Closing the barn door

Henry Buller

'Domination, domestication, and love are deeply entangled. Home is where dependencies within and among species reach their most stifling. For all its hyped pleasure, perhaps this is not the best idea for multi-species life on earth' (Tsing, 2012: 141).

'No matter how clever and crafty our novelists, they are no match for engineers' (Latour, 1998, 309)

Housing

Houses are places to be, where the micro-conditions for living, resting and interacting are generated and maintained. They are places of protection; protection from predators and from more elemental assaults such as meteorological extremes. They may also be places where prey is trapped and consumed or unpackaged and cooked. Birds construct their nests to protect the young once born and the mother bird during incubation. The nests' location, and sometimes their construction (materials, design), prohibit, or at least reduce, the likelihood of predation. A nest is a (temporary) 'home' in the sense that it might encompass a social group, it is a place to which the adults and the young 'return' (or 'home') for comfort, protection, un-threatening interaction, food and so on. In the UK, there is an additional layer of protection at work. It is an offence, under the 1981 Wildlife and Countryside Act, (for humans) to intentionally destroy or damage the nest of any wild bird while it is in use or being built.

Some migrating animals, birds and fish return cyclically to a specific location — a more spatially extensive 'home' place. Yet, while many animals build homes, by no means all occupy them in any permanent sense. In our fiction, Badger's houses may have door scrapers and Toads grow up in Halls, but, as Von Uexkull (2010) reminds us, in their 'natural' state the animal's house is often mobile or transitory; a temporary site of nurture, safety or defence, an opportunist and transitory halt, where food might be more abundant and some security is to be found in what is often an otherwise itinerant life. Describing the nest-building behaviour of chimpanzees, Goodall (1962) observes the construction of new nests each and every night, the fresh foliage of the tree-nests offering greater warmth and comfort. A single great ape, estimate Fruth and Hohmann (1994), may build as many as 19,000 shelters in a lifetime. Burrowing and nesting animals create houses of variable longevity — the naked mole-rat (*Heterocephalus glaber*) may remain located in an elaborate burrow system all its life, like many insect species — while ranging mammals, such the reindeer or the lion make little provision for semi-permanent shelter of even the most temporary kind other than the occasional selection of an appropriate nesting or birthing site.

However temporary, these 'houses' are nonetheless 'beastly places' where intraspecific communication is enabled, where infants learn from adults and each other (Hansell, 2005), where sociability is generated and social evolution enabled (Hansell, 1993). Housing becomes

a critical reinforcing act of internalising and externalising, selfing and othering, defining the line between familiar and the unknown, the wanted and the unwanted, the controlled and the uncontrolled. For human and other animals, the 'home' can be the sovereign locus of individual territoriality.

When we humans 'house' animals (the foremost act of domestication), we undertake a form of anthropocentric spatial fixity, the creation of an expressly 'animal space', as distinct from a 'beastly place' (Philo and Wilbert, 2000); a place of confinement, of de-naturalisation yet one that can also be, to a degree, an act of 'humanisation' (Nast, 2006); a 'zoo-ontological production' (Shukin 2009). The mobility, and spatial fluidity of the 'natural' and wild animal, unharnessed and uncontained, does not always serve us well. Though, increasingly, it is not only domesticated animals that we 'house', whether on the farm, in the zoo or in our homes, but wild animals too into defined areas of carefully bordered and protected 'naturalness'. Whatmore and Thorne (2000) demonstrate that even the wilder spaces along with their occupants have long been enrolled in a relational topology that is a form of both semiotic and material placing. Some animals house themselves, some animals have housing thrust upon them, others (an increasing number) are born housed.

For some 'pet' or 'companion' animals in Western societies, the outside kennel has been gradually been replaced as the quintessential animal 'house' by shared human/non-human indoor living spaces, extending to shared beds and eating-places. The human home/house is redefined by animal presence. Jean Cocteau loved his cats because, in his words, "I enjoy my home; and little by little, they become its visible soul" (1951, 568). Even Deleuze, infamous for his 'anyone who like cats or dogs is a fool' (Deleuze and Guatarri 1996, p. 265) readily admits to sharing his home with a number of cats since the 'fatal moment', when his son brought home a stray (Deleuze, 1987). In a very literal re-territorialisation, these are now 'indoor' animals with little, if any, hope of rehabilitation.

Across the world, zoo animals live in – or rather, are confined to – artificial and artefactual dwellings (the 'Lion House', the 'Monkey House') whose design frequently reflects fundamental human framings of both animal and human worlds (Mullan and Marvin, 1998). Here, protection and prohibition must co-exist with visibility, with accessibility and with (sometimes almost continual) interference. Although these are presented as the animals' 'houses', with nowadays, increasing reference to 'natural habitat', they are often, by definition, very far from 'home'.

Farm animals are 'housed'. The word now takes on a very different meaning. The word 'house' is singularly inappropriate. There is little of the 'house' and even less of the 'home' in a farrowing stall, a battery cage, a slaughter pen or even an industrial broiler shed. 'Housing' becomes an integral and intentional part of the controlling production environment and process; it brings animals, machines, technologies and buildings together in a vocational and techno-scientific materiality that is — in certain circumstances - almost indisassociable from that of the animals themselves. In these artificialised spaces, social groups can be utterly redefined as breed or species groups, often of a single gender, age and size. Family groups are re-constituted. In her film 'Blackfish', Cowperthwaite, shows how the so-called families of killer whales in the Sea World parks are not related individuals but assembled collections of different ages from different sources. A tiger in a zoo display may urinate against the concrete walls in a vain attempt to demark the memory of once-guarded and patrolled territories but more often than not, it is in response to some artificially introduced olfactory stimulation (such as chilli, cinnamon or cumin powder).

The worlds of these farmed and to a lesser extent zoo animals, like their bodies, even their genes, are no longer their own. We sculpt animal bodies to fit into their housing and adapt animal behaviour so they can live within their 'housed' environment. Circularly, animal the animals' physiological and psychological ability to cope with that housing come to define and determine animal welfare. In this, the paradigms of protection and prevention become hardened under a logic of near-total control: via the protection (and enhancement) of productive body processes through which the very materials and forms of housing units encourage greater productivity and via the prevention of 'outside' elements, be they microbial or meteorological that might slow or deviate those processes. Perhaps, the ultimate expression of productive animal housing is in-vitro meat where all the un-necessities of the bios are removed.

As the editors of this volume point out in their introduction, the forms and practices by which humans house animals reveal complex concerns. At one level, these are, undeniably, inevitably and intentionally instrumental and asymmetrical spaces, places and structures of control in which human interests take precedence. Yet to see them entirely in this light is to miss something. All of these 'housed' animals are still living, mobile, sentient and troublesome 'critters' whose interwoven lives, and whose living of those live matters to them and should matter to us. The farm is, as Porcher (2001) maintains, a space of interacting human and non-human *umwelts*, where both are - albeit differentially - housed. Current interest amongst human/animal scholars and amongst animal welfare scientists for attention to be paid to a more enlightened and relational accounting of the shared dwelling spaces, materialities and co-presences of the farm, the home, the zoo and even the 'wild' (Kirksey, 2014), suggest that too instrumentalist and mechanistic a view of the purely physical and environmental parameters (including housing) of animal lives might obscure alternative approaches to the understanding of those 'naturalcultural contractual arrangements' (Haraway, 2008) of intra- and inter-species flourishing.

In a couple of papers, Bruno Latour (1988; 1995) considers doors, or more precisely a cartoon cat flap built for a cartoon cat into a cartoon door and an artificial, non-human hydraulic 'door closer'. In the former, the series of modifications made to the door to accommodate the shifting priorities of human and non-human actors illustrate the creative dance of redefining relational interactions between, people, things and animals. In the latter, the automatic door closer shapes, at least a little, bit, the worlds of those who pass through. For Latour, the essence of both these devices or techniques is 'the mediation of the relations between people on the one hand and things and animals on the other' (1995, p. 1). The technical, the non-human and the human are all social actors and it becomes 'useless to impose a priori divisions between which skills are human and which are not human, which characters are personified and which remain abstract' (1988, p. 305)

'No one has ever seen a technique, and no one has ever seen a human. We only see assemblies, crises, disputes, inventions, compromises, substitutions, translations, and orderings that get more and more complicated and engage more and more elements' (Latour 1995, p 6)

How then do the multitudinous physical structures and techniques of animal housing contribute to such assemblies? That, after all, has been the central question of this entire volume. In the closing chapter, I want to think about how various housing practices and structures both derive from, yet also trouble, the relations we humans might have – or think we have - with sentient, yet domesticated, non-humans. In the final section of this chapter, I want to imagine different endings. For many millions of domesticated animals, the final

'house' is the slaughterhouse where materialities are re-fashioned. What possibilities, if any, do these particular houses offer for anything more than absolute and violent domination.

The cat litter tray

The cat litter tray or litter box has become an essential convenience in the management and practice of contemporary human-animal relations. These plastic trays that are found in countless houses and apartments across the globe are typically filled with clay, silica gel, corn or wood chip, in which pet cats are encouraged to both urinate and defecate. Cat litter trays have a number of different forms, some open, some covered, depending largely upon the sensibilities of either the cat, or the owner, or in some cases both. A quick visit to any local pet store reveals a variety of levels of sophistication in tray design, principally over the methods of emptying the soiled litter once the cat had used it.

There should be a sufficient number of litter trays, at least one per two cats and preferably one per cat, sited away from feeding and resting areas. The trays should be positioned in a quiet place in the house and cleaned at least once a day. Cats with easy access to the outdoors may not need a litter tray, although older cats, those who do not like to go out in bad weather, and cats that are unwell may require one. Cats can have individual preferences for litter characteristics, so it may be necessary to provide a range of litter toes and designs of litter trays (Rochlitz, 2005, 101)

Cat litter trays or boxes are usually made of moulded plastic. Manufacturers recommend that the boxes or trays be around one and a half times the length of the cat with sides between 12 and 12 centimetres in height (too high and the cat won't use them, to low and they will scratch the litter out all over the floor). Some are covered; most are open. Some have pressure pads and alarms to notify 'owners' when they are in use. Cat litter trays have become a vital, albeit temporary, form of animal housing and in their way have made a highly significant contribution to human-animal relations.

The invention or use of this device, which appeared in the first half of the 20th Century, is almost singularly responsible for the explosive growth of pet cat keeping in central urban locations and, in doing so, has helped to re-configure human-animal relations on a major scale. Up until the 1940s, most cat owners had gardens or at least access to public open space (Rochlitz, 2005). Cats were let out to roam, like the felines of that wonderful 1960s cartoon series 'Top Cat'. Un-neutered cats, difficult to keep in-doors in any case, roamed the streets and gardens of cities. As Katherine Grier writes in her book on the history of American petkeeping "the popularity of cats as pets was compromised by the fact that their owners faced the unpleasant problem of life without cat-litter" (2006, 77). Although desperate and enterprising owners traditionally used newspapers or sand, it was not until the late 1940s that a commercially available clay-based cat litter called 'Kitty Litter' became widely available, at least in the US where it was invented by Edward Lowe in 1947 and originally sold in 5lb bags.

With this invention, and subsequent derivations, people could keep pet cats indoors all the time even in the denser housing projects and high-rise apartments, never needing to let them outside. But what if the cats wanted to go outside? With the increasingly popular and cheap practice of neutering male cats (around 80% of domestic male cats are currently neutered), making them a lot more docile and thereby suited to an entirely indoor life, an entirely new configuration of the species *felis catus* emerges, served by an equally docile human population, now charged with the multiple tasks of supplying them with ready-prepared food,

occasional affection and the regular removal of used cat litter. Writing in 1988, Mertens and Schar advise that the indoor cat should have at least two rooms in which to roam, while Crouse et al. (1995) recommend a ready availability of cushions.

Alongside the cat tray, new human and cat social practices (and even personalities, Perrine and Osbourne 1998) develop in which both cats and humans play a key relational role (Mertens 1991; Stammbach et al. 1999; Fox, 2006; Bernstein 2007). Franklin (2007) reminds us that cats do not meow to each other, only to us humans. Derrida's cat, that 'irreplaceable living being', shared his bedroom and bathroom. Their conviviality ('being huddled together' or 'being with', Derrida 2008, 10) allowed them both to look at each other.

The cat-litter tray may become the particular site of disruptive animal agency. Not all cats use the tray. A large number of many web sites are dedicated to this critical societal issue. Using the tray to defecate and urinate has become so normalised in human expectation that not to do so is taken as a sign of feline unconformity, rebellion or chronic unsociability. Of course, in our unevenly relational world, that usually means, for the cat, a one-way trip to the vet or animal shelter. Cats do not use the tray because of behavioural aversions, medical reasons, because they don't like the litter, because they don't like the location of the box and so on. The box or tray becomes a device for the expression of their subjectivity. As one website advises: "If your cat associates her litter box with unpleasant things, you can work to help her develop new and pleasant associations".

The final point I want to consider relating to cat-litter boxes as physical infrastructure concerns their role in the more material biotic pathways and practices that link humans and non-humans. Cat faeces is a well-known source entero-pathogenes such as toxoplasmosis and, less commonly, toxocariasis, both of which have significant implications for human health (particularly for unborn children) and are acknowledged to be on the rise within domestic households. The presence of cat faeces in the home, (i.e., in the litter tray) is clearly a source of potential transmission. However, the faeces is not generally contagious for the first 48 hours after excretion and to avoid transmission, best practice is to empty the tray as soon as possible. Unfortunately, the social practices that have developed around in-door pet keeping tend to mitigate against this with home-owners preferring generally to leave faeces to dry out before removing and changing the litter. This, many feel, also helps the cat locate the litter tray for further use. The result is a clear increase in the potential for zoonotic infection yet pet keeping, as a social practice, comes with, for many pet keepers, a sort of systematic denial of the existence of such zoonotic pathways as if cross-species infection was just something that is not done in the modern extended multi-species family

The farrowing crate

For this second example, I want to draw upon Dawn Coppin's (2003; 2009) illuminating analysis of the farrowing crate in intensive pig production and the manner in which, in her words, 'the sow's agency as a temporally emergent phenomenon [...] arises in coordination with the physical environment and the human management system' (2009, 53). Tracing the development of this particular form of confinement, Coppin demonstrates how the adoption of farrowing crates reconfigures relations between farmer, pig, the materiality of the 'crate' itself and the wider public in both foreseen and unforeseen ways.

Farrowing pens, commonly barred-steel sided boxes around 200-250 x 50-90 cm, each one holding a single sow from late pregnancy to the weaning of her piglets, are commonplace

within intensive pig production (gestating crates having been banned, at least within the European Union). For producers, they have historically offered a number of advantages over free-range or open housing systems. They greatly facilitate intensive production methods (with corresponding reductions in individual human labour input) and permit all-year-round farrowing within indoor housing units. Critically, they protect the newly-born piglets from being inadvertedly crushed by the sow during the farrowing period, thereby allowing viable increases to be achieved in the number of piglets born to each sow through advances in genetic and reproductive technologies. Here there is a trade-off between the health and welfare of the piglets, which will grow to be sold for slaughter and that of the sow who is likely to be required to produce at least two litters (of 10 to 12 piglets) per annum for two to three years before culling. Confined indoor systems, with regulated environments, feed and medical regimes allow for more productive sows and larger litters which then necessitate further elements of confinement.

As Coppin (2009) shows, the agency of the sow is constantly frustrated and thwarted. She cannot turn around, she is obliged to rest on hard surfaces with little or no bedding (as this interferes with the manure management system) leading to sores and injuries. She often lies in her own manure and urine, whether on solid or slatted flooring, and has little opportunity to stand. Finally, in the absence of bedding material, she cannot indulge in nest-building behaviour despite a generally high motivation to do so during the farrowing period, nor can she satisfactorily interact with her piglets. The sow's frustration plays out in behavioural responses, from aggression and the savaging of piglets to the gnawing of the crate bars, general welfare decline and still-born piglets.

Drawing on Foucault, Coppin's aim is to show, on the one hand, how the disciplining of sows under intensive regimes creates a new form of domesticated, docile and disciplined animal via what is a fundamentally unsymmetrical human/animal relationship and, on the other hand, to demonstrate how the processes of disciplining and being disciplined also includes farmers, obliged to enter into new animal management practices, and other disciplinary agents, from animal researchers, required to find new parameters for assessing the welfare of the sows to an vocal animal welfare lobby increasingly mobilised in the advocacy of free farrowing systems. Thus, the very nature of pig husbandry is altered, as Porcher (2010) has so vividly described, as the particular confinement of the farrowing cage engenders agency (and, in Porcher's study, suffering) in both keepers and kept.

Increasingly, in a number of countries, there are calls for the abandonment of farrowing crates and their replacement by what are known as 'free farrowing systems' (FAWC, 2015). A different configuration of human/animal and sow/piglet agency emerges from these alternative confinement methods. While the value of crated farrowing in terms of productivity and efficiency is widely acknowledged, free farrowing systems do offer the sows the chance for greater freedom of expression and 'natural' behaviour as well as greater interaction with their litters, though they may result in higher levels of piglet mortality through maternal crushing. To overcome this, sows are encouraged to be 'better mothers' by displaying good maternal behaviour, something that is difficult in the conventional farrowing crates (Weschler and Weber, 2007). The role and agency of the farmers too is changed. While close access to the farrowing sows might be more physically difficult in free systems, additional attentiveness is often required in free or grouped facilities. Both the sows and the farmers are response-able social agents.

The final house: the house of slaughter

In his book 'Meat' from 1991, the anthropologist Nick Fiddes wrote that for many human societies, the killing of animals and the eating of meat symbolizes a (masculine) desire for domination and control over the natural world. To kill and to eat is a form of mastery. Arguably, at least in Western societies, it is constant signifier of human superiority over 'the beast' – a Cartesian de-signification of the animal.

For Fiddes, modernity's domination and control over 'Nature' achieves almost its apogee in the violence of contemporary animal killing. Fiddes (1991) parallels the dramatic growth in animal farming and meat consumption with the Industrial Revolution and its aftermath. Perhaps one of the most evocative expressions of this early modernist mastery was contained in those dramatic sections of Upton Sinclair's famous book entitled 'The Jungle, published in 1906, that dealt with the slaughterhouses of Chicago. Later, Derrida (1990) refers to the technological violence towards animals – and the non-criminal putting them to death - as being 'vital to our modernity' (p. 953). Modernity, its economies, its technologies and sciences of confinement and constraint, have made the killing of farm animals so frequent, so intense and so integral to modern economies that is has become infinitely banal (Shukin, 2010; Pachirat 2011).

The slaughterhouse, with its inverse-Fordist dis-assembly lines, is a temple to progressive modernity. Paula Young Lee (2008, 2) refers to the slaughterhouse as "one of the exemplary institutions of the nineteenth century" and certainly the very name has that ring to it – like 'wash-house' or 'poor-house'. Even today, slaughterhouses remain linear and highly serialized, with compartments and task divisions that strongly resemble those early twentieth century manufacturing assembly lines.

Slaughterhouses though, are above all places of violence, though they are ethically paradoxical and contradictory places. As Mick Smith (2002) has pointed out, in societies where the intentional killing of animals is generally abhorred, we kill hundreds of thousands each year in these industrialized killing facilities. We deal with that paradox in three ways: first, physically, by removing slaughter from our view in discreet units; second, juridically, by defining the parameters of killing increasingly tightly under the intrinsically ironic banner of 'humane-ness' and 'welfare' and; third, through a process of normalization of slaughter practices (which incorporates a rejection of less 'modern' practices such as Shekita and Halal slaughter).

What is the role of violence in animal killing and of rendering their bodies eat-able? What sort of violence is this? Does the violence reside in the act of killing (is killing inherently violent), does it lie in the reasons behind the act (killing to eat or killing to end suffering) or rather is it found in the mechanics of the act (with a pill or with a knife) or even in the aesthetics of the act (we might find the physical and material excesses of blunt force trauma unacceptable and yet be more at ease with suffocation - say of a fish). When does the violence start – perhaps at the very definition of certain animals as 'kill-able'? When does it stop (with death or beyond)? Is there ever a less violent way to kill and to eat?

'There is no way to eat and not to kill' writes Haraway. But there are many ways of killing — both direct and indirect - and, we might argue, not all are equally violent. The trouble, for many, is that there is always a violence in the process by which we kill the animals we eat. Indeed that violence has become an absolutely critical and systematic element in achieving the transition from the vibrant materiality of the living body to the somehow very different

silent materiality of the edible foodstuff. And that violence is always imprinted on that subsequent material form.

The reasons for - the apparent need for this violence are clear. The most obvious is for reasons of health – the health of the consuming body, rather than the consumed body. The dead animal body decays fast: the faster the killing and the proximity of killing to consumption (or preparation), the lower the risk of contamination and infection. So violence is necessary for speedy dispatch. While technology allows us to lengthen the distance (both spatial and temporal) between killing and consumption, the time-scale of processing, from slaughter to processing are, in fact, becoming shorter and shorter. The second obvious reason for the killing of livestock to be inherently violent is the control of supply. Human societies farm and kill animals according to a rhythm of supply and demand. Within the field-to-fork production cycle, slaughter time (like life-time) becomes a significant variable and must be minimized.

A third reason why killing needs to be violent is because it must kill. It cannot wound or mildly discomfort. To kill effectively, the heart must be stopped and brain activity cease. This cannot be achieved through gentle persuasion. The problem for livestock production is that this must be achieved while maintaining not only the integrity of the animal body, both for reasons of value, but also the relative purity of the animal body. Stock animals cannot be 'put to sleep', in that gentle metaphoric way we intentionally end the lives of our pet cats and dogs. The residue of the killing chemical would render the animal's body unfit for consumption.

The mode of killing (in other words, the speed, the violence) critically affects the quality of the meat product. An animal that becomes fearful or panicked will release hormones into its body pre-mortem, which taint the meat. An animal that suffers and struggles against death will create damaged muscle tissue and internal bleeding, visible to the consumer. Violence makes economic good sense for the quality of the final product. There are no gentle ways to kill for consumption.

There is also an ethics here, the faster we kill, the shorter the experience of being killed. For philosophers like Peter Singer, this is critical. He has famously argued that were we able to kill food animals entirely without suffering, and ensure that the dead animal is always 'replaced' by a live one; he sees no intrinsic moral complaint with animal killing for human consumption (Singer, 2008). Do we then correlate 'violence' with suffering? In his book 'The Ethics of What We Heat', he approvingly quotes the TV chef, Hugh Fernley-Whittingstall who, in his own book 'Meat' (2004) writes: 'truly wild animals, dispatched efficiently by a good shot, provide us with meat that is perhaps the least ethically problematic of all'.

The irony is that with growing societal ethical concern over animal welfare, and the desire to kill well (i.e without suffering), we have become, in some ways, more 'violent' in the manner of animal killing as the focus has been on speed and instaneity of death. (Here I take a rather traditional notion of violence — which I accept is perhaps a little limited in scope: violence as 'physical force'). The force of the percussive bolt, the strength of the electric current and so on... Moreover, that violence is increasingly technologized, undertaken in wholly artificial environments that resemble nothing of Fernley-Whittingstall's, romantic vision of outdoor slaughter, in a field with a rifle.

So, acknowledging, what Fitzgerald (2010) identifies as a growing tension in 'post-domestic cultures' between on the one hand, a growing concern for animal welfare and the quality of animal lives and, on the other hand, ever increasing demands for meat, we might wonder (as

we change some of the conditions and assumptions of modernity), what might be the nature of the 'post-modern' abattoir and the place of violence within it. Might it be made of glass as Pollan (2006) suggests?

'but maybe all we need to do to redeem industrial animal agriculture in this country is to pass a law requiring that the steel and concrete walls of the CAFO's and slaughterhouses be replaced with . . . glass. If there's any new "right" we need to establish, maybe it's this one: the right to look. [...]. Were the walls of our meat industry to become transparent, literally or even figuratively, we would not long continue to do it this way. Tail-docking and sow crates and beak-clipping would disappear overnight, and the days of slaughtering 400 head of cattle an hour would come to an end. For who could stand the sight? Yes, meat would get more expensive. We'd probably eat less of it, too, but maybe when we did eat animals, we'd eat them with the consciousness, ceremony and respect they deserve. (Pollan, 2002) .

Might a post-modern abattoir be one without animals and without killing or perhaps a place where animals 'die naturally' (should we move from carnivorousness to carrion-eaters?). Perhaps, it will be a site where new forms of life are converted to food, be they insects or forms of 'mould' or even cellular and microbial 'life' from which 'meat' is only 'grown'...

Abattoirs, farrowing crates, cat litter trays all the various forms of animal housing, animal confinement and human/animal place-sharing described in this book have generated, and are generated from a range of shared practices and shared technologies. These in turn come to define the meaning, the agency and the subjectivity both the keeper and the kept. Houses are, in varying degrees, dialectic spaces, enshrining both confinement and freedom, self and other. They are places of assembly but above all, places of social, human/non-human assemblage.

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