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Analysis of Media Coverage of Bionics Through a Disability Studies Lens

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Introduction

The field of bionics is based on the union of living organisms and machines [1]. Bionics can be used to restore function to non-functional or lost limbs or replace other body parts such as ears, eyes, hearts, etc. [1-2]. Recent years have brought many new possibilities of what the human body could become as there have been advances in “biomedical science”, “cosmetic surgery”, “genetic engineering” and “nanotechnology” [3]. Bionic technology can be aimed towards aiding individuals with disabilities and/or advancing human capabilities at large [4].

The Aim

Media are seen to enable social participation [5] and to help set the discussion agenda for society and are seen to create the boundaries within which debates takes place [6-7].

Therefore we wanted to analyse how bionic technologies are portrayed in newspapers and the usefulness or lack thereof of that portrayal for disabled people.

Methodology

- The database Proquest accessed through the University of Calgary library was used to retrieve articles from the *Calgary Herald* a Canadian newspaper with local focus (n= 301) and *The Globe and Mail* a Canadian newspaper with national focus (n= 424), dating from 1977 to 2013, using the keyword “bionic”.
- Qualitative Coding Software *Atlas.ti* was used for a deductive, inductive and iterative coding approach.

Results and Discussion:

From a disability studies point of view there were at least two problematic aspects exhibited by the newspaper coverage. One is the overly medical flavor of the bionic discourse (Table 1). This pigeonholes disabled people, a main group seen to be the recipient of bionics, into a medical discourse seen by many as problematic. The medical flavor is also exhibited by the lack of social issues mentioned (Table 2) which is the second problematic aspect. As is, the coverage around bionics is not of much use to disabled people; it could even be classified as damaging. For it to be useful it has to deemphasize the medical flavor and cover social issues disabled people might face around bionics.

Table 1: Frequencies of Medical Terms Used

Code	<i>The Globe and Mail</i> Total hitcounts (n=)	<i>The Globe and Mail</i> Article count (n=)	<i>The Globe and Mail</i> Article count (%)	<i>Calgary Herald</i> Total hitcounts (n=)	<i>Calgary Herald</i> Article count (n=)	<i>Calgary Herald</i> Article count (%)
Disease	56	25	5.90	78	27	8.97
Health	189	57	13.44	100	50	16.61
Impair	79	2	0.47	3	3	1.00
Patient	108	40	9.43	103	33	10.96
Treatment	28	19	4.48	52	23	7.64

Table 2: Frequency of Use of Social Issue Terms

Code	<i>The Globe and Mail</i> Total hitcounts (n=)	<i>The Globe and Mail</i> Article count (n=)	<i>The Globe and Mail</i> Article count (%)	<i>Calgary Herald</i> Total hitcounts (n=)	<i>Calgary Herald</i> Article count (n=)	<i>Calgary Herald</i> Article count (%)
Discrimination	4	4	0.94	1	1	0.33
Marginalisation	0	0	0	0	0	0
Mental health	1	1	0.24	0	0	0
Stigma	0	0	0	0	0	0

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