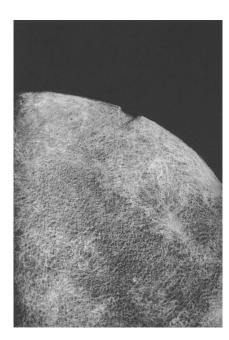
Consider the term *debris*. It originated in France in the eighteenth century and signified a type of broken, scattered substance once part of a standing building or structure. Its etymology differed from the earlier words moellon or décombres - 'rubble' - which referred to the type of stones left over from ruins, extracted from quarries or used in paving roads. Within early modern French architectural writing, authors used the term *debris* to describe the dispersed and often atomised remains of structures levelled by cataclysmic events – typically by war or natural disasters. Rubble, in contrast, suggested something potentially salvageable and local (in terms of its proximity to the building of which it was once a part). The emergence of debris, as a word, coincides with two important architectural developments: in the eighteenth century we see the increased use of gunpowder in European warfare (alongside research into its effects on architectural targets), and also a corresponding growth in the archaeological documentation of the surrounding fragments from destroyed ancient structures. This latter form of research differed from Renaissance investigations of Roman ruins by taking in the totality of bits that once composed the buildings of antiquity. An analysis of debris, in this sense, is different from the examination of architectural fragments from ruined sites, which generally referred to the study of former building elements as distinct from their surrounding remains. Additionally, the investigation of an architectural fragment could still be referred back to some specifically physical referent – a column, an architrave, perhaps even an entire structure. Debris, on the other hand, refers more to a collection of unrecognisable matter; debris is about taking in the total spatial transformation wrought by violence and disaster; and debris speaks of the ways former structures transform the nature of their surroundings.

Julien David Le Roy (1724-1803) and Gabriel-Pierre-Martin Dumont (1720–1791) were two of the earliest architectural theorists to discuss debris and provide it with a specifically architectural visual character. Le Roy, in particular, travelled to the Ottoman-controlled regions of Greece, where knowledge of classical structures was limited to the writings of Vitruvius and to surveys of the surviving temples of Paestum, and his resulting drawings provided the subsequent groundwork for two movements in architecture neo-classicism (and the adoration of more simple Greek architectural typologies) and the style that would eventually become known as the picturesque (emphasising the slow creep of nature on decaying buildings). His contribution to both has been well documented by architectural historians like Robin Middleton and Dora Wiebenson, but the reception of Le Roy's work obscures other significant ideas resonating through his images of Greek ruins that relate (and ultimately complicate) these earlier interpretive themes.

Debris

David Gissen



Although many of the structures examined by Le Roy were in a ruinous state as a result of the ravages of time and the encroachments of nature, his most important image (of the Parthenon) represented a singular and man-made cataclysmic event. What Le Roy was examining in the ruins of the Parthenon in Athens was not a well-aged, slowly decaying building but rather the victim of an 80-year attack beginning in 1677 by Francesco Moresoni and his Venetian forces. He wrote, for example, of the explosion that ripped the building apart, and his image of the Parthenon blown open along one side, with building fragments scattered across the hillside, provided architectural theory with an evocative emblem of debris. In this image we see the human destruction of an important ancient artefact and the resulting transformation of that artefact's surroundings an act of violence and territorial effect that typifies the earliest images of debris. This is far more than a dialectic between an ideal type and the onrushes of time. Rather, coursing through Le Roy's image is the notion that in one flash of a moment - 'type' and 'nature' become atomised.

The idea of destruction implicit in Le Roy's studies of debris becomes much more explicit 100 years later in the work of another French architectural theorist and inspector of ruins – Eugène Emmanuel Viollet-le-Duc. In his examinations of key French monuments, this architect, theorist and preservationist explored the remains

Jeffrey Kipnis, Moonmark, 1983 (illustration by C Glenn Eden) Courtesy Jeffrey Kipnis of numerous buildings throughout France, and whereas Le Roy provides us with an emotive and atmospheric concept of debris, Viollet-le-Duc imagines debris as the consequence of the rational and destructive engineering apparatuses that punctuate a history of warfare. For instance, in his book, *Annals of a Fortress* (1872), he explores the numerous sieges that befell a hypothetical French stronghold, and consistently uses the term débris as a way to capture the physical residue of this violence - notably through the effects of the boson or battering rams which attacked the foundations of stronghold walls in much the same way as modern artillery. Like Le Roy's images, in Viollet-le-Duc's drawings the ground becomes a site filled with shards, stones and other material remnants. But unlike Le Roy, absent here is any sense of the picturesque. Instead, through Violletle-Duc, debris is located purely as an index of destructive forces and violence, so where we might identify the image of debris within Le Roy as a mixture of ancient and modern worlds, type and nature, within Viollet-le-Duc's imagery debris is simply that remaking of a former building's surroundings through warfare - an image of debris, significantly, that continues to this day.

Where Le Roy and Viollet-le-Duc developed some of architecture's earliest images of debris, something we might term an architectural theory of debris did not emerge until 80 years later, in the mid-twentieth century and the aftermath of massive warfare at a global scale. While earlier wars unleashed incredible destructive forces, it was during the Second World War for the first time that enormous cities in Europe and Asia were flattened, transformed into accumulations of rubble. Architects reacted to the debris-laden cities that emerged out of twentieth-century warfare in a number of ways: for the European CIAM group the ruined state of the continent's great metropolitan centres presented an opportunity for re-imagining cities as blank slates obliterated of their pre-modern histories. Some architectural thinkers, such as Ludwig Hilberseimer, even wanted to abandon cities altogether, concerned as he was with the increasingly catastrophic nature of modern warfare, particularly the effects of nuclear fallout. But for another group of postwar architectural thinkers, the ruined sites of European and Asian cities were opportunities for reflection on the residue of destruction itself - the massive accumulations of debris - that these cities had become.

In England, for example, the work of the New Brutalists (centred around Alison and Peter Smithson and their larger Independent Group of architects, artists and designers) sought an 'authentic' architecture that responded to the everyday experience of postwar urban life. The Smithsons' realism, well documented by numerous architectural historians, often entails a reflection on debris. Debris becomes a type of parallel (and authentic) nature to that of the green parkways and fieldscapes of other postwar architects

and planners. In their Patio and Pavilion project once functional objects - bicycle wheels, tools, various forms of rubbish - are scattered around, beneath and above a simple shack-like pavilion, itself made of worn planks of discarded wood. The architectural historian Reyner Banham wrote of the installation that 'one could not help feeling that this particular garden shed with its rusted bicycle wheels, battered trumpet and other homely junk, had been excavated after an atomic holocaust'. It is as if debris had rained from the sky; an inundation of what Sarah Williams Goldhagen has described as 'gritty, dirty, grainy and rough' materials that photographer Nigel Henderson similarly captured in his series of collages composed of photographs of debris, forming a new image of urban subjectivity. The Smithsons' own commitment to debris as late-modern nature continued in their controversial housing project for Robin Hood Gardens, where the remnants of the demolished houses that previously occupied the site were formed into the terra-firma (or even infirma) of a new type of collective landscape. Rather than remove not only the image of debris from the city but also its physical manifestation, the Smithsons invest in debris a central role in modern urbanisation. The categorisation of their work, often labelled postwar architecture, may in this way be understood with a new literalism.

Unlike the British experience, in which debris marked the horrific sacrifices of an ultimately victorious nation, for the citizens of the defeated Japanese state debris lacked any suggestion of irony. During the Second World War over 1,000,000 Japanese soldiers and civilians were killed; in one evening alone 167,171 buildings were destroyed during the fire-bombing of Tokyo, and the nuclear attack on Hiroshima and Nagasaki killed over 200,000 people and introduced a new frightening language of mega tonnages and radioactive fallout. In the immediate wake of this destruction, the Japanese architect Kenzo Tange, one of the founders of the Metabolist architecture group, wrote one of the more evocative reactions to the horrific, ruinous and debris-littered state of Japanese cities. Comparing the 'desolate spectacle' of the destruction of Tokyo to cities in England and Germany, he wrote 'here there were not even the mountains of rubble of German towns'. The wooden structures of Tokyo produced a different type of debris - they 'had gone up in flames and smoke, leaving the ground covered with black dust and spent embers'. He continued, 'For acres and acres the prospect was one of a grey desert, where every now and then one came across broken crockery, strange green stones (the remains of bottles that had turned molten because of the heat), misshapen sheets of corrugated iron which had barely been covered by some flowering climber that had managed to germinate between one bombing and the next'. Here Tange contrasts the nature of debris – 'the grey desert' – with the more naturalistic nature – the plant that climbs out of this landscape. But debris and the climbing shoot should be understood as part of one and the same phenomenon – an image that returns Tange's postwar concept of debris back to Le Roy's earliest images of rubble-strewn landscapes. Debris suddenly produces the conditions for a new type of nature – a grey ground which nurtures the most weed-like of verdure.

Tange and other members of the Metabolist group went on to negotiate the seeming impossibility of reconstruction after such all-consuming destruction. Many of the resulting projects feature buildings which operate on a new ground, floating above the debris-ridden city, or even forsaking the ground altogether and migrating to water. Arata Isozaki, however, one of the youngest members of this group, offered a less heroic engagement with the image and effect of debris-laden worlds. His 1968 project, Hiroshima Blast Site: Electric City, contains images of two ambiguous architectural forms rising from the destruction of Hiroshima. The structures oscillate between appearing to be a product of the same disaster that befell its surroundings and a new type of building specifically built to relate to this post-apocalyptic world. Here, as in the Smithsons' work, we see an architecture of debris used to re-imagine the relationship between reconstruction - both materially and discursively - and the matter from which a reconstruction might be staged.

We might think of debris as an under-theorised category within more recent architectural culture, simply because the late-modern world has not witnessed a single condensed period of global warfare; but this is not the case. Several compelling contemporary examinations of debris interrogate the architectural imagery of destruction, warfare and geological transformations introduced first by Le Roy and Viollet-le-Duc. While some current day designers, such as Lebbeus Woods, continue the experimental 'rebuilding' efforts of postwar projects, other recent architects explore completely new images and roles for debris. The architectural theorist Jeffrey Kipnis, for example, produced one of the more radical contemporary proposals in the form of his 1983 *Moonmark* project, which proposed the production of lunar debris as an act of political protest through the detonation of the world's entire nuclear arsenal on one spot on the moon. The resulting explosion would not only scar the moon's surface (the first man-made object on the moon visible to everyone on earth), but would eject moon rock into the moon's immediate orbit. Elaborating on this performance of destruction, Kipnis proposed using satellites to herd 'the orbiting ejected material into Saturnlike rings around the moon' and imagined this circulating debris to be a 'testimony to our collective decision to survive and progress beyond our

potential for massive self-destruction'. Employing Lefevbre's concept of the production of space as an inherently political act, he sought a conceptual technique that would produce a space through the act of destruction itself. In this, Kipnis's proposal makes debris a tool of projection; and speaks of a potentially destructive future.

We also live in a time in which debris can be considered more historically. The debris of various wars can now be seen through a particular character: shards of wood from cannon warfare, shrapnel half-sinking in the muddy trenches of the First World War, the grey deserts of atomic and incendiary bombs from the Second World War, or piles of twisted rebar and shattered plate glass from the civil wars in the former Yugoslavia. Although unrecognisable as architecture, debris can be revisited as an index of a particular time through its grades and textures. It is this historical and material aspect of debris that underpins a recent project by the architects Manuel Herz and Eyal Weizman. For a public park and park buildings in Cologne, Germany, Herz and Weizman developed an architectural, constructional language composed of excavated debris and rubble first buried in the wake of the city's bombing during the Second World War. Here soil, rubble and debris are heaped over concrete frameworks with elongated windows (to extend past the angle of repose of the dumped pieces of brick and stone) forming a series of garden pavilions. Herz and Weizman propose using this shattered matter as a way to build a future out of a violent past - the debris will eventually be turfed over - creating a site for wild flowers, weeds and plants. Expanding upon the work of the Smithsons, these architects transform debris into a true construction system, but they also provide debris with a historical character and with an implied future quality that connects with, but ultimately extends beyond, debris as register of loss and disaster.

From these last two examples we should understand that debris is not something that should necessarily be an architectural image of horror because it cannot be easily reconstituted into its former and whole form. As a construct (or deconstruct), debris is certainly a key and horrific component of a new type of environment born from violence – it is so intimately connected with the destructive capacities of modern production. From its inception, both as a term and a concept, debris refers to cataclysmic social events registered in the transformation of a building's ground. This, one could argue, has subtle, yet important implications: debris, like rubble, violently returns buildings to their surrounding nature, but unlike theories of ruins and their inherent fantasies of the picturesque, debris also mutates a surrounding nature. Because debris is often unrecognisable in its original form, because it often refers to socioenvironmental disasters, debris is not only, like ruin, the return of society to nature, but is a type of latent, hybrid nature in its own right.

8 AA FILES 58 AA FILES 58

