Two photos have stuck with me from my fieldwork on irregular migration and border controls in the Euro-African borderlands some ten years ago. One of these, a local newspaper picture of a cute basket of kittens, echoes the discussion in this Colloquy about how animal and human movements intersect: the basket, placed on the tarmac of a Spanish port, had been removed from a stationed truck because the little feline hearts confused the sensors used to scan the vehicle for the heartbeats of hidden migrants. The other image was of a human foot, clad in nice if dusty black shoes, whose living owner was being pulled out from the bonnet of a car, where similar machinery had detected his clandestine presence. Both pictures were taken at the European Union’s strangest frontiers: the Spanish enclaves of Ceuta and Melilla in North Africa. Yet neither image is any longer strange. They form part of a “new normal” in which detecting and exploiting signs of life itself have become fundamental to “fighting migration.”

As I argued when I first set out my thoughts on the human bioeconomy (Andersson 2018, 2014), migrants may be the canaries in the coal mine of a much wider turn toward intimate exploitations of life itself for economic and political purposes. Yet other canaries are out there chirping, too. As discussed in the Collo-
quy’s introduction, the first to note this shift in some depth were scholars working on economies of vitality in biomedicine and genetics (Rose 2007; Sunder Rajan 2006)—a shift only accelerating via the technologies rolled out for the control of COVID-19 throughout the world. In other words, privileged biosociality and marginal migrants may be two sides of the same bioeconomy coin, one whose value—a bit like bitcoin—only keeps inflating. Consider China’s so-called social credit system, which tallies up citizens’ daily behaviors into a score through incessant surveillance, or its mirror image, the power that global surveillance capitalists now hold over social media users in turning their intimate interactions and emotions into raw material for predictive products generating vast profits (Zuboff 2018). At the low-fi end of the bioeconomy spectrum, we find the chancers and predators exploiting life for profit through rudimentary yet brutally sophisticated means—from the extortion of tortured and violently detained migrants and refugees in Libya (Achtnich 2022a, this issue) to the profiteering off poor citizens in the privatized lower reaches of the U.S. policing and criminal justice system (Harvard Law Review 2015).

It is important to disaggregate the rather different ways in which life itself has come to be imbricated in processes of value generation and extraction, as this Colloquy has set out to do. Marthe Achtnich (2022b, this issue) notes, in her introduction, that one starting point for this task is to recognize how bioeconomies of the kind alluded to in my initial examples of border surveillance are predicated not on the optimization of life à la Nikolas Rose (2007), but rather on its degradation. Bioeconomies, in other words, may be wedded to particular necro-economies (Mbembe 2019). Through juxtaposing a variety of case studies, from the livestock trade across the Mediterranean to migration controls to the transnational fertility business, this Colloquy has worked toward pluralizing our accounts of economies of life, situating these in their particular histories and contexts. Yet in this concluding note, I will suggest that such a plural account—attuned to our ethnographic sensibilities—can be complemented by a more top-down analysis of a bioeconomy in the tentative singular. Taken as a heuristic or analytical lens, the bioeconomy may help us to look, momentarily, beyond the bewildering variety and complexity of specific value-generating processes and force us to try and excavate the underlying logics that inform these processes, all the more remarkable because of their diversity (cf. Sassen 2014).

A bioeconomy, as I see it, operates on two interlocked levels. The bottom, subterranean level is where the actors of the market do not appear in their usual guise: as buyers and sellers, as producers, middlemen, and consumers. Rather, in
(political and economic) markets where life itself makes for the principal resource, the possessors of that resource are no longer “selling” it—rather, they constitute the *terra virgen* of primitive accumulation, reduced to purveyors of raw material. More crudely, they—we—are the raw material. Meanwhile, on the top level, normal market rules operate, if with some twists: here, the exploiters sell their “products” while frequently (as in surveillance capitalism) enjoying a superordinate position to the buyers in a captive market.

This chain of exploitation is perhaps not so abnormal, given the ravages of resource exploitation and its associated exploitation of humans down the centuries, with the only difference being that, now, intimate human vitality buried deep within our personhood—not coal or gems extracted from the soil—is the raw material du jour. The extractive bioeconomies of today, in this take, are but the continuation of capitalist and colonial exploitation by other means. Once, Nature and the Colonies were considered the resource frontiers of capitalism; today, Life is taking their place.

This shift may prove the swan song of late capitalism, but that argument is for another day. Here I would rather like to reflect on this shift in relation to a simple question: Where does the power to colonize manifest itself today? I will argue that, given shifting forms of techno-power, knowledge capabilities, and geopolitical alignments, colonization may be resurrected as an analytic beyond the territorial frame of spatial domination, settlement, and exploitation. The analytical lens of colonization may help visibilize escalating extractive and generative processes of exploitation on the granular/human, rather than (just) territorial, level. If the academic discipline of anthropology was the old handmaiden of territorial colonialism, whose aftereffects are still felt in universities, I posit that today a new state-corporate anthropology is coming into existence: a (quasi) “science of the human” situated at the confluence of algorithms of artificial intelligence; advanced mechanisms of finance, risk management and surveillance; and the multipolar geopolitical world emerging amid the Western project’s demise.

Border controls have served as a laboratory for this new anthropology, highlighting a seeming paradox: state attempts to purportedly seal borders have helped catalyze an increasingly borderless bioeconomy. This economy operates principally not through the logic of the border—demarcating, sealing, controlling—but rather through the expansive logic of the frontier. Colonization was in large part a project for imagining and extending the frontier for the purpose of conquest and extraction (*Tsing 2005*). The frontier is a zone of expansion, not a line of defense:
both old and new colonial projects draw on this expansive logic, even as they, then and now, also mobilize borders for purposes of exploitation and control.

To quite some extent, the colonization of life today no longer obeys the territorial and racial markers of its earlier version. Put bluntly, almost anyone, anywhere can come to be good raw material for one bioeconomic process or another, as we see in the data extraction from Western middle-class social media users, from whole populations subject to expansive COVID-19 controls (Tréguer 2021), or from citizens subjected to China’s social-credit operations. Yet old ghosts also return to haunt this moment. Indeed, many of the bioeconomic processes treated in this Colloquy—especially those targeting vulnerable, exploitable human life—still draw sustenance from the “coloniality” of power relations surviving territorial colonialism (Ndlovu-Gatsheni 2013). This is certainly the case with the migration controls targeting racialized Others with which this piece started, and which Achtnich (2022a, this issue) and Hans Lucht (2022, this issue) centrally engage.

We can look further for evidence of these older patterns of domination, colonial and otherwise: in China, the Uighur minority has been brutally targeted through minute surveillance, while in the West, migrant, minority, and lower-class communities stand at its sharpest end. Race and class are by no means absent in these economies; quite the opposite. Yet these forms of extraction and exploitation are also coming for the well-heeled, the supposedly unmarked, the grand prize of the middle classes. In the bioeconomy, old boundaries are broken down while new ones may be erected in their stead.

But let us return to the laboratory of border security and irregular migration to examine some of the more granular processes at work in the bioeconomy. A growing body of studies has shown how new technologies of surveillance have crept into the field of migration control almost by stealth, and with little political debate. The innovation is staggering: ranging from the use of advanced sensing equipment in Ceuta and Melilla or at the United States–Mexico frontier (Andersson 2019; Jusonyte and Goldstein 2016) to the biometric identification of asylum seekers, refugees, and irregular border-crossers in richer countries and UNHCR-run settings alike (Cowling 2020; Fog Olwig et al. 2020); and from the deployment of artificial intelligence and advanced algorithms for producing risk and protection profiles (Akhmetova and Harris 2021) to the use of satellites and social media for tracking mobile life with the help of surveillance capitalist companies (Godin and Donà 2020). We can add to this the cruder policing and criminal strategies preying on human suffering and hope as tools for both deterrence (Andersson 2018) and financial profiteering (Achtnich 2022a, this issue). Contrast,
finally, the micro-extractions attaching to migrants in captive conditions with the macro-political use of prospective migrants as a bargaining chip in the barter between so-called transit and destination states, as lately seen from Libya to the Poland-Belarus border (Greenhill 2010; Andersson 2019)—the list is long, and it is growing.

In all the cases above, the migrants are no longer the exploitable, vulnerable, disciplined workers who sell their labor at the lowest possible price, as Marxist and perhaps Foucauldian scholarship would assess the function of bordering and suffering to be. Nor are they simply potential GDP contributors of the kind sought in the postwar economization of life compellingly traced by Michelle Murphy (2017). Nor are they, finally, the consumers of smuggling services, housing, or goods. They are all these things at different stages of their mobile trajectories, to be sure, yet throughout the migratory process, that subterranean market of the bioeconomy time and again rears its monstrous head—not to devour migrant labor or consumption, but rather to nibble away at migratory life itself through a range of overlapping logics.

Treating all these processes within a single bracket of the bioeconomy (along with its alter ego, the necro-economy) works heuristically in that it helps shine a light on the logics of value extraction and generation in contexts where labor and consumption may not be central but subsidiary. It also allows us to glimpse the dense and sprawling institutional and corporate networks now involved in tracking and (de)valuing life on the move. To take one example, in the United States, the former Trump administration enrolled the big data company Palantir in targeting parents of migrant children as well as racial minorities via its advanced software (Franco 2020); in Yemen, the same company tracks World Food Programme aid recipients via biometrics (Korkmaz 2021); and in Europe, it has been heavily involved in COVID-19 tracking of citizens, with highly limited transparency (Howden et al. 2021). In these three cases, data is extracted as raw material for national or international authorities, with little meaningful informed consent, before escaping into a data cloud where few controls apply. In Yemen, the fear is that this data will end up in the hands of the U.S. defense establishment that is actively targeting supposed insurgents via drone attacks, potentially putting a damper on demand for life-saving aid given the perceived risks involved for recipients.

In such globalized data-mining—much as in the surveillance capitalist dreamscape of social media enjoyed by us all—academics are playing catch-up. The new anthropology, with its powers to colonize life in its granularity, is fast out-running “slow scholarship.” If in the era of high colonialism, the nascent discipline
of anthropology was politically valued (albeit intermittently) for its contribution to the colonial project, today the infrastructures of power-knowledge are shifting inexorably toward the state-corporate surveillance nexus at play in settings as diverse as European or U.S. migration management, China’s social-credit scoring, or global COVID-19 controls. On a hopeful note, however, here lurks an opportunity for further research that engages reflexively with our scholarly positioning within bioeconomies of value extraction and within shifting terrains of power-knowledge. In this context, perhaps we no longer need canaries in the coal mine: rather, as everybody’s lives become raw material for a new form of colonization, the coal mine is us.

Yet, to return to migration, the multifanged and sophisticated exploitation of life hardly escapes migrants’ own analysis. In a remarkable variety of settings, those targeted most acutely by these processes describe themselves as reduced to “goods,” as Achtnich’s (2022a, this issue) interlocutors put it; or as being the source of a “business” or even “slave trade,” as I heard on the routes to Spain; or even—to return to the hungry monster—as constituting the centerpiece of a feast where others “eat” from migration (Andersson 2018; Lucht 2022, this issue). Attending to the self-analyses of those at the coalface of today’s growing bioeconomies may help researchers join the fight against encroachments across what may constitute the final frontier of capitalism: embodied human life and the inner sanctum of human vitality. The contributors to this Colloquy, in variously disassembling the bioeconomy and thinking laterally across economies of life and death in contexts of mobility, have taken important steps in this analytical (and political) task.

ABSTRACT
This concluding reflection of the Colloquy considers how the bioeconomy, as an analytical lens, may cast light on processes of colonization beyond the territorial frame of spatial domination, settlement, and exploitation. Examining the power to colonize with special reference to the politics and policing of migration, it shows how certain migrants have come to serve as a laboratory in the quest to extract value from life itself—which itself links back to historical colonizations. What we may call a “new anthropology” is taking shape at the confluence of algorithms of artificial intelligence, mechanisms of finance and surveillance, and the multipolar geopolitical world emerging amid the Western project’s demise. Understanding the new frontiers of value extraction of this piecemeal yet powerful (quasi) science of humankind constitutes a crucial analytical task for us “old anthropologists,” and the bioeconomy may serve as a tool in this endeavor. [bioeconomy; migration; mobility; colonization; surveillance]
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