A Study of Punctuality
Using typo-chronology as Barthes’
studium and punctum

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Process as lawful and unruly
Fundamental to all archaeological typological and chronological work is the observation that it seems like there could be adherences to law not only in nature but also in certain cultural structures and cultural material expressions. Such conformities and predictable patterns are essential for the creation of reliable categories and the determination of sequences. Paying attention to different types of processes enables us to see duration as well as ‘innovative moments’ in the past. Often, this requires a safe time-distance in relation to the process, allowing us to regard certain slots of time as past and completed, and thus interpretable as entities and sequences. However, the contents of those entities will rarely be homogeneous, and the processes studied will not always have progressed smoothly and uninterrupted. A common experience is that instead of providing a firm foundation for argument and further contextualization, typologies or groups almost always demonstrate anomalies which break with the rules, distort the picture and create uncertainties.

How are we, then, to say something meaningful through archaeology about processes of change in the past and their social implications? For one thing, the difficulties of messy categories, processes and case studies must not keep us from attempting to extract what we can and to use that for more general considerations. In doing so, it is vital to pay attention both to heterogeneous processes that may release and drive change, and to regularities and constancies that may underpin those
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processes (cf. Bijker & Law 1992:6). Departing from a case study where apparent conformity to law is contrasted with exceptions to the rules, this paper will move beyond the difficulties such exceptions may cause, to illustrate how we may instead turn them to our advantage. How can we use archaeological anomalies and problems, interrupted processes, and hard-to-define entities as interpretational assets? Here it is attempted using Barthes’ concepts of punctum and studium as theoretical tools, and with methodological inspiration from an archaeological study of gravestones by Dethlefsen & Deetz (1966).

Innovation and problems as archaeological puncti

Roland Barthes introduced the concept punctum (pl. puncti) to pin down and describe that ‘something’ that catches our particular attention in an image. This would be a striking feature that makes the viewer react and respond to the contents of the image in a particularly strong way which is often emotionally founded (Barthes 1981:44). It can be almost anything (a missing shoe, a large cap, dirty nails) that breaks with the expected. And what is expected? That depends on who is looking. Barthes’ punctum is something that is in the eye of the beholder, something that emanates from his or her individual understanding, previous experiences, etc., but in combination with culturally inherited and founded pre-understandings (partly individual, partly collective) (Barthes 1981:48-9).

As a concept, the punctum is not inextricably tied to the study of images alone. While originally used for discussing images and photos, the concept may be transferred to other areas and used when discussing objects or the study of material culture (cf. Reinius 2008a, b, c). The point is that this ‘something’ which strikes the individual observer as odd and teases the mind is meaningful to her or him because of who she or he is, it is an individual experience; but it is also because of something immanent in the material, like a displacement in the structure or normality. A misplaced object in collections, a peculiar likeness with something seen before... Therefore, it could also potentially be seen or understood by more than one person. Though it cannot be planned for by the producer of the image, the punctum may be reacted upon by one or several viewers because of what it is and because of who they are.

The archaeological study of innovation and problems such as puncti in Barthes’ terms may be useful in two ways. It allows us to catch a
glimpse of the very moment when something happens, and perhaps also to understand why it happens (in this particular moment or way). It also serves to shed light on the cultural ‘structure’ that Barthes calls *studium*, which we perhaps did not even really see or perceive until we saw the ‘exception’, that is, the punctum. While the punctum speaks to our emotions, the studium speaks to our intellect. While the studium of an image may please us and generate general interest (how did people dress in those days? What did that famous writer look like?), it is the punctum that makes us stop over it. For the individual the punctum is the truly rewarding part, but to an investigating scholar both instances are useful on different occasions. A case study below, using Medieval coins, will illustrate this line of argument.

**Where is ‘change’ situated?**

Wiebe Bijker and John Law once called (Bijker & Law 1992:7) for studies of networks and technological processes to specify *contents* as well as contexts of processes of change. This is not a general critique of contextual thinking, but more a concerned plea for more precise investigations of processes, and for an integration of heterogeneous cases with attempts to build more general models (in this case, within actor-network-theory scholarship and the study of technological change). It was not a call to only draw the broad outlines, add yet more contextual layers, move on general levels, nor to regard the ‘social’ as a structure detached from objects or from ‘action’. Rather, their point was to show what those things imply or cause in *reality*. While the general outlines and models are more to do with what Bijker and Law meant by ‘context’, the ‘content’ of a process should be better revealed in heterogeneity and the singular instances. This call closely relates to the issue of finding out where change really happens. Where are ‘structures’ realized; where are ‘processes’ situated (cf. Latour 2005)?

Though useful for other purposes, a model will probably never correspond entirely with reality in any given situation, or in any given setting. But to start from the content and development of a specific process may shed light on a multitude of variations of realities that at least partly coincide, so as to constitute the foundation for a more general conclusion or understanding. This is an argument for always studying ‘processes’ through ‘cases’, no matter what the level of scale. Through specific and delimited cases it is possible to make the broad
outlines relate to lived and experienced reality, to make them human and possible to grasp, and to situate our understanding.

**Processes of stylization and of transformation**

A famous study of gravestones (Detlefsen & Deetz 1966; Deetz 1977) may be referred to here, a thorough study which points at some general principles regarding processes of change in culturally created material. By comparing gravestones inscribed with dates in some early Northern American colonial graveyards, it was possible to establish a typology and chronological sequence for the image motifs (skulls, cherubs and willow-trees) appearing on the stones, and from this to draw a number of interesting conclusions regarding the colonial society. While testing a general archaeological method (seriation), some interesting traits in the very development of the pictures were also demonstrated.

One such trait was the process of reduction and stylization that the images went through (Fig. 1). The older images were more elaborate and contained more detail while the more recent images contained less detail to the extent where it would have been difficult to even understand the content, had there not been older variations to refer to. Rather than regarding these very reduced images as mistakes or as bad craftsmanship, Deetz demonstrated how they formed part of a process of stylization and purification of concept which occurred in all the different graveyards, that is, by all the different stonemasons independent of each other (Deetz 1977:102-17). It was not a matter of laziness or sloppiness, but, in some cases, it depended on a familiarity with the motif that made it unnecessary to fill out all the details in the later stages of the sequence.

In some cases, on the other hand, the reduced and dissolved images were the result of unfamiliarity with the original images. The half-informative middle stages of the sequence just didn’t provide enough information to new stonemasons, who instead interpreted the images from what coherence their own logic and understanding could give to the picture. The early winged skulls were transformed into owls, fantastic wigs, keyholes, etc., separate from the ‘normal’ development into cherub angels (i.e. the next typological stage in the mainstream sequence). Here, the study points to another principle, which is how humans have the urge to create meaning in what they perceive, and how the process of creating meaning includes interpretive and re-interpre-
tive moments. Even when the knowledge about the first images was
present, the far-reaching stylization process was abandoned for a revived
image at a certain point. Perhaps (as Deetz would have it) this was for
ideological reasons, but perhaps also because the stripped images were
perceived as boring by a new generation and perhaps no longer to their
taste. In order to prove this, the newly introduced, ‘appreciated’ type
had much more detail once again.

Three processes seem to be at work in the case of the gravestones:
the ongoing stylization of the images; the interpretative process which
changed some of the pictures into something new and unexpected;
and the intentional, innovative process which introduced the cherubs
to substitute the worn-out skull motif and the willow-trees to replace
the cherubs. The shift of types apparently offers an opportunity to
revive the style, but also to slightly change and transform the meaning

Fig. 1. Principles of the development of image motifs on gravestones, after
Deetz 1977, Fig. 4. See also Dethlefsen & Deetz 1966, Figs. 4-5; and Deetz
1977, Figs. 5, 7, 9, for the stylization processes within motif types.
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content, without losing contact and familiarity with the precedent objects/images. It also seems, judging from this study, that new and intentionally composed motifs are more complex and detailed, than the ones that are born from repetition and imitation. Complexity goes towards stylization, the motif is revived, and the new motif is again reduced.

This may not always be the case, but there seems to be a general pattern here that is visible also in other images and with parallels in other culturally created material, which gives enough substance to the thought that this is a process that tends to repeat itself in an almost law-bound way. The number of distinct and characteristic (typological) traits decrease over time, or, the opposite, simple objects and motifs are completed and elaborated. One driving force is the human tendency to leave out what is considered unnecessary or redundant information (which amplifies the sub-conscious effects of a message and strengthens the ties of the group who understands it); the other force is the urge to embellish and fill out what is considered poor or empty. These processes seem to be general enough to build typological sequences and chronologies upon, and were several times tested in archaeological studies like Deetz’s.

Such processes do not always relate to complexity-simplicity, but similar ‘rules’ seem to apply such as in the case of a reduction of size over time, or the opposite enlargement into sometimes baroque dimensions, where the type finally loses contact with its meaning content (whether purely metaphysical or defined by its use). In coins, such ‘rules’ are also the decrease of weight and precious metal content over time, a fact that occurs in many historical coin-types. Whereas the latter case is most often considered as having economic purposes (gaining on the differences) and thus subject to other driving forces, it may equally and easily also be regarded in the context of, and in parity with, other ‘determinate’ processes in human- or culturally-created material as were referred to above.

The Studium of some Gotlandic coins

A group of Swedish (Gotlandic) coins from the 12th century were investigated by the present author with the above considerations in mind (cf. Myrberg [Burström] 2008, 2010) but with the purpose of creating a typo-chronology which was to form part of a larger study. Some of
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the conclusions of this chronological investigation will be referred to in order to illustrate some points of relevance for the application of Barthes’ *studium/punctum* concept within the study of archaeological process. It is helpful to begin with a brief description of the coins in question and the way the investigation was conducted.

The group of coins as a whole was minted for a period of about 150 years (AD c. 1140–1288) (Fig. 2). The subgroup (group I) mainly referred to in the present paper was minted for about 80 years (c. 1140–1220), and the iconography during that time remained basically the same, after which it was replaced by a partly similar, but decisively new type (group II). After 1288 the whole group or coinage was substituted with coins of an entirely different character. The shift in iconography between the two subgroups may be compared with the shift between skulls and cherubs in Deetz’s study. The number of coins in sub-group I known today is c. 25,000, while the number minted may have been several million. It is accordingly one of those archaeological sources that easily lends itself to statistical method.

Since the coins of group I are so similar to each other at first glance, it was unfeasible to organize them according to hoard dates (*tpq*), the most common way to begin a chronological investigation in numismatic research. A first point of departure was instead the hypothesis that this group of coins would ‘behave’ like many others and decrease in weight

Fig. 2. The earliest Gotlandic coins: Group I (c. 1140–1220) (top) and Group II (c. 1220–88) (below). Scale 2:1. Coins from the collections of the Royal Coin Cabinet, Stockholm. Photographs and figure assemblage by the author.
and silver content over time. To test this, a few dated hoards were weighed and it turned out the hypothesis of decreasing weight held true – but only on a large scale, when many coins were grouped together. Individually, coins of any date could very well diverge significantly (up or down) from the average and median values. A metal analysis of some samples showed that the silver content was about the same in light and heavy coins, and the remaining explanation was thus that the coins (specifically, the flan) had become smaller (in diameter) over time. Still, the number of exceptions to that rule made this typological trait of little use for dating purposes when it came to individual specimens. Statistics was thus a help to see the large-scale development, but of much less use in individual cases. One of the purposes of the study was to create a chronology which would enable the archaeologist to date contexts; another to break down the coin group into a sequence which would allow for conclusions to be drawn about the societal changes of which the coins were a part. For these purposes, and if most finds are to be useful, it was necessary to discern a more reliable individual dating.

Another way of tackling the problem was therefore to look at the images, similar though they were. Previous scholarship had suggested that the presence of inscriptions (text) or not might be a key to the chronology. It became apparent that this was not the case after the study of coin weight combined with hoard tpq was completed. Inspired by the gravestones’ study, the coin images were instead analyzed and organized according to the complexity of the image (reverse, ‘back’, side, entirely without text) (Fig. 3). The image, a church building, has several distinct traits despite being minute: gates, windows, protruding towers, etc. The hypothesis of decreasing image complexity proved very well against the other data and a chronological sequence built on this could be made up. Also this was a large-scale investigation, but combining quantitative and qualitative methods (e.g. counting numbers of typological elements and searching finds for ‘characteristic’ dies of my own judgement and preference). When tried in individual cases, the ‘complexity-decrease hypothesis’ also held true to a much larger extent than when using the weights or text inscription. There were, however, a few exceptions to the rule, of which one will be returned to below.

In the context of this paper the resulting typo-chronology could be regarded as the physical reflection/component of a ‘structure’ in Giddens’ terms (1979:63-5, cf. 1984); comprehensible, reliable and
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predictable cultural rules or structuring properties that guide transformation over time and space. It could also be referred to as the image studium in Barthes’ terms: the normal expression of a certain cultural setting, understood and shared (though maybe somewhat differently interpreted) by both the creator (‘sender’) and viewer (‘consumer’, or ‘receiver’). By forming an understanding of the studium, recognizing it, we who are from another cultural context may also share some parts and understanding of its meaning content and operators (Barthes 1981:50). This implies that the study of the large-scale process (like a typo-chronology) may also be a way of reaching an understanding of cultural aspects of past worlds. In the case of the Gotlandic coins above, an understanding of general cultural matters or patterns (such as cultural contacts, ideological content of image, aspects of economic life, etc.) could be achieved through the typo-chronology even though no direct information was given regarding more precise societal events, individual agents or the similar. Instead, this type of information is to be found through investigating the micro-level, the small-scale case. Such an individual instance or exception to the structure may often be detected through an anomaly that serves as a punctum.

Fig. 3. The elements of the reverse design analysed in the study (reconstructed complete pictures, based on several coins). The scheme demonstrates the chronological changes the types underwent over an estimated period of sixty years. To the far left an early example of the obverse side with a clover-cross, followed left – right by four examples of reverse (church) types (the oldest to the left). Not to scale. Drawings and figure assemblage by the author.
A type-variation as a punctum

The same case of Gotlandic coins, with which the reader is now acquainted, will also be used to illustrate the concept of punctum and how it may be put to use in archaeology, even in investigating a process. When working with the then-established typo-chronology in the continuing larger study, a doubt as to its validity arose when a combination was found of what I knew to be an early coin obverse (front-side) with a substantially later reverse (back-side). Not only was the reverse image later in time, but it was executed in a distinctive style, soft and curled (Fig. 4). Now, what to do with this obvious falsification of the basic assumptions for the chronology? Since the chronological framework was felt to be reliable on the whole, there had to be a specific explanation for this anomaly.

Upon closer examination of the coins involved, it turned out that the obverse image of the ‘late’ combination was blurry and lacking sharpness, implying that the die was corroded when it was used to strike the image onto the coin flan. In contrast, an early combination had a sharper obverse image. A probable interpretation of this is that the obverse die had been kept, perhaps in a damp place, by the artisan and then reused at a later stage. Here, something specific was learnt regarding the organization of coinage and minting in this context. Apparently dies could be reused after a while and were not immediately destroyed after being retired from regular use (this is otherwise normally assumed to be the case). Perhaps the die concerned was put aside because it was worn or ‘out of style’, but at a certain point and for some specific reason it was needed and found acceptable again. Since the reused die was an obverse, not the reverse that was assumed to carry the ‘chronological’ information, the case also seems to underline and confirm that assumption, rather than proving the chronology wrong. One may argue that if the obverse was regarded as less time-specific, it could more easily be put to use again than the more time-bound reverse. With its old style, it may also consciously have been put to work to incorporate into the overall coinage context the simplified and somewhat peculiar reverse image, which is comparable to the half-informative ‘middle stage’ of the images in the gravestones study above. It linked past and present in a tangible way which may well have drawn on ideas of ‘legitimization through archaisation’, that is, deliberate association with real or perceived genealogies and an idealization of the past for political purposes (cf. Hyenstrand 1996:153-65; Hingley 2009:156).
The coins, being both 'functional' artefacts and 'meaningful' artworks, open up for interpretations giving equal weight to their pragmatic and technical dimensions and to their autonomous symbolic meanings (cf. Gell 1996:36-7). The interpretations suggested above do not only explain the singular case, but also provide a cultural-historical understanding of some of the broader societal conditions in twelfth-century Gotland. From the particular it expands to providing an explanatory framework which may be used as at least an initial hypothesis for other such odd cases. That is, the punctum which called for attention and prompted the interpretation interplays with the studium.

Fig. 4. One of the oldest variations of Group I (left – top right combination). The variation was produced in two combinations, with a significant interlude between the production of the first combination (left – top right) and the second (left – bottom right). The same obverse die (left) was used for the older coins as for the more recent ones. The indistinct lines of the more recent coins are due to corrosion on the die, indicating that it had been stored for some years, perhaps as many as 40–50, before it was put into use again. Not to scale. Drawings and figure assemblage by the author.
Another striking feature in this unexpected combination of dies is the qualitative change that the church on the reverse has ‘suddenly’ undergone. The older church is more detailed and complex and very similar to coins from Frisia and northern Germany. Indeed, so closely do they recall those, in image, style and technology, that the older variations of Gotlandic coins may be assumed to have been produced either by artisans from those European areas, or by artisans who were taught there. Churches looking like that simply did not exist on Gotland in this period. The domestic church would most likely have been a small, rectangular building, most often made of wood, without any towers, and decorated with local-style animal ornamentation developed from the Viking styles (gradually influenced by Continental Romanesque style), including animal-head finials on the roof (see e.g. the eleventh-century stave church from Hemse on Gotland (Sweden), now in the Historical Museum in Stockholm; the still-standing twelfth-century church from Borgund (Norway); a variety of examples in Eckhoff 1914-16; as well as the traces of the floor plans of several other early Scandinavian churches found in the last century).

Indeed, this is also what the church building on the later coin looks like. The later image is thus closer to the domestic-style churches, and rephrases the concept *church* into local terms through substituting the towers with what looks like animal-head finials. The understanding of the concept *church* is there but it may be argued that the die-cutters are no longer imitating but depicting. One possible interpretation is that this is the moment when the first generation of coin-makers is substituted by local artisans. But what could have resulted in a loss of contact with the original understanding of the image and subsequent dissolution of the composition was apparently bridged between generations, and the image was instead fuelled by a new stylistic interpretation which kept and conveyed the same basic concept. The earlier coins thus bore symbols rather than icons, from the perspective of the consumer/receiver of the message; a discussion that goes beyond the subject of this article, but underlines how any investigated process may have been shaped differently for different actors.

Also here, a punctum (the time-leap combination of dies) for the investigating scholar resulted in an increased understanding of more than the individual instance or the typo-chronological structure. The anomaly also gave way for considerations of issues like the organization of minting, transfer of knowledge between artisans, and the artisan’s
possibilities to create individual designs within the general type. The fact that the churches on the early coins were different from what users would have known and recognized did not really strike me until stopping to contemplate the punctum. Indeed, the odd and curled style of the later image was one of the reasons it reached out to me in the first instance. The emotional dimension of the punctum created an entry point where the meticulous work with coin die-links became something else and more, and transformed the typo-chronology into what could perhaps be called a ‘puncto-chronology’.

Combining ‘determinism’ and agency

The purpose of this paper is to discuss how the archaeological study of process may fruitfully contrast perceived conformity to law with the ever-present exceptions to the rules. The case study above illustrates some aspects of this discussion. A general critique that has been directed towards seriation as a method within archaeology regards its basic assumptions that there is regularity and an almost automatic development in culturally produced artefacts, independent of human action. This view risks ending up in a belief that objects have powers of their own. Instead, human intervention must be recognized. Also, the assumptions of linear, single direction cultural development may be far from how any given culture actually evolved (Adams & Adams 1991:208). This falls back on the discussion of conformity to law – exception. Today’s archaeology is fully aware of the need to remain sensitive to variation, and will put much thought into understanding differences and singular cases. Still, it is intriguing that many materials demonstrate similar courses of development and appear almost to have a determinate nature. There is at present much less interest in our scholarly environment to touch upon that mystical aspect of object lives, which makes it all the more interesting. That the world is chaotic we all know, but what keeps it on the track?

The case study above also aims to illuminate how an anomaly or exception may actually contribute to, rather than ruin, the study of a process, if allowed to work as a punctum, an eye-stopper and creator of interest. Allowing the punctum to work means stopping to investigate what in the general picture is catching the eye, and why it does so. While Barthes’ punctum is largely emotionally founded, it could also be used as an analytical tool in situations where scholarly curiosity is
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raised and tickled by anomalies or exceptions to what we professionally know to be the expected. Through that punctum may arise not only understanding of the specific case, but also of the structure, and of the general cultural framework that is the studium. Used in this way, the punctum may create an opening into a middle ground of cultural understanding across time and space.

Furthermore, the case study serves to illustrate that in any given material there will be parallel processes of slow change, being or appearing as adhering to law, and intervening events and actions which are just as much part of that general pattern though different between them. This general theoretical model previously has been proposed and elaborated in slightly different ways by social-theorists, e.g. Giddens (societal structure – individual agent) (1979, 1984), or historians like Braudel (different length time-scales relating to different levels of events and involving different parts of society) (Braudel 1966). The continuing challenge for research is to situate case studies within such schemes while remaining sensitive to individual conditions. Indeed, some of the remaining fascination of engaging in historical and archaeological studies seems to be precisely this recurrent tension between what appears as ‘eternally human’ or predetermined outcomes, and the multitude of different events, occasions, and exceptions, that rest within human behaviour.

References


