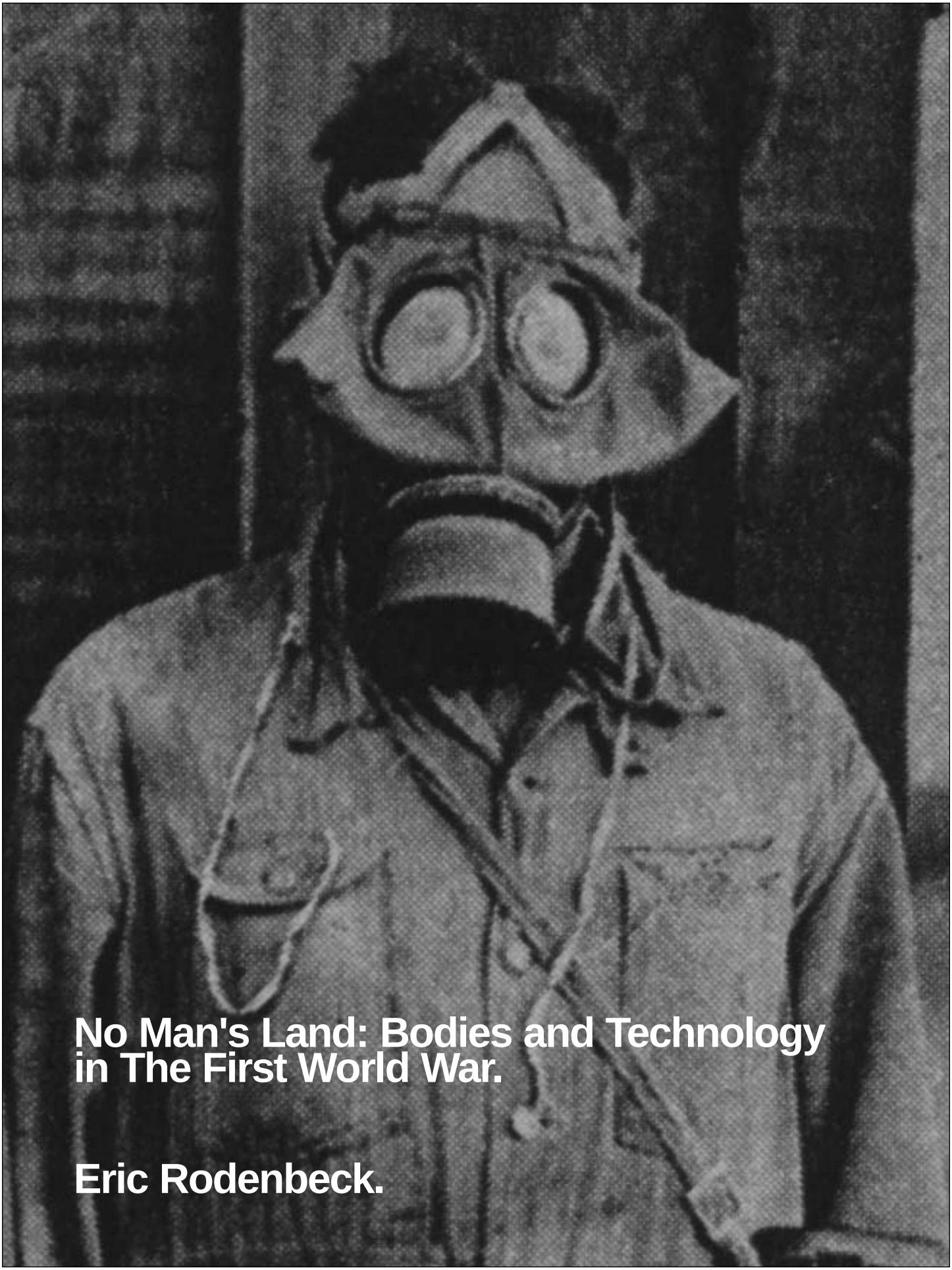

No Man's Land: Bodies and Technology in The First World War.

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Part of an actual battlefield photographed during the recent fighting in France
(*Western Newspaper Union*)

The term "no man's land" came into use during World War I to describe the zones of fiercest fighting between Germany and the Allies. Literally uninhabitable for unhuman beings, these landscapes were subjects of tremendous fascination for soldiers and those on the "home front" alike, and as such they were comprehensively investigated in essays, poems, drawings and photographs throughout the duration of the War. The rotogravures of The New York Times' Current History Magazine depict no man's land using scenes of total destruction, vast areas stretching to the horizon with "all signs of civilization completely obliterated." Often illuminated only by the deadly light of exploding shells, these images vividly illustrate the new nature of industrial warfare, its capacity to utterly refigure the world according to its own set of rules.

There were, however, remnants of the old amidst the rubble of this new landscape, and figures still moved through it, though they would have been unrecognizable to those not familiar with the conditions they fought and lived in. The new soldiers fighting in and around "no man's land" are investigated in the pages of Current History as thoroughly as the landscapes they moved through, and in these descriptions and photographs may be found the tentative recognition of a crisis that, through its descriptive immediacy, often paints a more vivid picture than the memoirs and retrospectives which followed the War. Existing language was stretched to accommodate a new set of conditions, and the often-conflicting claims regarding the new soldiers, their machines, and their bodies before, during, and after the War play into the derivative definition of no man's land as "an

area of uncertainty or ambiguity": in this new landscape the condition of the human was in no way clear.

That a dialogue of the body can be said to exist at all serves as an indication that the status of the body is being contested: much of the language used describes a new set of conditions as though the means of definition had not themselves been changed by the newness of these conditions. Through this emerging dialogue of the body, up for grabs, in and among all this dangerous newness, the War is figured as a conflict in which the narrative status of, as well as the continued survival of, the human itself is at stake. Definitions of the human become dependent on the status of the body, and the concurrent separation and dependency of the two provides a context for much of the linguistic and ontological tension that characterizes this dialogue.

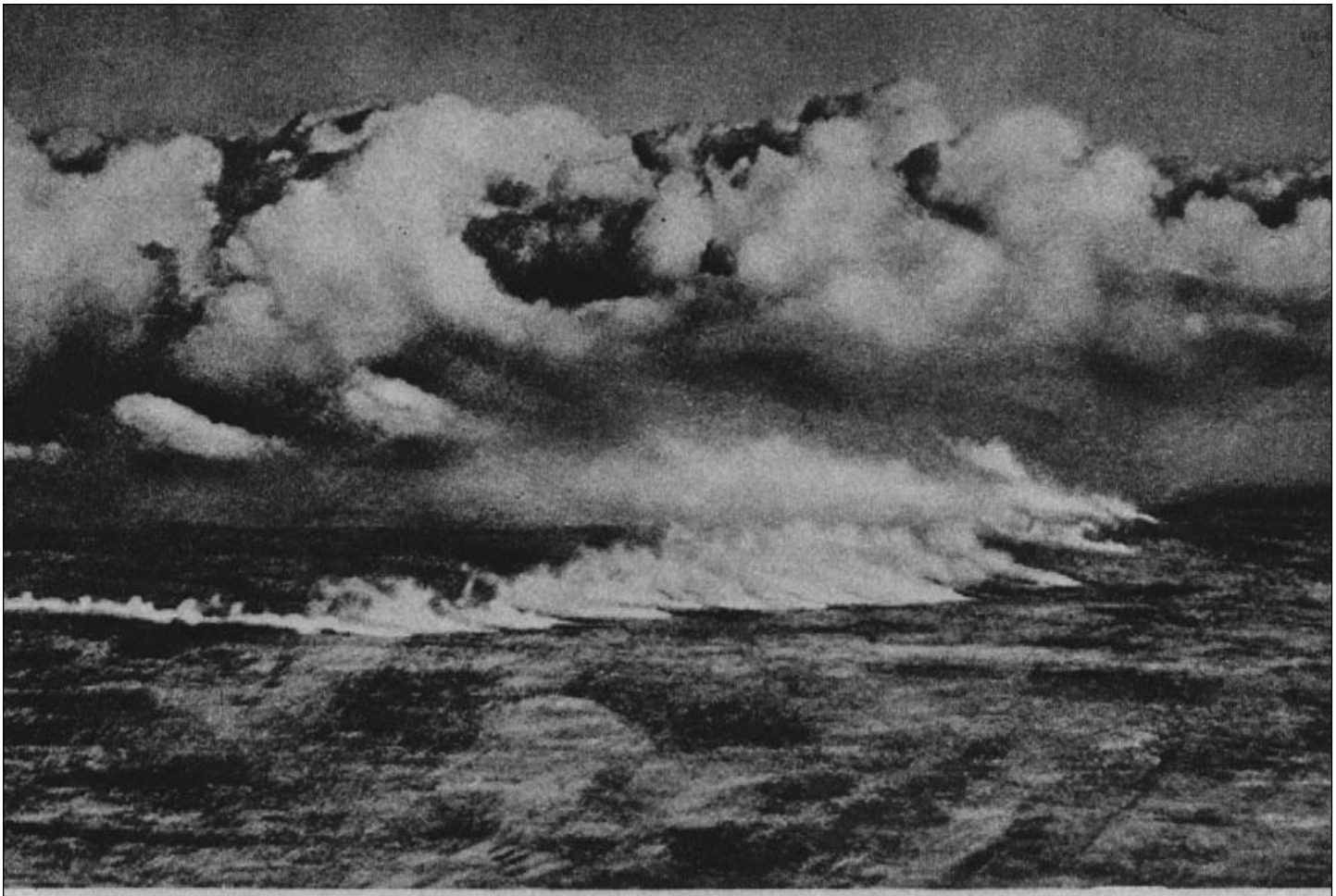
Gas Masks and Tanks: Tools or Prostheses?

Different types of gas masks (from left to right): American, British, French, and German

For the purposes of this essay it will be useful to set up two mutually exclusive 'technological categories': the tool and the prosthesis. A tool, generally, develops in response to a perceived need or want (I could do this thing if I had this tool) and therefore functions as an anticipatory addition. The functional intent of a tool, by this logic, is to change the world through its use, and in this sense is disruptive, altering what would normally occur. It is this logic that informs the rhetoric surrounding the introduction of labor-saving devices into the home or industry: this vacuum cleaner will make your life easier, free up your time, etc. The body, in this equation, remains unchanged.

A prosthesis, on the other hand (on another hand?), is a device which aims at replacing a part of the body which has been rendered missing or useless through accident or genetics (I used to be able to do this thing, or I should be able to do this thing alone, but now I need a prosthesis to do what my body was formerly sufficient for) and is thus a replacement for something lost or missing. Prostheses are retroactive in regard to the body and anticipatory in regard to the world: they either aim at restoring the damaged body to its previous condition of wholeness or impose a normalizing effect on bodies congenitally deficient. The disruption to the body has already occured by the time a prosthesis is introduced, and the overriding intent of such devices is to allow the body to function as it did before, in anticipation of a world that remains the same.[1]

Missing from these definitions is an understanding of the reciprocal nature of human-technological relations. Both assume that one side or the other of the body/world relationship remains constant despite the introduction of a new element. Their primary value for us will be in their demise: a clear division between tool and prosthesis, and thus in the anticipated status of both body and



A German gas attack photographed from an airplane. The gas is sweeping across the ground under a bank of clouds

environment, becomes problematic concurrently with the first real advances in the development of prostheses, in their ability to function as working elements and not merely as cosmetic devices or as stumps. Though linguistically it seems possible to define the body and the environment as mutually exclusive objects of intended change or constancy, these differences begin to collapse as part of the process of their construction. The status of the human at the intersection of body and environment occupies an increasingly ambiguous position as prostheses begin to anticipate, and tools function retroactively.

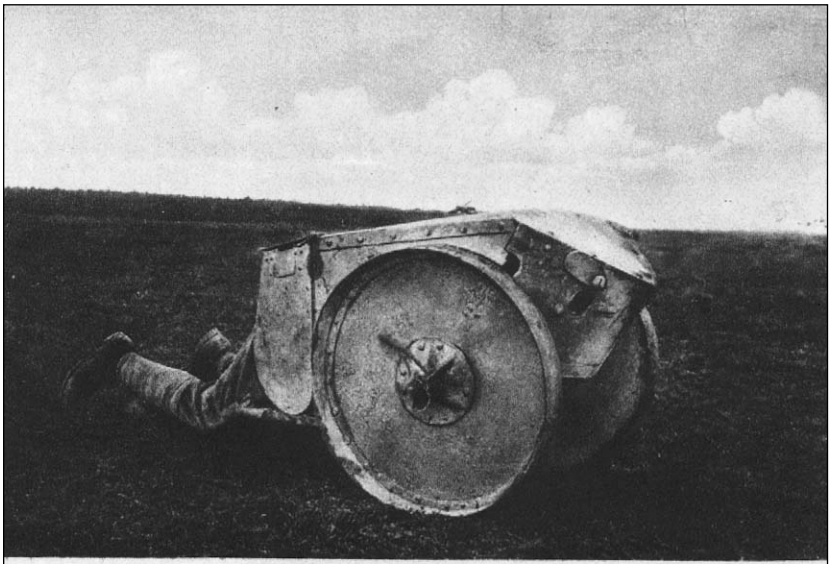
Beginning in November 1917, widespread shelling with poison gas made the wearing of gas masks essential in and around the zones of no man's land. Use of the masks was so vital that life in the zone was impossible without it, and the extensive training that soldiers received in their use emphasizes precisely the helplessness of the body without them:

> ...[the gas] can kill, and no doubt about it. But for every poison there is an antidote, and we have found it. Your helmet is perfect, and you simply must believe in it, you must trust to it. We have made full provision for your safety...During an attack, after putting on the respirator, just stand and wait. There is nothing you can do for yourself exceept to keep your helmet on. Your skill, your strength are nothing...
> After exposure to gas, all food, water and wells are poisonous...remember, you must believe what I say—keep your helmet on in time of danger, and you are perfectly safe.[2]

Which technological category does the gas mask belong to? On the one hand it is obviously a tool—it allows the body to exist in a place where it could not before, just as snowshoes and fur coats allow for existence in climates otherwise too cold for unclothed bodies. The difference, of course, is that snowshoes are designed in response to a natural environment, not a manufactured one as no man's land decidedly was. This distinction is problematic for a number of reasons, not the least of which is the issue of what "natural" means: by claiming that tools designed for effectiveness in technological environments are inherently prosthetic you have to, by extension, claim that all tools are prosthetic and that all environments are technological. This is precisely what I want to argue, but what's crucial is the shift, that after immersion in a technological environment of such global application it's no longer possible to sensibly argue for the difference between natural and technological environments.

Yet the language of the speech, described as sounding "strangely like a sermon," is strong enough to warrant closer attention: something else is going on here. The degree of trust in the helmet necessary for survival is such that it begins not only to augment but to actually replpace a part of the body: in the statement "Your skill, your strength are nothing" may be read an implicit "Your nose, your lungs, all the parts of you that normally allow you to breathe, are nothing without the mask." "You simply must believe in it, you simply must trust to it": in other words, place as much trust in its workings as would normally be placed in the sinuses and the throat. The mask is emphasized as a technology to be taken for granted, since it is already "perfect." It thus becomes an addition to the body, a replacement survival apparatus for the "skill and strength" that are now "as nothing." A part of the body has been declared useless, and is replaced by the mask: a prosthesis.

Me or My Tank?



Armored man-power tank, used by the French, for cutting barbed wire entanglements
(*Inter. Film Service*)

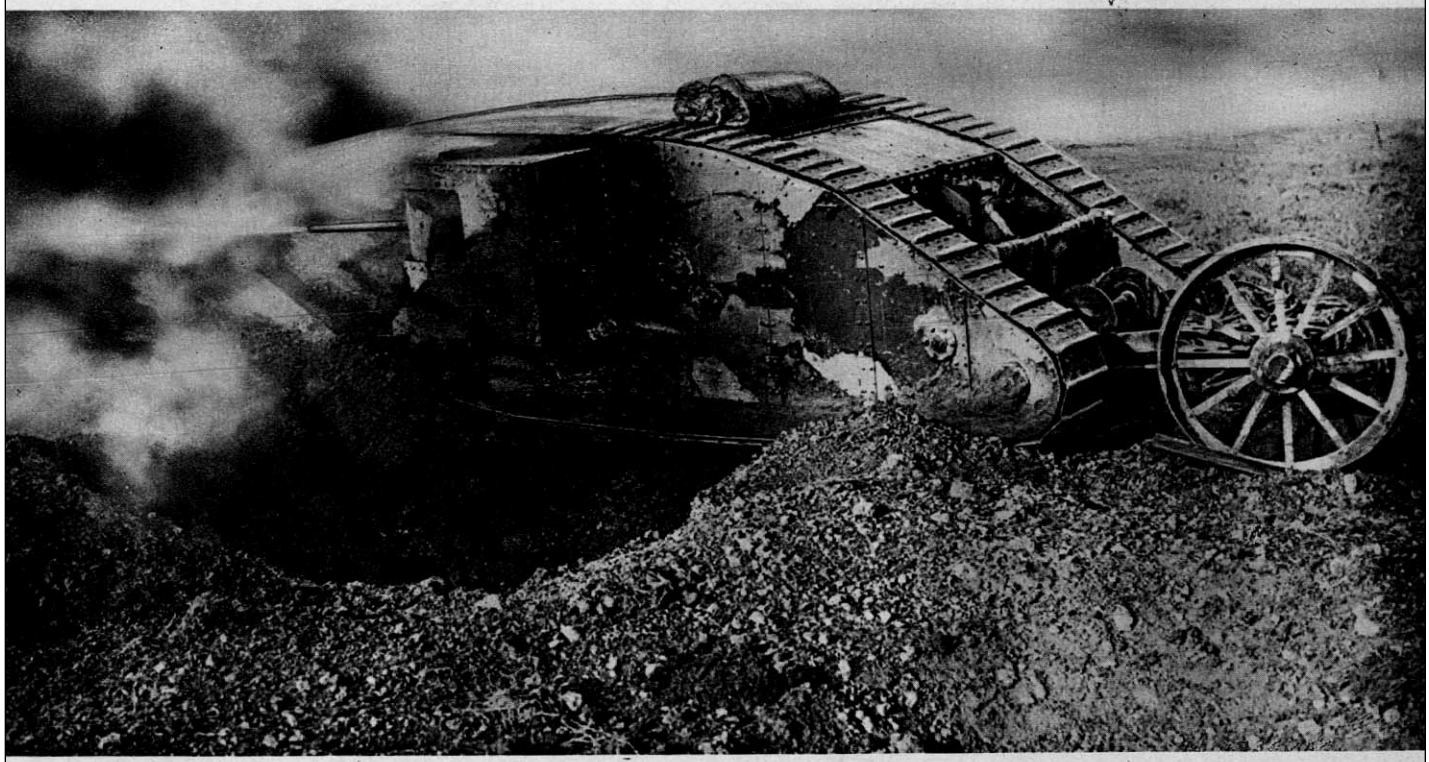
The tool/prosthesis becomes further blurred in descriptions of the body in relation to the new armored cars, or "tanks." Developed early in the conflict, they were prime examples of the new degree of coordination necessary for the waging of industrial warfare: built in Illinois as caterpillar tractors by the Holt Manufacturing Company, they were sold by the thousands to Britain, where they were armored and sent to the front. They made relatively safe negotiation of the blasted landscapes of trench warfare feasible due to their peculiar construction: their centers of gravity were located well to the rear and they could thus cantilever out over trenches and negotiate shell craters far better than people could. They were, in other words, very much at home where humans could not in what was literally a new landscape.

Just as importantly, they provided a moving physical shield within which soldiers could operate in relative safety under extremely inhospitable conditions: the first tanks were in fact little more than shields on wheels used to provide shelter while cutting barbed wire entanglements. They were so

much more suited (better suits?) than unarmored humans at this kind of warfare that they often seemed to be players on the scene in their own right, with motivations and emotions of their own:

> "...a ‘tank’ had been coming along slowly in a lumbering way, crawling over the interminable succession of shell craters, lurching over and down, and into and out of old German trenches, nosing heavily into soft earth, and grunting up again, and sitting poised on broken parapets as though quite winded by this exercise, and then waddling forward in the wake of the infantry."[3]

A BRITISH "TANK" CROSSING A SHELL HOLE



This New Type of Armored Car, Traveling on Caterpillar Tractors, Has Played an Important Part in the Somme Engagements, and Is Believed to be the Precursor of Great Land Dreadnoughts

(Photo from Underwood & Underwood.)

That tanks really were ontologically regarded as individuals does not of course follow from this one example of stylistic excess: soldiers have traditionally anthropomorphized ships, guns, and other technologies upon which their lives depended. Yet this language is being used to introduce a technology and situation that were quite new (the article is prefaced with the first photograph of a tank to be published in the United States) and deserves special attention in light of the writer’s claim that although

> "these things sound incredible...they are true. I write them in fantastic style, because that is really the nature of the thing.”[4]

The language’s "fantastic style" changes at time to something more complicated and ambigiuous than the repetition of an historically validated trope, as the machines and theor operators are referred to interchangeably as the originators of actions:

> "A curious experience befell the crew of a ‘tank’ that helped to clear the Germans out of Foreaux (High) Wood. It climbed into the enemy trenches and did terrible execution with its guns, when the occupants tried to bolt to their support trenches. After raking the ground for

half an hour, the commander found that the infantry had not arrived in accordance with his plan."[5]

Here it becomes unclear who is actually doing the fighting: is the tank "razing the ground for half an hour," or the commander? If this language is, as claimed, "appropriate to the nature of the thing," then what emerges here is the consignment of both human and machine to an uneasy space from within which the actions of one are easily confused with those of the other. The tank serves as a tool for the use of those inside it but also, in descriptive terms, as a replacement for them. Those inside are so unable to act without it that their actions are inseparable from its actions. The tank within this rhetoric serves as a replacement for the entire body: a body that, when not entirely absent from the action, is unimaginable without its machine prosthesis. The non-prostheticized human has no place in no man's land.

Where's the Connection? Additions To and Subtractions From the Body

The dialogue accompanying the widespread application of prosthetics in attempts to rebuild soldiers is no less ambiguous than that surrounding the intense dependency on tools described above. Here the use of language becomes even more crucial an issue, as rhetoric is called upon to present prosthetic devices as simultaneously allowing an easy return to "normal" body functions and also as affording possibilities for improvement and more intense integration into industrial assemblages.

Considerable effort was spent in the development of artificial limbs "almost perfect in their imitation of nature," usually made of wood and flesh-colored rubber. These naturalistic limbs were, however, "for dress only," intended as cosmetic attachments and thus functioning as prostheses in a very limited and specific sense, namely to make the body appear as it had before. The attachments that actually allowed the body to function again took any number of non-naturalistic forms: "tools, hooks, chucks, which [could] be interchangeably adjusted."[6]

These devices received far more attention from surgeons, journalists and photographers than their naturalistic counterparts: there are no photographs and

only passing mentions made of the latter in the pages of Current History, while the former are rigorously documented.

In order for these prostheses to fucntion as working elements and not simply as stumps with specialized sockets attached,

> "the specialized Italian System, the theory of which was laid down by Vanghetti, of making the amputation so that the muscles from the living part of the arm can be attached in such a way to the artificial limb as to get an organic muscular connection."[7]

was developed. This "organic muscular connection," in light of the above machine-body blurrings, may reservedly be seen as applying to the entire assemblage of body and prosthesis, thus further complicating the dialogue: where exactly is the connection when body and machine become one functioning system? In order for the body to be returned to "normal," the amputation is performed according to the demands of the prosthetic. The human, or what is left of him, begins literally to be shaped in anticipation of being prostheticized. Partial bodily replacement through technological means requires a body without any unity other than the required by the prosthesis: the body returning from the battlefield is already incomplete by virtue of its passage through no man's land and its integration into an assemblage of tanks, gas masks, and artificial limbs.

Bodies as Prostheses: Writing Of and On the Incomplete Body

In certain cases, however, notably in instances of severe facial disfigurement, a return to some kind of normal appearance was obviously the primary goal. Advances in medical technologies, spurred on in part by huge numbers of readily available incomplete bodies, had made possible the transfer of tissue from one part of the body to another, to the concurrent amazement and revulsion of those who witnessed the process:

> "Major Gilles is about to operate. The patient's position is not quite suitable. He puts a yellow gloved hand upon the patient's yellow shoulder and touches him. The effect on me is something like a shock. What was something like a man, seems of a sudden to be a figure stuffed with straw. The figure flops to one side, soulless, boneless.
> "'You understand what we are going to do?'
> I shake my head.
> Major Gilles points with his knife to the man's chest. There, faintly marked on the reddish-yellow flesh, is the shape of a face. 'These spots here are the eyes, this is where the nose will be, and here you see the mouth which we shall give him.'
> Good God, it searches me to the bone! That penciled face on the man's chest, like a mask; and above that penciled face on the chest, the old blasted and shattered face that a few days ago had the beauty and freshness of youth; why do surgeons speak of these things as a landscape gardener of his plans?"[8]

A new situation again stretches the use of language and thus the status of the human: the writer, in "shock," recoils from the rendering of the body in surgery as just as secseptible to human intervention as is the physical terrain of no man's land. This passage is vital because it describes the reaction of a "whole" person as the human is wrenched from the body in an immediate and horiffic way, and the wasted flesh in vivid contrast with the new plainly illustrates the real difference between the two kinds of bodies. This separation, however, has already occurred on the battlefield: the observer, though not understanding what the surgeon is "about to do," recognizes beforehand that the the body without a face "was something like a man," almost but not quite human. His shock,

then, is located in the immediate and visceral recognition of the pre-existing condition of the battlefield body as incomplete. Specifically, the observer recognizes through the blatant objectification of the body having passed through an industrial zone that its status has already been changed by its passage through no man's land.

Using the body itself as a surface, surgeons wrote on it with the same language used for working prostheses. Their new body is malleable, shifting, literally inscribed with a new and startling face, and its parts are as interchangeable as the tools, hooks and chucks that serve it as attachments:

> "At the Hammersmith General Hospital, London, for example, six useless muscles were taken from a patient's wrist and transferred to the other, with the result that the hand, previously paralyzed, could be used once again."[9]

Here missing or defective parts of the body are replaced not by a technological apparatus but by other parts of the body. Muscles are retroactively declared useless but are given a new function in the service of missing parts, and the body becomes a prosthesis for itself.

Natural Bodies vs. Rational Prostheses: Dangerous Organs and an Absent Humanity

Both in no man's land and returning from it, the body of the soldier was considered incomplete: unable to function without a prosthesis, the body is available for additions and modifications which, paradoxically, restores it to a "new and improved" state. This rewriting was hardly limited to the battlefield—a literal retrofitting was, in the words of one journalist, "bound to have its reaction for good towards those disabled in industrial life."[10]

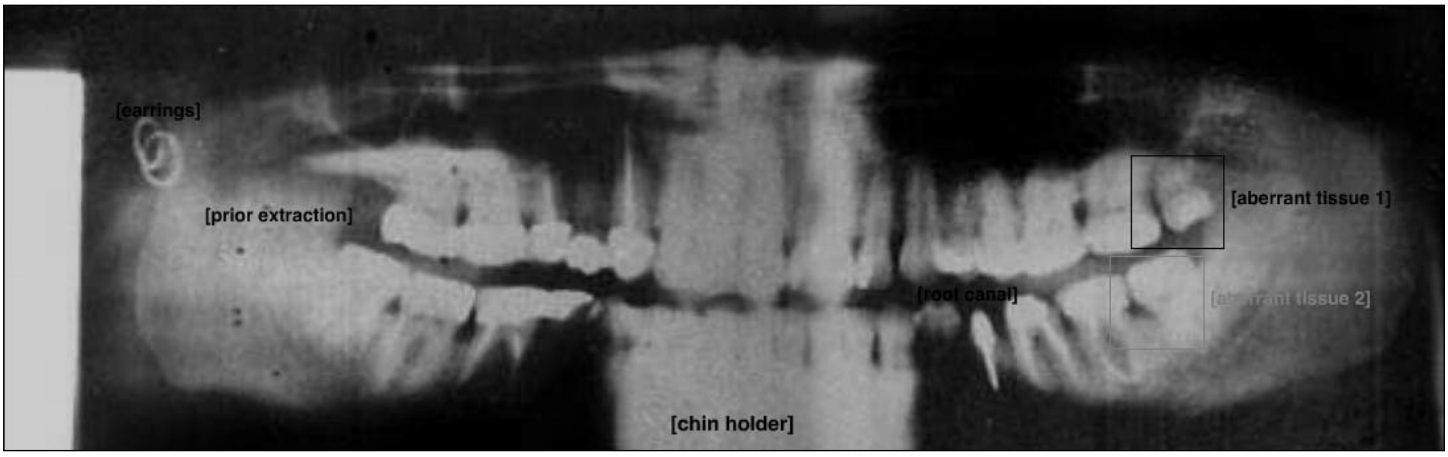
This statement is meant to refer to the maimed and wounded in factories, on railroads, and other similarly "industrial" occupations. The explicit and hopeful causal relation between battlefield and civilian bodies, however, demands the close examination of the domestic industrial body in terms of the military industrial body. If the body in industrial warfare is considered incomplete even before being maimed, then what of those whose lives daily include routine bus rides, factory work, and electric lamps? What this seemingly and innocuous optimistic expression of hope for a better life points towards is the incomplete body existing not merely as a result of industrial warfare but as a condition of industrial existence as such. "Those disabled in industrial life," then, begins to include not only the amputees produced by the new factories and railroads but all bodies in an industrial context.

This understanding of a disabled body informs the anxiety pandered to by an advertisement for "Nujol" which ran in the back of several issues of Current History between 1914 and 1918. The non-prostheticized body is presented as coarse, brutish, that of a "cave man." This body, having failed to adjust itself to the conditions of "civilized man," is as much a danger to itself as the gas and shells of no man's land are to the unarmored battlefield body. It possesses an outdated "internal mechanism" which poses a "constant threat to health" and needs to be "adjusted." The body has been presented with a changed set of conditions within which the digestive system itself becomes as useless without Nujol as the breathing apparatus is without the mask in no man's land, and now requires a prosthetic substance to survive.

Disability here is no longer confined to those with missing limbs or ruined faces, but is instead an essential condition of the "different kind of life" brought on by civilization. The body in a technological context is already, inherently incomplete and requires a prosthesis in order to satisfy the condition of being human. Man the tool-maker is replaced by the human within a perpetually disabled body.

Shock at the Old, Not the New: The Contemporary Body Has Already Been Incomplete

The treatment of the body as a site for improvement in the pages of Current History is so blatant and seemingly naive as to appear almost comic to the contemporary reader: the ads read as entirely transparent to a jaded TV watcher and the photographs of prostheticized humans seem as freakish



as something out of Barbarella or Flash Gordon. Yet our laughter is not entirely innocent, of course—a note of nervousness informs my cynical reaction. My unease is in many ways similar to that of the face-lift observer, edgy while watching the landscape gardener sculpt and plan a body according to their own set of drawings. I recoil at the suggestion: that my body might right now be available to the same kinds of inscription as the not-quite-human body on that World War I operating table, but what underlies my discomfort is a bit subtler and, in the end, more disturbing.

My mouth is full of silver, I can't see farther than my arm without contact lenses, and the stitches in my hand have been there for more than a year and are, I assume, literally part of my body by now. My back problems, it's been explained to me, stem not so much from anything I might be doing wrong as simply from the fact that my body has not been "designed" to walk upright very well. My "caveman internal mechanism" simply hasn't caught up yet with civilized life and, what's worse, it doesn't work in the modern world without prosthetics.

What disturbs me about these articles and photographs is precisely the blatancy that fascinates me and makes me smile. Specifically, these documents present an historical picture that, when held against contemporary notions of the body, are as much a cause for shock as the wasted face compared with the new face on the patient's chest. This comparison forces a recognition that my body, with its lenses and additions, has been changed by its passage through no man's land, is in fact already incomplete without prostheses and has historically already been incomplete without them. An historical shock, then, which through an exaggerated poetics leads to an understanding that the contemporary body is already incomplete, and has been since 1914 at least.

Footnotes

1. Thanks toScott Bukatman for help in the development of this distinction.
2. Eddy Sherwood, "Poison Gas in Warfare: The Deadly Mustard Gas Now Employed—The Methods of Gas Training," in Current History. New York, ca. 1913, p.293
3. Anonymous, "British Armored ‘Tank Cars,’" in Current History New York: ca. 1915(?), p.244
4. ibid p. 245
5. ibid p.244
6. Anonymous, "War Surgery: What Medical Science and the United States Army Hospitals are Doing for Wounded Soldiers," in Current History, ca. 1915, p. 124.
7. ibid p.125
8. Galeazzi, Ricardo, "Rebuilding Disabled Soldiers: Wonderful Work that Italy is Doing to Render Maimed Men Self-Supporting," in Current History. New York: July 1918, p.101Bebie, Harold, "A Miracle of the New Surgery," in Current History. New York, ca. 1915, p. 125-6.
9. Anonymous, "Wonders of War Surgery," in Current History. New York: ca. 1915, p.906.
10. ibid p.905.

Further Reading/Sources

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(interactive investigation of prostheticized WW1 soldiers)
http://ultra.stamen.com/02_18_99/

The Codex Series v2: 2000_Investigation
(examination of relationships among digital image technology and body definitions)
http://www.codexseries.com/

Harpers Magazine, July 2001. “Dr.Daedalus,” Lauren Slater. pp.57-67.
(Radical plastic surgery for aesthetic reasons)

The Atlantic Monthly, December 2000. “A New Way to Be Mad,” Carl Elliot. pp.72-83.
(Emergence of wannabe amputee desires as a legitimate and recognized psychosis)

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(Sometimes lurid descriptions of wartime sexuality. Available for download:
http://xxx.stamen.com/sexualhistory/)