I found Thom’s book extremely illuminating, insightful and enjoyable. I learned a great deal from it, and look forward to this online discussion, from which I’m sure I’ll learn a lot more.

One point where I was left feeling rather frustrated was in the brief discussion of Chomsky’s views on language and adaptation (section 6.2). I had been hoping to get some guidance on how to think about the increasingly acrimonious debates between Chomsky and others on the existence or non-existence of a dedicated language faculty or Universal Grammar, but Thom remains officially neutral on this. As he says in the Précis,

“What might be a natural object of study is an innate cognitive mechanism – sometimes called a Universal Grammar – without which we would not be able to acquire and use languages. I say that this only “might be” a natural object of study simply because whether such a mechanism actually exists is a disputed and much vexed issue, on which I am personally agnostic.”

Although I would have liked to hear more on the pros as well as the cons of Universal Grammar, what mainly frustrates me is the possibility that what Chomsky means by language is not the same as what Thom means, so the discussion may be at least partly at cross-purposes.

Thom makes a convincing case that language evolved to make ostensive communication expressively powerful, whereas Chomsky repeatedly denies that language has a primarily communicative function. Thom defines language as “The suite of cognitive traits that allow us to acquire and use languages” (i.e. public languages like French or English). For Chomsky, though, language seems to be more like a language of thought, and this has become increasingly obvious in his recent writings. Here are a couple of extracts from a recent informal talk by Chomsky on ‘Language and the Cognitive Sciences’ at Carleton University (my italics):

“It appears overwhelmingly clear that a generative process suddenly emerged at some pretty recent point … Well it emerged in an individual, mutations don’t take place in groups, so some individual was fortunate or unfortunate enough to get this generative capacity… Furthermore, there was no selectional pressure at that time. There couldn’t be. It’s just something that happened to an individual. So you’d presumably expect what appeared at that point to be just determined by natural law, there’s no other pressure, something kind of like a snowflake. And the same would be true as this capacity of this property is transmitted to offspring. Notice that the capacity itself HAS selective advantage, the person who had this capacity could think, it could plan, it could interpret, you know, could construct, internally of course, complex thoughts. That, you would expect, would have advantage transmitted to offspring in some small hunter gatherer group, maybe a couple of hundred people. It could take over most of the group after some period, and at that point there would be a reason to externalise it, to make it available to others so that it’s not just in your own head. And that seems to be the way language works, with externalisation being an ancillary process.” (Chomsky 2011)

And here is a longer extract from the questions after that talk: ”

Question: One of the things you argued in support of is Language’s productivity, and Fodor uses the same argument for a language of thought. I wondered if you think language plays a greater role, like Fodor does, and is there such a thing as a Universal Grammar of thought?

Noam Chomsky: Well, I DO think so, and, in fact, what I was describing was a language of thought. What actually seems to have happened, as far as we can piece anything together, and as far as the empirical evidence shows, is that at some point—maybe seventy-five thousand years ago—some small neural rewiring took place, of course, in some individual, because it’s the only possibility, and that individual had a computational process which was somehow linked to pre-existing conceptual
structures. Now, what those pre-existing conceptual structures are, we haven’t a clue about that. That’s the problem I ended with. Nobody has a clue what that could be or where it could have come from. But it’s there, and it’s totally different from anything in the animal world. And if this generative procedure could link to it, you do have thought. So, that’s a language of thought. And then somewhere down the line it got externalised and you get interactions among individuals. So, yeah, I think it is a language of thought. But I don’t see any reason to think it’s separate from language, I think it just is language.”

Chomsky goes on to add, rather cryptically,

“Noam Chomsky: In fact, if you look at Fodor’s work, and you ask the question ‘What do we know about the language of thought?’, well it turns out to be English.

[Audience murmurs]

Question: You are saying that everybody thinks in English.

Noam Chomsky: I’m not saying that we think in English, but the reason it turns out to be English is that’s the language everybody’s using. Whatever the language of thought — this internal, our own internal language, yours and mine — whatever it is, is inaccessible to introspection. Okay, if you introspect, you can’t go one minute without talking to yourself. It takes a tremendous act of will not to talk to yourself. In fact you do it all night, it keeps you up all night. It’s just impossible not to do it, but what you’re introspecting is the externalised language. So, you can tell when you’re talking to yourself, you can tell whether two sentences rhyme, okay. Or you can tell how long they are, or something like that. And actually, if you really pay attention, you’re not really talking to yourself in sentences, just kind of odd little fragments. Something is going on deeper which we CAN’T introspect into, any more than you introspect into the mechanism of vision, and that’s the language of thought. And it’s probably universal. It’s hard to imagine how it could be anything else. There’s no evidence for acquiring it.”

Now if this is what Chomsky means by ‘language’, it’s easy to see why he denies that language has a primarily communicative function and that it emerged through natural selection. On the other hand, as long as the capacity for ostensive communication was present before “externalisation” took place, Chomsky’s account might well be compatible with the view that the externalisation process was driven by selective pressures, along just the lines Thom suggests. (I don’t know if this makes sense – it’s a long time since I thought of myself as a linguist – and am quite happy to be put right.)