Introduction
Indonesia is home to a diverse range of rich design practices that have been invented, altered, and remixed over centuries of trade and colonization. Many of these practices combine a sense of urgency around environmental crises with very local forms of community organizing and alternative economies. Although most design activists in Indonesia are dealing with globally significant issues (e.g., climate crises, food security, and migration), there is little awareness or understanding of their work outside Asia. The aim of this article is to bring some of these practices and projects into broader discussions about design activism.

This article presents a complex case of design activism currently occurring in and around the village of Kandangan, in an agricultural area of Central Java. Kandangan is the location of two organizations, Magno and Spedagi, as well as a cluster of other design initiatives directly and indirectly linked to these two: Pasar Papringan (a local makers market); Omah Tani, Omah Kelingan, and Yudhi Homestay (eco-tourism initiatives); and the International Conference on Village Revitalization (a practice-led research collaboration between Indonesian and Japanese designers).

Magno is a locally owned eco-design business, with about 30 employees manufacturing wooden radios, toys, and stationery items for chic retail outlets in Indonesia’s cities and for global wholesalers. As a model of socially responsible product design, Magno develops the skill capacity in the community through a “New Craft” methodology, in which a modern manufacturing approach is applied to the handcrafting of products. Items are designed with a step-by-step assembly in mind so that a person with no prior craft experience from the village can quickly be trained to make products of a standard form and quality! In an effort toward resource sustainability, the company regenerates its wood supplies through a local reforestation program. The designs have been awarded a suite of global design awards, and the business is highly successful, allowing its owners to redirect profits into other forms of design activism.

1 The full Magno product range can be viewed at http://www.magno-design.com (accessed October 1, 2017).
One of these efforts is Spedagi, a grass roots, not-for-profit community group that focuses on the redesign of village life toward sustainability and that uses bamboo bicycles as its symbol. Spedagi is a shortened form of Sepeda (bicycle) and Pagi (morning), referring to the practice of cycling in the early morning to commute, shop at the market, or just to be active in the village streets before the heat of the day.

Magno and Spedagi were founded by Singgih Kartono and Tri Wahyuni, graduates of Indonesia’s oldest design school, Bandung Institute of Technology (ITB). Kartono is a talented and charismatic designer who speaks English fluently and has received significant attention as a product designer, both in Indonesia and globally. Although Kartono’s achievements are impressive and important, understanding design activism needs to be not only about a designer’s stories, but also about learning to read places and relationships. This article focuses less on Kartono as a designer and more on the relationship between design activism in Kandangan and global discourses of activism and sustainability. This relationship is complicated by non-local notions of entrepreneurship that tend to equate design activism with a single designer’s efforts to lead social change, and also by the way neoliberalism is remixed as “DIY capitalism” in Indonesia.

In this spirit, my examples are not extensive or far-reaching. Rather, I focus on a single place-based example from ethnographic fieldwork and practice-based design projects. I have visited Kandangan both as a guest and as a collaborator, helping to design educational programs, exhibitions, and exchanges to engender conversations between Australian and Indonesian designers, design academics, and design students. I also have conducted semi-structured interviews with a range of Kandangan designers and residents, as well as with Australian designers who have worked with them.

The activist practices in Kandangan are important for the obvious reason that they empower local people challenged by poverty and limited political agency to share knowledge and to create their own futures. But these practices also are important because they converse with global design culture in a way that contributes to its decolonization while creating the necessary language for collaboration. Analysis of this design work, as well as the design work itself, produces a “more extensive coverage of design, variously defined, around the world, informed by the recognition of the effect of colonialism and post-colonialism alike.”

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5 The field work for this article relates to a wider research project—the exchange https://indoaustdesignfutures.org/—to map emergent design practices in Indonesia and to bring together Indonesian and Australian designers, design researchers, and design educators to work on sustainable futures by rethinking the way we design food production, housing, transport, and cities—all of which reveal urgent problems that affect the entire region of Southeast Asia.
This article is structured in two parts. In the first part, I provide context to the emergence of design activism in Indonesia and Central Java. Drawing on the work of Anna Tsing, I introduce the idea of reading such activism in terms of “scale-making projects,” which helps to deepen the context within which design practices are understood and, as a secondary result, to resist the temptation to categorize design activism only according to national boundaries.8

In the second part, I detail the practices at work in the design activism clusters at Kandangan, leaning on Guy Julier’s work to explain the “to-ing and fro-ing” between neoliberalism and activist design. Julier proposes “four possible conceptual tactics for the activist designer that are also to be found in particular qualities in the mainstream design culture and economy.”9 The four tactics are identified below:

- Intensification, which describes a density of designerly intervention;
- Territorialization, which describes the scale at which responsibility and impact is conceived;
- Temporality, which describes the way that speed, slowness, progress, and incompleteness are dealt with; and
- Co-articulation, which describes the combinations of concerns and practices in a way that strengthens both.

I use these four themes as a starting point for thinking about what design activism does in Kandangan, paying attention to the semiotics (meanings inherited and challenged), scale (dynamic and relational), and speed (determined by local needs and global flows) of design interactions. I then consider how design activism relates to global design culture and examine what is sometimes, impossibly, thought of as a global movement of design activism. I use Julier’s categories to take the discussion of design activism in Kandangan beyond the “designer” and to argue that design activist practices operate by making both scales and place, and always in “productive friction” with global design culture.10

Design and Cultural Activism and the Indonesian Context

In conceptualizing design activism in Kandangan, I build on definitions and descriptions of activism offered by design academics11; I also examine important work done by scholars of Indonesia to identify emerging forms of cultural activism in Indonesia in the fields of art and design, film and popular culture, and media studies.12 As I have argued elsewhere, cultural activism in Indonesia is made possible by the way activists redirect and remix the categories of art, design, culture, agriculture, and business, inserting themselves between categories.13 Design activism in Kandangan operates in this way.


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By presenting the Indonesian context, I do not intend to offer a single story of design activism at a national scale in Indonesia. The grand narratives of nationhood have been thoroughly untangled by scholars of Indonesia and other modern nations, rendering such generalizations theoretically impossible. In fact, Indonesia provided Anderson a very lucid example of the way multiple cultural identities are manipulated by the state to form “imagined communities.”  

In addition, in an argument that has special significance for design, Appadurai reminds us that modernity—although often historicized as a single narrative—is in fact “multiple modernities,” consisting of different stories in different places.

Design plays a role in forming and communicating national identity in Indonesia, and the relationship of local design practices to nationhood works at multiple scales. “Nations are not isolated entities; they engage in multidirectional dialogues with neighbors, friends, influencers, trading partners, and enemies.” A detailed examination of these dialogues and multiplicities is beyond the scope of this article; note, however, the important contextual point that outsiders, including myself and many readers of this article, might engage with the practices discussed here as “Indonesian,” even though the designers themselves do not.

This work begins not with the nation but at the scale of a small village, Kandangan, which like most villages in Java is facing immense problems as waves of its employable residents move to work in factories in the big cities, at large-scale agriculture projects in the outer islands, or as domestic workers further afield. Nevertheless, the concerns and practices discussed in this article are not limited to “rural,” “village,” or “non-urban” activism. As Willis suggests, the urban is everywhere. Activist design responses to urbanization in Indonesia are many. Design activism includes using drones in the counter-mapping of forests in West Kalimantan to support indigenous and local land claims, as well as producing festivals that reclaim local water sources in Salatiga.

Although rooted in the places where they happen, these forms of activism are about the flows of resources and power across and between the urban and the rural. They produce designs (maps and stories) that generate different ways of looking at the world. In this way, the activism itself—like capitalist projects, such as transnational logging companies or bottled water brands—is a scale-making project.

“Scales” can be understood geographically, but also “arise from the relationships that inform particular projects, scenes, or events... Project scales jostle and contest each other. Because relationships are encounters across difference, they have a quality of indeterminacy.” Tsing refers to the making of scale as a creative process: “Scale is the spatial dimensionality necessary for a particular kind of view, whether up close or from a distance, microscopic.
She argues that scale—for instance, globalism and regionalism—is brought into being through a kind of conjuring that allows people to see the world in different ways. Projects are “scale-making” when they “make us imagine locality, or the space of regions or nations, in order to see their success.” I consider the various forms of design activism in Kandangan as scale-making projects, generating objects, images, and systems that are located in the village but that challenge preconceptions of what the village means and how it relates to global design.

**Intensification: Remixing Bamboo**

Julier relates the concept of intensification to the way that designers orient life in various directions by providing materiality through design. “The objects of design culture and design activism are affective.” In this section, I discuss the use of bamboo by designers in Kandangan as a materialization of localized design and production. The Spedagi bicycle gives form to design activism in a number of ways (see Figure 1). First, with the abundance of bamboo as a material in Central Java, Spedagi provides an opportunity to manufacture bicycle frames from local materials. This opportunity has opened up discussions about the resources required for the production and consumption of designed objects. The frames of Spedagi bicycles are made from Giant Bamboo (*Dendrocalamus asper*) and used in a design inspired by the “bilah-tangkup” construction (i.e., slates that hold each other) of the bamboo rafters in a traditional Javanese roof truss. This bamboo assemblage is a rich example of intensification. The bicycle remixes aspects of local and global design into a material form that both is functional and makes a statement.

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20 Tsing, *Friction*, 58.
21 Ibid., 57.
22 Julier, “From Design Culture to Design Activism,” 232.
As another form of design activism, the Spedagi bicycle also functions as a complex symbol for grass roots sustainability—one that works on many levels, and sometimes with contradictions. Bamboo as a material is cheap, fast growing, renewable, and biodegradable, and it requires few resources to produce; however, it also (and perhaps because of these properties) carries class connotations in Indonesia, specifically relating to life outside urban centers. Thus, in global design culture, bamboo is associated with sustainability and eodesign (think light, airy homewares, linens, and allergen-free baby products), but in Indonesia it also is associated with poverty, scarcity, and the hardship of village life. Bamboo symbolizes a position of marginality to the city, to development, and to elite notions of culture, including design culture.

These associations play out in many designed objects, with housing being perhaps the most obvious. Modern, urban life in Java means living in multi-story concrete buildings (gedongan), housing estates (perumahan) or, in the case of Jakarta, super block apartments. As Abidin Kusno writes, the designs of the Jakarta superblock can be read as part of a strategy to hide the growing conflicts between circuits of poverty and luxury consumption, unemployment and the decline of state authority, evictions and urban violence, environmental degradation and the privatization of public resources. Such conflicts are hidden behind “a powerful image of a new kind of urban form in the city.”

Architectural design strategies intensify the idea of the urban and relegate the village and certain design materials (such as bamboo) to the margins, as undeveloped, traditional, and local.

In Kandangan, traditional bamboo houses, while cheap and sustainable, are often considered an inferior alternative to cement block houses, in the same way that a bamboo basket that takes three hours to weave and deteriorates after a few months is often considered inferior to a plastic one. These kinds of associations are largely invisible in global design culture, where labor is hidden and markets are supposedly inexhaustable. In using bamboo in a locally grounded design form that is contemporary, globally appealing, and stylish, the Spedagi bicycle both uses and disrupts these associations. In fact, only by looking closely at the delicate inner grain and warm golden color of the highly polished and coated composite material from which the frame has been constructed can viewers recognize the bamboo (See Figure 2). The shape of the frame is also a disguise (and a key functional innovation) because it does away with the familiar ribs of a bamboo stem. It casts off expected notions of Indonesian bamboo as “rustic.”

23 Bamboo has been emerging in some large-scale architectural projects in Indonesia (e.g., Green School) and also is being reconsidered in complex ways by some Indonesian designers. (See Jamaludin’s study of the meaning produced by the shape and form of traditional bamboo rice containers in Sundanese culture: Jamaludin. Jamaludin, “The Aesthetics of Sundanese Traditional Design, Case study: Rice Containers Design,” Journal of Visual Art and Design 4, no. 1 (2013): 35–41.

The use of local bamboo to make bicycles in Kandangan is an example of an everyday designed object that intensifies the meaning and affect of a material (bamboo) and also performs that meaning in the public realm. Spedagi released a full range of bicycles for sale in 2017. Bicycles are hand-numbered by each limited edition, and designs are revised iteratively and improved quickly with each small-run edition production. As evidenced by the marketing of the bicycle, the project asks us to reimagine the village by connecting to global design culture. The website states that the “Spedagi Bamboo Bike is ‘magnet’ and icon, as well as the metaphor, of Village Revitalization itself: It was born from something that has been forgotten.”

Territorialization: Revitalizing the Village as a Scale-Making Project
To consider the scale at which responsibility is conceived by the designers who package Spedagi’s village revitalization process as a global exchange process, I now focus on the ways that design activism both territorializes and is territorialized in Kandangan.

Spedagi’s activism is first and foremost a response to urbanization materialized as a redesign of village life. The bamboo bicycles are part of this project. The narrative is logical: Develop the local economy, create local opportunities, redesign village life, and people will stay. When people stay, they will grow and share knowledge about the local environment, they will invest energy...
and money into local initiatives, they will create a place worth living in, and they will not leave, will not urbanize. But the reality of these goals is much more complex, and for city dwellers (like myself and 54 percent of Indonesians whose lives are city-based), a “return to the village” movement might feel romantic—but conceptually inaccessible.

However, if we consider the urban as a process that operates beyond cities and is in fact a “mobile geography, a figure of desire and aspiration that exists everywhere,” village revitalization can be read as a scale-making project. Spedagi helps us to imagine Kandangan in ways that both reproduce and push back at the design of the village in Indonesia, used politically over history. In the colonial vision, Indonesia’s villages are “idylls of tranquility, consisting of a homogenous and classless ‘peasantry’ practicing ‘subsistence farming’ while being insulated from the cash economy.” This colonial vision was developed further in Suharto’s New Order propaganda, which encouraged villagers, as Indonesian citizens, to work together without conflict, guided by shared values of gotong royong (working together), kekeluargaan (family spirit), and rukun (harmony). Such a romantic vision of rural Indonesia remains dominant among many policymakers and academics, and it also exists in the way national and global design discourse frames Indonesian design as a community-based craft.

The International Conference on Village Revitalization (ICVR) provides a clear example of the way Spedagi is scale-making. The conference has been held three times: first in 2014 in Kandangan; second in 2016 in Ato, Yamaguchi, in Japan; and most recently in 2018, in the village of Ngadimulyo, near Temanggung in Central Java. The theme of village revitalization is conceived here as a global concern and articulated with the following goals:

- To share experience and knowledge of village revitalization efforts;
- To exchange experiences of village revitalization efforts among various stakeholders;
- To gather suggestions, knowledge, and experience of village revitalization efforts;
- To build local, regional, national, and international networks of individuals and related organizations that support village revitalization; and
- To promote global sustainable living that starts with village revitalization.

What are the local and the global goals in this context? Spedagi designers use the revitalization of the village as a scale-making project that reframes not only the village itself, but also its relationship with other scales: the province, nation, region, and globe.
Spedagi designers align the village with communities outside Indonesia that share their concerns. They focus on relocalization by intensifying the local systems of exchange while remaining outward looking.

**Temporality: Making Tempeh and Slowing Down at Pasar Papringan**

Meanwhile, design initiatives in Kandangan operate within a temporal tension, where design activism makes a point of slowing down processes and practices. One example is *Pasar Papringan*, a market designed for exchanging locally made products, food, coffee, and local farm produce. Pasar Papringan has been in operation since 2016, with the unconventional cycle of *Wage* (the 35-day market cycle in the Javanese calendar). Indonesian rupiah are sometimes exchanged, but the primary medium of exchange in the market is a custom-designed currency, made from bamboo. Organizers claim that Pasar Papringan is a zero-waste marketplace, with no plastic bags or take-away food containers.

Of all the initiatives discussed here, Pasar Papringan is most dependent on the support of the village community and as a result has had precarious beginnings. The market has relocated several times and, according to organizers, has presented political challenges at a local level. One reason is that, despite the land’s having many shared uses (e.g., growing and harvesting food), the actual title of common land can be very ambiguous in villages in Java. At the site of Pasar Papringan, a number of claims to the land emerged after its profit potential became apparent. A second possible reason that initial momentum was difficult is in the scale-making itself—that is, how Pasar Papringan is branded as a global idea. As in many international development contexts, people in Java sometimes are suspicious of projects, or “proyek,” that are perceived as international and that purport to help them but that lack consultative processes, inclusive decision making or genuine participation and long-term vision. For many people, the “proyek” still carries associations from the New Order of corrupt government development; for others, it conveys inauthentic sustainability efforts using disingenuous international funding arrangements. In some places in Java, as in Australia, “appearances of ‘authenticity’” also are beginning to define what Willis and Fry call the “neurural”: an agricultural styling, such as a petting zoo in a restaurant, is designed and constructed that has little to do with “the actualities of commercial farming.” These suspicions speak to the way that neoliberalism is playing out in particular ways in Indonesia and that rub up against local forms of design activism. Activist initiatives like Pasar Papringan operate in this context, where communities are suspicious of top-down development initiatives, and

farmers might be suspicious of agendas that propose to scale down agriculture (and profit margins) or indeed to localize markets. To be genuine, such initiatives need to be not only place-based, but also open-ended and temporally responsive.

Compounding this complexity are the existing cultures of local markets, which already operate with their own rules, social relations, economies, and sense of place. In its making of place, a local market resists design culture while simultaneously distributing it. A village market is typically unbranded, but Pasar Papringan, categorized online as a “shopping district,” has 5,000 Instagram followers and is also a tourist destination. In her book, Markets, Places and Cities, Kirsten Seale refers to this friction as the difference between making place and placemaking. The making of place in a local market is emergent, she argues—dense with “micro-processes, intimate in scale, involving close relationships between senses, bodies, space and materials.” Pasar Papringan, with its deliberate design and manipulation of place, could be read as an imposition, signaling the gentrification of village processes and producing friction between scales of activism. This interpretation presents a series of design challenges for the market’s organizers, who maintain the agenda of building a movement that redirects consumption practices and supporting small-scale village production.

Food is the primary focus of the market—particularly food that is grown locally and used by designers to revitalize local knowledge and bring sustainability into everyday practices. Using food as a medium to link design and activism is “about a shared fate, shared resources, shared risks and shared solutions, creating publics, nurturing the commons through involved, inclusive and dialogical communication.” A clear example of this link can be found in the work of designer Fransisca Callista (Siska) to revalue local food knowledge.

Tempeh—a daily source of protein in Java that can be made on a small scale with local ingredients—is now most often made with industrially grown soybeans. A design innovation itself, tempeh was discovered accidentally sometime in the seventeenth century in Java, when the mycelium (Rhizopus oligosporus or Rhizopus oryzae) came into contact with soybeans being used to make tofu-making. Tempeh can also be made from other beans, such as benguk [Mucuna pruriens]. Siska became interested in tempeh when she moved to Kandangan to work on Pasar Papringan and other Spedagi initiatives. She began mapping local food knowledge that was losing visibility in the village. As well as discovering that benguk was edible and medicinal, Siska found that it was being grown by farmers on the edges of Kandangan as a nitrogen-fixing, living fertilizer for other crops, like papaya, banana, and cassava. The plant grows by climbing its way up banana trees or other available trellises.

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32 Oliver Vodeb, Food Democracy (Bristol: Intellect, 2017), 24.
Siska worked with farmers already growing benguk to make a locally grown, locally produced tempeh to supply the village. Any excess is sold at Pasar Papringan, wrapped in banana leaves. The husk and bean skins also can be used as dye for batik, which is another local design industry in Kandangan, producing items for the market.

In terms of temporality, these practices can be read as the slowing down of design processes to re-establish community connections. In turn, this slowing down makes visible local design—human practices that often go unnoticed (such as those connected to food preparation) and the multiple nonhuman species involved in design processes. Rather than having set goals or points of closure, Pasar Papringan works in unconventional cycles—in open-ended ways that go beyond the materialization and marketing of design. Siska's design work, which remaps local food production with a multispecies approach, is an example of the kinds of practices that such design activism enables, as well as the effects it can have on people and ecosystems. Entrepreneurship in this sense, while circulating globally, can represent commoning, “motivated by an ethic of care for what nourishes and sustains people and the people both now and into the future,” generating genuine innovation and existing in strong contrast to commercial design exchanges.

Co-Articulation: Local Brands That Travel
In this last section I discuss design activism in Kandangan as a co-articulation of different agendas, particularly legible in the brands of Magno and Spedagi. Magno products present a materialized tension between design culture and design activism. As a successful business, Magno supports a local community, funds many of the initiatives described, and circulates ideas about sustainability. To do so, it also exploits globally circulating aesthetics of sustainability. As well as being locally focused, Magno products are available worldwide and are evidence of the facilitation of the free global flow of capital and goods and the speeding up of design culture. Magno products don’t linger in Kandangan to be sold to passersby. Rather, after production they rapidly travel into the global market, accelerated by the translation and transaction affordances of digital technologies.

When Kartono and Wahyuni travelled to Australia for Sydney Design Week, they brought the entire Magno product line and two bamboo bicycles. The sale of the carefully assembled, unvarnished items helped fund their trip, but they also brought concerns for natural resources into homes, offices, galleries, and campuses in Australia and challenged the perception of Indonesia as a source of natural resources and cheap labor, rather than of

design innovation. The objects themselves privilege craftsmanship over efficiency, reminding the user that design can produce effects that go beyond ease and convenience. As a specific example, the most well-known Magno radio, the IKoNO, is designed with no helpful graphics for tuning (see Figure 3). The idea is that users get to know their radio by touch and feel, by slowing down, by attending to it, rather than depending on the aid of language. Like the bamboo bicycle, the Magno wooden radios work as activist objects, drawing their users into their place and pace of production and into their material story.

Kartono and Wahyuni also brought with them two Spedagi bicycles. The bikes also articulate sustainability concerns by materializing participation; however, as vehicles, they work through their movement in the world—by being mobile objects in the public realm and by disseminating an “open design” that prioritizes innovation over reproduction. Powered by the muscles of its human rider, the scale of the bicycle’s articulation as a material

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Figure 3
IKoNO++ Magno Wooden Radio. Photo by Aris Wijayanto; courtesy of Singgih S. Kartono.

object within space is determined by each individual user. However, the idea of Spedagi, and the bicycles themselves, also travel at multiple scales.

While travelling in Australia, these activist objects enabled collaborations between Indonesian designers and Australian designer activists. The Spedagi bicycle acted as a catalyst for a “bike hack” during Sydney Design Week, when Australian designers and bike mechanics experimented with upcycled materials for constructing bike frames. The bicycles also sparked the interest of Sydney-based artist and bike activist Gilbert Grace, who connected Spedagi’s work with the The Kandos School of Cultural Adaptation—an initiative that grew out of the design of an alternative history and speculative fiction for the small town of Kandos in regional New South Wales.38

Designers who are actively working with others in their own contexts can share knowledge in this way. Because of co-articulated agendas, they are already collaborators, and are already engaged in small and slow solutions. Activist design objects such as the Spedagi bicycles act not in smooth, evenly distributed, or symmetrical ways as they move between places; rather, they are assemblages, “made up of many heterogeneous terms and which establish liaisons, relations between them... it a symbiosis, a ‘sympathy.’”39 The experiences of these designers point to a kind of collaboration with goals deeper than short-term profit motives and could decolonize the kinds of design relationships that operate between countries like Indonesia and Australia. The combination of concerns and practices associated with Magno and Spedagi can be seen clearly as strengthening the agenda of Kandangan activism when these concerns and practices travel at a global scale and connect with other forms of place-based design activism.

Conclusion
This article has presented design activism both occurring in a village as inseparable from the urban and as local practices inseparable from global design. The perspective adopted is based on deeply localized practices that grip contemporary global design questions through designed objects, events, images, and practices. Within the scope of this article, I cannot discuss and engage with the many Indonesian design activists doing amazing work; thus, I have focused on just one village in an effort to discover how design activism interfaces with global design questions. I have worked
through this interface by considering four themes—intensification, territorialization, temporality, and co-articulation—derived from Guy Julier's questions on the relationship between design activism and neoliberalism.

Rather than trying to define design activism as a global movement, this article raises the possibility for a decolonizing study of design that begins in specific places and is led by the concerns of those places. This process challenges the definitions and boundaries of design as they shift in global discourse. The telling of this story of village-level design activism is meant both as a contribution to the growing scholarly debate about the efficacy, scope, and scale of global design activism and as an invitation for design scholars to open up dialogues with designers who are making valuable contributions to local politics and ecological change at multiple scales.

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