal and the environment’ (Gibson 1979, 128), which can be extrapolated to include humans, and importantly, the term also cuts across ‘the dichotomy of subjective-objective’, allowing us to broaden our analytical approach to the notion of subsistence. As Hardenberg et al. note: ‘There is no contradiction between the subsistence-related functions of resources and their cultural construction, since frequently the resources relevant for subsistence and the practices related to them, are the ones to which cultural meaning is particularly assigned’ (Hardenberg et al. 2017, 18). In addition, subsistence does not lie diametrically opposite of the cultural and social realms and can be understood to encompass and fulfil the multiple needs and interests of the actors involved in the subsistence practices. Thus, the interaction of culture and nature could also be defined by the phrase: ‘culture is the human nature’ (Sahlins 2008, 104). With that, it is possible to critically assess: what can truly be outside of subsistence? What do non-subsistence activities consist of?

Human-nature interactions have been investigated through various approaches influenced by diverse theoretical schools. Environmental determinism has heavily influenced interpretations of the relationship between nature and humans especially in the archaeological discourse, which seeks to reconstruct specific dimensions of the past (Livingstone 2011). Approaches embedded in this theory assume that there is a one-way relationship in which nature ‘affords’ resources to humans and impacts human lifeways. In recognising how humans are reactive to natural conditions, environmental determinism fails to consider the influences humans have on nature, and cultures are deemed as an evolutionary solution for dealing with their adversarial surroundings (White 1943). In investigating the extinction of different human populations (Black et al. 2015; Prüfer et al. 2021; see Timmermann 2020 for counterarguments) or the demise of civilisations in the Old and the New World (Yoffee/Cowgill 1991), multiple models have been proposed. Nature is often considered the major cause that accounts for the large-scale changes that humans underwent in prehistoric and historic periods. Such theoretical approaches, which give all explanatory power to nature and allow little or no agency to humans, are not just ubiquitous in the scientific domain, but have been widespread in the public view, as exemplified by the success of popular science books (e.g. Diamond 1997).

On the other hand, anthropocentric approaches emphasise human agency and centre around human practices as well as human ontologies. The massive environmental impact of humans’ activities on the earth is represented by the naming of the current geological epoch as the Anthropocene (Crutzen/Stoermer 2000; Haraway et al. 2016; Steffen et al. 2011). With its root in Western discourse (Catton/Dunlap 1978), this narrative, which permeates in recent anthropological and archaeological literature (Boyd 2017), puts humans to the forefront and attempts to explain worldly phenomena exclusively in relation to humans. In recognising the theoretical baggage of anthropocentric dogmas, here it is intended to reframe the understanding of human-nature interactions and allow for a nuanced understanding and complexity,

instead of painting them with a simple brush of dualism or dichotomy (for a similar discussion couched in nature and society, see Descola/Pálsson 1996). During the last few decades, new approaches – such as the ontological and posthuman turns, Interspecies Ethnography and entanglement of humans and things (e.g. Hill 2013) – have attempted to re-examine traditional anthropocentric interpretations to the human-nature relationship, aiming to recognise its complexity by investigating how humans and non-humans influence one another. The ‘multispecies/interspecies ethnography’ contributes to recognise that the boundaries between organisms and species are much more blurred and fluid than previously considered (‘species turn’: see Haraway 2008; Tsing 2015). Not only have humans never been humans on their own, but animals, plants, fungi and microbes are effective agents and not passive objects, as also stressed by more recent approaches in archaeology (deFrance 2009; Feinberg et al. 2013). The same applies to things, as suggested by the ‘social lives of commodities’ (Appadurai 1986, 3) and the Actor-Network Theory of Latour (1999; 2011), which strongly challenge the traditional anthropocentric approaches (see Knapett/Malafouris 2008). Every actor – also the unconscious ones (Hodder 1982) – has agency in shaping networks of social relationships. Such an ‘ontological turn’, following the ‘flat’ ontology by Latour, has contributed to deeply transform the way materiality and agency are conceptualised in archaeological research (Latour 1993; see Alberti/Bray 2009, 337 with relevant bibliography). An ontological distinction between people and things cannot be truly made in light of the constitution of societies and the production of agency.

Post-humanism also rejects the classic humanist divisions of self and other, mind and body, society and nature, human and animal, organic and technological (Wolfe 2009). Therefore, post-humanism can be understood as a call to move away from the anthropocentric approach that recognises the limits in interpreting worldly phenomena from the point of view of humans and acknowledges humans as one of many agents that help to shape the world. These efforts made in archaeology and socio-cultural anthropology are followed here to move beyond ontologically

anthropocentric perspectives, to investigate different forms of human-nature interactions (‘non-anthropocentric attitude’, see Boyd 2017, 39 with references therein and Hussain, this volume). While we are aware of the theoretical challenges that arise by excluding human privileges in writing nonhuman narratives due to the innate nature of human beings (Boyd 2017, 301; Russel 2012, 5), some attempts in this volume are presented to critically re-consider traditional narratives, with acknowledgment of the recent non-anthropocentric ontologies inspired by non-Western epistemologies (e.g. Viveiros de Castro 2012).

3 Introducing the Contributions to ‘Beyond Subsistence’

Starting from the most recent theoretical inputs regarding the concept of resources, this edited volume aims to investigate the complexity of the human-nature interactions with the contributions of several authors who deal with these topics in various fields of study and use different theoretical approaches.

The volume opens with chapters that address efforts to reconceptualise the interactions among humans, animals, plants and substances. The need to embrace a ‘non-human turn’ in reconstructing the prehistoric past, going beyond relationist/interactionist viewpoints, is stressed by Hussain’s contribution. This is aimed at understanding the independent roles of animals as agents that actively contribute to the complex networks of interactions in which they are embedded. The analysis of the components and processes of those networks is a way to capture the deep sense of non-human agencies and the dynamics of their engagements. The inter-species perspective recognises that animals are not just passive objects of humans’ economic or symbolic interests – as traditionally embedded in Western narratives – but agents that actively interact with their human counterparts. There is a need to acknowledge animal agency and human-animal mutualism (Boyd 2017, 308; see also Armstrong Oma 2010): ‘Just as humans have a history of their relations with animals, so also animals have a history of their relations with humans’ (Ingold 1994, 1). In this

sense, hunting is not just a resource acquisition strategy but an ‘interspecies entanglement’ (Boyd 2017, 308 and bibliography within). Following SFB 1070’s ‘resource turn’, **Sieler** stresses the necessity of fully including substances in the non-human turn, embracing the ‘posthuman relationality’ that wants to overcome the ontological anthropocentrism because: ‘relational understandings of the social explicitly include the non-human in the forms of plants, animals, and things. Substances have largely remained overlooked so far’ (Sieler, this volume). Substances are included within the entanglement of human-nature interactions representing the ResourceComplex, which is a set of multiple resources that exist in specific cultural and social dynamics and interact with one another.

The contributions in this volume stress how every type of entity assumes specific characteristics and social values in relation to the network of social interactions they are part of. Resources need to be considered within their own contexts, as suggested by **Wolf**’s work, focusing on personal ornaments made from mammoth ivory from the Swabian Jura, Germany, where this material was largely available and used for diverse artefacts. In other regions such as southwestern France, where this material was scarce, it was used exclusively for personal ornaments, which reflected and contributed to shaping social relations within and between groups. In the absence of separation between tangible reality and social relations (e.g. Ingold 2000; 2007; Renfrew 2001), the pivotal role played by the dialectic between (material) ‘dependence’ and (social) ‘dependency’ connecting humans and things, understood as entanglement (Hodder 2011; 2012), becomes apparent. Pigs are luxury products within the specific networks of actions and actors that surround the *jamón serrano* (**Melles**); rice is conceptualised in relation to the central values of ‘auspiciousness’ (*maṅgalam* or *cubam*) and distinction (*maṛiyādai*; **Beckmann**); grass pea can be charged with specific cultic value within parts of religious processes (**Orendi**).

The enactive relation of cognition and materiality in shaping the value of resources (Hutchins 2005; Malafouris/Renfrew 2010) can be recognised in **Karakaya**’s contribution. The value of food beyond subsistence is emphasised, as the object

of practices that create and contribute to maintaining social tissues, building up and stressing both connections and boundaries. Although food has special semiotic values because of certain universal properties, it bears messages (e.g. solidarity and community, identity or exclusion etc.) intimately embedded into each specific socio-economic context, conveying the ‘everyday social discourse’: ‘When human beings convert some part of their environment into food, they create a peculiar powerful semiotic device [...]. It is therefore a highly condensed social fact. It is also [...] a marvellous plastic kind of collective representation’ (Appadurai 1981, 494). The three main areas in which ‘gastro-politics’ express themselves are the household (**Beckmann**), marriage feasts and temple rituals (see **Orendi** and **Karakaya**). The cultivation of rice is not only embodied in different important rituals but also creates strong family and household networks involving many actors and entities (**Beckmann**). Moreover, the evidence of what has been discarded is also indicative of distinctive social and cultural behaviours, as stressed by **Karakaya**’s contribution. With his study about the cultivation of rice in the Kaveri Delta, India, **Beckmann** demonstrates how basic activities ‘can be understood as both embedded in and generative of complex cultural symbolisms and social relationships that emerge from and extend beyond the realms of subsistence and immediate family relations’ (Beckmann, this volume). A similar approach is comparable to that carried out by **Sieler** regarding the use of mercury as a therapeutic resource. The value of substances goes beyond the biochemical qualities: ‘basic need is a variable concept’ and mercury can be perceived and utilised in dissimilar ways: ‘Mercury does not always equal mercury’ (Sieler, this volume). The multifaceted nature of resources, between materiality and immateriality, praxis and cognition, seems to be clearly reflected in the dualism of the definition and the concept of ‘substance’. ‘Matter is more than merely representational, it is material and representational in its relationality’ (Sieler, this volume). Like culture, materiality is a social product, created and changed by the network of relationships among the entities themselves (see **Sieler**, quoting Barad 2007 and Ingold 2007). Substance is the matter of which things are made, but

it does not correspond to just ‘things’. Substances are, in fact, complex material structures to which many different properties can be attributed. Such properties are socially embedded because the perception and valuation of substances changes in different social realities over time. Conversely, the cultural appropriation of substances is based on the perception of substances. ‘[...] Substances are complex material structures to which many properties can be attributed. Their characteristics are associated with specific values that give substances social definitions. It is precisely through the often implicit embedding of a substance into social and cultural contexts that it differs from any general physical description of the same substance’ (Hahn/Soentgen 2011, 24).

Fine arts and luxury goods, which are the outputs of the transformation of resources into materialised objects that reflect social asymmetries, are also parts of networks of social interactions. Production-and-consumption patterns involve a wide range of resources that can be either directly connected to subsistence (**Beckmann**) or not, such as clay, metal, stones, wood and ivory (**Wolf**). These resources can be acquired by direct exploitation (**Melles**) or through exchanges, and they can be converted into objects and activities, expressing new asymmetrical relationships. They can be considered economic, social, cultural and symbolic capitals (Bourdieu/Wacquant 1992) which embody different forms of accumulated labour. **Wolf**’s contribution on personal ornaments emphasises the cultural value of technological traditions as well. In fact, ‘the cultural role of commodities [...] cannot ultimately be divorced from questions of technology, production, and trade’ (Appadurai 1986, 35), and is also through the reconstruction of technical changes that we can grasp transformations of social values. With **Melles**’ investigation of the definition of ‘good tastes’ and the perception of the consumers by the example of *jamón*, it becomes apparent that demand does not simply depend on the availability of goods, and that consumption is a social act (Appadurai 1986, 29–31).

Care is linked with the maintenance activities that go beyond subsistence, which are tasks that all human groups need to undertake to survive, regardless of their historical period and

geographical location (**Sánchez Romero**). Such maintenance activities create forms of communication that are fundamental for the development of cohesion, empathy or solidarity strategies. This same provision of care is embedded in the role of the givers of care, such as the mothers of children or cultivators of rice (**Beckmann**).

All in all, this volume aims to provide a spectrum of different perspectives on the interactions of humans and nature in the past and present. They all tackle different aspects of animals, plants and substances that have cultural meanings and social implications which go beyond economic values. All the different resources are embedded in ResourceComplexes (rice, ivory, serrano ham, care in the past, rituals as a few examples) reflecting socio-cultural processes, and not necessarily associated with subsistence. The materiality of those resources is interconnected, and humans and nature are entangled with one other, reflecting co-dependencies (Miller 1998). The chapters also are a reflection of interdisciplinary discussions across different historical and cultural studies. This can take the form of integrating more deeply anthropological and sociological studies with archaeology or taking a historical view into the investigation of cultures in the present. Interests in reframing resources as well as documenting cultural and social activities, which are as important as ‘basic needs’, may hopefully broaden our understanding of humans and nature, and their multifaceted relationship.

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