Introduction

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This book is about objects, images and time. It is about how objects and images relate to and shape notions of temporality and history. While notions of time and history have been studied ethnographically and comparatively, their nexus with nonverbal forms of communication and particularly with objects and images have been overlooked. Recent important studies have shed light on the continuities between graphic and artefactual systems and forms of memory. Such studies have so far privileged a comparative and synchronic perspective (Severi 2015) or that of individual societies (Küchler 2002, 2009; Erikson 2007; Heckenberger 2007). What we aim to do in this book is to look at the interrelations between image and artefactual systems and conceptual and operational systems demanding of notions of time and history. We will explore the temporality inhering in images and artefacts from a comparative perspective, bringing together ethnographic studies from the Lowlands of Central and South America and Melanesia.

Our approach is to focus on how peoples in both regions 'live in' and 'navigate' time (Munn 1992 and Gell 1992) each through their distinctive systems of images and the processes and actions by which these come to be manifest in objects. By advocating the possibility of a comparison of a qualitative understanding of an abstract concept such as time we first need to confront classic assumptions of what it is that we are comparing. In her critical review essay on the anthropology of time, Nancy Munn exposed a lasting and consistent bias in anthropology toward a notion of 'social' time, consisting of varied categorical divisions whose particularities and varying intensities give 'active qualities' to these categories (Munn 1992: 95). Anthropology has thus emphasised the qualitative description of temporal rhythm as constitutive of social 'facts.' While drawing on the early twentieth century writing of Henri Hubert's classical reading of Henri Bergson's concept of qualitative time as 'inner durée', anthropology has turned the idea of qualitative time on its head by arguing for an inner experience of time that is fundamentally social in nature. Alfred Gell's (1992) contribution to anthropology's consequential preoccupation with time bound and intersubjectively shared practices such as rituals of celebration and commemoration, agricultural and seasonal migration does not divert from this approach to time, but helps to shed light on why it is that an understanding of connections between events even beyond the biographical life span of a person is shared in a manner that allows for prediction and

comparison as well as strategic planning. He does this by deploying Husserl's notion of time consciousness which, restricted as it is to the tracing of snapshots experience of the abstract durée of time, is dependent upon images of events whose recognizable composition allow for a modal mapping of events in relation to one another. Only via such images of time-bound events can time be navigated strategically in the same manner as we navigate space, he argues (c.f. Gell 1985).

Of interest for the essays in this volume are precisely such images, both intuited and deduced from objects that assign a spatial measure to temporal flows, as we seek to understand how they come to be shared and inform the everyday in ways that subtly unifies and distinguishes people from one another across generations. By the same token we ask whether by looking at the processes and actions that give shape to images of time, and at the transformations visible in serialized objects within which images come to be arrested, we are able to shed light on specific notions of historicity and temporality, which, on a more abstract level, show recognizable patterns within, if not across, these diverse and different regions. That is at issue is the temporality of the image itself and the way this temporality comes to turn its stoppage in the object into a qualitative and modalized model enabling people to navigate time as securely as they navigate space. There are no comparative studies that deal with this problem. Our choice to compare Amazonia and Melanesia emerges from the realization of important systematic differences and similarities demonstrated by the ethnographic literature from both regions with respect to the concept of the image. This volume is thus as much about the question of how images work in subtly different ways and the difference this makes to society and culture as it is about the strategies deployed in the plotting of life projects and the fermenting and extending of biographical relations on the back of such modular time maps.

On image and artefact systems

As Gell (1998) suggested, discussing the dynamics of style in Marquesan and Maori societies, the cumulative work of generations of indigenous artists could be seen as an expression of their 'collective mind'. What Gell pointed at in the last two chapters of *Art and Agency* was the possibility to look at the material expressions, or traces, of such 'collective minds' so as to shed light on the powerful dynamism, patterns of transformation and cultural expressivity underpinning them. We take stock of this insight and propose to take it a step further by looking both within and between the material expressions of collective minds, the creative and transformative tensions, the differences and regularities they express. We do this in light of our recognition that images, artefacts and more generally the visual and material forms that social life acquires, contain an invaluable source of information and insight into the life of their makers still widely untapped.

It is worth noting that the notion of system that we use here has many aspects in common with the notion of style. If we have not chosen to use the latter term is because of its roots in art historical and archaeological approaches, which have tended to consider style mostly as a means to compile chronologies and typologies of artefacts and artworks from a perspective

external to that of their makers. While we are not dismissing the contribution of such approaches for the present study, our approach is distinctively ethnographic. In this sense we consider style as an internally coherent system of images and objects that contains the preconditions of its own existence as self-evidently manifest to the people who act within its boundaries and are able to transform it. Thus, artefact and visual systems as studied in this volume are systems for the reckoning of time that allow people to grapple with biographical, intergenerational time and the shifting circumstances of history.

In order to clarify what we mean by systems of images and objects we first discuss how relations occur at different levels: between groups (of things and persons), between discrete images and objects, or between parts of images and objects (internally). What is it that makes a corpus of images and artefacts a system? What kinds of relations do need to hold between the discrete elements to form a system? What kinds of relations exist between systems and what do we learn from studying them? What do we learn, in turn, from relations internally held by objects? And how such internally held relations shed light on temporal processes that shape the life of individuals and groups? In foregrounding these different scales of analysis we take inspiration by a number of authors who began exploring the dynamics, tensions and generative powers of systems of objects and images and pointed in different directions, some of which we intend to follow here.

Firstly, Lévi-Strauss in *The Way of the Masks* (1982) directed his attention to the systematic differences in the way the Salish and the Kwakiutl (Kwakwaka'wakw) made two types of masks – called xwexwé and dzonokwa - and how such differences in the visual appearance of the masks bore witness of the history and changing relations of these two peoples. Relations between two different visual systems are in this case enlightening of the historical relations between two different people. The implications of this insight are twofold. On the one hand, stylistic transformations in visual systems offer the kind of insights that complement or are difficult - if not impossible - to obtain through verbal and written forms. On the other hand, 'transformation' is a key concept here, insofar as it offers a dynamic view of relations as they unravel through time and space (see Damon this volume). So, Lévi-Strauss asks: insofar as a mask is observed by the ethnographer at a determinate point in time, what can it tell us about its past and future? Following his application of the notion of transformation - which he famously elaborated in his 'canonical formula' to study transformations in myths (1963) - to the study of visual systems, we thus heed his cue to look at particular objects as 'moments' within chains of transformations and aim to explore their quintessential meaningfulness to shed light on the qualitative experience of time they generate. Or, to put it otherwise, we aim to explore the 'temporality of abduction', the intrinsically temporal experience of subjects who both live in and generate time through their visual and artefactual worlds.

Secondly, in Lévi-Strauss' view each mask is to be looked at not only for what it represents but also for what it chooses not to represent, for what it negates. It is exactly this point that opens the way to consider artworks as elements in a system of 'possible or legitimate motivic transformations', as Gell subsequently put it (1998:215). Image and artefact systems are not mere collections of images and objects made through time and space by groups of people,

rather as systems they instantiate the conditions of their own existence, their capacity to transform and interact with the shifting circumstances of history. It is on such conditions of existence and on the relational fields underpinning them that we focus our attention in this book. We consider image and artefact systems as instantiating multiple and manifold relations between the visual and material forms (Küchler 2013). Focusing on such multiple and multiplying relations we consider the inherent generativity of such systems. Inspired by Gell's discussion of the 'least difference principle' (1998; see also Were this volume) in regards to Marquesan art style, we consider each style as containing in itself the possibilities of its transformations, to both rearrange its elements in new combinations, to acquire new elements from other systems, or to explore the boundaries of its meaningfulness (Gow 1997, Fortis 2016). How exactly such transformations occur is a question worth asking.

Here the scale of analysis changes, moving from relations *between* systems to relations *within* a system, focusing on the relations between the discrete elements forming a system, or a style. How do the elements of what we call a system hold together? What do they have in common and how do they differ from those belonging to other systems? These are theoretical questions that the contributors of this volume address ethnographically. Dynamism and generativity are indeed vital elements of each visual and artefact system. What we are particularly interested in here is what these key elements tell us about people's notions of temporality, how dynamism and generativity *within* specific systems, or art styles, are exploited to make sense of and plot individual and collective actions in time. We could say that mastering visual and material techniques is to a certain extent mastering time and history.

Thirdly, narrowing the scale of analysis even further, relations can be discerned within the discrete elements of a system, an image and an object. This was noted by Forge in his discussion of Abelam painting style in the Sepik region of Papua New Guinea, where he argued that the 'meaning is not that a painting or carving is a picture or representation of anything in the natural or spirit world, rather it is *about* the relationship between things' (1973:189). Foregrounding the meaningfulness of the relations between the parts of a painting Forge both shifted the focus of discussion from representation to relation and zoomed in on the internal creative tensions inherent in images and objects. Lévi-Strauss (1973[1955]) called attention to the intrinsic dynamism of the decorative patterns of face paintings of Kadiweu (Caduveo) women in Central Brazil. Focusing on Kadiweu women's actions of drawing the patterns he noticed that the symmetry displayed by the finished designs was the outcome of a dynamic process where individual elements were related through dislocation. Dynamism is thus the outcome of the generative asymmetry between the basic elements of patterns. Dynamism and asymmetry are the causes rather than the effects of designs, Lévi-Strauss' remarks show (see Deleuze 1994[1968]:19-20). His insight thus introduced the quintessential instability and transformative quality of designs that has since been observed and explored by ethnographers working with indigenous peoples in the Lowlands of South America (Gow 1989, Guss 1989, Lagrou 2007, Severi 2015). What both Fortis, Küchler and Lagrou show in this volume is how the repetition of the same visual motifs and forms engenders difference. Difference is internal to the composition of images

and objects; it is integral to their time-sensitive nature and its appreciation allows them to play an important role in shaping biographical relations.

The theme of 'internally held relational structures' (Küchler 2014) has been central to the anthropology of Melanesia, following the paradigm shift operated by Marilyn Strathern and her comparative reflections on the nature of relations in Melanesia (1988). What is particularly relevant here is how such 'internally held relational structures' are seen to differently operate to reckon, record and plan the passage of time in the visual and material systems studied ethnographically by the contributors of this volume.

Before discussing the similarities and differences between the Melanesian and the Amerindian cases analysed in this volume, it is worth noting that a focus on internally held relations challenges the habit to look for one-to-one resemblances as a precondition of a certain kind of representation. This is an experience all too familiar to Euro American ethnographers eagerly starting to question their informants on the 'meaning' of the images or objects encountered during fieldwork. Thinking of going straight to the point, we often start by missing it. Perhaps a necessary mistake that can only be remedied by means of asking further and more relevant questions, slowly, step by step, getting closer to what our informants mean and do. Used as we are to consider meaning in objects and images as limited to the three dimensions of formal analysis and tied to a linear cumulative history, we miss a fourth dimension that implies that 'meaning is invariably historically and situationally generated' (Damon in this volume). Inter-subjectively shared and intuitive understanding of time bound operational processes and systems thus emerges from an ongoing process of 'adjustment and elaboration' (Damon 2012:190) of artefacts that like the boats Fred Damon studied allow for a dynamic view of complex multifaceted processes inaccessible to contemplation in of themselves. We consider artefactual and visual processes key to the creation of intersubjective spacetime in the Amerindian and Melanesian contexts studied in this volume. What renders such systems particularly up to the task is their capacity to contain manifold relations and foster their changes in time and space linking individuals and groups in predictive yet sometimes spectacularly transformative ways.

What we have learnt in the past few decades from the rich ethnographic studies of image and artefact systems in Amerindian and Melanesian societies is that Western concepts of 'representation', 'resemblance' and 'lifelikeness' are of little use to understand how indigenous peoples conceive of their visual and material engagement with the world. Their focus is often instead on the multiplicity and the differences that the making of artefact and images generate or maintain. For example, Amerindian visual systems show a dislike for realistic representations. What they often opt for are visual styles that either foreground the ambivalence and tension between the constitutive elements of the image - e.g. figure vs. ground (Guss 1989) and instability of figuration (Severi 2015) - or are irreducible to be defined as either figurative or decorative and Boas noted earlier (1955[1927]). The important point is that figurative representations are seldom iconic. They instead tend to be ever different from their referents (Fortis 2012). What they are instead capable of is generating a multiplicity of representations, of mental images, visions of spirits, mythical beings and other

non-human entities. In the words of Davi Kopenawa, Yanomami shaman: 'The *xapiri* are the images of the *yarori* ancestors who turned into animals in the beginning of time. This is their real name. You call them "spirits", but they are other.' (2013:54).

If images and objects are capable to generate and hold multiple and shifting relations to their referential objects/subjects, how do they hold multiple temporalities? How do we then unpack the qualitative understandings of time that images and artefacts instantiate? If images and artefacts mediate between humans and non-humans, including the dead, do they also mediate between the present and the past? Do they hold the future in themselves, or help to think about it, if not to generate it?

Comparisons

Important differences and similarities emerge when comparing the visual and material lives of the people inhabiting the Lowlands of Central and South America and Melanesia. In this book we call attention to similarities emerging from comparing relations between elements at a higher order of abstraction and from the appreciation of systematic differences between these two regions (cf. Gregor and Tuzin 2001:7). These similarities can be clustered around a number of recurring themes that we have broadly defined as 'multiplicity', 'repetition', 'transformation' and the centrality of the 'body'.

Multiplicity

In Amerindian and Melanesian visual systems, images and artefacts manifest the capacity to self-generate multiple versions of its own originating conditions. Critical to the kind of multiplicity inhering as propensity within such images and artefacts is the capture of the defining quality of the originating condition in terms of 'the courses and quality of the action they inscribe' (Damon 2012: 177). Fred Damon (2012; 2016) describes, for Melanesia, this capture of a qualitative apprehension of an originating condition as defining the individuating quality of an artefact with the example of the outrigger canoe prevalent across wider Oceania. The boat's complex structure, composed as it is of multiple precisely measured and proportioned parts, follows a standardized form that is perpetually nuanced into unique products, judged and appreciated in terms of their likeness as best instantiation of its own kind. The concept of multiplicity these boats demonstrate collapses the one and the many in a distinctive fractal manner, allowing for relations implicit to the construction of the boat to be expressed in a transitive, iterative and recursive manner. Redundancy and self-similarity, and an associated language of fractals and of a cosmology suggestive of a theory of chaos, was developed by Roy Wagner (1986; 1991) for Melanesia, with variations of the idea taken by others (Strathern 1991; Mosko and Damon 2005). The precise measure within which this idea of multiplicity comes to reside is, however, not one simply guided by intuition, but demanding of actions which like the originating conditions they manifest are derived from focused experience, observation and adjustment (Damon 2012: 191). Both Hauser Schäublin and Coupaye (this volume) differently speak to this notion of multiplicity. The former uses

the concepts of 'cultural keynote' and 'accord' to refer respectively to the image repository and the material and ritual forms it affords in the contemporary lives of people living in different areas of the Sepik River. The latter exposes the complex social processes inherent in the cultivation of long yams in the same regions of Papua New Guinea, whereby it is the quality of the processes of cultivation that allows access to ancestral values and to the imagining of people's future oriented exchange practices.

Referring back to the beginning of time, the time of origin, where the preconditions of present day life were laid down, is a feature of Amerindian cosmologies, which, as Lévi-Strauss (1995) demonstrated, have at their core an original difference, a space reserved for alterity. Such original difference has informed how Amerindian peoples dealt with the shifting and often fraught circumstances of their history, such as the encounter with white peoples. The time of origin is thus the time when identity and difference emerged as separate but complementary conditions which will have ongoing influence on the present life of human beings. The tension between the one and the many has deep roots in time and coexists with the multiplication of differences. While in Melanesia it is the fractal multiplication of self-similar images at different scales that sets actions in motion in time-conscious ways, for Amerindian societies it is the case of the multiplication of qualitative differences starting from an original duality which injects the system with a 'dynamic disequilibrium' (*ibid*:63) that is in itself a manifestation of time. The multiplication of differences is a precondition of Amerindian visual systems. As Lagrou shows with regards to Huni Kuin design patterns dynamism is expressed through exploiting figure-ground ambivalence and the interplay between symmetry and asymmetry leading to visual transformations. Dualism and complementary opposites are thus transformed into 'complex figures of spatiotemporal mediation', Lagrou notes, whereby Huni Kuin visual dynamism is intimately linked to social dynamism in that 'their kinship system is dynamic, it produces continuity including differences and transformations across generations in ways that are both thinkable and predictable [...]' (this volume). Processes of transformation are thus the preconditions of social life which is navigated historically and biographically with the help of images of time generated within the range of possibilities that each and every Amerindian visual system affords. Images, in their different actualizations - ranging from graphic patterns, objects, figurative designs, visions, and pictography - carry this transformational character as an inbuilt potentiality to adapt, interpret and act within history with its extraneous shifting circumstances. This is evident in the case of Marubo people as Cesarino argues in this volume, where a combination of pictography and alphabetic writing provides a shamanic critique of the alphabetic writing introduced by missionaries. The Marubo, like other Amerindians, already possessed alphabetic writing in ancient times, but lost it to white people while they kept another graphic form, designs. The resultant shamanic combination of writing and designs is thus more a recombination of a previous multiplicity than a form of acculturation.

Repetition

To better qualify what we mean by multiplicity, a key characteristic of Melanesian and Amerindian visual systems, we introduce a further theme – repetition - whereby these systems display an equal tendency to continuity and transformation. Escaping the isomorphism between images and what they stand for of Euro-American aesthetic epistemologies several Amerindian visual systems are informed by what we may call a 'slippage' between symbol and referent. As identified by Viveiros de Castro (2002) in respect to the cosmology of the Yawalapíti, notions of 'ideal prototype' and 'actual phenomenon' are key to make sense of differences between beings. Differences are here understood as distributed along a 'gradual continuum' ranging from prototype to imperfect actualizations. More broadly similarities are understood as small differences and what begins as the same unravels as different, a pan-Amerindian theme discussed by Lévi-Strauss (1995). This has important consequences for visual and material systems. The fabricated is ever different from the prototype as the image is ever different from its object. Processes of making are informed by similar gaps between models and replicas. What appear as self-similar images contain difference within and between themselves. Difference is the trigger that puts agency in motion (Fortis and Küchler, this volume). It is therefore by learning to see difference, where we are used to see likeness (cf. Forge 1970), that we can glimpse at the temporality of images and artefacts. Similarity and difference complement each other in the constitution and understanding of artefacts and images. Differences can be infinitesimally small but remain nonetheless differences, increasing and decreasing along a chromatic scale that renders relations of similarity meaningful (see Gonçalves 2010). The implications of such 'chromatic differences' are key for understanding how Amerindian and Melanesian visual systems help navigating time and history (see Fortis 2019).

Repetition of archetypical forms is thus not a form of representation, rather, similarly to what Deleuze noted, repetition 'differs in kind from representation, the repeated cannot be represented: rather it must always be signified, masked by what signifies it, itself masking what it signifies' (1994[1968]:18). The play of repetition, alongside multiplication, seems to capture the life of images in Amerindian and Melanesian ontologies. Images repeat what cannot be represented and in its original form is incommensurable with human experience. Images by means of slippage and repetition mediate between the incommensurable spacetime of the living and that of the dead, and in doing so help shaping human biographies. This is evident, for example, in the case of the Achuar where *arutam* hallucinatory visions, in which an invisible form appears in the guise of familiar image of a deceased kinsperson, help creating a heightened sense of self manifested in the increased capacity of individuals to act in ways that are socially valued (Taylor 1996:208).

Severi (2015) has similarly called attention to the quality of what he defines as 'chimeric objects' - both in the Americas and in Melanesia - of evoking rather than representing images and ancestral names. These objects articulate heterogeneous aspects exploiting the ambiguity between their visible and invisible elements to support mnemonical processes. In this work we move beyond memory to address issues of ontogeny and ontology. Images and artefacts, as differently argued in the chapters that follow, are part and parcel of the lived experiences through which biographical relations are constituted, an issue exemplified by the widespread

emphasis on the fabrication and decoration of bodies in Amerindian societies (Seeger 1975, Gow 1999, Miller 2009, Fortis 2010) and in Melanesia (Strathern and Strathern 1971, Strathern 1979, Hauser Schäublin this volume). By the same token, images and artefacts are relational indexes, or 'qualisigns of time' (Coupaye this volume) that allow a shared experience of living in a time that is forged by multiple agencies, differently involving humans, non-humans and the dead.

It is in the process of repetition that we thus glimpse a distinct form of temporality. An experience of time that is internal to the life of forms, be they visions, designs - on the body of women, men and children, or woven on clothing and hammocks - objects carved in wood or woven in plant fibres. Repetition, semiotic slippage between prototypes and images and more generally the non-iconic nature of images and objects point more generally towards the gap between human biographies, bounded by birth and death, and the continuity of the social body. This gap is addressed through structural homologies between images and prototypes rather than through one-to-one resemblances. As demonstrated by Fortis and Küchler (this volume), both *nudsu* and *malanggan* carvings, respectively in Panama and New Ireland, differently enfold human and non-human time – including that of animals, trees and the dead. Articulating what from a human perspective are incommensurable temporalities, these objects exploit their differential capacity to hold a multiplicity of time-views together for the sake of the safe reproduction of social life. As we will see below such multiplicity of timeviews is indeed not a static phenomenon. Its dynamism, what renders its changes meaningful are exactly the transformations in relations of structural homology between abstract/prototypical and concrete/actual images.

Transformation

Amerindian and Melanesian visual systems generate a multiplicity of heterogeneous images in the mind by means of structurally homologous repetitions that render them time sensitive. On the one hand, artefact and image systems are 'time reckoning' systems (Fortis 2019) and systems for the 'navigation of time' (Küchler 2005). On the other hand, these are dynamic systems that contain the preconditions of their own transformations. That is, the new forms that their constitutive elements take are logically deductible from the forms that preceded them, or, perhaps better said, from the immanent order that characterizes each system. By the same token, as Cova's chapter demonstrates, local systems transform in dialogue with neighbouring systems taking into account historically specific social forms of production and relations. Systems of transformation are evidenced by a number of cases in both the Lowlands of Central and South America and Melanesia. As both Lagrou and Damon show in their chapters, designs and artefacts are meaningful forms that respond to both tensions immanent to social life and to the adaptation of principles of social orders to new environments. Another example is the case of cordage and latticework in the Pacific that have given way to transformational forms such as respectively malanggan in New Ireland and quilts in the Cook Islands, whereby 'opposing temporal maps of ancestral continuity and historical time' have taken up new forms due to changing historical circumstances (*ibid*:181).

A further example is that of the relation between graphic forms and writing across a number of Amerindian peoples. As it has been noted in a number of cases, the oppositional character of 'figurative' and 'geometric' designs has informed the way some Amerindian groups initially related to alphabetical writing and subsequently developed new forms to integrate the new graphic system into their own. As Gow (1990) argues with regards to Piro (Yine) people, alphabetic writing was associated to geometric designs seen at the onset of the hallucinatory experience of shamans, whereby knowledge as the outcome of reading was equated to knowledge as the outcome of an encounter with the spirit mother of ayahuasca. Similar to the designs on the skin of the anaconda opening up to the world of images in Huni Kuin myths, designs covering the visual field in Piro hallucinatory visions are the preconditions for encountering powerful beings. The written page is a 'paper skin', in Davi Kopenawa's words (2013), which function is that of mediating access to the spatiotemporally distal world of images. In a similar vein, Marubo shamans, whose critique of alphabetic writing figures in Cesarino's chapter, exploit the transformational qualities of the 'drawn thought' to inform their teachings to young people acquainted with white people's 'obliviousinducing technology'.

The body

The human body is a central element in processes of transformations, production and perception of images and artefacts, as well as in the constitution of social groups and their reproduction over time (Seeger et al. 2020[1979]). The body is the locus of display of relational, age set and gender identities and is attended to by actions that are attuned to the qualities of imputed originating conditions. Above all, the body is thus a fabricated artefact composed of parts relationally conceived and requiring constant nuancing and elaboration involving acute observation, experience and adjustment, much like the outrigger boats described earlier (Strathern and Strathern 1971; Strathern 1979). Furthermore, the body, both in its living material and in its afterlife immaterial form, is central in the interactions between individual persons and groups for the realization of biographical and collective projects. What is striking is that such interactions around the social body are often mediated, if not enabled, by the articulations of images and artefacts in complex systems that require the skilful actions of groups of people (see Were in this volume).

The body as artefact, decorated, displayed, fabricated, transformed, is thus the focal point of attention in conceiving life as an ongoing collective project that has both its root in the past (ancestral, clanic, mythological) and is projected in the future (kinship). Pivotal to the attention directed to the body is the skin. As membrane of the body, the skin is attended to with actions that serve to close and open the body from outside influences at important lifecycle events during which the internally held capacity are prone to dissipation. The attention to the skin of the body by elaborating it with patterns that conceal as much as they reveal relations held immanent within persons, human and non-human beings alike, is of paramount importance. The pattern resulting from actions of closing while connecting is visible as much on human bodies, as captured by Els Lagrou for Amazonia, as it is in the surface of gardens as described by Brigitta Hauser-Schaublin for Melanesia. The skilled nuancing of pattern in

both these case studies are a kind of object of chrono-geography (Gell 1992: 190-196), allowing for the registering of observable relations between events that can be attributed to causal chains of effects in the affirmation of social time and situated history. The case studies also show that these patterns on the surface of bodies of human and non-human entities are translatable and transposable across media, resonating with one another across domains accessible to observation (Heckenberger 2007:306).

Structure of the book

The chapters in this book are arranged into three parts, each exploring a distinctly dimensional perspective on the relation between time and object, drawing on and interpolating thematic continuities in Amerindian and Melanesian cosmology sketched out above. There is the question of how an object permits the contemplation of an originating condition via its own temporality, and via the actions and processes it makes manifest as qualities. This perspective on the quality of the object as register of its own temporality rather than its position in time demands an analytical move away from an attention to classification and towards an attention to sequences; sequences inhering in the production of objects, underpinning their biography and informing the nuancing of objects over time so that each is its best resemblance. Then there is the question of how an object permits the navigation of biographical time, enabling an understanding of how time is experienced and observed as shaping the relations that make up a life lived, offering a foothold for retrospective and prospective contemplation of the probable and potential inhering in life projects. And finally there is the question of what happens when the very processes and actions that capture time in an object fall by the way side as new materials and new technologies command attention and objects become testimony to the severing between what the historian Reinhard Koselleck (2004) has called the horizon of expectation and the space of experience.

The quest to find an alternative to what the early twentieth century art historian Aby Warburg had called a 'panoramic view of history,' comprised of chronologies, influences and the occasional genius, with what Warburg called an approach 'sensitive to the image's own capabilities to extend itself in time' (Bing 1999, 585) has dominated the anthropological approach to objects since its beginnings. Warburg's encounter with Navajo ritual performance and his personal acquaintance with anthropology especially Franz Boas and his familiarity with the nineteenth writings of Edward B. Tylor are well known in art history, although it famously ignored the implications of the anthropological perspective for its own methodology (Tylor 1871; Boas 1915, 1927 [1955]; Didi-Huberman 2002: 63). Anthropology itself, although sensitive to the relations and processes objects make manifest in its ethnographic analyses, especially since the formative work of Anthony Forge in Melanesia and Lévi Strauss in the Americas, has paid little attention to the theoretical implications of its own methodology. The chapters in this volume are contributing to the reappraisal, theoretically and methodologically speaking, of the relation between time and its object against the background of ethnographies whose complex object narratives, suffused with a predilection for generative and transformative images, refuse to be comprehended

from within a classificatory paradigm. Instead these object narratives draw our attention to processes and actions an object makes manifest in its elaboration, its sequencing, its transformation and its translation.

The hunch that there is more to this attention that an object demands than just the laundering the socialness of the forces that we project onto them has been around for a while (Küchler 2008). The Melanesianist Roy Wagner said of the object in Oceania that it 'figures sympathetically its field of reference' and 'becomes that which it expresses,' reminding us of Claude Lévi-Strauss's insight that objects qualitatively enable the modelling of complex processes much like models in science (Wagner 1986:6). The object here is its best version of itself, recalling what can only be known from observation rather than referencing what can be known independently (Ginzburg 2001). It matters, because it permits the contemplation of an abstract idea that is accessible to understanding via sharp observation and experience and it enchants, in the words of Alfred Gell (1992), because of the skill demanded in adjusting the object to the image or the 'field of reference' it contains and makes manifest. The reference to Levi-Strauss's concept of bricolage is important here, although it is significant to note that the case studies will draw out not the habituating practices postulated by Pierre Bourdieu's (1977) Outline of a Theory of Practice, but the tempering of the propagating nature of the image which object narratives allow access to. What this tempering is about, how it works and what it is making possible is one of the big questions anthropology can answer. The chapters in this volume will go some way towards this as they are making use of rich ethnographies surrounding the making and using of objects the complexity of which has defied easy categorisation to this day.

The structure to which the essays speak has been created drawing on Alfred Gell's (1992) work on the anthropology of time, underscoring and taking forward the twist introduced by Gell into the anthropological approach to time, in that the focus is not on time per se, but on the way the object makes manifest the quality of processes and actions of temporal cognition. Drawing on Husserl's theory of temporal cognition as a continuous feedback or modification of internal representations of time or internal time consciousness based on a protentional-retentional model, Gell presents us with a theory of the centrality of the relation between an indexical object and its non-indexical image token. Gell (1992: 229-232) shows that Husserl's model has been taken up in the cyclical model of perception, itself descendent from the cybernetic model developed by Miler, Galanter and Pibram (1960) in the theory of behaviour, which was developed by the psychologist responsible for founding the study of cognition, Ulrich Neisser (1976). Neisser's model of the perceptual cycle shows past and future to have no absolute ontological basis, but to be aspects of the cognitive functioning of the organism that is obliged to contend with a world by forming internal representations of it, which are continuously modified and updated.

Drawing on his earlier work (Gell 1985) on the problem of navigation in space, Gell ingeniously recognizes the reasons for the persistent oversight of the necessity for images and their concretisation in objects, which has plagued the legacy of Husserl's work in social theory. In this short paper on spatial navigation, Gell argued that when we use a map (which

is a set of non-indexical spatial beliefs) we allow the map to generate a series of mental images which correspond not to the map, but to certain perceptual views of the world in order to identify our position on the map-space (Gell 1985; 1992:235). The task of navigating, in short, requires non-indexical images that take the form of an internalized map no matter how exhaustive the indexical image of our environment may be that we have stored up, while at the same time the physical map has to be turned into images in order to be useful for navigation. The same consideration applies, so Gell argues (1992:235), to navigating the real layout of events in time of which 'we, as sentient individuals, have to form representations, which take the form of maps' (ibid 235). To act in a 'timely manner,' we have to construct representations of the otherwise inaccessible temporal sequence of events – a so called B series time map, an internal representation or cognitive map of B series time, which does not correspond to perceptual time in A series temporal territory (ibid: 236). Like spatial maps, objects thus map time by bringing non-indexical temporal belief inscriptions into conference with indexical images, themselves generated from non indexical cognitive maps, by matching them against incoming information from perceptual exploration and physical manipulation of the environment (Gell 1992: 236). And again like spatial navigation, the navigation of time requires the counterfactuality of the coexistence of possible worlds whose path can be charted and made accessible to contemplation. Gell's insight that it is modal logic (ibid: 244) that permits the conversion of non-indexical and indexical images and a charting of paths from one possible world to the next is perhaps the most complex and yet most crucial aspect of his treatise, enabling anthropology to execute comparative analysis of seemingly distinct phenomena and practices.

Where Gell's ruminations on time leave us is to see objects, subject to processes and actions attended to as qualities, and their relation to the internal and intuited, non indexical image in a new light. Rather than just enabling the sequencing and classification of temporal events external to themselves, we can now see them as holding the very temporal cognition immanent within, making it manifest and offering it up to contemplation and understanding. This means of course that the qualities of non-indexical images and their inhering sequence are accessible to attention and elaboration as much as perceptual images. The case studies which have shaped the chapters in this volume consider how this manifestation of temporality articulates itself and why it matters to people charting the course across possible worlds. To make the case studies more accessible to probing the methodological imperative behind the theoretical move to interpolate object and image with temporal cognition we have divided them into three grand narratives attending to diachronic time or time beyond the life span of persons, to biographical time and the charting of life projects by navigating possible worlds, and to witnessed time when worlds intersect and navigating them involves calibrating what works and with what effect.

Part I – Attending to Time: Process, Action and Sequence

Frederick Damon's chapter explores continuities between cosmologies of time and qualities of process manifest in objects across Asia and the Pacific, arguing for correspondence of

scale between the intuited processes of an originating condition and perceptually accessible temporal environment. His paper focuses on the outrigger sailing boat that is a common feature across the Austronesian diaspora between coastal China and New Zealand, attended to wherever it is made as an analogy to operational systems underpinning societies, modelling the workings of credit clearing and credit bearing systems, seasonal ecologies and distributive resource systems, land leasehold systems and genealogical systems. Rather than commanding skills and modalities of attention that are specific to the boat as a type of object, Damon shows the continuities that exist between seemingly different processes and their harnessing in distinct types objects. Gardening and carving, growing and sailing are brought into conference with ontologies that inform the close observation and experience in the synchronizing of processes demanded for each to work according to expectation. Timeliness here is of the essence and the boat as a physical and ideal object instantiates the qualities of sequences that underpin life.

Ludovic Coupaye's chapter develops this notion of processes-made-things further with the example of the intriguing object of long yams grown as iconic artefacts among the Abulës-Speakers of Sepik River region in Papua New Guinea. Instead of being only visual "representations" of ancestral values, narratives or even beings, yams are manifesting people's imagination of temporal processes and their propensity for infinite replication of itself. In order to expose the temporality inhering in the yam as object and image alike he extends his analysis from their formal and visual appearance towards what they manifest, taking into account different dimensions and scales of actions by means of which yams appear in the Abulës-speaking environment (at least in Nyamikum village). The analysis exposes action manifest in the yam object, the vernacular logic they draw on and articulate and the sequences the actions orchestrate as they shape the yam.

Pedro Cesarino's chapter on shamanic writing and drawn thought among the Marubo of Western Amazonia explores the mnemonic technology of formulaic composition that aligns shamanic imagery with the verbal arts of Amazonia. His analysis focuses on composition, the sequencing and conjoining of mutually constitutive parts, as key methodological anchor to expose the temporality made manifest in visual and verbal arts alike. It is the nuancing of composition, much like in the Melanesian examples of the boat and the yam, that is attended to as paving the paths to navigating possible worlds.

Part 2 – Navigating Possible Worlds: Surfaces, Patterns and Shapes

Brigitta Hauser Schaublin's chapter shows how, in the Sepik River societies of Papua New Guinea in Melanesia, primeval beings or rather their particular skins and their properties and innate qualities are dominant non indexical images which she sees as comprising 'a cultural keynote,' a repository of images that like music is fashioned as sequence from certain modalities of action. The inherent temporality of these images, she argues, informed how people transformed the landscape, their bodies and social bodies when settling in the environs of the Sepik River during the grand Austronesian migration into the Pacific centuries ago. In

life cycle rituals, senior, knowledgeable men select and activate pieces of this repository and organize it into sequences that recall, reiterate or re-enact primeval events. The organization or rather the configuration of these imagistic fragments differs from manifestation to manifestation, but link seemingly distinct objects and media via their implicit and shared accord.

Els Lagrou's chapter discusses the patterns painted on bodies and woven from fibre among the Huni Kuin (Cashinahua) from the Northwestern Amazonian rainforest. Pattern in body painting and weaving is a female art and is understood by men and women alike to manifest the charting of connections across different topological levels of space-time and thus to make accessible the multiple relations and iterations of this topology that composes individual beings. The art of patterning thus captures a relational, temporal topography, showing how proper distances should be kept while showing, at the same time, how these distances collapse during the transformational processes of other-becoming that characterize all personal biographies of human beings in this Amerindian relational ontology.

Paolo Fortis's and Susanne Küchler's chapter takes a comparative look at figurative objects that manage relations between the worlds of the visible and invisible among the Guna in Panama and the peoples inhabiting the shores of one of the northernmost islands in the Bismarck Archipelago of island Melanesia. They explore the different articulation of seriality and sequence made manifest in these figurative objects and the complex ways in which the temporality to which they grant access permits the charting of relations within and across the visible and invisible worlds.

Part 3 – Moving between Intersecting Worlds: Witnessing and Questioning

Victor Cova's chapter compares indigenous Shuar architecture with that of hispano-descendant Macabeo settlers in the Morona-Santiago Province of Ecuador and their mutual transformation of each other. He argues that the temporality inherent in the logic of social space allows alliances across the intersecting worlds, yet these are called into question where wage-labour becomes the new determining social relation. The architectural transformations brought about by the confrontation between different building materials and construction technologies, each involving specific temporal modalities of sequence of process and action, he describes to occur when worlds intersect are shown to shape relations with outsiders.

Graeme Were's chapter explores the selective take up of new digital technologies to present the repository of images in 3D in the absence of the performance of life cycle rituals within which the images would have been actualized in objects. He argues that the transformation of images from 2D into 3D via digital means have made this technology uniquely capable of maintaining their strategic role in navigating intersecting worlds. The quality of process and action resulting in object forms has remained the same even though on the face of it seemingly everything has changed.

References

Bing, G. 1999. Editorial Foreword. In *A. Warburg, The Renewal of Pagan Antiquity: Contributions to the Cultural History of the European Renaissance*. Translation by David Britt. Getty Publication, 81-89.

Boas, F. 1915. *Race and nationality*. New York: American Association for International Conciliation.

--- 1955[1927] Primitive Art. Toronto: Dover Publications, Inc.

Bourdieu P. 1977. Outline of a Theory of Practice. Cambridge: Cambridge University Press.

Damon, F. 2012. Labour Processes Across the Indo-Pacific: Towards a Comparative Analysis of Civilisational Necessities. *The Asia Pacific Journal of Anthropology*, 13(2): 170-198.

--- 2016. *Trees, Knots and the Outrigger: Environmental Knowledge in the Northeast Kula Ring*, Oxford: Berghahn.

Deleuze, G. 1994[1968]. *Difference and Repetition*. Translated by Paul Patton. London: Athlone Press.

Descola, P. 1997. *The Spears of Twilight: Life and Death in the Amazon Jungle*. London: Flamingo.

Didi-Huberman, G. 2002. The Surviving Image: Aby Warburg and Tylorian Anthropology. *Oxford Art Journal*, Vol 25(1): 61-69.

Erikson, P. 2007. Faces of the past: Just how "Ancestral" are Matis "Ancestor Spirit" Masks? In C.Fausto & M.Heckenberger (eds.) *Time and Memory in Indigenous Amazonia: Anthropological Perspectives.* Pp. 219-242. Gainesville: University Press of Florida.

Forge, A. 1970. Learning to See in New Guinea. In P.Mayer (ed.) *Socialization: The Approach from Social Anthropology*. Pp. 269-292. New York: Tavistock.

--- 1973. Style and Meaning in Sepik Art. In A.Forge (ed.) *Primitive Art and Society*. Pp. 169-192. London: Oxford University Press.

Fortis, P. 2010. The Birth of Design: A Kuna Theory of Body and Personhood. *Journal of the Royal Anthropological Institute*, 16(3): 480-495.

- --- 2012. Kuna Art and Shamanism: An Ethnographic Approach. Austin: University of Texas Press.
- --- 2016. General MacArthur Among the Guna: The Aesthetics of Power and Alterity in an Amerindian Society. *Current Anthropology*, 57(4):430-451.

--- 2019. The Aesthetics of 'time-reckoning': a Guna Chromatic History. *Journal of the Royal Anthropological Institute*, 25(3): 441-466.

Gell, A. 1985. How to read a Map: Remarks on the Practical Logic of Navigation. *Man*, 20(2): 271-286.

--- 1992. *The Anthropology of Time: Cultural Constructions of Temporal Maps and Images.* London: Berg.

--- 1998. Art and Agency: An Anthropological Theory. Oxford: Clarendon Press.

Ginzburg, C. 2001. Wooden Eyes: Nine Reflections on Distance. New York: Columbia University Press.

Gonçalvez, M., A. 2010. *Traduzir o Outro: Etnografia e Semelhança*. Rio de Janeiro: 7 Letras.

Gow, P. 1989. Visual Compulsion: Design and Image in Western Amazonian Cultures. *Revista Indigenista Latinoamericana*, 2:19-32.

--- 1990. Could Sangama Read? The Origin of Writing among the Piro of Eastern Peru. *History and Anthropology*, 5:87-103.

--- 1997. A Lesson in Piro Beadwork: Understanding Style in a Lived World. Curl Essay Prize Lecture, Royal Anthropological Institute.

--- 1999. Piro Designs: Painting as Meaningful Action in an Amazonian Lived World. *Journal of the Royal Anthropological Institute*, 5(2):229-246.

Gregor, T. & D. Tuzin (eds.) 2001. *Gender in Amazonia and Melanesia: An Exploration of the Comparative Method*. Berkeley: University of California Press.

Guss. D. 1989. To Weave and Sing: Art, Symbol, and Narrative in the South American Rainforest. Berkeley: University of California Press.

Heckenberger, M. 2007. Xinguano Heroes, Ancestros, and Others: Materializing the Past in Chiefly Bodies, Ritual Space, and Landscape. In C.Fausto & M.Heckenberger (eds.) *Time and Memory in Indigenous Amazonia: Anthropological Perspectives*. Pp. 284-311. Gainesville: University Press of Florida.

Kopenawa, D. 2013. *The Falling Sky: Words of a Yanomami Shaman*. Cambridge (MA): The Belknap Press of Harvard University Press.

Kosseleck, R. 2004. Futures Past: On the Semantics of Historical Time. New York: Columbia University Press.

Küchler, S. 2002. Malanggan: Art, Memory and Sacrifice: Oxford: Berg.

- --- 2005. The Modality of Time-Maps: Quilting in the Pacific From Another Point of View. *RES: Anthropology and Aesthetics*. 47:179-190.
- --- 2008. Technological Materiality: Beyond the Dualist Paradigm. *Theory, Culture and Society*. 25(1):101–120.
- --- 2009. *Tivaivai. The Social Fabric of the Cook Islands*. London: The British Museum Press.
- --- 2013. Threads of Thought: Reflection on Art and Agency. In L. Chua & M. Elliott (eds.) *Distributed objects: Meaning and Mattering after Alfred Gell.* Pp. 25-38. Oxford: Berghahn.
- --- 2014. Additive Technology and Material Cognition: A View from Anthropology. *Journal of Cognition and Culture*, 14: 385–399.

Lagrou, E. 2007. A Fluidez da Forma: Arte, Alteridade e Agência em uma Sociedade Amazônica. Rio de Janeiro: Topbooks.

Lévi-Strauss, C. 1963. Structural Anthropology. New York: Basic Books.

- --- 1973[1955]. *Tristes Tropiques*. Translated by John and Doreen Weightman. London: Jonathan Cape.
- --- 1982. *The Way of the Masks*. Translated by Sylvia Modelski. Seattle: University of Washington Press.
- --- 1995. *The Story of Lynx*. Translated by Catherine Tihanyi. Chicago: The University of Chicago Press.

Miller, FG., E. Galanter, and K. Pibram 1960. *Plans and the Structure of Behaviour*. New York: Henry Holt & Co.

Miller, J. 2009. Things as Persons: Body Ornaments and Alterity among the Mamaindê (Nambikwara). In F. Santos-Granero (ed.) *The Occult Life of Things: Native Amazonian Theories of Materiality and Personhood*. Pp. 60-80. Tucson: The University of Arizona Press.

Mosko, M. & F. Damon. (eds.) 2005. On the Order of Chaos: Social Anthropology and the Science of Chaos. Oxford: Berghahn Books.

Munn, N. 1992. The Cultural Anthropology of Time: A Critical Essay. *Annual Review of Anthropology*, 21:93-123.

Neisser, U. 1976. Cognition and Reality: Principles and Implications of Cognitive Psychology. San Francisco: W.H. Freeman.

Seeger, A. 1975. The Meaning of Body Ornaments: A Suya Example. *Ethnology*, 14:211-224.

Seeger, A., R. Da Matta, E. Viveiros de Castro. 2019[1979]. The Construction of the Person in Indigenous Brazilian Societies. *Hau: Journal of Ethnographic Theory*, 9(3): 694-703.

Severi, C. 2015. *The Chimera Principle: An Anthropology of Memory and Imagination*. Chicago: Chicago University Press.

Strathern A. & M. Strathern. 1971. Self-Decoration in Mount Hagen. London: Duckworth.

Strathern, M. 1979. The Self in Self-Decoration. Oceania, 49(4):241-257.

--- 1988. The Gender of the Gift: Problems with Women and Problems with Society in Melanesia. Berkeley: University of California Press.

--- 1991. Partial Connections. AltaMira

Taylor, A.-C. 1996. The Soul's Body and Its States: An Amazonian Perspective on the Nature of Being Human. *Journal of the Royal Anthropological Institute*, 2(2):201-215.

Tylor, E.B. 1871. *Primitive Culture*. Cambridge University Press.

Viveiros de Castro, E. 2002. Esboço de Cosmologia Yawalapíti. In *A Inconstância da Alma Selvagem e Outros Ensaios de Antropologia*. São Paulo: Cosac & Naify.

Wagner, R. 1986. Symbols That Stand for Themselves. Chicago: University of Chicago Press.

--- 1991. The Fractal Person. In: M. Strathern and M. Godelier eds. *Big Men and Great Men: Personifications of Power in Melanesia*. Cambridge: Cambridge University Press.

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