Making International Things: Designing World Politics Differently

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Can we make international things—maps, algorithms, museums, visualizations, computer games, virtual reality tools? Objects that criss-cross global space, exert political influence, and produce novel forms of knowledge? This article, and the special issue it introduces, suggests that scholars of international relations can and should engage in the task of making concrete material, aesthetic, and technological objects that exceed the epistemic, logocentric, or textual. It joins a growing conversation focused on the potential of expanding the praxis of the social sciences into multimodal formats of design, craft, and making. In this article, we explore the intellectual, social, and political stakes of beginning to make international things, unpack the disciplinary reticence to engage in this task, and the potential dangers it entails. Most importantly, we suggest five central benefits moving in this direction holds: (i) generating a future-oriented social science; (ii) cultivating an "atmospheric" social science faithful to new materialist, feminist, and practice theories; (ii) embracing a radical collaborationist ethos more-suited to the demands of the day; (iv) investing us in sociopolitically committed scientific praxis; and (v) inaugurating a radically new disciplinary architecture of scholarly praxis.

¿Podemos crear cosas internacionales? ¿Mapas? ¿Algoritmos? ¿Wuseos? ¿Visualizaciones? ¿Juegos de ordenador? ¿Herramientas de realidad virtual? ¿Objetos que atraviesan el espacio global, ejercen influencia política y producen nuevas formas de conocimiento? Este artículo, así como el número especial al que sirve de introducción, sugiere que los estudiosos en el campo de las Relaciones Internacionales pueden y deben involucrarse en la tarea de crear objetos materiales, estéticos y tecnológicos concretos que excedan lo epistémico, lo logocéntrico o lo textual. El artículo se une, de esta manera, a un creciente discurso que está centrado en el potencial de expandir la praxis de las ciencias sociales a formatos multimodales de diseño, habilidades y creación. En este artículo, exploramos los desafíos intelectuales, sociales y políticos que implica el hecho de comenzar a crear objetos internacionales y, también, desentrañamos la reticencia disciplinaria que existe con respecto a participar en esta tarea, así como los peligros potenciales que conlleva. Cabe destacar que este artículo sugiere cinco beneficios principales que podrían obtenerse si caminamos en esta dirección: 1) el hecho de poder generar una ciencia social orientada al futuro, 2) el hecho de llegar a cultivar una ciencia social «atmosférica» que resulte fiel a las nuevas teorías materialistas, feministas y prácticas, 3) el hecho de abrazar un ethos colaboracionista radical más adecuado a las demandas de hoy en día, 4) el hecho de poder involucrarnos en una praxis científica sociopolíticamente comprometida, y 5) el hecho de poder inaugurar una arquitectura disciplinaria radicalmente nueva de la praxis académica.

Peut-on créer des objets internationaux? Des cartes? Des algorithmes? Des musées? Des visualisations? Des jeux vidéo? Des outils de réalité virtuelle? Des objets qui traversent le monde, exercent une influence politique et produisent de nouvelles formes de savoir? Cet article, et le numéro spécial qu'il introduit, suggère que les chercheurs en relations internationales peuvent et devraient créer des objets matériels, esthétiques et technologiques concrets, qui dépassent les champs épistémique, logocentrique ou textuel. Il rejoint ainsi un débat qui prend de l'ampleur, centré sur le potentiel d'élargissement de la pratique des sciences sociales à des formats multimodaux de conception, confection et création. Dans cet article, nous nous intéressons aux enjeux intellectuels, sociaux et politiques qui apparaissent quand on commence à fabriquer des objets internationaux, et nous décortiquons la réticence disciplinaire vis-à-vis de cette tâche ainsi que les dangers potentiels. Plus important encore, nous suggérons que s'engager dans cette direction présente cinq avantages essentiels : 1) générer des sciences sociales tournées vers l'avenir, 2) cultiver des sciences sociales « atmosphériques » et fidèles aux nouvelles théories matérialistes, féministes et pratiques, 3) adopter une philosophie de collaboration radicale, qui correspond davantage aux demandes actuelles, 4) nous impliquer dans une pratique scientifique engagée sur le plan sociopolitique, et 5) inaugurer une architecture radicalement nouvelle de pratique académique.

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How can we not simply study how things become international, global, or wordly objects but also actively make, craft, construct, or design international things? The distinction between these two tasks is radical. Over the last decade, the field of international relations (IR) has become evermore deeply interested in the politics of objects, technologies, materials, and "things" in all their guises. While IR has long possessed materialist theories of politics, these re-

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cent developments have drawn on scholarship from science and technology studies (STS), new materialist social theory, anthropology, sociology, and beyond to theorize the lively agency of all material things and their co-productive entanglement in power, knowledge, politics, and sociality. As technological developments accelerate, especially vis-à-vis machine learning, artificial intelligence, quantum mechanics, autonomous weapons systems, and so forth, the sociopolitical urgency of analyzing and understanding material-technological politics has come into ever-sharper view. At the same time, our understanding of objects has expanded to include conceptualizations of their aesthetic, affective, and atmospheric effects on social life. As a concept, "materiality" now means much more than it once did.

We now—therefore—have a good idea of what constitutes an "international thing." More than simply an object that is ubiquitous across global space, an international thing is characterized by the ways in which it possesses an autonomous capacity to interact materially, aesthetically, affectively, and atmospherically with global political spaces. International things possess an "active form" that exceeds (full) human control and which both symbiotically and parasitically injects itself into political life (Austin and Leander 2024). In different terms, international things engage politics through processes of "folding and encountering" in ways that see these objects "continuously reconstituting themselves and the terrains they enact" (Huysmans and Nogueira 2023, 6, 8). This, most importantly, gifts these things a form of contextual sensitivity or adaptability: international things operate differently in different places, augmenting their capacity to spread without limit, and evading what would seem to be contradictions or blockages that would halt their flow. They are both sticky and fluid. Both defined and undefined. Both human and nonhuman. Both functional and dysfunctional. Both present and absent. Both political and apolitical. And they are growing in number.

It is this last point that generates the debates this article seeks to open up and the special issue it introduces explores. IR has recognized the importance and complexity of material politics for the world, and the ways the influence of that politics appears to be growing at an ever-quicker and alarming pace. International things now entangle us everywhere, and their power appears dystopian. Yet, the question of whether this status quo should affect—even transform the quotidian praxis of IR and cognate social sciences remains fraught. While our understanding of politics has expanded radically beyond humanism in all its various guises, our modes of theorizing, studying, and engaging our world remain remarkably humanist. Scholars of IR write theories about the vitality and autonomous agency of technologies. We write empirical studies about how that politics plays out. We write down concepts describing the aesthetic and affective power of the material world. We write stories about other cosmologies that might help us engage the natural world differently. And so forth, we write a great deal about the material, the technological, and the aesthetic.

But can writing about the material world really capture what's going on? Can remaining within what we might call "analogue" academic practices give us full access to the vital, affective, and aesthetic workings of technology? Or do we need to take up the task of actively beginning to design, craft, construct, and make international things to more effectively theorize their works and, perhaps, interfere with the sociopolitical changes they induce? These questions all ask whether it is possible to practice the discipline of IR differently. Beyond the privileging of the written word, logos, and episteme. Can we imagine ourselves designing and dis-

seminating computer algorithms, architectural plans, audiovisual exhibitions, or other fundamentally material and aesthetic objects? Or are these questions absurd given we are not (for the most part) architects, computer scientists, or artists, and the craft of IR must fundamentally remain textual because our vocation is centered around the cerebral task of knowledge production, engaged with through a focus on conceptual sophistication, methodological experimentation, and external empirical inquiry). This article, and the special issue it introduces, explores these questions.

At the core of our questioning is the provocation that "making is thinking" (Sennet 2008). As multiple disciplinary traditions now affirm, any act of creating an object produces different forms of knowledge as we are forced to negotiate with forms of matter that possess distinct possibilities, affects, histories, and capacities (Haraway 1991; Ingold 2010). In the act of writing a text, one learns something. In the act of molding a clay pot, one learns something different. And in the act of coding a computer program, something still different is learned. At the centre of our argument is thus that the discipline of IR is unnecessarily limiting the scope of its knowledge production, as well as the politicality of that knowledge, by remaining almost exclusively within the realm of textual making (Kittler 1996). In particular, we suggest that by engaging in the making of different kinds of international things, IR can (i) far more precisely and holistically understand or theorize the dynamics of global politics, and (ii) inject that knowledge more effectively in political processes, coming to engage with, intervene in, and potentially help transform world political dynamics.

Our argument unfolds in conversation with the articles that make up this special issue. Among the contributions, we encounter questions such as: What would be gained by imagining scholars of IR designing and deploying computer algorithms to aid humanitarian assistance? What can we learn from co-producing textiles and other crafts with communities affected by violence? Can new forms of digital visual making intervene in politics more effectively than other approaches? Such questions reflect a nascent yet important movement across IR to expand its praxis in different directions. The goal of this article is to contextualize those developments, understand their politics, unpack objections that exist to their claims, and foreground the value of beginning to make international things like these. At the same time, we also seek to push for "going further" in expanding IR's repertoire for making international things, interrogating why—for instance—IR still remains most at ease with the idea of engaging in the making of artistic, visual, or aesthetic objects, but far more reluctant to engage in forms of coding, engineering, architectural design, and so forth.

We proceed in five main parts. First, we heuristically construct a "spectrum" of international things, ranging from those more usually associated with epistemics or speculation (e.g., the aesthetic) to those seen as being more "closed" (e.g., unamenable to reflexivity) and/or "functional" (e.g., designed for specific purposes). This spectrum is deployed to stress that our call is for IR to expand the types of international things it engages with. Second, we equally unpack the term "making" into its various constituent parts to understand the stakes of our proposition more fully and, in particular, to construct a basic equivalency between forms of making (e.g., writing versus prototyping) that are usually seen as very distinct. Third, on the basis of those heuristics, we then lay out a series of five benefits for IR that we see engaging more fully in the making of international things as being likely to cultivate: a more future-oriented, collaborative, atmospheric, committed, and different social science.

Fourth, we then tackle three key objections to our provocation: that making international things is not our job, that it risks deepening the neoliberalization of the university, and that it ignores the dangers and sociopolitical risks of engaging in material–technological making. Finally, we conclude by proposing a brief "specification sheet" for the future of making international things.

A Spectrum of International Things

International things are not uniformly alike. It is crucial to understand this because a common objection to the encouragement that we should "make international things" is that we already do. By this, scholars generally refer to the idea that they are already making (i) arguments, (ii) texts, and (iii) concepts, or—more radically—that IR increasingly engages, for example, in visual forms of making or cognate aesthetic objects (Harman 2019). We agree that these are all forms of making, and some of them do result-indeed-in international things. As Weitzel (this issue) makes clear, to make international things does not require a vast leap in imagination: "by locating and theorizing making-thinking as something already embedded in some IR and political science... [we can see how] the mechanics and logics involved in "making" exist analogously in what might be viewed as more familiar research practices and logics." Forms of making are already part of our praxis and can, in fact, "augment systematicity and rigor in research and stimulate public debate."

It is important to clarify that our provocation is thus a need to *expand* the kinds of making we engage with. Indeed, underlying the reaction that "we already do this" is a series of assumptions that limit the *scope* to which we do this. Many of these relate to an understanding of the kinds of epistemic objects that social science engages with. Karin-Cetina (2001, 181) describes epistemic objects in terms of "a lack of completeness of being that takes away much of the wholeness, solidity, and the thing-like character they have in our everyday conception." That "everyday conception" or "viewpoint" sees tools or objects as having "the character of closed boxes" (Knorr-Cetina 2001, 181). For her, thus:

The defining characteristic of an epistemic-object is this changing, unfolding character – or its lack of "object-ivity" and completeness of being, and its non-identity with itself. The *lack in completeness of being* is crucial: objects of knowledge in many fields have material instantiations, but they must simultaneously be conceived of as unfolding structures of absences: as things that continually "explode" and "mutate" into something else. (Knorr-Cetina 2001, 182)

Variations on that understanding of epistemic objects have become dominant in the self-understanding of much social science. Indeed, social scientists embrace this view of the "unfolding" and "incomplete" nature of the concepts we create and the texts that materialize them as epitomizing the always-incomplete nature of thought and the academic vocation. At the core is the idea that epistemic objects are intrinsically open to reflexivity, either internally to themselves or in the "unfolding" that occurs when they are injected into the world and opened for debate. As such, epistemic objects are not really "objects" in a material sense: they lack concrete "object-ivity." They are objects, but not closed objects. We make (i.e., write) books, yes, but books are not black boxes. Rheinberger (2005, 406-7) refers to this as the "material transcendence" of epistemic objects, which are "epistemic by virtue of their preliminarity," i.e., openness. This sits in contrast to "technical objects," which

are seen as "confined and not transcendent" (Rheinberger 2005, 407). Indeed, the valorization of epistemic objects is situated in prejudicial contrast to the aforementioned "everyday viewpoint" of objects. It is assumed that most engineers, designers, architects, etc., see their work as involving the creation of "closed boxes"—embracing an instrumental view of technology—and that this is qualitatively different from the creation of epistemic objects. We are not in the business of black-boxing.

Something contradictory emerges from all this. That epistemic objects "unfold" and exhibit a "lack of completeness of being" does not prevent their black-boxed instrumentalization. We all know this: Concepts, whether conservative or critical, are frequently abused by other actors when released from their academic cages. They can be turned into things with a strong "object-ivity" and a "completeness of being" against our will. Nonetheless, what keeps our faith in epistemic objects is how their ontological openness allows for (i) a disavowal of responsibility for their misuse, and (ii) the capacity to continually control and express our *intended* meaning behind such objects. To take each in turn, the fact that concepts, texts, or arguments are misused reflects the intentionality of someone other than their author. "That's not what I/we meant," is the reply. In this manner, we can maintain distance from the abuse of epistemic objects. Secondly, this capacity to maintain distance also allows for the illusion of continued control. We can clarify what we meant, write back, and/or descend into conceptual abstraction to such a degree that misuse is seen as less likely.

We might hypothesize that it is for this reason that IR's principal extensions of its modes of making have occurred through engagement with the aesthetic and/or the artistic. The "artistic" is assumed to have similarly "incomplete" characteristics to the "epistemic" in its dynamics. We replace forms of epistemic unfolding with aesthetic unfolding: a constant capacity to "explode" and "mutate" in meaning and purpose. While it is clear—and a central preoccupation of Critical Theory—that art and the aesthetic can be misused, just as concepts, for political purposes—fascist or otherwise—this is again something that it is assumed we can maintain distance from. By contrast, it is often thought that to create a material-technological object such as, say, an algorithm does not allow for such distance and the reopening of reflexivity. For example, an engineer designs and builds an algorithm, which then goes "out" into the world. While there may be cases of misuse intended by another actor, more common focus is placed on "unintended consequences" in which the desire for functional (i.e., that it must do X or Y) attributes within the algorithm creates a situation in which the maker is responsible for naively assuming the possibility of a linear translation between technical attributes and outputs. While it is often claimed that the objection here is simply "naivety" in the mind of the engineer, something that might be solved through greater reading in the social sciences and the humanities, it seems that there is an unacknowledged assumption that such objects are qualitatively different from epistemic objects, in spite of the efforts of much work in STS to undo this distinction ontologi-

As Ragazzi's contribution to this issue makes clear, these debates significantly reduce the kinds of objects IR is willing to make. The disavowal of "mapping" as a form of making within IR and many other disciplines, for example, reflects a growing desire only for the most speculative, abstract, and nonrepresentational forms of artistic/aesthetic practice. Ragazzi (this issue) seeks to problematize this tout court rejection of the "map" and articulate ways of

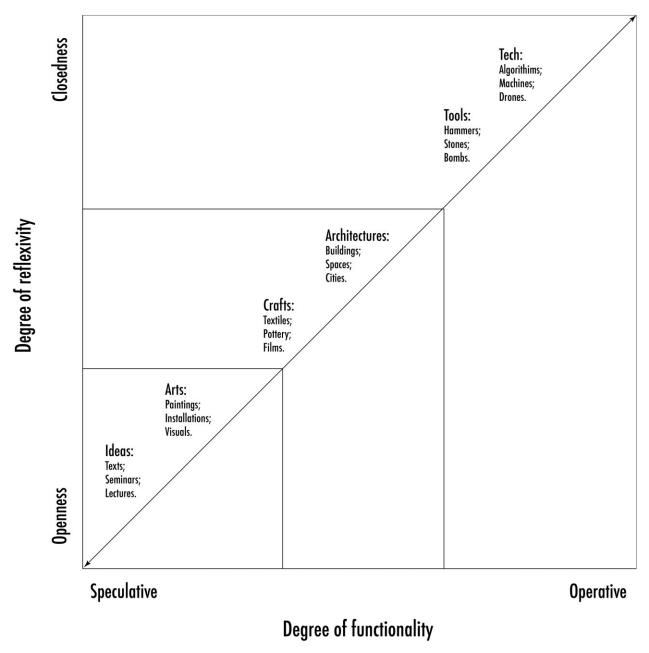


Figure 1. The spectrum of international things, as currently imagined within IR

combining the "traditional claims to authority" vested in mapping, which present "results rather than process, using traditional Euclidian representations of space, built with closed-source software" with a "broader set up. . . geared at questioning traditional forms of authority." But he finds difficulty in this endeavor, noting—for example—that work in IR that has deployed Bourdieusian forms of mapping "are among the least cited." Ultimately, our reluctance to "make maps" reflects a more general trend toward seeking to inject ever-greater degrees of reflexivity (assumed to be synonymous with criticality) and ever-less degrees of "functionality" (assumed to be "dangerous") into made objects.

The above cleavage allows us to chart two axes on which we can construct a spectrum of "international things" *as imagined within IR*, revealing where we are reluctant to tread. The first axe is that of the assumed "control" one has over an international thing. At its limits, there is a misleading bi-

nary between "openness" and "closedness" (i.e., a scale of presumed inherent reflexive capacity or polyphonic meaning). The second is related to "purpose" and a binary between "speculative" and "operative" objects, meaning how they seek—or not—to enact a prosaic function in the world (beyond the function of generating greater speculation, greater reflexivity, etc.). We can map (!) this spectrum as in figure 1, and chart out where different types of made objects are assumed to fall within its matrix. As will be clear, objects that seem to be fundamentally "epistemic" or "aesthetic" fall into the bottom quadrants, and are where IR feels most at home. By contrast, the top quadrants are seen to be the domain of other scientific fields or objects of social scientific critique.

This spectrum is—however—simply a representation—or, rather, a caricature—of how IR seems to think about this state of affairs, a representation of a perception that limits

Table 1. Types of making (terms meant with their closest colloquial connotation in the English [e.g., not "building an argument" in making-material, which would be more synonymous to "writing/speaking/publishing"])

$Making\hbox{-}thinkable$	Making-material	Making-public
Managing	Evaluating	Marketing
Teaching	Assigning	Grading
Researching	Writing	Publishing
Imagining	Drawing	Showing
Storyboarding	Filming	Screening
Sketching	Crafting	Exhibiting
Mapping	Constructing	Operating
Plotting	Fabricating	Connecting
Designing	Building	Manufacturing
Engineering	Producing	Installing
Testing	Prototyping	Developing

the scope to which we can think about engaging with the making of international things. For our purposes, it is thus important to stress that we do not think such a spectrum accurately represents either the degree of "control" one can have over an object or its amenability to speculative thinking. Indeed, it is clear that this spectrum is meaningless when, say, "books" are mediated and accessed through high-tech algorithms, or algorithms themselves are aesthetically crafted. Moreover, it is our view that this spectrum exists only because of a misinterpretation of the notion of epistemic objects. Knorr-Cetina (2001, 62) clarifies, for instance, that she refers to "any technological, scientific, or natural object (e.g., a garden) that is part of a process of revealing and articulation related to knowledge." All objects have the potential to be "characteristically open, question-generating, and complex" by acting as "processes and projects rather than definitive things" (Knorr-Cetina 2001). Indeed, it can even be argued that we only think differently about epistemic objects due to the lingering presence of a "relatively esoteric and hierarchical" view of knowledge production (Fuller 2016). The challenge, however, does not necessarily lie at this theoretical level, as many would accept this basic premise. Indeed, our injunction is not simply that all international things have the potential to be open and complex, but that engaging in the making of these international things is crucial in and of itself for generating new knowledge and forms of sociopolitical intervention.

But what does "making" mean?

What Does "Making" International Things Mean?

In addition to the diversity of qualities attributable to international things, is the diversity of meanings behind the term "making." We make conversation, make tea, make love, make lunch, make good, make speeches, make (write) documents, make (teach) classes, make (craft) models, make art, make music, make (code) algorithms, make furniture, make computers, make transistors, make medicines, etc. The term is generic, gesturing at a vast array of practices. To clarify its usefulness, we can divide it—arbitrarily and ideal-typically into three categories: making-something-thinkable, makingsomething-material, and making-something-public. Table 1 gives an incomplete view of practices that fit into these categories. The first three rows express how intangible epistemic objects are thought to be made within academia via the managerial construction of the university, through teaching, and toward research. Scholars will have no trouble recognizing

themselves as university or project administrators who engage in practices of managerial planning to make their activities thinkable, draw on evaluation practices that materialize their activities through indicators, and who market themselves and their institutions via journals, on social media, in professional conferences, and/or in trade fairs. Likewise, the core of our vocation involves making-things-thinkable to students through teaching, ideas that we then attempt to materialize for them through setting assignments, before "publicizing" that process via grading. This model is then more or less transposed into our own "core" professional practice: engaging in various research practices to produce ideas (always in conversation with others, e.g., being taught by what already exists), before following the disciplinary assignment of "writing" those thoughts down, which are then judged/graded through publishing models.

The value of considering a typology of making in this generic form is to give equivalency to each of the practices described. At this meta- and abstract level, the goal of each of the practices described is generically identical. Writing has the same goal as building, and grading has the same goal as manufacturing. But, just as with the spectrum of international things imagined earlier, the further we proceed down this table, fewer and fewer of the described practices are commonplace in IR. Of course, some (but still few) scholars will recognize themselves as involved in mapping for the purpose of making visualizations (Aradau et al., this issue; Ragazzi, this issue). But far fewer will recognize themselves as involved in design, engineering, or the actual testing of mundane technologies (but see, e.g., Lacy, Austin, and Leander, this issue). Of course, there might be good reasons that this is the case. Why is it not enough for IR scholars to remain within the practices of making that fit comfortably within their remit as conventionally understood? Is it not enough to probe the boundaries of IR's praxis by engaging less conventional sources such as images, films, or artworks? Why venture beyond the comfort zone of the discipline and follow, for example, "the many routes" Maya Lin has provided to help us "not to repeat the old mistakes," as Sylvester (this issue) recommends we do or instead engage with "textiling" to "pluralize IR politically, analytically, and socially," as Bliesemann et al. (this issue) also suggest?

For us, there are two main reasons for doing so. First, engaging different forms of making generates different capacities to intuit, think about, and reflect upon the world: making is thinking. As Jane Bennett (2010, 56) has written, when "artisans (and mechanics, cooks, builders, cleaners, and anyone else intimate with things)" engage in practices of making, they "encounter a creative materiality with incipient tendencies and propensities, which are variably enacted depending on the other forces, affects, or bodies with which they come into close contact." These "creative materialities" differ depending on the kind of making one engages in. Thus, while writing a text or building a house might be generically similar in their task of making-material, they each encounter different "incipient tendencies and propensities" within the world that enable us to learn something different. As Ingold (1997, 111) continues, all forms of making involve:

Qualities of care, judgement and dexterity. This implies that whatever the practitioner does to things is grounded in an attentive, perceptual involvement with them, or in other words, that he watches and feels as he works. It is precisely because the practitioner's engagement with the material is an attentive engagement that skilled activity carries its own intrinsic

intentionality, quite apart from any designs or plans that it may be supposed to implement.

These words stress that all forms of making contain processes that exceed rationalization—care, dexterity, feeling which shape what they render perceptible about the world and/or what can be achieved. For a more familiar example, the best advice one can often give to a student struggling with a dissertation or journal article is simply to "start writing—anything!" In the process of writing, even when our thoughts are incomplete, we sometimes make things clear to ourselves through the "intrinsic intentionality" embedded in that form of making. Hopefully, our thoughts complete themselves in the process of making a text, more or less coherently. Our insistence that IR expand its practice into different forms of making rests on the idea that we urgently need to gain a better sense of the different "intrinsic intentionalities" that different forms of making involve. For example, and specific to the question of making international things, one might hypothesize that certain actors—especially corporate and government entities—have developed a specific capacity to generate objects that flow across global space with minimal resistance. Those objects are neither simply functional nor closed to reflexivity (see figure 1), but—on the contrary—frequently seem to involve amalgamations of aesthetic, affective, and material potentials (see below and Austin and Leander 2024). But we frequently struggle to understand how those actors have achieved this and are thus ever-more incapable of contesting the commercialization of life, shifts to right-wing politics, and other contemporary dilemmas. Beginning to engage making such international things, then, might help us make sense of the power others have gained from doing so and—where we see fit—offer the capacity to interfere with

Second, and relatedly, each of the articles that make up this special issue demonstrates how the evident discomfort in taking these steps is paradoxically intensely productive for IR as a field. Indeed, the value of making international things is only augmented when it takes IR scholars beyond the safety of their home turf. This is especially the case when they may be forced to acknowledge that these novel practices of making cannot be readily "assimilated into disciplinary norms of rigor, systematicity, peer-review, and political commitments to truth claims" (pace Weitzel, this issue). Why? Because expanding our praxis in this manner is likely to find us recultivating and reshaping 'ourselves' in the field, to borrow wording from Sylvester's exploration of Maya Lin (this issue). This involves (see below) generating a different social science capable not only of affirmatively constructing novel international things but also perhaps engaging in the unmaking of existing international orders, as Sjoberg (this issue) argues we should. While each of the contributors to this special issue differs in their view of the kinds of "making" they consider pertinent for IR to engage in, and so in their understanding of how that "making" relates to thinking, the contributors are all interested in the promises that rest in (un-)making. The next section unpacks and highlights the reasoning underpinning that interest and points to the inflections entailed for IR and the international social sciences more generally.

The Promises of Making International Things

A first potential benefit of stretching the work of IR into the relatively unexplored territories of making mapped in figure 1 and table 1 is that expanding our repertoire of making international things in these directions challenges the retrospectivity of the field. Typically, IR studies what has already happened. Becoming something like a history of the present. While this is an important task, it has also generated the perception that we inhabit a "closed world that has already become" and in which any alternative "future of the genuine, processively open kind... [seems to have been] sealed off from and alien" to our imaginations" (Bloch 1996, 8). By contrast, embracing practices of making pushes us to actively take charge of our futures and, potentially, to generate a more future-oriented social science. Instead of flying backward into the future—to borrow an image from Latour (2010)—social scientists who engage in practices of making render visible and so actively engage with the futures they would like to see emerge. Indeed, if making involves rendering things thinkable, material, and public, then it also connects, reassembles, and even generates novel political realities. For instance, Ragazzi's (this issue) engagement with critical mapping generates other ways of conceiving, presenting, using, and debating politics in ways that have the potential (realized or not) to alter future political possibilities. The act of making, involved in examples such as his, propels us into the decidedly unaccustomed place where we are forced to face the futures our work is implicated in generating. In this way, it may open up the exhilarating, if discomforting, potential of creating something genuinely novel. Building on the "virtual" characteristics of the material engaged, it may be possible to extend beyond recognized "possibilities" and "think the new" (Grosz 1998).

Even when making remains contained by what is recognized as possible in the here-and-now, it still opens up the possibility of creating alternative futures. Making involves working in the "speculative modes" that we associate more with science fiction than with the social sciences, despite the long-noted connections between the two genres (among many Weldes 2001; Kiersey and Neumann 2013; Hermann 2021). The making of films, visualizations, maps, computer algorithms, or textiles involves reconfiguring our futures. As such, acts of making are often anti-dystopian practices. They are associated with hope, as Sjoberg (this issue) is right to insist. This includes hope for unmakings of the kinds she advocates, i.e., unmakings that resist reparative/restorative designs that may conservatively reinstate violence and hierarchies and instead hope to favor the open and unsettled, queer or creative. Instead of looking at the already accomplished, analyzing and criticizing it—perhaps to remedy existing harms-making thus implicates social scientists in forming what is still underway. It allows them to inscribe their own priorities, insights, and hypotheses in what is becoming instead of observing, explaining, understanding, or judging things that have come to pass. This not only brings the social sciences closer to the world, but it also gives them a central stake in shaping its future.

Second, to engage in the practice of making international things is to work more faithfully with the insights of a broad range of theories—including feminism, practice theorizing, new-materialism, and pragmatism—that emphasize the centrality of processes that exceed language and meaning. These theories stress not only the blunt power of the material–technological, but also its fundamental entanglement with aesthetics, moods, and affects that augment its influence in the world. Making international things allows us both to better explore these intangible aspects of the material–technological and to uncover the ways in which we contribute to and therefore also can inflect and trouble them. It other words, it is a means of paving the way for an *atmospheric* social science that focuses on that which stirs,

troubles, and inspires us, taking interest in that which makes us "see the world in this way or that" and so act in it accordingly (Ahmed 2014). Indeed, this overarching and general reason for moving toward making international things runs through the contributions to this special issue. "The textile narrative is a language that can only be transmitted from and received with the body," as Maria Mercedes Rojas puts it in the contribution of Bliesemann et al. (this issue). More than this, it sensitizes us to aspects of "the work" involved in the formation of atmospheres that we may be prone to overlook or underestimate the significance of, as Aradau et al. (this issue) show.

Additionally, engaging with the atmospheric and affective qualities of international things forces a reflexive consideration of the "response-abilities" of social science for shaping them. For Haraway (2012), responsibility is not an abstract ethical question, but one centered on our capacity/ability to respond to the world concretely: our ability to respond (c.f. Austin 2020). When we foreground what social sciences like IR can contribute to practices of making, we thus also direct our attention to the ethico-political implications that are implied in *not* engaging in making. This alerts us to the complicity of IR in leaving the violence of prevailing material-aesthetic atmospheres in place when the field does not contribute to unmaking them (Sjoberg, this issue). It lays bare our responsibility for engaging with the politics of the material-technological, the affective, and the atmospheric, rather than abdicating it and leaving it to others, most often conservatively to the powers that be (Austin and Leander 2021). Today, for example, it is entities like Google who appear to be most successfully designing the affective and aesthetic atmospheres of the world, atmospheres they insinuate into our lives through sensory marketing and aesthetic nudging. In short, "'moving close' to the nuts and bolts of 'making'" (Austin and Leander, this issue)—becoming intimate with it—is to open up the possibility of developing a social science better equipped to response-ably handle the atmospheres of our materialtechnological world and so to contest the current dominance of commercial/governmental logics in their forma-

Third, making international things also shifts professional practices. It holds the promise of prompting IR to become far more collaborative, inflecting also the form and directionality of this collaboration. Social scientists tend to lack skills in forms of making that lie beyond their own administrative, teaching, and research makings. Moreover, even within these remits, they are mostly highly specialized. A political theorist usually does not master ethnography or agent-based modeling (and vice versa). As such, they collaborate with others less to master the skills of another and more to reach a common goal, as each of the contributors to this issue do when they work with coders, filmmakers, artists, or game designers (respectively, Aradau et al., this issue; Ragazzi, et al., this issue; Sylvester, this issue; Austin and Leander, this issue). In all this, engaging in different forms of making imposes basic modesty. While it requires shared ground to become possible, collaborating does not involve abandoning our own skills or preoccupations. For an IR scholar to work with a coder, filmmaker, artist, game designer, etc., is different from becoming one. The point of collaborating is to make the most of difference, allowing the sum to become more than the parts-and perhaps to turn into multiple sums-through co-creation and co-production. Involving others demands giving them and their priorities space. The media and materials involved also claim space, as do, for example, the filming technologies,

mapping software, embroidered textiles, or virtual reality technologies discussed in the contributions to this issue.

Importantly, Lacy (this issue) underscores that collaborative work does not necessarily generate radically novel research agendas or insights. It may simply serve to check or as in his contribution—confirm predefined (disciplinary or otherwise) questions. However, as he also discusses, collaboration can do more. It often escapes the top-down authoritative grip of established questions in defiance of individualized leadership. The fissures and frictions that then emerge show openings and spark insights (Hamraie and Fritsch 2019, 4). Resisting the temptation of "homogenizing" them makes room for working within the spaces between them and generating "investigative commons" that operate as "formations against the universal" (Fuller and Weizman 2021, 163). Collaborating in this sense opens the door to continuously reconfigured inclusivity. The scholars and students (sic), materials and media, professionals, and organizations involved may shift, with consequences for the questions posed and insights generated. Rather than a disturbing threat to strictly delineated disciplines, collaborationism signals a commitment to the imaginative and creative (Leander 2020; Austin and Leander 2021). In all this, it implies a shift in the criteria for what is considered competent research. Instead of encouraging practices of research policing and enshrining the boundaries and hierarchical orderings of an academic field, collaboration of this kind cherishes probing research and the pushing of boundaries. Anchoring such "collaborationism" more firmly in academia as this special issue attests to—is to ensure space for such an understanding of research and knowledge, whether as part of existing disciplines such as IR/Global Studies or as an independent social science.

Fourth, practices of making that embrace the futureoriented, collaborative, atmospheric, and response-able also hold the promise of contributing to rendering IR more committed to engaging with "the urgencies of our times" (Strauss 2021, 14). By engaging in making, scholars find themselves intensely, fully, and obviously implicated in the risks and dilemmas it entails. They have to work with the necessarily impure politics that are imposed on anyone, starting in the middle of things (Shotwell 2016; Austin and Leander 2021). Lacy (this issue) has no choice but to face the discomforts generated as the affective and aesthetic sensibilities developed in the design projects he engages with transgress the (ethical, political, epistemic, etc.) limits of those involved, including his own. Recoiling from the kinds of discomforts Lacy reflects on, or placing the burden of dealing with them on someone else, is difficult—typically impossible for scholars who become directly engaged and involved. They are in the middle of them. Sharing and living them. In a pressing and immediate manner, practices of making pull social scientists in. They become committed in a literal sense of commitment by combining the *cum* (with) and *mittere* (send, thrust, and release). In making, scholars act to send, thrust, something into the world. Affirmative commitments are therefore at the core of the contributions below. Ragazzi advocates for critical mappings that disturb the authority of existing maps, while Aradau et al. (this issue) push for alternative visualizations that disturb predominant conceptualizations of security, Austin and Leander for a sensibility to the material-aesthetic ecologies of humanitarian technologies, and Sjoberg for unmaking structures of violence. Rather than an embarrassing bias to be neutralized hidden away, such commitments are embraced and explicated. They can thus also be critically and reflexively assessed.

Finally, engaging in making international things pushes the limits of the prevailing premises of IR. As such, it may give the impetus for a radically different "architecture" of scholarly practice and, specifically, one that is more related and relevant to the world surrounding it. This would start with reconsidering the physical spaces IR scholars inhabit on a quotidian basis. Indeed, engaging a wider repertoire of making requires rethinking the physical, environmental, and social spaces in which IR carries out its research. The transdisciplinary and transvocational practices implied in producing collaborative textiling projects with former FARC combatants (Bliesemann et al., this issue) or working with the International Committee of the Red Cross (ICRC) to produce digital tools for people affected by conflict or other crises (Austin and Leander, this issue) necessarily relocate the center of research to very different spaces. It moves research away from the conventional realm of the university office, library, or seminar room to communal spaces, organizational meeting rooms, or possibly also to various evolving "living labs" (e.g., Følstad 2008; Ahmadi et al. 2020).

Far-reaching changes to the professional structures of the discipline also follow from engaging in making. Most centrally, engaging in practices of making challenges the discipline's classic load-bearing beam: research premised on individual achievement (Austin and Leander 2021). Collaborative work defies the push to chop research into slices attributable to individual or institutional project participants that sustains such models. Relatedly, committed research prioritizing response-ability relativizes the significance of "owning" results and instead tends to privilege spreading and sharing, moving research toward an open-source ethos. Finally, the very idea of research results and their significance shifts. For a start, alongside deliverables and outputs, failure is at the core of making, learning from, and further developing it (e.g., Lacy, this issue; Ragazzi, this issue). Making is thus associated with an evaluation of research, not only permissive of failure but also cognizant of its pivotal place in research. Moreover, instead of a view of results as isolated, once-and-for-all achievements, findings gain significance and change as they become part of unfolding and recursive processes of knowledge-making. To make "memorials to the future," where "viewers must remake the war and themselves," is to set such processes in motion (Sylvester, this issue). Doing so matters precisely because it prevents research results from becoming definitive and therefore so entrenched and dominant that they overshadow alternatives and close developments, including those that would be necessary to tackle the problems related to their dominance.

Ultimately, expanding our repertoire of making demands far-reaching shifts in IR's conception of research. Ends, processes, and achievements require rethinking. So do the spaces and engagements of research. All of this would have to be associated with major reforms of the research policies that regulate funding, priorities, and careers in the social sciences, well beyond what currently seems likely or even possible. A reconstruction on this scale faces many obviously formidable and infinitely complicated obstacles. But a final promise of making is that it may help circumvent these obstacles by prefiguring the changes required. Practices of making international things are already ongoing, often with the support of research councils and institutions. They are constantly showing, arguing, negotiating, and doing. This leaves traces in research policies. The support they have deepens these. Making is already transforming IR as a discipline.

Three Key Objections to Making International Things

Even where it is acknowledged that a broader spectrum of international things, and their making, can be imagined—and that, speculatively, this would have some value—there remain core objections to the proposition. In particular, three key objections must be addressed. The first suggests that fields like IR must preserve their core epistemic mission, especially in the face of repeated attacks on the humanities and social sciences. The second warns that making may nurture wider nefarious tendencies of neoliberalizing the university. The third suggests that engaging in making is fundamentally dangerous—socially and politically—especially when pushed beyond the artistic or aesthetic. We now consider each of these concerns.

The first objection can be summarized straightforwardly. Making international things is not our job. This view rests on a relatively conservative reading of scientific practice and disciplinary cleavages that privilege functional differentiation (Stichweh 1992). Support for this objection comes from the prosaic fact that there are very few scholars of IR who have the skills to, say, use a computer-aided design tool to sketch an architectural model. Nonetheless, this is not problematic if the collaborative ethos described earlier is embraced. But underlying these issues is a far more serious concern. The devaluation of the social sciences and the humanities among governments and society is growing, resulting in efforts to defund our activities and attack their relevance (Solovey 2020). A core tactic to defend against this status quo has been to stress the unique value of social science as unrelated to instrumental (economic, impact, etc.) concerns (Spracklen 2016). The goal has been to emphasize that there are certain aspects of social reality—ethics, critique, culture, values, and politics—that cannot be captured by the natural or engineering sciences, and which require our unique tools and insights to be addressed. To expand beyond this core mission seems to risk diluting the value of social science and, perhaps, rendering it more vulnerable to outside attacks.

Several responses can be made to these objections. First, it is important not to naturalize the discipline and its limits. Does there really exist a natural portfolio for a social scientist, freezing our identities? Clearly not. IR has twisted and turned in its preoccupations since its nascence. Alternately coming to favor the integration of history, law, sociology, anthropology, etc., and at times bringing in a military science preoccupation with the design of complex infrastructures and technologies. Our goal is thus indeed to undo some of the boundary work that presently exists in the discipline and to embrace the fact that one of the great virtues of IR as a discipline is its comparative openness. While there is sometimes concern about the degree to which the discipline is derivative and "imports" concepts from other fields, this is also a virtue. The vibrancy and expansion of many of the sub-fields of IR that are most prone to work at the edge of the discipline and integrate concepts from the social sciences more broadly only confirms this.

Additionally, there is the simple fact that times are changing. The nature of world politics has shifted materially, technologically, atmospherically, and affectively. Long gone are the days when politics and engagement with that politics could be artificially constrained to humanist frames. Nowadays, it is difficult to disentangle a particular artistic or scientific form of worldmaking (Goodman 1978). In this regard, the problems facing the world require less that different scientific cultures be put into contact and more that a new

understanding of how society is being shaped is required, one that works in fundamentally transdisciplinary and transvocational terms. Colloquially, this sentiment is captured in the injunction that we must *learn to program or be programmed*. We must learn to speak with world political dynamics as they really exist, rather than as we might wish, or else we will fail to influence them. Theoretically, the same point has long been acknowledged as related to the "displacement of language as [a] universal medium" (Hansen 2000, 2; Austin 2019) and/or by the idea that "the existence of the inhuman" is "threaded through and lived through us" (Barad 2012, 219). Nonetheless, even where all this is recognized colloquially or theoretically, the dilemma has remained addressing it methodologically:

The long-standing logocentrism of our (often inimical) methodologies renders us hard-pressed to discover concrete instances through which we can reflexively grasp technology's practical impact on our experience. (Hansen 2000, 2)

To begin making international things, and so to think differently about politics, is also—in this regard—an effort to cultivate novel non-logocentric methodologies that might better bring us into contact with the nonrepresentational aspects of reality and its vital liveliness. In this, we follow Weber's (1998, 453) view that "if we continue to speak the same language of international theory, we will reproduce the same history in and of the field" and—perhaps worse—fail to align the field with the demands of the world today.

Finally, it is important to stress that a push to make international things is, at one level, normatively open. It may involve working with actors or projects that the more critically minded may find themselves politically suspicious of (see Lacy, Austin, and Leander, this issue), but it can equally involve cultivating practices of making designed specifically to assist the oppressed or with a clearer emancipatory goals (see Sylvester, this issue; Bliesemann et al., this issue). Most radically, it can involve generating a politics targeted at unmaking—in explicitly destructive terms—existing world political orders to open space for new ones to emerge. In all this, there is thus no necessary correlation between neoliberalization, militarization, or securitization and moving beyond traditional academic praxis. On the contrary, we would suggest that the future-oriented, atmospheric, committed, and collaborative ethos of making international things actually contains the potential to undermine the dominance of these global power structures today.

This latter invocation of neoliberalization directs our attention to a second major objection to engaging in practices of making, namely, that making international things nurtures neoliberalism, reinforcing its grip on IR, the social sciences, and the university more generally, with deeply problematic consequences (Austin and Leander forthcoming). As Jahn (2022, 80) writes, "the neoliberal economy [has] exerted pressures of privatization, commodification, deregulation on all areas of society, including knowledge production," and so universities have "turned to the production of commercially exploitable knowledge." In her view, in this "knowledge economy, all knowledge that is not readily commodified loses its value," and-most pertinently for our discussion—"the pressure to produce marketable knowledge generates anxiety about the lack of practical impact" (Jahn 2022, 80). Engagement with material and technological knowledge (as opposed to, say, the artistic or theoretical) is often considered more susceptible to becoming part of this neoliberal logic and of reinforcing it. Most see technological society as involving the fetishization of "a neoliberal ideology of human technical creativity" that has enabled the naturalization of "neoliberal ideologies of nonintervention" (Chua 2023, 40).

In this view, the idea that IR should transform its praxis represents what Conway (2021) sees as a dangerous shift to a "full spectrum scholarship." With this term, he connects the ideas we propose here to the military notion of full spectrum dominance, which indicates a desire for control of all dimensions of the battlespace through the diversification of tasks, resources, and capacities. From this perspective, attempts at blurring the lines between scientific disciplines generally result in a unidirectional push toward marketable knowledge economies that *purport* to be able to combine different disciplinary skills but, in reality, work only to entrench existing power structures. Pursuing a similar argument, for Duffield (2019, 23ff), engaging with technologies at the core of "post-humanitarianism" is not only about caving into neoliberalism's reluctance to engage with the underlying problems through a privileging of "glitchy," adaptable, and apolitical tech solutions that lock people into precarity. It is also to get "actively involved in the elimination of the very power to resist" by privileging "compliant feminized design sentiments" at the expense of "masculine tropes like emancipation, detachment, modernization, progress and mastery" (Duffield 2019, 23).

These concerns about the risk of deepening neoliberalism through making cannot be lightly dismissed. They point to crucial issues for contemporary critical thinking and the politics of knowledge more generally. Making is not, and cannot possibly be, protected from managerial approaches to university management, the commercialization of research, and the related loss of control over research agendas and "massive production of ignorance" associated with the governing of knowledge through market mechanisms (Mirowski 2011, 235; Leander 2016). However, we would contend that it might not be part of the problem but something that mitigates it or contributes to its solution. Engaging in making is an opportunity to gain a granular insider understanding of the processes at work in the pervasive neoliberalization of the university and social life more generally. If seized, that opportunity provides the foundation for a grounded, well-informed critique able to credibly parse and engage with already existing forms of neoliberalism, as well as with the role of researchers therein. That includes also researchers involved in making. Inversely, distancing scholarship, confining it to its own pristine and pure realm, leaves it caught within its own preoccupations and abstractions (Sylvester, this issue). It becomes solipsistic. Distorting or entirely missing the stakes (other than possibly its own) in commercial makings, its critique loses its incisive edge. It becomes ineffective or irrelevant. At best. By perpetuating the illusion of distant innocence, assertions of autonomy mask the already *existing* complicity of researchers with commercialized neoliberal makings, including the complicity entailed in not critically engaging them. Inversely, involvement dissipates doubts about the implications and responsibility of researchers. With that, it opens up the prospect of seriously challenging our own fraught relation with the perpetuation of neoliberalism. Rather than jeopardizing the criticality and autonomy of research, making is necessary to sustain them. Precisely because neoliberalism is pervasive, venturing out of the academic "Ivory Tower" is possibly more significant than ever.

More than sustaining critique, making is also crucial for advancing pragmatically and practically pertinent alternatives to the ever-firmer hold of neoliberalism in research. For a start, it quite simply shows the possibility that different makings, and centrally makings that do not reinforce hierarchies, are indeed possible. They can be emulated, discussed, and continued. They may be sources of inspiration. They offer "counterpoints" rather than "contradictions," in a register that is "not necessarily negative but a gentle refusal, a turning away from what exists, a longing, wishful thinking, a desire, and even a dream" (Dunn and Raby 2013, 34). Practices of making sometimes offer glimpses of radical alternatives to prevailing problems. Practices of making may be leveraged to subvert neoliberalism from within, as do the counter-mappings and counter-visualizations explored in this special issue (Ragazzi, this issue; Aradau et al., this issue). In a slightly different mode, making may also provide alternatives by working from within, engaging with deeply problematic practices to transform them through collaborative doings. It is an effort to reset relations by participating in them so that the tools of the master may indeed sometimes help dismantle the master's house, or at least allow for its substantial reconfiguration and repurposing (Singh 2017, 84, inspired by Glissant). In this register, rather than proposing alternatives to the military "Archipelago of Design," "The Right Choice" technologies of the ICRC or visual practices in IR, Lacy, Austin, and Leander and Weitzel (respectively, this issue) propose to work with them to transform them. More generally, most contributors to this special issue acknowledge project funding associated with neoliberal university management but work with it and in the university to affirm and advance critical scholarship and research autonomy. Most do so explicitly *contra* the neoliberal grip on research. Last but not least, committed collaborative modes of making provide plenty of opportunities for developing alliances—and perhaps even solidarity—in the face of the absurd excesses of neoliberal research management. The specific manifestations of neoliberal bureaucratization, the accelerated pace of research, problematic evaluation criteria and achievement indicators, or skewed and outright problematic priorities of funders all offer occasions to join forces to contest managerialism. Subversive, transformative, and potentially at the origin of novel allegiances and solidarities in the face of research management, making does not only sustain criticality; it has a potentially important role to play in displacing the grip of neoliberalism on the university.

The third objection we must address is not simply that making poses risks to the value of social science or that it risks engulfing these in a neoliberal vortex, but that it is dangerous in-and-of-itself. Indeed, underlying the spectrum of international things laid out earlier is a fundamental fear: that moving upward to what are assumed to be more "closed" and more "functional" objects poses serious risks. Though our control over epistemic objects may not be perfect, so this logic goes, our capacity to reflexively and responsibly control the effects of other seemingly more closed objects is far more limited. This perspective can perhaps best be encapsulated in Michel Foucault's dictum that it's not that everything is bad, but that everything is dangerous. Here, while it may be acknowledged that some benefits could accrue from making international things, and that we might even imagine developing so-called liberation technologies designed for emancipation (Diamond 2010), it is stressed that the historical record typically reveals that such projects generate dangerous unforeseen consequences and are quickly coopted by power structures. This fear has generally limited much of (critical) IR to the task of "constantly questioning the acceptability of current regimes of truth and engaging in transformative—and not solution-based—practices" (Lorenzini and Tazzioli 2020).

To address this third objection, it is first worth noting that the canonical critical theorists who still undergird these claims within IR would likely not agree with this assessment. Derrida, for instance, never embraced the view that critique must essentially remain groundless and has a "requirement not to become useful" (Burgess 2019; Jahn 2021). On the contrary, he "fought against apartheid... participated in resisting the French government's attempt to reduce the teaching of philosophy... [and was] an outspoken critic of infringements on human rights" (Bernstein 1993, 83). Asked about this, he noted that:

The difficulty is to gesture in opposite directions at the same time: On the one hand to preserve a distance and suspicion with regard to the official political codes governing reality; on the other, to *intervene here and now in a practical and engaged manner whenever the necessity arises.* This position of dual allegiance, in which I personally find myself, is one of perpetual uneasiness. I try where I can to act politically while recognizing that such action remains incommensurate with my intellectual project. (Bernstein 1993, 84)

Foucault noted similar contradictions in his own life (Jouet 2021). The dual position at stake here is fraught, as we have already described. It involves the uncomfortable embrace of critical reflexivity and a problem-solving commitment to engaging. In doing so, it requires taking far more seriously the radical contingencies that most critical theories of material, technological, and aesthetic life embrace. Read faithfully—for example—feminist, new materialist, practice theoretical, and cognate approaches reveal the spectrum of international things laid out in figure 1 to be entirely false. There is no necessary reason that the object of the drone, for example, be seen as entirely functionally "operative" and entirely reflexively "closed." On the contrary, the last decade has seen an explosion in the use of drones in functionally speculative and reflexively open ways; consider figure 2. Here, we see how the use of drones for killing suspected terrorists, for example, may indeed fit in the top right corner of this spectrum. But we also see how artists deploy drones strapped with spray paint to expand the reach of street art into inaccessible places: corrupting commercial control of urban space, and potentially opening new avenues for expanding the public sphere. Even within the military, the drone can trigger a reimagination of military strategy and activities, potentially shifting the possible uses of the drone therein and perhaps even the role of the military itself. As an object, the drone can be both functionally speculative/reflexively open and functionally operative/reflexively closed.

Indeed, it is usually very difficult to firmly classify any object at a fixed and permanent point within this spectrum. Drones have been used—for instance—to choreograph aesthetically evocative light shows in the sky. These "droneshows" may be both speculative and open in their effects on the world, sitting at the bottom left of the spectrum or they may operate as top-down authoritarian propaganda and so sit at its top left. The drone in a drone show can, in that sense, be both speculative in their deployment of aesthetic atmospheres and also reflexively closed in their subservience to corporate, governmental, and artistic structures of power, enshrining prevailing hierarchies, injustices, and exclusions. Importantly, one need not stay with drones or technological objects to make this point. To return to epistemic objects, they can equally shift in their status. For instance, theories of pluriversality seem to clearly fit within the bottom left of this spectrum when deployed to further struggles for

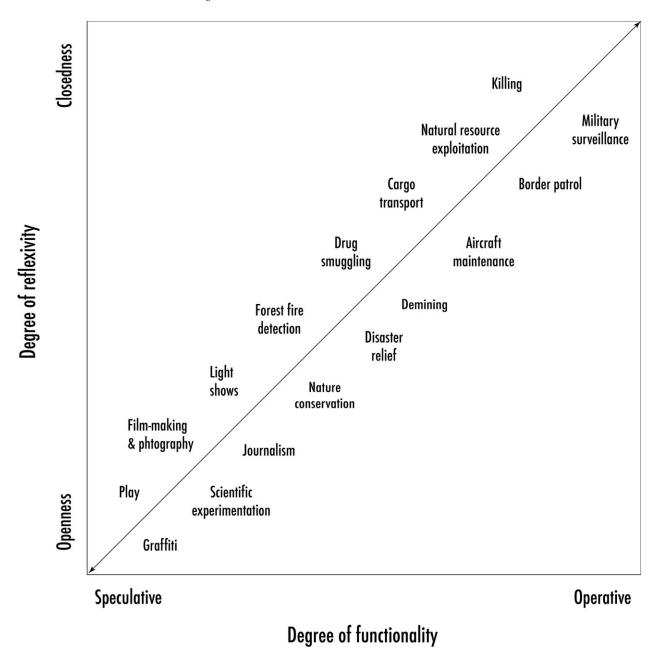


Figure 2. Different context and purpose-dependent places in which the object of the drone can fall on a functional-reflexive spectrum of international things.

justice, especially in the global south, and challenge hegemonic concepts of knowledge and ways of life. They are epistemic objects for liberation. But very similar understandings of pluriversality have also been deployed by states—such as Russia, Turkey, or India—to secure visions of civilizational uniqueness, quash epistemic alternatives, and repress political autonomy (Lewis and Lall 2023). What matters for where any international thing falls across this spectrum is thus not any essence unique to that thing, but instead within what context it has been nurtured, who has been involved, and how this has been response-ably, or not, engaged with. Making is sometimes what makers make of it. But—as ever—context, circumstance, and complexity make such a process impossible to predict. Makers make on terms outside their control, and that contingency must be riskily embraced.

Indeed, embracing the uncertain potential for alternative forms of making requires accepting danger. In this, the

critical ethos underlying making international things is also perhaps best described in the pragmatist terms that undergird much of the feminist, new materialist, practice theoretical, etc., theories that have prompted IR's broader interest in the material, technological, affective, aesthetic, and atmospheric. Within this pragmatist theoretical frame, it is explicitly acknowledged that modestly accepting limits to control is necessary. Even a "puppet theater master" who pulls the strings of the objects of their making, acts out a script of their making, and controls a scene they have meticulously designed cannot fully control the effects of their puppets (Latour 2000, 197). Makers of international things who have no strings to pull, limited control over scripts, and even a scene that is unbounded and escapes them are even less likely to be able to control the outcomes of their making. Their politics is therefore necessarily "dirty," "unfinished," and "ongoing" (Haraway 1997; Grosz 2002;

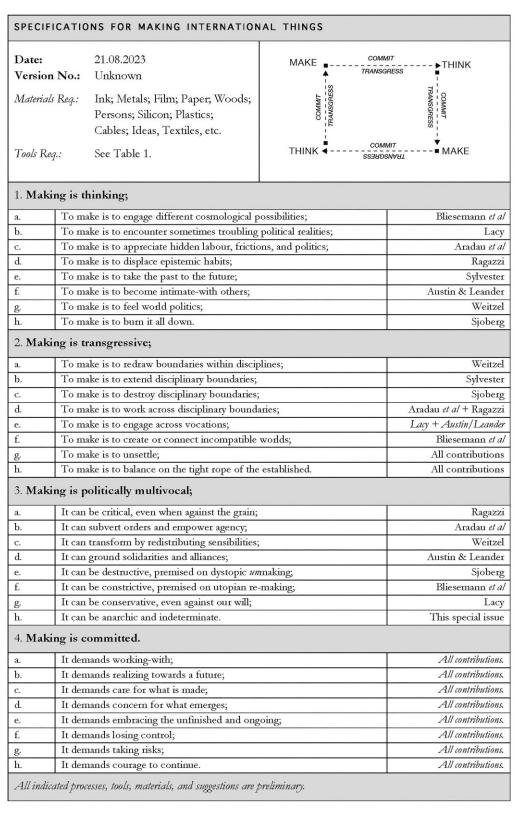


Figure 3. A specification sheet for making international things

Hutchings 2018). It is also clear, however, that this should not imply inaction. On the contrary, withdrawing is unethical. It is not only a denial of response-ability but also one leaving the terrain of making to those who refuse to critically engage and so conservatively enshrine its implications. Rather than retreating in fear when faced with the risks that come with the loss of control, therefore, pragmatists suggest that:

Although there can never be permanent closure in belief, in the sense of normative or ontological conclusions that will not need further revision, there is a need for *provisional forms of closure* to steer through actual debates and solve actual problems. (Prasad 2021, 5)

While the reference to "solving problems" may still jar many within critical IR, this is—in fact—the stance that the field generally takes outside the task of making international things. Critical scholars, for instance, have long embraced such provisional closures when advising governments on climate policy, human rights protections, women's rights, and so forth: advocating for pragmatic shifts within centers of sociopolitical power. In our view, a very similar form of provisional closure can be imagined within the task of making international things. The challenge is to embrace our aforementioned response-ability to make committed provisional closures that will allow us to imagine making novel international things with critical potentials.

A Specification Sheet For Making International Things

A specification sheet is a technical document. It usually lays out how an object or service is intended to function and/or the details of its design, construction, and composition. It is therefore a document more associated with the top-right quadrant of the spectrum illustrated in figure 1. Often, they take the format of very structured texts, such as lists or tables. What would such a specification sheet look like for the project of making international things? By way of conclusion, we attempt to construct such a document in figure 3. We have concluded in this manner because a listcum-specification sheet for making international things represents some of the paradoxes at stake in engaging in this project. On one level, the specification sheet is functional and operative. It seems to prescribe certain attributes, fixing them. On the other hand, the specification sheet is also an aesthetic and speculative object that works to represent "increasingly complex and contradictory material" but also to "engage in ever new combinations" and "conjure up an imaginary of possibility, potential, and emergence" (de Goede, Leander, and Sullivan 2016, 8). This specification sheet is thus open. Each category could be extended. It not only draws on the contributions to this special issue (referenced in the right-hand column of the sheet), but also goes beyond them. It hopes to open up for further debate on what other forms of making international things might involve for IR.

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References

Ahmadi, M., A. Weibert, V Wenzelmann, Tanja Ertl, Dave Randall, Peter Tolmie, Volker Wulf, and Nicola Marsden. 2020. "Gender Factors

- and Feminist Values in Living Labs." In Feminist Philosophy of Technology, edited by Janina Loh and Mark Coeckelbergh, 167–83. Berlin: Springer.
- AHMED, S. 2014. "Not in the Mood." New Formations 82 (82): 13-28.
- Austin, J., and A. Leander 2021. "Designing-with/in World Politics. Manifestos for an International Political Design." *Political Anthropological Research on International Social Sciences* 2 (1): 83–154.
- ——. 2024. "The Active Form of Security." *Science, Technology, & Human Values,* accepted and in press.
- ______. forthcoming. "The Future of Academic Expertise: Speculative European Bureaucratic Fabulations." In *Handbook of Knowledge and Expertise in International Politics*, edited by B. Bliesemann de Guevara, A. Warnecke and B. Poopuuet al. Oxford: Oxford University Press.
- Austin, Jonathan Luke. 2019. "Towards an International Political Ergonomics." European Journal of International Relations 25 (4): 979–1006.
- 2020. "The Poetry of Moans and Sighs: Designs for and against Violence." Frame: Journal of Literary Studies 33 (2): 13–31.
- Barad, Karen. 2012. "On Touching—The Inhuman that Therefore I Am." Differences 23 (3): 206–23.
- Bennett, Jane. 2010. Vibrant Matter: A Political Ecology of Things. Durham, NC: Duke University Press.
- Bernstein, Richard. 1993. "An Allegory of Modernity/Postmodernity: Habermas and Derrida." In *Working Through Derrida*, edited by Madison, 204–29. Evanston, IL: Northwestern University Press.
- BLOCH, ERNST. 1996. The Principle of Hope. Cambridge: The MIT Press.
- Burgess, Peter. 2019. "The Insecurity of Critique." Security Dialogue 50 (1): 95–111.
- Chua, Charmaine. 2023. "Disruption from Above, the Middle and Below: Three Terrains of Governance." *Review of International Studies* 49 (1): 37–52.
- CONWAY, PHILIP R. 2021. "Critical International Politics at an Impasse: Reflexivist, Reformist, Reactionary, and Restitutive Post-Critique." *International Politics Reviews* 9 (1): 213–38.
- DE GOEDE, MARIEKE, ANNA LEANDER, AND GAVIN SULLIVAN. 2016. "Introduction: The Politics of the List." *Environment and Planning D: Society and Space* 34 (1): 3–13.
- DIAMOND, LARRY. 2010. "Liberation Technology." *Journal of Democracy* 21 (3): 69–83.
- DUFFIELD, M. 2019. "Post-Humanitarianism: Governing Precarity through Adaptive Design." *Journal of Humanitarian Affairs* 1 (1): 15–27.
- DUNNE, A., AND F. RABY 2013. Speculative Everything: Design, Fiction, and Social Dreaming. Cambridge, MA: MIT Press.
- Fuller, M., and E. Weizman 2021. Investigative Aesthetics: Conflicts and Commons in the Politics of Truth. London: Verso Books.
- FULLER, STEVE. 2016. "Embrace the Inner Fox: Post-Truth as the STS Symmetry Principle Universalized." Social Epistemology Review and Reply Collective
- FØLSTAD, A. 2008. "Living Labs for Innovation and Development of Information and Communication Technology: A Literature Review." *Electronic Journal of Organizational Virtualness* 10: 99–131.
- GOODMAN, NELSON. 1978. Ways of Worldmaking. Indianapolis, IN: Hackett Publishing.
- Grosz, E. 1998. "Thinking the New: Of Futures yet Unthought." $symplok\bar{e}$ 6 (1/2): 38–55.
- . 2002. "A Politics of Imperceptibility: A Response to 'Anti-Racism, Multiculturalism and the Ethics of Identification'." *Philosophy & Social Criticism* 28 (4): 463–72.
- Hamraie, A., and K. Fritsch 2019. "Crip Technoscience Manifesto." *Catalyst: Feminism, Theory, Technoscience* 5 (1): 1–33.
- Hansen, Mark. 2000. Embodying Technesis: Technology Beyond Writing. Ann Arbor, MI: The University of Michigan Press.
- HARAWAY, D. 1991. "A Cyborg Manifesto: Science, Technology and Socialist-Feminism in the Late Twentieth Century." In Simians, Cyborgs and Women: The Reinvention of Nature, edited by D.J. Haraway, 183–202. London: Routledge.
- ——. 1997. Modest_Witness@Second_Millennium.Femaleman©_Meets_Oncomousetm. New York, NY: Routledge.
- 2012. "Awash in Urine: Des and Premarin® in Multispecies Response-Ability." Women's Studies Quarterly 40 (1/2): 301–16.
- HARMAN, SOPHIE. 2019. Seeing Politics: Film, Visual Method, and International Relations. Montreal, QC: McGill-Queen's University Press.

- HERMANN, I. 2021. "Thought Experiment as Method: Science-Fiction and International Relations in the Anthropocene." In *International Relations in the Anthropocene: New Agendas, New Agencies and New Approaches*, edited by David, Franziska and Delf, 425–40. Cham: Palgrave Macmillan.
- HUTCHINGS, K. 2018. "Pacifism is Dirty: Towards an Ethico-Political Defence." Critical Studies on Security 6 (2): 176–92.
- HUYSMANS, JEF, AND JOÃO P. NOGUEIRA 2023. "Against 'Resistance'? Towards a Conception of Differential Politics in International Political Sociology." European Journal of International Relations. https://doi.org/10.1177/13540661231185569.
- INGOLD, Tim. 1997. "Eight Themes in the Anthropology of Technology." Social Analysis: The International Journal of Social and Cultural Practice 41 (1): 106–38
- ——. 2010. "The Textility of Making." Cambridge Journal of Economics 34 (1): 91–102.
- JAHN, BEATE. 2021. "Critical Theory in Crisis? A Reconsideration." European Journal of International Relations 27 (4): 1274–99.
- 2022. "Neoliberal Takeover? The Dangers of Post-Critique." *International Politics Reviews* 10 (1): 76–82.
- JOUET, MUGAMBI. 2022. "Foucault, Prison, and Human Rights: A Dialectic of Theory and Criminal Justice Reform." Theoretical Criminology 26 (2): 202–223.
- KIERSEY, N.J., AND I.B. NEUMANN. 2013. Battlestar Galactica and International Relations. London: Routledge.
- KITTLER, FRIEDRICH. 1996. "Technologies of Writing." New Literary History 27 (4): 731–42.
- KNORR-CETINA, K. 2001. "Objectual Practice." In The Practice Turn in Contemporary Theory, edited by T. R. Schatzki, K. Knorr-Cetina and E. V. Savigny, 184–97. London: Routledge.
- LATOUR, B. 2000. "Factures/Fractures. De La Notion De Réseau À Celle D'attachement." In Ce Qui Nous Relie, edited by A. Micoud and M. Peroni, 189–208. Paris: de l'Aube.
- ———. 2010. "An Attempt at a "Compositionist Manifesto"." New Literary History 41 (3): 471–90.
- LEANDER, A. 2016. "The Commercial in /for International Political Sociology." In *Routledge Handbook of International Political Sociology*, edited by P. Bilgin and X. Guilllaume, 376–87. London: Routledge.

- ——. 2020. "Composing Collaborationist Collages about Commercial Security." Political Anthropological Research on International Social Sciences 1 (1): 73–109.
- Lewiss, A., and M. Lall. 2023. "From Decolonisation to Authoritarianism: The Co-Option of The Decolonial Agenda in Higher Education by Right-Wing Nationalist Elites in Russia and India." *Higher Education*. https://doi.org/10.1007/s10734-023-01074-0.
- Lorenzini, Daniele, and Martina Tazzioli. 2020. "Critique without Ontology: Genealogy, Collective Subjects and the Deadlocks of Evidence." *Radical Philosophy* 2 (7): 27–39.
- MIROWSKI, P. 2011. Science-Mart: Privatizing American Science. Harvard: Harvard University Press.
- Prasad, Monica. 2021. "Pragmatism as Problem Solving." *Socius* 7: 1–13. https://doi.org/10.1177/2378023121993991.
- RHEINBERGER, HANS-JÖRG. 2005. "A Reply to David Bloor: "Toward a Sociology of Epistemic Things"." Perspectives on Science 13 (3): 406–10.
- SENNET, RICHARD. 2008. The Craftsman. London: Yale University Press.
- Shotwell, A. 2016. Against Purity: Living Ethically in Compromised Times. Minneapolis: University of Minnesota Press.
- Singh, J. 2017. Unthinking Mastery: Dehumanism and Decolonial Entanglements.

 Duke University Press.
- Solovey, Mark. 2020. Social Science for What?: Battles over Public Funding for the "Other Sciences" at the National Science Foundation. MIT Press.
- Spracklen, Karl. 2016. "The Attack on Social Sciences." In *Making the Moral Case for Social Sciences: Stemming the Tide*, edited by K. Spracklen, 8–29. London: Palgrave Macmillan.
- STICHWEH, RUDOLF. 1992. "The Sociology of Scientific Disciplines: On the Genesis and Stability of the Disciplinary Structure of Modern Science." Science in Context 5 (1): 3–15.
- STRAUSS, C.F. 2021. "Seeking Radical Affectionstrauss, Carolyn F." In Slow Spatial Reader: Chronicles of Radical Affection, edited by C.F. Strauss. Amsterdam: Valiz.
- Weber, Cynthia. 1998. "Reading Martin Wight's 'Why is There No International Theory?' As History." Alternatives: Global, Local, Political 23 (4): 451–69.
- Weldes, J. 2001. "Globalisation is Science Fiction." Millennium 30 (3): 647–67