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Transformation: A Concept for the Study of Cultural Change

Definition

Transformations are complex processes of change that occur between a *sphere of reference* and a *sphere of reception*. *Transformations* are effected by *agents* (who do not necessarily have to be human beings) belonging to the *reception sphere*, who, by selecting, adopting, or otherwise incorporating an aspect of the *reference sphere*, modify the *reception sphere* while at the same time construing the *reference sphere*. This close connection between modification and construction is an essential characteristic of transformation processes, which can occur both diachronically and synchronically. Such processes therefore lead to something "new" in two senses, namely to mutually dependent, novel configurations in both the *reference culture* and the *reception culture*. This relationship of interdependency, of reciprocity, will be denoted in what follows by the term *allelopoiesis*, a neologism formed from the Greek roots *allelon* (mutual, reciprocal) and *poesis* (creation, generation).

Introduction

The relationship between continuity and change in cultural phenomena is one of the fundamental problems of the historical study of cultures in general. Several different approaches have been taken to account for it theoretically, for example in the history of ideas or mentalities, in the field of iconology, and in concepts like 'thought style' (*Denkstil*) and 'paradigm shift.'

A perfect example of how complex and fruitful this line of inquiry can be is provided by the productive metamorphosis of ancient objects, concepts, practices, arts, and sciences that has been taking place for over two thousand years now. How is it possible, for example, that such disparate political regimes as the British Empire, fascist Italy, and the democratic republic of the United States all invoke the ancient idea of the *imperium Romanum?* What accounts for the success with which humanist historians adopted ancient models of analyzing the past for their own works of history, considering that these models were developed for a totally different society?

¹ In this and the following chapters, technical terms from the *transformation methodology* will be placed in *italics*.

What novel meanings grew out of the characters and scenes from Ovid's *Metamorphoses* when they were interpreted morally and allegorically and were subjected to a Christian *revaluation* in the Middle Ages, or when they were *translated* in the early modern period into paintings, sculptures, dramas, and operas? What needs were addressed by the idealizing use of antiquity in drama and historical novels in the nineteenth century, especially when one considers the rapidly increasing scientization of antiquity then taking place? Why, again in the nineteenth century, was a new physics able to legitimize itself by relying on the ancient philosophical concept of atomism? And finally, on another level: does this modern trend towards scientization represent the ultimate and final stage in the productive *appropriation* of ancient cultural phenomena? Or does antiquity continue to be fundamental for the construction of modernity, even if only as an indispensable foil?

The theory of *transformation* proposed here is meant to provide a versatile organon for the description and analysis of such instances of cultural change. The concept of *transformation* bears on the pragmatic, institutional, and semantic phenomena of cultural change, both in their temporal development and in their spatial location and diffusion. *Transformation* is understood as reciprocal creative production (but also as *creative destruction*), as the *translation*, transfer, and reconfiguration of cultural goods that plays a foundational role for the development of a society's systems of knowledge and art as well as for its cultural and political self-positioning. In this way the term '*transformation*,' which is already used prominently across many disciplines, from mathematics to the natural and social sciences and the humanities, is taken up and expanded to include the principle of *allelopoiesis*, i.e., of reciprocal constitution, construction, or fashioning.

The principle of *allelopoiesis* makes it easier to depart from linear concepts of unidirectional influence. *Transformation* posits that an object or phenomenon from the *reference sphere* is not static or simply established, but rather is altered, generated anew, even 'invented' by the specific medial conditions attending any given process of *transformation*. At the same time, the *reception sphere* itself is altered in the act of transformative incorporation. Thus this act of incorporation cannot merely be understood as an instance of borrowing or adoption, of inscription or documentation, but rather must always be seen as a constructive act as well that follows the rules and impulses of a specific time and culture. It can be assumed, finally, that *reception cultures*, in their understanding of what they have incorporated, always create a concomitant narrative of self-understanding through which cultural identities and efforts at self-reflection are regulated. Thus an investigation into *transformation* does not ask primarily whether a given reference to a *reference culture* is correct or incorrect. The point, instead, is to describe an historical process as an instance of *transformation*.

The theory of *transformation* introduced in this essay has been developed specifically in order to be applied to the widest range of processes of cultural change. If the illustrative examples in what follows come mainly from Greco-Roman antiquity, this is no accident. For it is only through its dialogue with antiquity as the paradigmatic

(albeit in no way homogeneous but rather endlessly transforming) cultural foil that European culture, with all its global consequences, has developed. This applies to the constitution of Christian culture, to the differentiation between the arts and the sciences, and to the split between the humanities and the natural sciences, as well as to the development of cultural and national identities. Neither antiquity itself nor its reception are the focus of interest here, but rather the role antiquity plays in the cultural, artistic, political, and scientific self-positioning of subsequent cultures. The vitality with which successive cultures have endowed the various aspects of antiquity accounts for the fact that more ancient artifacts and greater knowledge about antiquity are available today than one thousand or five hundred years ago. Like every historical epoch, antiquity not only existed in the past but has also come into being over the course of history.

The interdisciplinary nature of transformation theory is the root of its integrative approach, one that makes it possible to adopt and develop further the tools and methods of various theoretical models such as reception theory, transfer theory, and discourse analysis.

Reception theory, which emerged from the field of literary studies, first placed its focus on the relationship between text and reader. The understanding of reception as an interactive relationship was then applied to other arts. One line of reception research is concentrated on the productive integration of artistic phenomena into new aesthetic forms and media. The technical, scientific, political, economic, and social realms, on the other hand, have been largely ignored. Due to this primarily aesthetic focus, recent approaches in reception theory, in which more space is given to the creative performance of reception, generally remain concentrated on the intimate interaction between recipient and work, or rather on how the object is received along the recipient's horizon. In contrast, another line of research emphasizes the material aspect as a constitutive or leading factor in reception. According to this view, it makes a difference whether the object in question is, for example, a manuscript, a critical edition, or a painting, or whether one is dealing with knowledge gained through laboratory experiments. Transformation theory borrows these various developments and broadens the spectrum of phenomena that they can be used to investigate. In particular, the approaches to reciprocity found in more recent reception scholarship are adopted. In transformation analysis, however, the aspect of interdependence is developed further, since transformation is understood here as a retroactive process, and the focus is not solely on the horizon of the recipient. Indeed, the goal is to comprehend the entire process of *transformation* in all its component parts.

Complementary to reception studies, certain concepts of cultural transfer theory have been developed that are not aimed primarily at aesthetic processes. Instead they investigate people and things, practices and techniques, ideas and concepts in transfer between spatially separate cultures or socially disparate groups. Cultural transfer research tends to concentrate on the analysis of synchronic processes of cultural exchange and on the spatial differences that determine them. It emphasizes the dynamic nature of transfer processes as well as the interaction between source cul-

tures, intermediaries, and target culture. In addition, the solidity and permanence, or rather the density and duration, of the transfer process are considered the essential elements for differentiating a comprehensive process of this kind from more or less individual reception processes. Transfer theory focuses on processes of appropriation and assimilation into a new cultural horizon, understanding them as deliberately initiated and guided by specific interests. Transformation takes up these approaches but transcends them, for it also accounts for discontinuous and isolated processes of appropriation, as well as (willfully) ignorant and distorting forms of cultural incorporation. Transformation, with its insistence on allelopoiesis, overcomes the focus on the spatial aspect of cultural exchange, while also including temporal dimensions in its analysis.

A further important approach to describing cultural change is discourse analysis. It conceptualizes discourse as a dynamic system that determines the potential for what can be thought and said by a specific social group at a specific point in time. Foucault comprehended the diachronic shifts in discourse formations in two epistemological figures: archaeology and genealogy. Archaeology aims to reconstruct historical forms of knowledge and their rules, while genealogy describes the progression of discourses in connection with power configurations. In particular, more recent approaches assume that historical change takes place via the tension between the perpetuation of discourse and the latter's constant change. In this respect transformation theory shares a basic assumption with discourse theory: realities are generated and regulated discursively. Furthermore, both theories believe that not only practices (as manifested in texts and artifacts) but also supra-individual structures and institutions constitute the parameters and media of cultural change. In contrast to discourse analysis, however, transformation broadens the view to include the reference culture – and the reference culture's own alteration in the process of cultural change – as a constitutive element of that change.

How Transformation Works

Transformations generate dynamics of cultural production that always entail the alteration of what preceded them, on which the transformation reflexively bears and which is only specified over the course of the transformation process itself. Nevertheless, such processes are not linear - that is, they should not be understood as a oneway street. Rather they are characterized by relationships of interdependence: transformations are bipolar processes of construction in which each pole reciprocally constitutes and gives shape to the other - a kind of cultural self-construal. This self-reference can be consciously reflected upon, as the interplay between 'one's own' and 'the other.' But it can also flow into the transformation as an unacknowledged projection or identification. This productive reciprocity of cultural phenomena from the reference and reception cultures is denoted by the term allelopoiesis.

The consequence for the objects of transformation is that they do not move through the process of reception as constant, quasi-unchanged entities. On the contrary, the input and output of transformation must be understood as actively performative elements that mutually generate themselves and each other in the very process of transformation, and that furthermore are determined by the respective contexts of the reference and reception spheres.

The two sides of *allelopoiesis* – the constitution of the *reception culture* through the reference to a reference culture, and the reception culture's construction of the reference culture – are historically established phenomena and have in some cases been investigated in detail. In this sense the term allelopoiesis merely makes explicit and contextualizes something that has often been a staple of theoretical reflection, especially in historical scholarship. On the one hand, the concept emphasizes the fact that a given culture does not create itself ex nihilo, i.e., it cannot be thought of as an autopoiesis, but rather stands in relation to divergent cultural phenomena with which it associates itself, from which it distances itself, or by which it is influenced in other ways. On the other hand, the concept underlines the fact that every historical understanding of a circumstance is not a simple realistic representation of the past, but rather develops in the context of a specific perspective and within the parameters of specific theoretical positions and interests. Thus the representation of any past phenomenon must be understood as a construction from a later perspective.

The concept of allelopoiesis thus helps to take seriously the dimensions of retrospectivity, perspectivity, selectivity, and particularity that attend any historical representation. Historical descriptions and judgments are retrospective insofar as they regard what comes later as an historical result of what came before. They are perspectival insofar as they analyze and judge from a specific point of view. They are selective insofar as they ignore certain aspects and focus on others. Finally, they are particular insofar as they can never portray an event in its totality.

Due to this entangled dynamic of transformation processes, the reference object has an indefinite ontological status that can range between the two extreme poles of discovery and invention. This status cannot be determined or fixed in any general way, but rather, if at all, on a case-by-case basis. Reference objects need not be of a material nature, but can also be structural or semantic. On the one hand their otherness and inherent resistance to change set limits to what can be done with them. On the other hand they are characterized by processuality and formal and semantic plasticity or openness. This relationship between stability and plasticity delimits the scope of transformation. The function and potential force of the object of a transformation are tied to its specific embedding in a sphere of reference. The sphere's structural repertoires and stock of forms generally serve as a nodal point for transformations. What is more, they themselves can even generate and structure transformations. Conversely, the reception sphere also possesses formal and structural repertoires that determine the choice and incorporation of phenomena from the reference sphere.

Transformation processes are initiated by one or more agents. Agents need not be human beings, but can also be collective entities, institutions, or mere artifacts. Furthermore, various agents can work interactively or in competition with one another at the same time. Everything that changes the condition of another object or phenomenon by effecting a difference is therefore to be designated as an agent. This understanding of agency affords a more precise view of interdependencies and correlations between individuals and a group, between the material world, institutions, and human actors. Thus in addition to determining and causing relationships, the power and influence of non-human forces can be analyzed, bearing in mind that things, too, can authorize, allow, suggest, influence, block, forbid, etc.

Nonetheless, agency cannot be understood as a quasi-magical quality of media and materials. Just like the human actors involved in *transformation*, these, too, only become *agents* of cultural change during the *transformation* process. In this context media are assigned a special significance, precisely because they are not neutral communication channels or carriers of information. By virtue of their particular medial qualities, texts, images, and numbers – and in a broader sense also materials, technologies, genres, etc. – influence the *objects* of the *reference* and the *reception spheres*. The kind of object being transmitted (e.g., a text, an image, a formula), the material form it takes (a printed book or a manuscript, a painting, sculpture, or geometric structure), and the genre within which it is realized (epic or drama, mythological tale or popular genre scene, scientific treatise or mathematical model) is therefore of decisive importance for the *transformation* process.

Fundamental for the scholarly observation of *transformations* is the methodologically informed and dissociative distinction between *reception sphere* and *reference sphere* that underlies the investigation. Since these spheres must be identified anew in each *transformation* analysis, and since their relationship shifts with each successive *transformation*, the comparative criterion that underlies the analysis can only be determined by the state of knowledge possessed by the scholarly *observer*. Each *transformation* modifies the state of knowledge about the *reference sphere*, thus also modifying the validity claim (*Geltungsanspruch*²) made on this basis in the reception sphere.

The Validity of *Transformation*

In this context, the term 'validity' does not denote ahistorical truth or atemporal applicability, but rather refers to the value or impact that is ascribed to a *transformation* by an historical actor and his environment. It therefore makes more sense to speak of

² For a discussion of the term 'validity claim' (*Geltungsanspruch*), see the article on Jürgen Habermas in the *Stanford Encyclopedia of Philosophy*, by James Bohman and William Rehg, http://plato.stan ford.edu/entries/habermas/ (accessed 28 September 2018).

claims or pretensions to validity, in order to analyze better the full range of conditions that lead to the legitimation and authorization of transformations. These exist on all levels of transformation, even on that of the scholarly observer. The point of considering validity claims, it is important to emphasize, is not to test a transformation in terms of its success, correctness, or representational suitability. Instead it serves to investigate the criteria for success, correctness, or suitability that pertain in the reception sphere and to which transformations are subject, thus opening them up to analysis.

Transformations are always embedded in historical contexts and are therefore always tied to specific validity claims. The selection and arrangement of reference material are also determined by the claim made for them at a specific point in time by specific authorities or institutions. Pretensions to validity can also be expressed and negotiated in a less institutionalized and unarticulated form. For example, a work of art also makes an (aesthetic, political, etc.) validity claim. Therefore transformation analysis is devoted to both the explicit and the implicit validity claims made for an object and treats them in light of the criteria for validity pertaining at the time.

The examination of how transformations are legitimated and authorized also helps to clarify what forms are operative for constructing the past and allelopoietically utilizing the reference culture. Is the reference culture instrumentalized in the reception sphere for validity claims, or are pretensions to validity at work in certain transformations that are unrelated to the reference sphere or that can be differentiated from it? Both are significant for transformation. An object whose affiliation with a specific reference culture makes it problematic can be 'ennobled' in the transformation – that is, its value can be increased through its contextualization in the reception sphere. Yet the validity claim can also be based on this very affiliation (e.g., the object's great antiquity), which remains constant in all transformations.

If knowledge is what a given community recognizes to be knowledge, then in the reconstruction of transformation processes, those things will appear as ancient, medieval, modern, etc. when they are considered to be such in a specific knowledge community at a specific point in time. From this perspective, transformations in scholarship and science can also be considered without judging them primarily according to their correctness or the truth of their research results. The point is rather to ascertain their significance for certain transformation processes. Thus there are phenomena in the history of science that from today's point of view appear wrong or highly retroprojective but that were of great importance for the development of the episteme. In this way historical genealogies can be elaborated that do not aim at causes or origins and that do not lend themselves to the narration of the history of science as a history of progress, but that instead can assist the investigation of transformations, including with respect to the history of their validity claims.

Noting the significance that pretensions to validity have for *transformation* processes also helps to differentiate the roles played by the historical actor and the scholarly observer. To the degree that scholarly observers select, classify, and interrogate the material they study, they create new pretensions to validity that may seem suit-

able in the present but that need not necessarily be objectively 'correct,' thereby in turn themselves becoming agents of further transformations. In this sense, scholarship is itself transformative and triggers new transformations. Although scholars can be aware in their work of how tied their own assumptions are to their own time and context, this fact itself cannot be subjected to analysis, but rather must be the object of future transformation research. Hence cultures are constructed even in the hands of scholars - not only foreign ones, but also their own.

Transformation Types

Due to the allelopoietic character of transformations, no typology can fully account for the multifaceted forms in which they occur throughout history. Most descriptions of transformation processes concentrate terminologically on the effects such processes have on the reception culture. As for the specific types of transformation, the distinctions between them are largely determined by the perspective of the observer. Ultimately, it is the observer who decides whether the object, the reference sphere, the reception sphere, or the agent is decisive for the distinction made. The same transformation can be subsumed under different transformation types by different observers.

The typology of *transformation* set out here is a proposal for focusing the individual elements of a transformation, placing each one in turn in the foreground as decisive. This having been said, transformations are characterized primarily by one of three basic modes, namely the inclusion, exclusion, or recombination of cultural phenomena, which can be observed in relation to the *object* of the transformation as well as to the reception and reference spheres. With respect to the agents, furthermore, transformations can have various motivations depending on whether the goals and effects of the transformation include the conservation, authorization, legitimation, canonization, or idealization - or on the other hand the alienation, rejection, etc. - of the transformed phenomena. When considered this way, transformations are assumed to be projective processes.

In addition to these analytically describable forms, there are transformation phenomena that, albeit evincing no effect on the micro-level, nonetheless have a considerable impact on the macro-level. For example, various elements of a transformation or of several collateral transformation processes can interact with, strengthen, or weaken one another. In this way they can bring about a complex, perhaps unintentional, and unforeseen dynamic that, in light of its non-additive and non-linear effects, can be understood as an emergence. Precisely because transformations are always complex networks, it is sensible to differentiate heuristically between diverse types in a way that allows the contributing factors to be reconstructed. The open list proposed here in no way replaces historical analysis. On the contrary, it is intended as a handmaiden to such research.

Appropriation

A transformation that detaches a reference object from its original context and incorporates it, largely preserved (different from assimilation), into the reception culture. Appropriation can be the result of the intention of historical actors, but the relative constancy of ancient reference phenomena can also be due to material or medial factors.

One example of appropriation is provided by humanist editions of ancient historiographical and semi-historiographical texts, such as the Swiss humanist Heinrich Glarean's 1544 edition of Caesar's Commentarii de bello Gallico. The text as then known is included in its entirety and is supplemented with commentaries on geographical designations and the text's content, by prefatory images such as a map, and by still other texts. Through these alterations, the ancient text – the self-justification of a military commander – is adapted to the reading habits of a humanistically educated audience, but it still exists independently. In this way, humanist editorial practice brands the ancient version as 'other' while at the same time claiming it for itself in the commentary.

On the other hand, it can be seen as an assimilation of the same source text when Caesar's opening sentence ("Gallia est omnis divisa in partes tres") is taken up and incorporated nearly verbatim into original works of sixteenth-century humanist historiography, leading seamlessly into the author's own narration. This is the case in Polydore Vergil's (1470 – 1555) Anglica historia and in the Bavarian history by Johannes Aventinus (1477-1537).

Assimilation

A transformation that integrates elements of the reference sphere into the context of the reception culture, blending the two together. In contrast to appropriation, the elements are subject to more marked alterations. Whereas appropriation denotes various processes of gradual incorporation into the reception sphere, assimilation is a form of fusion in which the assimilated reference object can ultimately be recognized only as an allusion or, in extreme cases, can no longer be recognized at all.

An example of a moralizing Christian assimilation is the didactic program that Conrad of Hirsau (1030 - ca. 1091) formulated in his Dialogus super auctores, for use in monastic schools. In its conceptual arrangement of didactic material, this handbook of Latin literature constructs a textual canon of pagan and Christian authors that ignores temporal and religious boundaries and instead seems homogeneous and continuous. The differences between ancient and Christian authorities disappear, since, in Conrad's presentation, a pious and judicious reception of ancient works shows that they can be read as sources of divine truth.

Disjunction

A transformation in which something from the reference culture is dressed in a form belonging to the reception culture, or in which something from the reception culture is endowed with a form belonging to the reference culture. Proceeding from inclusive or from exclusive selection processes, disjunction can serve to legitimize a given art form by filling it with sanctioned content (such as inscribing Christian content in pagan poetic forms) or to adapt pagan or otherwise questionable content by means of a formal approximation (usually accompanying acts of revaluation) to the reception culture.

The term derives from the "principle of disjunction" of meaning and form developed by Erwin Panofsky in his book Renaissance and Renascences in Western Art. In characterizing a predominant tendency in medieval art, Panofsky made the following important observation:

Wherever in the high and later Middle Ages a work of art borrows its form from a classical model, this form is almost invariably invested with a non-classical, normally Christian, significance; wherever in the high and later Middle Ages a work of art borrows its theme from classical poetry, legend, history or mythology, this theme is quite invariably presented in a non-classical, normally contemporary form.³

Encapsulation

A transformation in which the object is passed down unchanged and integrated as a self-contained whole into the reception sphere, but without being subsumed into it entirely. The converse process is also relevant from the point of view of transformation theory and the history of science and scholarship, namely when individual elements are detached from their encapsulation and put into new contexts (such as a museum or a scholarly study) where they are perceived as discrete, ancient objects.

An example of encapsulation is the reliefs removed from the Mausoleum of Halicarnassus, which were reused as building materials in the walls of the neighboring crusader castle. Today the reliefs are preserved as discrete objects in the British Museum.

With regard to texts, quotations and motifs can also generally be understood as spolia in a metaphorical sense, as in the cento, a poetic form composed entirely of classical quotations that are decontextualized and assembled into a montage (montage / assembly). An example of textual encapsulation and recontextualization is the fate of a longer quotation from the proem of Parmenides' didactic poem from the fifth century BCE. Sextus Empiricus quoted the passage in the second century CE,

³ Erwin Panofsky, Renaissance and Renascences in Western Art (Stockholm: Almqvist & Wiksell, 1960), 84.

but without explaining its historical background. In the modern fragment collection edited by Laura Gemelli Marciano, 4 the quotation is detached from the context in which it was passed down (i.e., it is detached from Sextus Empiricus's text) and is arranged in what is posited to be the original order of Parmenides' poetic fragments. Furthermore, it is historically recontextualized in the editor's proposed interpretation of the poem.

Focalization / Obfuscation⁵

A transformation in which the agent's interest is concentrated on a specific object while other items or circumstances around the *object* are neglected, *obfuscated*, or otherwise marginalized. Focalization entails a narrowed but at the same time an intensified handling of the highlighted aspects of the reference object.

An example of the related processes of *focalization* and *obfuscation* is the ideal of Greek art propagated by Johann Joachim Winckelmann (1717-1768) in his Gedanken über die Nachahmung der griechischen Werke in der Malerei und Bildhauerkunst. which for him was characterized by "noble simplicity and quiet grandeur" ("edle Einfalt und stille Größe").6 From the broad spectrum of art works transmitted from antiquity, Winckelmann concentrated above all on those that corresponded to the ideal he hypostatized (peaceful individual figures), whereas he tended to marginalize emotional portrayals (maenad groups, for example). Focalization and obfuscation can also be observed in Winckelmann's treatment of one and the same object. In his interpretation of the Laocoön group, for example, he directed his attention primarily to the dying priest's "greatness of soul" ("magnanimitas"), obfuscating all the aspects of the artwork that indicate a desperate fight to the death. In addition, a focalization of this kind can be productive in a broader context. For example, Winckelmann's focalization led to a new interpretation of the ancient tradition that became the basis for Neoclassical aesthetics.

⁴ Die Vorsokratiker. Griechisch-lateinisch-deutsch. Auswahl der Fragmente und Zeugnisse, ed., trans., and com. Laura Gemelli Marciano, 3 vols. (Düsseldorf: Artemis & Winkler, 2007-2010), vol. 2: Parmenides, Zenon, Empedokles (2009).

⁵ As an alternative to 'obfuscation,' the German term Ausblendung could be translated as 'marginalization.'

⁶ The translation is found in the Wikipedia entry on Winckelmann: http://en.wikipedia.org/wiki/ Johann_Joachim_Winckelmann (accessed 28 September 2018).

Hybridization

A transformation in which novel cultural configurations are formed from elements of the reference and reception cultures, including intersections, distinctive syncretisms, and fusions, even of contrary and contradictory elements.

An example is provided by the Alexander poems of the twelfth and thirteenth centuries, fusions of ancient lore and courtly culture. In these Latin and vernacular hybrid forms, elements of the reference or the reception culture can dominate, depending on which language or poetic form is chosen. Whereas in the Old French Roman d'Alexandre, the ancient material is largely absorbed into the world of courtly norms, i.e., into the normative system of the reception sphere, the primacy of the ancient model is evident in the form and content of Walter of Châtillon's Alexandreis, which was also produced in France in the same period.

Ignorance⁷

A transformation that pays no attention to certain facts or circumstances. It can refer either to active ignorance, i.e., the conscious refusal to acknowledge something, or to passive *ignorance*, i.e., the (unconscious) inability to take cognizance of something.

An example of *ignorance* is the stance taken in the field of classical archaeology toward the colored painting of ancient sculpture. Although the polychrome nature of numerous works had been documented and described, the notion of a "white antiguity" endured far into the twentieth century.

Creative Destruction

A transformation in which the deliberate destruction of elements from the reference sphere is the necessary condition for the creation of something new. The empty space left by the act of destruction provides the possibility for cultural change.

A prominent example of transformation via creative destruction is Michelangelo's radical demolition of Old St. Peter's Basilica to make way for his own building plans. Noteworthy in this respect are also the numerous Christian churches that, beyond simply rededicating preceding pagan structures, arose from the latter's modification or demolition. Another example of creative destruction, this time in the field of literature, is the polemical attack on formal rhetoric and rule-based poetics that took

^{7 &#}x27;Ignorance' is a problematic term, as in transformation theory it embraces both the active, conscious refusal to acknowledge a person or thing denoted by the verb 'to ignore,' and the passive, (usually) unconscious lack of knowledge denoted by the noun 'ignorance.' As an alternative to 'ignorance,' the Geman term Ignoranz could be translated as 'nescience,' but the same difficulties inhere.

place in the second half of the eighteenth century, since only in its wake could a new literary language develop.

Montage / Assembly

A transformation that individually takes up various elements from the reference sphere and puts them together with elements from other contexts, creating a new relationship among them. This interplay creates new dimensions of meaning. The spectrum of *montage* ranges from the integration of individual elements into a new unit of meaning (e.g., in a syncretistic, hybridizing, or synthesizing way) to the desultory juxtaposition of elements whose fractured aspect holds in store a wider range of potential meanings and interpretations. *Montage* can also be considered a process of decontextualization (excision) and recontextualization (collage).

Justus Lipsius used the literary technique of the cento in his Politicorum libri sex (editio princeps 1589). He was then one-upped by the Baroque poet Julius Wilhelm Zincgref, whose Emblemata ethico-politica (1619) assembles original commentaries to its individual emblems out of passages taken from ancient texts and original content by the author; the various contributions are signaled by the use of different fonts. An example of collage technique in the academic context is the *Mnemosyne* Atlas conceived by Aby Warburg, intended to illustrate the "afterlife of antiquity" in European culture. For this purpose Warburg used photographs of paintings and sculptures, but also of postage stamps, placards, and newspaper clippings, that he mounted on wooden frames covered with black fabric and continually rearranged around certain thematic foci.

Negation

A transformative process of active and explicit exclusion. The object is rejected, but it continues to remain present though the negative relationship or rather is first constructed via this relationship. As opposed to *ignorance*, *negation* entails a demonstrative repudiation.

An example is to be found in the famous opening sentences of Filippo Tommaso Marinetti's Futurist Manifesto (1909), in which, in a radical departure from the academic tradition, the modern machine replaces ancient art, whose legacy is portrayed as hostile to both life and progress: "A roaring car ... is more beautiful than the Nike of Samothrace.... We want to free [Italy] from the countless museums that cover it like so many cemeteries."8

⁸ Filippo Tommaso Marinetti, Manifesto del Futurismo, in Le Figaro, 20 February 1909: "Un automobile ruggente ... è più bello della Vittoria di Samotracia.... Noi vogliamo liberarla ... dagli innumerevoli

Reconstruction and Supplementation

A transformation that results from a focus on fragments and through their connection to one another; the fragments can be available but may also be mere clues. Reconstructions are attempts at restoring a lost or only fragmentarily preserved whole. They pretend to the authenticity of the transformed product and neglect the interpretive dimension of the transformation. As opposed to reconstruction, in supplementation the reference elements are usually interpreted more freely in the process of attempted completion.

The Supplementum Lucani (published 1640), by the English poet and historian Thomas May (1595 – 1650), provides an example of reconstruction. It continues the Latin poet Lucan's (39 – 65 CE) civil-war epic *Pharsalia*, which in all likelihood was never actually completed by its author, who made it end with the death of Caesar. In the process, May adapts the discourse of the Roman Republic to the events of his own time. Accordingly, he idealizes and simplifies the figure of Cato the Younger, stripping him of Lucan's ambivalent portrayal and depicting him instead as a Stoic sage and epic hero.

From the sixteenth century until far into the nineteenth, sculptures found in fragmented form were completed via material supplementation, although such procedures just as often led to new creations. Thus in the seventeenth century, torsos of young boys, which the modern discipline of archaeology identifies as Narcissus, Hyacinthus, or victorious youths, were transformed into Apollos by having supposedly characteristic attributes added to them. Why? The contemporary desire for Apollo statues was great, and the appearance of the youths corresponded to the contemporary notion of what this god looked like.

Substitution

A transformation that exchanges one cultural complex for another. An example of the substitution of an ancient practice for a medieval one is the poetic crowning of Francesco Petrarca (Petrarch). In 1341, at the invitation of Robert, King of Naples, Petrarch was crowned poeta laureatus by the Roman Senate. He claimed to be reviving an ancient Roman honor. However, the crowning was also meant to substitute for a university graduation ceremony that included exams, a diploma, and an oration - a ceremony that, as we know from Petrarch's Familiares, the University of Paris had offered him at the same time. Petrarch systematically suppresses this fact, however, in all reports of the poetic crowning in order to emphasize the revival of an ancient tradition.

musei che la coprono tutta di cimiteri" (as quoted from Wikipedia, http://it.wikipedia.org/wiki/ Manifesto_del_futurismo, accessed 29 September 2018).

Translation

A transformation that transposes content from a reference culture into a reception culture, thereby recombining it under changed circumstances. This applies not only to the translation of a text from one language to another, but also to phenomena such as the 'translation' of Stoicism into a political theory in the Renaissance or into utopian and dystopian literature in the Baroque period.

A classic example of the manifold intertextual *translation* of ancient references in literature is James Joyce's *Ulysses*. Similar are inter-pictorial processes in the fine arts, such as Édouard Manet's use of the compositional structure of an engraving by Marcantonio Raimondi (Judgment of Paris, after Raphael, ca. 1515) for his painting Le déjeuner sur l'herbe (1862/63). According to Glenn Most, Raphael's School of Athens (1509 – 1511), with its division into three groups of people and their thematic characterization, can be understood as a multi-layered transmedial translation: the reference text is Plato's dialogue Protagoras in the Latin translation of Marsilio Ficino (editio princeps 1484).9

Revaluation / Inversion

A transformation that leaves elements of the reference culture recognizable as such but that creates semantic shifts. *Inversion* appears as a radical form of revaluation bordering on negation.

An example of a transformation that gives new meaning to and inverts an ancient reference object is Giordano Bruno's treatment of the central tenets of Aristotelianism. According to Paul Richard Blum, in his 1588 Camoeracensis Acrotismus Bruno revaluated the Aristotelian concept of "nature" as "eternal and indivisible essence," at the same time characterizing it as a "tool of divine providence animated by an innate wisdom." Thus he formulates a concept of nature that Aristotle himself explicitly rejected, but he designates it as Aristotelian by combining it with Aristotelian approaches to natural philosophy and scientific theory. In this way Bruno succeeds in portraying Aristotle as a representative of his own philosophy and himself in turn as a proper Aristotelian.

⁹ Glenn Most, "Reading Raphael: The School of Athens and Its Pre-Text," Critical Inquiry 23:1 (1996): 145 - 82.

¹⁰ Paul Richard Blum, Giordano Bruno (Munich: Beck, 1999), 107: "Deshalb favorisiert der Anti-Aristoteliker ... den Begriff einer einheitlichen Natur, gegen den Aristoteles ausdrücklich am Beginn der Physikvorlesung argumentiert hatte, nämlich die Natur als 'ewige und unteilbare Essenz, Werkzeug der göttlichen Vorsehung, die durch eine innewohnende Weisheit aktiv ist."

Multilevel, Complex Transformation Processes11

For an example of a complex transformation process in which various types can be discerned, let us consider the development of early Christian concepts of the afterlife and their transformation of ancient pagan and Jewish elements. The first Christian text to speak extensively of the damnation of sinners and the salvation of the elect and the just is the Apocalypse of Peter, which probably dates to the first half of the second century. The text relates how Peter sees the end of the world in the palm of Jesus's hand:

And he showed me ... on the palm of his right hand the image of that which shall be accomplished at the last day; and how the righteous and the sinners shall be separated, and how they do that are upright in heart, and how the evil-doers shall be rooted out unto all eternity.¹²

The punishment of individual groups of sinners that Peter sees is portrayed in the text of the *Apocalypse* as an eschatological prophecy of Jesus:

Then shall men and women come unto the place prepared for them. By their tongues wherewith they have blasphemed the way of righteousness shall they be hanged up.... And again behold two women: they hang them up by their neck and by their hair; they shall cast them into the pit. These are they which plaited their hair, not for good (or, not to make them beautiful) but to turn them to fornication, that they might ensnare the souls of men into perdition. And the men that lay with them in fornication shall be hung by their loins in that place of fire.... And the murderers and them that have made common cause with them shall they cast into the fire, in a place full of venomous beasts, and they shall be tormented without rest.¹³

The theatrical reception situation in which Peter observes this eschatological prophecy is of structural importance for the differentiation of a punitive Christian afterlife, for this reception situation puts the *Apocalypse of Peter* in a tradition of pagan performance based on a model of publicly staged punishment. How the Apocalypse of Peter utilizes these Roman imperial spectacula can be described as a multilayered transformation process.

In the *Apocalypse of Peter*, a Christian afterlife topography is constructed that is distinct from the here and now. In this process, structural and reception patterns of a specific cultural practice, namely the punitive and performative forms of spectacula, are translated into a new reception situation and into a narrative depiction of the last days. This intermedial transfer makes recourse to the narrative procedure from the early Jewish tradition for describing journeys to the afterlife. This procedure was first used in the Book of the Watchers, and it is what made the narrative suggestion of an

¹¹ This section was contributed by Maximilian Benz (Excellence Cluster Topoi, Berlin).

¹² The Apocalypse of Peter, "The Ethiopic Text," trans. M. R. James (Oxford: Clarendon Press, 1924), available online, http://www.earlychristianwritings.com/text/apocalypsepeter-mrjames.html, accessed 29 September 2018.

¹³ The Apocalypse of Peter, "The Ethiopic Text," trans. James.

afterlife topography possible in the first place. It consists of the combination of imaginary movement (a traveler to the afterlife successively sees the locations of salvation and damnation) and demonstrative dialogue (the punishments and rewards are described and interpreted in a dialogue between the traveler and an angelus interpres).

The Apocalypse of Peter adopts the spatial concept but modifies the narrative procedure: the imaginary journey is replaced by a collection of punitive images, and the technique of demonstrative dialogue is converted into the deictic structures of a monologue, namely Jesus's eschatological prophecy. This is done with a view to the didactic, exhortative function of the eschatological spectacle. In addition to this focalization on admonition, the transformative adoption of the narrative procedure of the afterlife journey also constitutes an instance of revaluation. For the Apocalypse of Peter clearly departs from the early Jewish tradition. It does not narrate a journey to the afterlife – and thus describes no afterlife topography – but is rather a virtual 'tour of Hell,' concentrated on the punishments of the Last Judgment. This function of the 'tour of Hell' is supported by an act of hybridization, in which gruesome images of staged corporal punishment from pagan spectacula and philosophical and literary schemes of the underworld (for example in Plato or Virgil) are fused with the principle of mirror-image punishments familiar from the ancient Jewish tradition.

The Apocalypse of Peter's peculiar eschatological narrative makes it an early Christian transformation of pagan spectacula. The creative power of this transformation consists precisely in the fact that it fuses components of the early Jewish tradition with genuinely Christian elements, incorporating a visually impressive archetype of pagan culture into a haunting narration of the full range of punishments of the last days. In one fragment in which it is transmitted, the Apocalypse of Peter ultimately culminates in universal salvation: in this version the gruesomeness of the transformed *spectacula* exclusively serves the purpose of exhortation, and it is sublimated in the view that all humankind will be saved.

However it is not only the Christian reception sphere that is transformed in this relationship of reciprocal construction (allelopoiesis). In the punitive images of the Apocalypse of Peter, due to the necessarily selective reference, a Christian perspective on pagan spectacula becomes evident that both proscribes them and repudiates them as futile. The cultural practices of the reference sphere are newly interpreted as if sub specie aeternitatis.

The Apocalypse of Peter represents only one facet of the way Christianity dealt with spectacula over the centuries. From a broader perspective, the allelopoietic dimension of this transformation process lies not only on the plane of the historical actors, but rather must also be calculated on the plane of the scholarly observer. For the modern reconstruction of late-antique pagan spectacula depends largely on Christian testimony. Thus the Church Fathers' polemics against Roman imperial spectacle culture have preserved conceptions of the spectacula that even now continue to determine our understanding of this phenomenon from the ancient pagan reference sphere.